ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF MEDICINE

DEPARTMENT OF PSYCHIATRY

MAGNITUDE AND FACTORS ASSOCIATED WITH SUICIDAL BEAHVIORS AMONG HIGHSCHOOL ADOLESENTS IN ARADA SUBCITY, ADDIS ABABA, ETHIOPIA

DURETI KASSIM WORDEFO

MAY 2025

ADDIS ABABA, ETHIOPIA

ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF MEDICINE

DEPARTMENT OF PSYCHIATRY

MAGNITUDE AND FACTORS ASSOCIATED WITH SUICIDAL BEAHVIORS AMONG HIGHSCHOOL ADOLESENTS IN ARADA SUBCITY, ADDIS ABABA, ETHIOPIA

A THESIS SUBMITTED TO THE DEPARTMENT OF PSYCHIATRY, SCHOOL OF MEDICINE, COLLEGE OF HEALTH SCIENCES, ADDIS ABABA UNIVERSITY FOR THE PARTIAL FULFILMENT SUB-SPECIALITY CERTIFICATE IN CHILD AND ADOLESENT PSYCHIATRY.

DURETI KASSIM

ADVISORS
Dr. Awoke Mihretu
Dr. Fikirte Girma

MAY 2025

ADDIS ABABA, ETHIOPIA

ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES
SCHOOL OF MEDICINE
DEPARTMENT OF PSYCHIATRY

MAGNITUDE AND FACTORS ASSOCIATED WITH SUICIDAL BEAHVIORS AMONG HIGHSCHOOL ADOLESENTS IN ARADA SUBCITY, ADDIS ABABA, ETHIOPIA:

A QUANTITATIVE STUDY

BY: DURETI KASSIM

APPROVED BY THE EXAMINING BOARD

ADVISORS	SIGNATURE	DATE
Dr. Fikirte Girma	_____	_____
Dr. Awoke Mihretu	_____	_____

EXAMINERS	SIGNATURE	DATE
Dr. Asnake Limenehe	_____	_____
Mr. Henok Hailu	_____	_____

ACKNOWLEDGEMENT

To begin with, I am profoundly thankful to Allah for the guidance and blessings he provided me during my fellowship and especially during the process of conducting this research.

I extend my heartfelt appreciation to my advisors, Drs. Fikirte Girma, Awoke Mihretu, and Daphne Korczak, for providing unwavering guidance and support throughout the study.

I am deeply indebted to Awol Mohammed (Kiya), my dear and loving husband, and my children, whose immeasurable support and encouragement were a cornerstone of my success. I also like to acknowledge all members of my family, collegues and friends, who provided me with assistance and motivation during this journey.

Finally, I acknowledge Addis Ababa University for providing the fund necessary for the study and CDT Africa for their invaluable assistance during the duplication of the study tool. My gratitude also extends to the high schools where the study was conducted, the dedicated data collectors, supervisors and the participants who participated in this study.

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

Page

ACRONYMS AND ABBREVIATIONS

AOR	Adjusted Odds Ratio
ASSIST	Alcohol, Smoking and Substance Involvement Screening Test
CDC	Center for disease control
CI	Confidence interval
COR	Cruid Odds Ratio
GAD 7	Generalized Anxiety Questionnaire 7
IQR	Interquartile range
LMIC	Low-and middle-income countries
OSSS-3	Oslo Social Support Scale 3
PHQ-9A	Patient Health Questionnaire 9 modified for adolescents
PI	Principal Investigator
SPSS	Statistical Package for Social Sciences.
STB	Suicidal thoughts and behaviors
WHO	World Health Organization

ABSTRACT

Background: *suicide in adolescent age group is a growing global health challenge. Suicide behaviors serve as significant predictors of completed suicide and occur at a higher rate compared to suicide death. Understanding how common suicidal behaviours are and the factors linked to them is crucial for designing programs aimed at lowering the risk of completed suicide within this specific population.*

Objective: *To estimate the prevalence of suicidal behaviors and related factors among high school adolescents in Arada subcity, Addis Ababa, Ethiopia.*

Method: *A quantitative cross-sectional study design was used. Random sampling method was employed to choose the high schools from high schools found in the subcity and to select sections from every grade level. Data were gathered through self administered structured questionnaires. Data entry and analysis were performed using SPSS software.*

Results: *Lifetime prevalence of suicidal thought was 26.9%, suicidal plan was 18.8% and suicidal attempt was 17.0% in high school adolescents. The last 12 months prevalence of suicidal thought, plan and attempt were 13.5%, 8.7% and 7.2% respectively. Age (AOR=2.82), gender (AOR=2.80), anxiety (AOR=3.59) and social support (AOR=0.26) had significant association with suicidal thought. Gender (AOR = 2.80), anxiety (AOR = 3.68), school absenteeism (AOR = 2.20), social support (AOR = 0.35) and family relative wealth (AOR = 11.77) were significantly associated with suicide attempt among the study participants.*

Conclusions and Recommendation: *Suicidal behaviors were prevalent among high school adolescents in Arada subcity of Addis Ababa, posing a major public health challenge. Female gender, anxiety, school absenteeism, and poor social support increased the likelihood of suicidal behaviors. Addressing this requires understanding these factors to develop targeted prevention and intervention strategies, emphasizing mental health education in schools.*

Key words: *Suicidal behaviors, adolescents, highschool, Arada subcity.*

1. INTRODUCTION

1.1. Background

The term Suicide originates from Latin and its meaning is killing oneself. It refers to a self-inflicted death with clear evidences as the person had intention to end his or her life (1). Suicide-related phenomental encompass a spectrum that extends from contemplation of death and idɯeation to actual suicide attempts (2). One person dies every 40seconds globally making it a public health problem throughout the world (3).

More than 700,000 people commit suicide every year globally making it a worldwide issue and one of the major causes of mortality across the globe. In 2019, the worldwide age-standardized suicide rate was estimated to be 9.0 deaths per 100,000 population(3). However, its distribution and changes in rate over time varies across places or people. The global suicide rate in adolescents was 3.8/100,000 individuals. Suicide was recognized as one of the top causes of mortality in adolescents and ranked as the fourth leading cause of mortality in those aged 15–29 years in 2019 (3,4).

More than 3/4 of suicidal fatalities took place predominantly in countries with low and middle income. According to WHO 2019 report, 88% of the adolescents who ended their life by suicide were from LMIC (3). Ethiopia also carried high burden of deaths due to suicide and the World Health Organization (WHO) estimated as the suicide rate was 9.4/100,000 people when standardized for age which was above the global average for the same year(3).

Suicidal behavior occurs more often than completed suicide (5-7). Suicidal behavior encompasses suicidal thought (ideation), creation of a suicidal plan and execution of suicide attempts(7). They are strong predictors of completed suicide and estimates indicating that for each completed suicide, 10 to 20 people attempt it (5). A commentary assessing trends in suicidality in a decade in the Ethiopian general population, derived from 9 published studies between 1999 and 2022 showed as suicidal thoughts affected 1% - 55% of the population, and suicide attempts occurred in 0.6% to 14% of individuals. Moreover, there was an overall increase in suicidal behaviors during this period (8). According to a community and school based studies done in different towns of Ethiopia, the lifetime prevalence of suicidal ideation among

adolescents was 22.5% - 58.3%.Additionally, the prevalence of suicidal planning was 37.3%, and attempts ranged from 4.4% to 16.2% (9-14).

Despite the fact that suicide is claiming the life of many people, it can be markedly reduced if associated risk factors are identified and preventive measures are taken timely. There are multiple identifiable associated risk factors of suicide and suicide behaviors which can serve as warning signs for appropriate intervention to be taken (5).

Suicide risk factors are not universal, and it's essential to consider how various individual and psychosocial risk and protective factors interact, as they can affect people and communities differently depending on the situation and timing. Understanding what contributes to resilience or vulnerability to suicide and suicidal behavior requires recognizing this complexity. Risk can shift with changing circumstances and even in similar conditions factors that function as risks or protections for an individual may not exert equivalent influences on others. Therefore, to better understand the various suicide risk factors across cultures, it is essential to produce locally relevant evidence and develop culturally sensitive prevention strategies (5, 33).

1.2. Statement of the problem

According to a 2019 fact sheet published by WHO, suicide claims the life of one individual every 40 seconds, resulting in the loss of thousands of lives each year. It impacts individuals of all ages, from children to the elderly, in every country. However, it was identified as the fourth most common cause of mortality for individuals in the age range of 15 to 29 in 2019. It is even more prevalence in LMICs, where majority of the world population resides, particularly among adolescents (3).

In Ethiopia, the suicide rate exceeds the global average (3). On the other hand, 71% of the population under the age of 30, which comprises the majority of the Ethiopia’s workforce(15). As a result, suicide will pose psychological, social and functional (academic in adolesents) impact on individual, family, and community at large and make the country lose a large portion of its workforce, which will have a huge impact on the socioeconomic development of the country.

1.3. Rationale of the Study

Although thousands of youths commit suicide worldwide each year, the majority of these deaths occur in LMIC. However, there are multiple identifiable factors associated with it which that can act as alarms prior to the act providing an opportunity to recognize and implement effective preventive measures. For every completed suicide, about 20 additional individuals make an attempt and it is a strong predictive of suicide deaths in the future (5). Suicide attempts often reflect a plea for help rather than a strong desire to end one's life. So, effective suicide prevention depends on addressing this plea.

Researches show that despite the fact that majority of suicide and suicidal burden occurring in LMIC, fewer than 15% of researchs related to suicide take place in these countries. In Ethiopia also researches done on suicide and suicidal behaviors are only few and most of them are done on adult population.

Cognizant of the fact that Ethiopia is among the countries where there is a paucity of data about suicide and suicidal behaviors, it’s critical to produce evidence locally concerning the extent of the problem and its related factors to devise appropriate preventive strategies. Up to the knowledge of the investigator most studies done on adolescent suicidal behavior were done outside Addis Ababa city and those conducted in Addis Ababa focus maily in adolescents receiving medical care in health facilities. This might inflate the prevalence of the problem unlike studies done on the general population. On the other hand, as most of the adolescents are found in schools, studies done in school setup gives better representation of the extent of the issue in adolescents. Additonally, studies done in school adolesents focused mainly only government led schools. So, this study involved adolescents attendind their education in both government and nongovernment led schools and it gives a better picture about suicidal behaviour about this neglected issue.

In Ethiopia, there are instances of adolescents engaging in self-poisoning that go unrecorded, and there is there is a notable gap in linkage to psychiatric care services. The issue is often not recognized as suicidal behavior by both healthcare providers and other stakeholders. Our study also tried to address this gap by actively exploring the presence of these behaviours even if they don’t report it actively

As this study was conducted in the subcity found in the neighbourhood of Addis Ababa university school of health sciences, it represents a contribution by the college to the surrounding community by generating health-related evidence.

Our findings will be of value to healthcare providers, planners and government authorities to devise appropriate suicidal behavior preventive strategies in Arada subcity of Addis Ababa city administration and to the city adminstration too. It will also act as a milestone for further large scale studies on the subject matter by other researchers in the future.

1.4. Significance of the study

This study is important because it focuses on suicidal behavior, a critical public health concern which is recognized as the leading risk factor for suicide.Suicide is claiming the life of thousands of adolescents each year globally in general and in LMIC countries including our country in particular. Given the high magnitude of suicidal behavior among adolescents, it is crucial to comprehend its local prevalence and associated factors to devise effective prevention and intervention strategies.

This study will contribute to the current understanding of adolescent suicidal behaviors in Ethiopia. It examines how common suicidal behaviors and factors associated with them are among adolescents enrolled in both government and non-government high schools in a sub-city of Addis Ababa's city administration. Given the differing socioeconomic backgrounds of students in these institutions, this study provides valuable insights. Education is free at primary and secondary government led schools and students in government high schools typically come from families with lower socioeconomic status. On the other hand students attending their education in non-government schools are generally from middle- or high-socioeconomic backgrounds as students have to pay fee for their education in these schools. By including adolescents from both types of schools, this study offers a more comprehensive understanding regarding suicidal behavior in high school adolescents and its relationship to varying sociodemographic characteristics, compared to studies that focus solely on government schools.

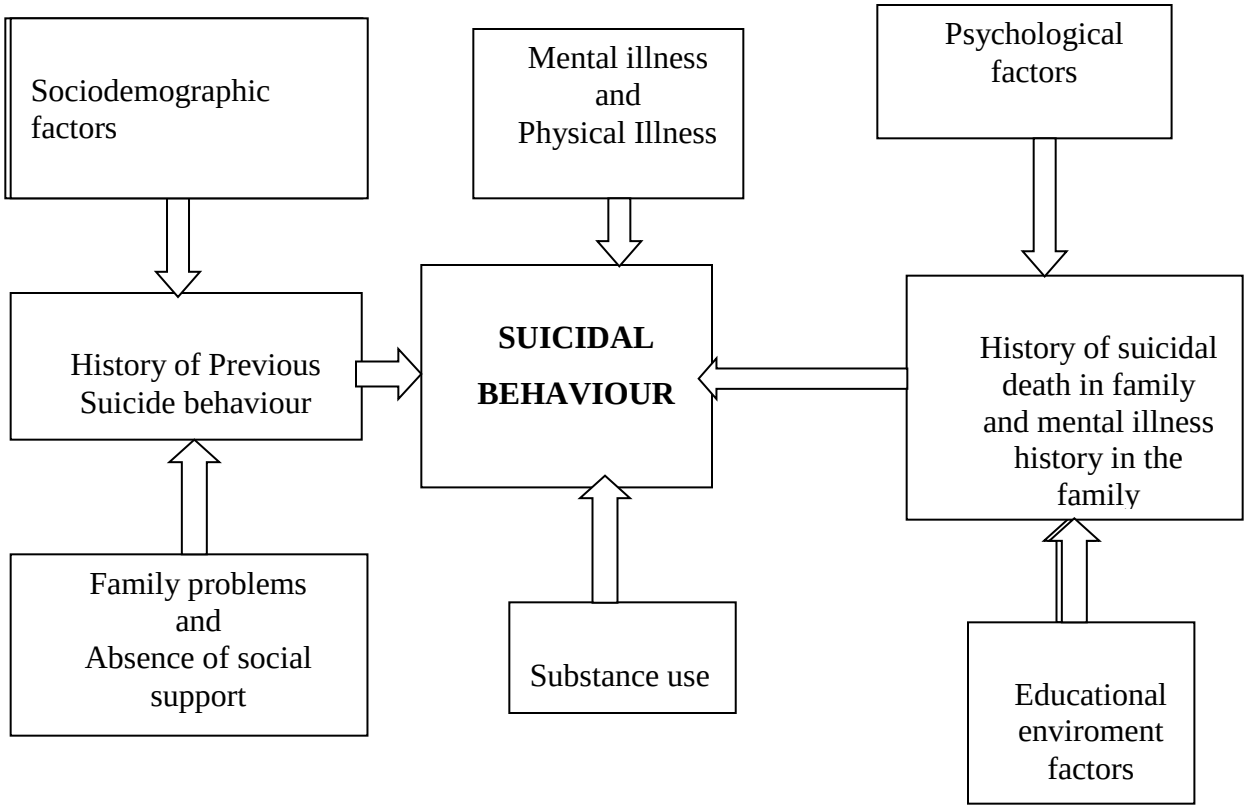
The study’s results can serve as a useful resource to the schools where the research was conducted, as well as for the Addis Ababa City Administration Education Bureau, in collaboration with the City’s Health Bureau. These results can inform the designing of initiatives

to prevent suicide in high school adolescents, including awareness campaigns delivered through mini-media platforms, social media channels, workshops, and other educational initiatives.

Additionally, the study can guide the design of intervention strategies aimed at strengthening or establishing referral systems between high schools and adolescent mental health facilities within the sub-city. It also highlights the importance of creating adolescent-friendly mental health services, ensuring that students with suicidal behaviors can access support easily and comfortably.

Finally, our study lays the groundwork for future researches, paving the way for more in-depth exploration of adolescent mental health and suicide prevention strategies.

Conceptual Framework



2. LITERATURE REVIEW

2.1. Overview of sucide and suicidal behaviours

The term Suicide originates from Latin and its meaning is killing oneself. It refers to a self-inflicted death with clear evidences as the person had intention to end his or her life(1). Suicide related phenomental encompass a spectrum that extends from contemplation of death and ideation to actual suicide attempts (2).

Suicidal behavior encompasses suicidal thought (ideation), creation of a suicidal plan and execution of suicide attempts (7). For each suicide that is completed, there are upto 20 times as many individuals who make an attempt (5). Suicidal thoughts and attempts results in in many consequences including health complications and financial strain and they are strong predictors of suicide-related deaths.

Various theories of suicide offer different explanations for why individuals may attempt to take kill themselves. Edwin Shneidman's theory of suicide suggests that the main factor driving individuals to engage in to suicidal attempt is psychache.According to this theory, i.e., suicide happens when a person fails to endure psychological pain any longer. Roy Baumeister's suicide theory integrates cognitive, personality and social psychology concepts and proposes that suicide attempts stem from a desire to escape painful self-awareness in a significant number of cases. According to Thomas Joiner's interpersonal theory, the interest for suicide arises from the interplay between feeling burdensome to others and a disrupted sense of belonging. Hopelessness, problem-solving, impulsivity, and interpersonal communication are also mentioned to motivate suicide attempt in some theories (16-19).

2.2. Prevalence of suicide and suicidal behaviours in adolescents.

Suicide is a serious health problem, but in many cases, it can be prevented. More than 700,000 people commit suicide every year globally making it a worldwide issue and one of the major causes of mortality across the globe. It kills more people compared to breast cancer, HIV/AIDS, malaria, as well as war and homicide. Suicide accounted for over one out of every 100 deaths worldwide in 2019(3).

In 2019, the worldwide age-standardized suicide rate was estimated by World Health Organization to be 9.0 deaths per 100,000 population. However, rates are not uniform but varied between WHO regions and countries and it ranges from less than 2 deaths per 100 000 to more than 80 per 100 000. In 2019, regional variations in suicide rates standardized by age were evident with the African region, Europe, and South-East Asia having rate of 11.2, 10.5 and 10.2 per 100,000 respectively exceeding the worldwide average of 9.0 per 100,000. On the other hand, the Eastern Mediterranean region recorded the lowest rate, at 6.4 per 100,000.When country level report is seen, the lowest rate of 0.3/100,000 was reported from Antigua and Barbuda and Barbados which are countries from WHO Region of the Americas whereas the highest rate of 87.5/100,000 was reported in Lesotho from Africa(3).

Although suicide is a significant global issue affecting countries regardless of income level, more than 3/4 of suicidal fatalities took place predominantly in countries with low and middle income. As being part of low income countries, Ethiopia also carried high burden of deaths due to suicide. Based on the 2019 WHO global health estimates, Ethiopia's suicide rate standardized by age was 9.4 per 100,000 people, surpassing the global average for same year. (3).

Adolescence is a time of rapid biological and social changes in an individual's life which has a role to increase their vulnerability to developing suicidal thoughts and behaviors. Consequently, prevalence of suicide and suicidal behaviours increases dramatically during the adolescent transition (20).

Suicide is among the major cause of mortality in youth globally (4). The worldwide suicide rate among adolescents is 3.8 per 100,000 individuals with older adolescents and male sex adolescents being affected more than younger and female ones (4). It was the fourth most common cause of mortality in those aged 15–29 years. When separated by sex, it ranked the third main cause of mortality for females and the fourth for males in this age group. Low- and middle-income countries accounted for 88% of adolescents' suicidal death (3).

Suicidal behavior occurs more often than actual suicide (5-7) globally with LMIC being the most affected regions in the world. Worldwide, the lifetime prevalence of suicidal thoughts and attempts ranged 3.1% to 56% and 0.4% to 5.1% respectively in the general population (21). Reasearch conducted in Germany showed that among young adults and adolescents, the lifetime rates of suicide thoughts, plans, and attempts were 10.7%, 5.0%, and 3.4%, respectively (7).

Studies showed that in countries with low to middle income levels, prevalence studies demonstrate as having thoughts commiting was 16.9% and suicide attempts was 17% over the past year. African countries and Western Pacific region indicating the highest levels of suicidal thoughts (20.4%) and suicide attempts (20.5%), respectively (22, 23).

A systematic review and meta-analysis exploring thought of killing onself or attempts of suicide worldwide prevalence of among youth found that 14–23% experience active suicidal thoughts, 4–24% develop a plan to take their own lives, and 5–16% have attempted suicide across the globe(24).

A study was done using Global School-based Student Health Survey pooled data to explore the prevalence of self-reported suicidal ideation and attempt as well as factors associated with them among adolescents across 90 countries involving both high- and low-income nations. The findings showed as lowest levels of suicidal ideation were observed among 13–15-year-old girls ($0.8 \pm 0.5\%$) and boys ($0.7 \pm 0.7\%$) in Myanmar, and among 16–17-year-old girls (1.6%) and boys (3.9%) in Laos. In contrast, the highest rates of suicidal ideation were reported among 13–15-year-old girls in Kiribati (36.2%) and 16–17-year-old girls in Wallis and Futuna (35.9%). For boys, the highest prevalence was found in 13–15-year-olds in Samoa (37.1%) and in 16–17-year-olds in Liberia (22.8%) according to the report of this study (25).

The above study revealed that rates of attempts of committing suicide were lowest among 16–17-year-old boys in Laos (3.8%) and 13–15-year-old boys in Suriname (4.2%). Among girls, the lowest prevalence was reported in Indonesia, with 2.7% for those aged 16–17 and 3.6% for those aged 13–15. Conversely, the highest rates among 13–15-year-olds were observed in Samoa, where 67.2% of boys and 53.7% of girls reported suicide attempts. Prevalence of attempts of committing suicide in 16–17-year-olds was highest (33.6%) for boys in Liberia and 35.2% for girls in Ghana (25).

A population based study conducted across 59 countries with low as well as middle income assessed the magnitude of thought about committing suicide, making plan to do, and attempting it in adolescents.It revealed that the 12-month prevalence rates of ideation to be 16.9% whereas the plans made and attempted suicide constituted 17.0% for each. According to the Result, the highest rate of attempted suicides (20.5% was found in the Western Pacific region and of suicidal ideation (20.4%) and planning (23.7%) were seen in the African region. Conversely, Southeast

Asia region showed the lowest prevalence rate of suicidal behaviours (thought of commiting suicide (8.0%), planning (9.9%), and made trials to kill oneself (9.2%). The study also found that girls and adolescents aged 15–17 were more prone to experiencing thoughts, make plans, as well as attempt suicide relative to boys and younger adolescents aged 13–14.

In Ghana, nationwide student health survey was done in schools among senior high school adolescents which showed that 18.2% experienced suicidal thoughts, 22.5% engaged in suicide planning, and 22.2% had attempted suicide (26). Another study carried out in Lagos, Nigeria, revealed that the weighted prevalence of high school students experiencing suicidal thoughts within a one-month period was 6.1%. Furthermore, the prevalence of those who had developed specific plans to commit suicide during the same timeframe was found to be 4.4% and 2.8% of the students actually made a trial to kill themselves within the last month (27).

A systematic review and meta-analysis showed that prevalence rate of suicidal thoughts was 1% to 55% and suicide attempts was 0.6% to 14% in the general population of Ethiopia. Furthermore, the pooled 12-month prevalence was 9% (ranging from 5% to 16%, $I^2 = 99.64\%$, $p < 0.001$) for suicidal ideation and 4% (1% to 8%) for suicide attempts. The estimated combined lifetime prevalence of attempts to end one's life was 4%, with a range of 3% to 6% (28). Another study tracking suicidality trends in Ethiopia from 1999 to 2022 indicated a rise in suicidal behaviors prevalence during the last decade. (8).

A community-based study conducted in Gonder town, located in northwest Ethiopia, found that 5.5% of youths had made attempts to kill themselves at one time in their life time in this world (95% CI: 4.4% to 6.8%) (10). Another school based study done northwest Ethiopia Dangla town, reported that 22.5% of high school students experienced suicidal ideation, while 16.2% had attempted suicide (11). In a high school based study conducted in woldia town, northeast Ethiopia, the rates of thought of killing oneself and attempts done in students learning in high schools were found to be 16.29% and 12.87%, respectively. (29).

An institutional cross-sectional study carried out in Oromia Region Fitche Town, revealed that 20.5% of adolescents in high school experienced thought of ending their life in their lifetime, while 12.5% had attempted suicide (14). In another study done on students at Mettu University in Southwest Ethiopia, 34% experienced suicidal thoughts over the past year, with lifetime prevalence rates of suicidal thought, planning, and attempts being 58.3%, 37.3%, and 4.4%,

respectively (12). A study carried out in Addis Ababa government high school students from grades 9 to 11 revealed that 14.3% of the participants had tried to commit suicide at least once in their lives (13).

2.3. Factors associated with suicidal behaviours

Suicide and suicidal behaviors are associated with numerous factors. Many of these factors can be recognized as early warning signs, which offer a chance to foresee the risk and apply timely interventions to stop suicidal actions and prevent death by suicide(5).

World health organization mphasizes the need to recognize and address the root causes of suicide, as well as the factors that help protect individuals from it. It addresses that suicide is rarely the result of a single issue; instead, it usually stems from a combination of contributing factors. These can include mental and physical health problems, substance use, long-term illnesses, severe emotional turmoil, experiences of violence, major life disruptions and cultural or socio-economic difficulties. These influences often overlap and interact in complex ways. Additionally, the role of mental health challenges can differ depending on the specific context (30, 31).

Psychological autopsy studies meta-analysis finding identified attempts to commit suicide and deliberate harm inflicted on self as strongest risk factors linked to suicidal behaviors. Additionally, having a family member who attempted suicide was found to significantly raise the likelihood of an individual attempting suicide (32).

Suicide risk factors are not universal, and it's essential to consider how various individual and psychosocial risk and protective factors interact, as they can affect people and communities differently depending on the situation and timing. Understanding what contributes to resilience or vulnerability to suicide and suicidal behavior requires recognizing this complexity. Risk can shift with changing circumstances and even in similar conditions what serves as a risk factor for one individual might not impact another person similiarly and the same is true for protective factors. Therefore, to better understand the various suicide risk factors across cultures, it is essential to produce locally relevant evidence and develop culturally sensitive prevention strategies (5, 33).

Risk factors of suicidal behaviors in youths in LMICs are organized into three distinct levels according to socio-ecological model of suicide: 1) Individual level: includes personal factors such as psychiatric conditions, HIV infection, low income, lack of food security, and limited educational achievement; 2) Interpersonal level: includes poor family bonds, family disputes, poor social connections, Bullying, Interpersonal violence, romantic relationship difficulties, traumatic childhood experiences; 3) Community level: involves broader societal influences such as restricted access to healthcare services and exposure to adverse conditions during early life(23).

A systematic review revealed that major depressive disorder, a history of previous suicide attempt and family dysfunction are leading factors considered as risks for suicide attempts in adolescent populations in Latin America and Caribbean region (5).

A study done on high school students in Nigeria found being female, not living with one's mother, having a mother who drinks alcohol, witnessing domestic violence, experiencing academic difficulties (both past and present), lacking close friends at school and facing difficulties interacting with schoolmates as well as teachers, having long standing physical health problem and experiencing mental health problems to have significant association with adolescent suicidal behaviour (27).

According to a study done on high school adolescents in Ghana, feeling anxious, experiencing bullying, physical attacks or involvement in physical fights, and food insecurity raises the likelihood of exhibiting suicidal behaviors in general. The odds of having suicidal thought increases with truancy, where as the odds of making suicidal plan increases in those experiencing lonliness. Additionally, having more intimate friends was associated with an increased odds of attempting suicide (26).

In a community and high school-based studies done in different towns of Ethiopia, having female gender, lacking strong social support, feelings of loneliness and hoplessness, experiencing academic disappointment that leads to academic underachievement, history of a kin who took their own life showed significant association with suicide thought and attempting suicide.

It was also found as suicide ideation has strong association with having history of alcohol intoxication in life-time, chewing khat and absenteeism from school. Engaging in risky sexual

behaviors, experiencing common mental health issues, having personal income, violence history and experiencing physical harm showed significant association with suicide attempt (10, 11, 14). Gender or alcohol use didn't show an association with both suicidal thoughts and attempts (11).

In a study done in Mettu University, being female, having inadequate social assistance, history of a kin who attempted suicide, ever use of alcohol, living in countryside, and engaging in spiritual practices seldomly were identified as having significant association suicidal ideation (12).

3. OBJECTIVES

3.1. General Objective

- To estimate the prevalence of suicidal behaviors and related factors among high school adolescents in Arada subcity, Addis Ababa, Ethiopia.

3.2. Specific objectives

- To estimate the prevalence of suicidal behaviors among high school adolescents in Arada subcity, Addis Ababa, Ethiopia..
- To identify factors connected with suicidal behaviors among high school adolescents in Arada subcity,Addis Ababa, Ethiopia.

4. MATERIALS AND METHODS

4.1. Setting of the Study

This research was done in high schools within Arada subcity of Addis Ababa city administration, the largest city and capital of Ethiopia and it is divided in to 11 adminstrative units called subcities. In 2016EC (2023/24GC), there are a total of 229 high schools in the city among which 78 are governmental and 151 are non-governmental.

Arada subcity is found in the city's northern part, nearby the centre. It shares border with Yeka, Gullele, Lideta, Kirkos and Addis Ketema subcities. It covers 9.91 km^2. There are a total of 19 high schools in this subcity among which 7 are governmental and 12 are non-governmental.

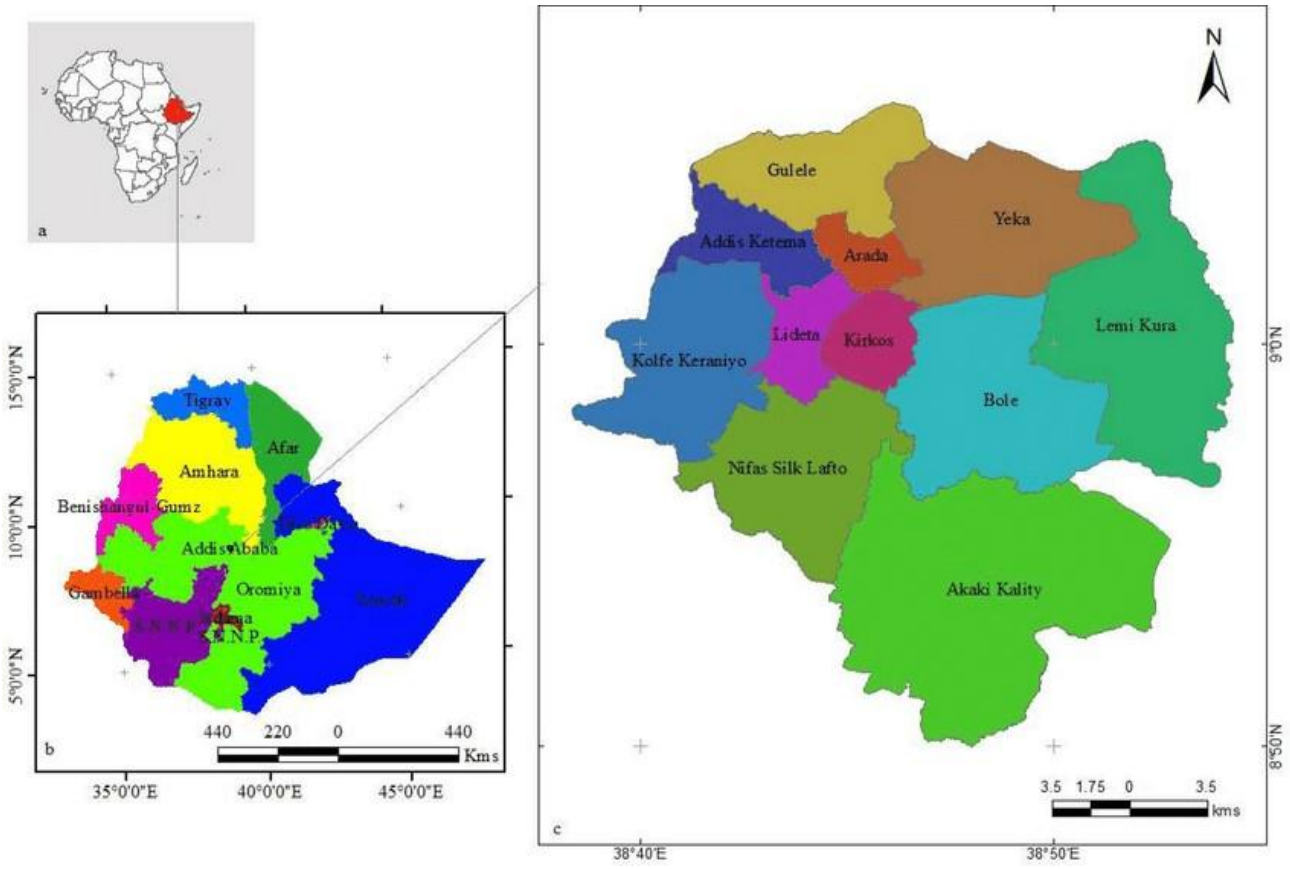


Figure 1.Addis Ababa Map with its subcities. Source: Ethio GIS (2022)(34).

4.2. Period of the study

This reaserch was carried out between February 01 and April 05/2024.

4.3. Design of Study

A quantitative cross-sectional survey was done at an institutional level to quantify the prevalence of suicide behavior in adolescents found in high schools and to see its association with different factors identified in other studies as having association with it.

4.4. Source population

All high school students attending their education in grades 9 to 12 in both governmental and non governmental schools included in the research during the study time was the source population.

4.5. Study population with eligibility criteria

Populations of the study were all subjects selected from the source population using sampling technique and fulfill eligibility criteria to participate in the study. They are those from whom data was collected.

Eligibility criteria: Inclusion and exclusion criterias:

- ✓ Adolescents attending their education in 9-12grade who consented (18-19yrs of age) or assented and their caregivers consented (<18years old) were included.
- ✓ Adolescents attending their education in 9-12grade who declined to consent were not included.
- ✓ 14-19 years old adolescents who were ill during the study time were not included.
- ✓ Adolescents who had difficult of understanding the study process were not included.

4.6. Determination of sample size

Sample size was determined using the formula for a single population proportion.It became 730 by using suicidal ideation prevalence of 20.5% among adolescents in high school from a study done in Fitche town of Ethiopia (14),95% confidence interval, a 3% margin of error, and a 5% non-response rate.

4.7. Sampling technique/procedure

High schools found in the selected subcity were stratified into governmental and nongovernmental. Sampling frame of governmental high schools and nongovernmental high schools was prepared separately by taking their list from education bureau of the city administration. Two high schools were selected from the governmental and two high schools from the nongovernmental high schools by simple random sampling method.

After selecting schools, sample size was distributed among the four schools proportionally according to the student population in each high school (source population). Accordingly 1 to 3 sections were selected from each of 9-12 grades in each school by simple random method after preparing sampling frame by taking list of all sections found in each grade. Every student in the chosen sections were included if they fulfill eligibility criteria.

4.8. Instruments for data collection

Structured questionnaire were utilized to gather information. Eight sunsections were included in the questionnaire; (1) Socio-demography, (2) suicidal behaviors screening, (3) social support, (4) mental health screening, (5) substance use screening, (6) Screening for history of mental illness and suicide in the family (7) chronic physical illness screening (8) bullying victimization screening. Instruments which were translated to Amharic language and were culturally adapted by previous researchers were used. For instruments which were not translated to Amharic language and were not adapted culturally, translation and back translation were done by people who are proficient in both Amharic and English languages and cultural adaptation were done by conducting expert meeting.

Socio-demography characterstics: of participants included their age, gender, grade, their last semister's rank in class, their feeling about their rank, school abscentee days, religion, relationship status, of family's relative wealth and with whom the student is living during the data collection period.

Suicidal behavior: suicidal behavior was assessed using Composite International Diagnostic Interview (CIDI) Suicide Questionnair. CIDI is developed by WHO and is a comprehensive and standardized tool for assessing mental disoders in various populations. It asks the life time and 12months history of suicidal thought, plan and attempt. If participant answered yes to any of the

suicidal behavior questions, it asked at what age it occurred. If the study subject gave history of suicidal attempt, it asks in detail about suicidal attempt like how many times it occurred, what method was used etc. The questionnaire's Amharic version was validated in clinical and community settings in Ethiopia, showing internal consistency with Cronbach's alpha of 0.87 (45, 46).

Social support status: assessment used Oslo Social Support Scale (OSSS-3) adapted version which has three item and scores of responses to each item were summed. Social support levels were categorized into poor, moderate and strong based on the score (36). It's Cronbach's alpha is 0.64 (37). Most studies used it to assess social support in adolescents in Ethiopia although it was not validated for adolescent population in Ethiopia. It was adapted to adolescent context by adding neighbours in addition to family or relatives to get practical help if they should need it in the first question as neighbours are one of the main social support structures for adolescents in Ethiopian setup.

Depression: it was assessed using Patient Health Questionnaire for Adolescence (PHQ-9A). This tool has 9 items and every item was measured on likert scale. Values rated from 0(symptom didn't occur at all) to 3(symptom occurred nearly every day). It assesses depressive symptoms in teenagers in the last 2-weeks period. Resposes to each item were added with total scores of 0 -27. A score of 0-4 is suggestive of not having depression while a score of 5 or above is suggestive of depression (38). It has a sensitivity of 89.5% and a specificity of 77.5% (39). In one study done to assess the psychometric properties of PHQ-9 modifeid for MDD in adolescents, the Cronbach's alpha values for internal consistency at baseline, 4 weeks, and 8 weeks were 0.879, 0.859, and 0.827, respectively(40).

Anxiety: Generalized Anxiety Disorder questionnaire (GAD-7) was used. This tool has 7 items and every item was measured on likert scale. Values rated from 0(symptom didn't occur at all) to 3(symptom occurred nearly every day). Resposes to each item were added with total scores of 0 -21.It assesses generalized anxiety symptoms in the last 2-weeks period. It is a valid tool to screen for generalized anxiety disorder in adolescents. It has internal consistency of Cronbach's a = 0.69 (41).

Substance use: selected items from the WHO Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) was used. It assesses current use as well as ever use of substances. This

tool was developed to support early detection of substance use disorders and health problems related to substance use. It can be used in different settings including health care settings. It is useful to screen for substance use and was created to be culturally neutral and applicable in a diverse cultureal settings. It uses 8 items to assess life time and last 3 months use of substances (44).

Expert consensus meeting was conducted and some questions from the WHO ASSIST questionnaire were omitted as the total number of questions to be answered by the adolescents became a lot.

History of Bullying: it was assessed using Forms of bullying scale victimization version (FBS-V). This tool has a both victimization and perpetration versions. FBS-V was composed of ten questions and response to each question was rated from 1 to 5. Resposes to every item were added with the sum of the scores being 10 - 50. Greater levels of bullying were indicated by higher scores. In a study done in Ethiopia, this instrument showed high internal consistency and its Cronbach α was 0.90)(43).

4.9. Data collection procedures

Data collection was done on school days during break time or in periods they were free. Data collectors and supervisors gave the self admintered questionnaire to students. Questionnaires were pre-tested in schools with similar setting to check for clarity of the questions, their sensitiveness, and completeness. Appropriate correction was done to the questionnaires where gaps were found during pretesting.

4.10. Operational definitions

Adolescent	10-19years old person (47).
Anxiety	Minimal Anxiety- if a study subject scores 0-4 on GAD 7. Mild Anxiety- if a study subject scores 5-9 on GAD 7. Moderate Anxiety- if a study subject scores 10-14 on GAD 7. Severe Anxiety - if a study subject scores 15-21 on GAD 7. (48)
Bully	‘’Any unwanted aggressive behavior(s) by another youth or group of youths, who are not siblings or current dating partners that involves an observed or perceived power imbalance and is repeated multiple times or is highly likely to be repeated’’ (CDC definition).

	Bullying victimization- if a subject scores above the mean on FBS-V No Bullying victimization- if a subject scores below the mean on FBS-V
Depression	Mild depression - if a study subject scores 5-9 on PHQ 9A Moderate depression - if a study subject scores 10-14 on PHQ 9A Moderately severe depression - if a study subject scores 15-19 on PHQ 9A Severe depression - if a study subject scores 20-27 on PHQ 9A(38)
Social Support	Strong—if a study subject scores 12-14 on the OSSS- 3 Moderate —if a study subject scores 9-11 on the OSSS- 3. Poor —if a study subject scores 3-8 on the OSSS- 3. (36).
Suicide	‘’Self inflicted death with explicit or implicit evidence that the person intended to die’’(1).
Suicidal behaviours	Suicidal thought, suicidal plan and suicidal attempt(7)
Suicidal ideation	‘’Thought of serving as the agent of one’s own death’’(1).
Suicidal plan	‘’A proposed method of carrying out a design that will lead to a potentially self-injurious outcome; a systematic formulation of a program of action that has the potential for resulting in self-injury’’ (49).
Suicidal Attempt	‘’Self-injurious behavior with a nonfatal outcome accompanied by explicit or implicit evidence that the person intended to die’’(1) .
Risk factor for suicide	Any identifiable attribute of an individual or group that has been shown to correlate with a greater risk of suicide (5).

4.11. Analysis of the Data

The software which was used enter the data was SPSS version 20.0. Data analysis was also done by the same software. To present the data on the prevalence of suicidal behaviors, percentages, frequency distributions ratios, measures of dispersion and measures of central tendency were utilized. Chi-square test was employed to analyze the association between suicidal behaviours and independent variables. Binary logistic regression was used for multivariable analysis to identify variables with significant associations and controlling confounding variables. P-value below 0.25 was used to identify variables to be included in the final multivariable model during bivariable analysis. Associations were taken as significant by calculating Adjusted Odds Ratios including 95% Confidence Intervals and p-values < 0.05.

Study variables:

i. Dependent variable

- Suicidal thought(ideation)
- Suicidal plan
- Suicidal attempt

ii. Independent variables

- Sociodemographic characteritiscs
- School related factors
- Social support
- Mental health including substance use and physical health.
- Family hx of mental illness, substance use, suicidal attempt and death by suicide.
- Bullying victimization

4.12. Data quality assurance.

Study participants were given brief orientation on how to respond to the questions on self adminsterred questionnaire before they start filling the questionnairs.

Half-day training was held for data collectors and supervisors, focusing on the tools and procedures for data collection. The data collection formats were reviewed for clarity and completeness before data gathering. Pre-testing of questionnaires was in schools with similar setting to check for clarity of the questions, their sensitiveness, and completeness. Appropriate corrections were done to the questionnaires on gaps found during pretesting. Study participants were supervised through out for any difficulties during data collection period.

The PI did carefully selecte and gathere completed and relevant data. To maintain data quality, gathered informations were reviewed by the PI for completeness, accuracy, consistency and relevance before entered and analyzed in the software. Double data entery was performed in to the software and cleaned before analysis.

4.13. Ethical considerations

Ethical Approval and clearance from the Department of Psychiatry were secured for ethical purposes. To obtain approval for conducting the study in the selected schools, an official letter was handed to Addis Ababa education bureau and schools selected for the study. Students aged 18 - 19 years were required to provide informed consent by writing, while those under 18 had to give verbal assent along with written consent from their parents or caregivers. After an informed assent and/or written consent were taken from study participants, data collection was started. To get informed consent form parents or care givers for their adolescent child's participation in the research, information sheet and consent paper were sent to them via the student. The signed consent was collected from the students before they start filling the questionnaire.

Before the participant provided informed consent, introduction about the study topic, name of the investigator and reason their selection for the study were made. Next, necessary explanation about description of the study procedures, purpose of study, benefits and risks/discomforts which might occur because of participation, their right to refuse participating in the study or withdraw anytime after they have started participation, how to ensure confidentiality, right to ask questions and as they have full right to raise concerns was explained to the participants. After the provision of the above detailed information, an informed written consent was obtained. This was done for caregivers by sending them the information sheet. Status of study participation didn't have any impact on the service the adolescents were getting in the school.

If adolescents who were participating in the study were found to have concerning mental health issue including active suicidality based on their scores for different items during data analysis period, arrangements were made to help them accecc psychiatric care in health facilities. To trace theses students to link them to the necessary intervention, there was a record of their questionnaire code on their signed consent form. The consent form to be signed by the student had his/her and his/her parents/caregivers name and telephone number. The signed consent forms are kept with the PI in a secure place insuring its confidentiality.

RESULTS

Sociodemopgraphic characteristics of research subjects

600 out of 730 planned participants participated equating with 82.2% response rate. Their age ranged from 14 to 19 years and 17.14±1.27years was their mean age. The gender distribution indicates a higher representation of females, with 56.8% compared to 43.2% males. In terms of educational status, Grade 11 students represent the largest group at 31.2%, while Grade 10 has the lowest at 19.0%[Table 1].

Table 1.Social and demographic profile of participants, Arada subcity, Addis Ababa, Ethiopia. (n=600)

Variable		Number	Percent (%)
Gender	Male	259	43.2%
	Female	341	56.8%
Age	14	15	2.6%
	15	64	10.7%
	16	102	17.0%
	17	118	19.7%
	18	241	40.2%
	19	60	10.0%
Grade	9^{th} grade	132	22.0%
	10^{th} grade	114	19.0%
	11^{th} grade	187	31.2%
	12^{th} grade	167	27.8%
Religion (n=593)	Christian	483	74.2%
	Muslim	103	17.4%
	Others	7	1.2%
Marital status (n=584)	Single	545	93.3%
	Unmarried couple's	22	3.8%
	Married	15	2.6%
	Others	2	0.3%
Family Relative wealth compared to neighbourhood families (n=596)	The same	514	86.2%
	Below	48	8.1%
	Above	34	5.7%
Living with whom (n=595)	With family	544	91.4%
	With relatives	42	7.1%
	Alone	5	0.8%
	Others	4	0.5%

School Related Factors

Around 72% of study participants reported attending their education in the majority of the school days missing school only three or less days in the last month. Regarding their feelings about their academic performance in the last semester, 24.1% expressed dissatisfaction.

Social Support Status

Social support status of participants were categorized in to poor if they scored 3–8, moderate if they scored 9–11 or strong if they scored 12–14 on Oslo 3 social support scale. Accordingly, 37.5% had strong, while the remaing had moderate or poor social support.

Health Profile of the Study Participants

1. Mental health profile of study participants

Participants were screened for depression using PHQ 9A and for anxiety using GAD 7. The results showed as 36.3% of participants were found to have depression ranging from mild to severe degree. Similarly, significant portion of the individuals exhibited anxiety symptoms (42%) among whom 8.6% had fulfilled criteria for severe anxiety.

2. Substance use profile of study participants

Study participants were screened for life time use of substances. Accordingly, 25% (145/588) of the participants reported having history of ever use of at least one substance. Among the substances used, the most used one was alcohol (12.6%) followed by tramadol or other drugs (3.8%) and tobacco (3.6%) while the least used were khat (2.4%) and cannabis (2.4%). From those who reported ever used any of the asked substances, around 70% had also used substances in the last 3 months. Alcohol was found to be the most frequently used when compared to the other substances.

3. Chronic physical illness screening results.

Chronic physical illness screening of the study subjects showed that the majority didn't have any chronic physical illness however, 13.9% reported having at least one chronic physical illness.

Screening result for mental illness,use of substance and suicidality in the family.

The study finding showed that the 7.3% acknowledged having mental illness and 13.9% problematic substance history in their family. Concerning suicidal attempt history, 8% of them

reported history of suicidal attempts in their family where as 0.2% were uncertain. In terms of suicide completion, 5.9% of participants gave history of family member committing suicide.

Bully victimization status of study participants

The findings from the study on bulling victimization history revealed that near a quarter of the study participants indicated that they had experienced bullying victimization. However, that a substantial majority of study them had no experience of being bullied.

Suicidal Behaviour Related Assessement of the Study Participants

The study assessed in detail about life time and 12 months suicidal behaviours of study participants which include suicidal thought, plan and attempt using CIDI tool. Accordingly, the life time and 12 months suicidal thought is 26.9% and 14% respectively although a significant proportion of participants said they don't know if they ever had suicidal thought or not. Nearly one in five participants in the study reported making suicidal plan at some point in their life and 8.7% responded as they had a plan in the last 12 months.

This research showed a troubling prevalence of suicidal attempts in adolescents who participated in the study, with 17% reporting making at least one lifetime suicidal attempt. Among those who attempted suicide, 36% of them did so more than once. Regarding the last 12months suicidal attempt, 7.2% reported attempt history. Substantial percent (44.4%) of these recent suicidal attempts resulted in injury or poisioning or required medical attention (26.3%) including over night admission (13.9%). The most common method used in recent attempts was using sharp materials like razor followed by over-the-counter medications overdose or by mechanical methods like strangulation. The rest mentioned using poisioning (10.5%), over dosing with prescription medication or other drugs like alcohol (2.6%) or using gun (2.6%). Sadly, 34.1% and 35.1% of those who had life time and 12 months history of suicidal attempt respectively indicated that their initial attempt was a serious effort to end their lives and they survided just because of luck. On the other hand, 12.2% and 10.8% among those who attempted suicide in their life time and 12months back respectively said they attempted sucide as to seek help rather than intention to end their life.

The mean age of study participants when they experienced suicidal behaviours (thought, plan and attempt) for the first time in their life was 14years and the mean age when they last

experienced suicidal behaviours in the last 12 months from the time of data collection was 16years . Females (33.8%) reported having life time suicidal thought more than males (17.8%). They also make more plan (22.8% vs 13.5%) and attempt (21.8% vs 10.5%) than males. When we see the last one year suicidal behaviour, the percentage of females who exhibited it was higher than that of males. On the contrary, the proportion of males who said they don't know if they ever experienced the suicidal behaviours or are not willing to tell out number females [table 3].

Table 2. Magnitude of Suicidal Behaviours in participants, Arada subcity, Addis Ababa, Ethiopia.

Suicidal behavior		**Number**	**Percent (%)**
Life time suicidal thought(n=598)	Yes	161	26.9%
	No	177	29.6%
	I don't know	248	41.5%
	Not willing to tell	12	2.0%
12 months suicidal thought(n=586)	Yes	79	13.5%
	No	213	36.3%
	I don't know	276	47.1%
	Not willing	18	3.1%
Life time Suicidal Plan(n=586)	Yes	110	18.8%
	No	200	34.1%
	I don't know	261	44.5%
	Not willing to tell	15	2.6%
12 months suicidal plan	Yes	50	8.7%
	No	239	41.8%
	I don't know	268	46.9%
	Not willing to tell	15	2.6%
Life time Suicidal Attempt (n=554)	Yes	94	17.0%
	No	310	56.0%
	I don't know	141	25.5%
	Not willing to tell	9	1.6%
Lifetime number of suicidal attempts (n=72)	Once	26	36.1%
	Twice	14	19.4%
	Three times or more	12	16.7%
	I don't know	12	16.7%
	Not willing to tell	8	11.1%
12 months Suicidal Attempt	Yes	39	7.2%
	No	246	45.1%
	I don't know	252	46.2%
	Not willing to tell	8	1.5%

Table 3. Suicidal behaviours segregation by gender among adolescent high school students, Arada Subcity, Addis Ababa

Variable		yes		no		I don't know		I am not willing to tell	
		No	**Percent (%)**	No	**Percent (%)**	No	**Percent (%)**	No	**Percent (%)**
Life time Suicidal thought	**Male**	46	17.8	85	32.9	121	**46.9**	6	**2.3**
	Female	115	33.8	92	27.1	127	37.4	6	1.8
Life time Suicidal plan	**Male**	34	13.5	88	34.9	122	**48.4**	8	**3.2**
	Female	76	22.8	112	33.5	139	41.6	7	2.1
Life time suicidal attempt	**Male**	25	10.5	145	61.2	63	**26.6**	4	**1.7**
	Female	69	21.8	165	52.1	78	24.6	5	1.6

Associated factors of Suicidal behaviours in participants.

Association between suicidal behaviour with different factors was checked by multivariable analysis. Binary logistic regression was employed and factors significantly associated with suicidal behavior were identified after control of confounding factors. If factors were found to have P-value below 0.25, entering them to the final model followed by multivariable analysis was performed. P-values lower than 0.05 was taken as an indication of significance of association.

1. Factors Associated with Lifetime Suicide Thought in participants.

Many factors were significantly associated with suicide thoughts. Older students (18-19 years) were found to have significantly higher odds of suicidal thoughts (AOR. =2.81) compared to their younger (14-15 years) counterparts. Gender also played a role, with females exhibiting significantly higher odds of suicidal thoughts (AOR. = 2.80) than males. Anxiety is another factor which showed an association with odds of having suicidal thoughts being higher in students experiencing anxiety (AOR. = 3.59). Social support acted as a protective factor as participants with strong social support showed was lower odds of experiencing suicidal thoughts. Other factors examined, including school absenteeism, family wealth, living arrangements, alcohol use, chronic medical illness, depression, and bullying victimization, showed crude

association with suicidal thought but when entered in to the final model , they did not show statistically significant associations [table 4].

Table 4. Results of Multivariable logistic regression analysis on suicidal thought in participants, Arada subcity, Addis Ababa, Ethiopia.

	COR (95% CI)	AOR (95% CI)	P-value
Age			
14-15years	1	1	
16-17	1.80(0.95,3.41)	1.73(0.68, 4.41)	0.25
18-19years	4.01(2.09, 7.69)	2.82(1.04, 7.59)	0.04
Gender			
Male	1	1	
Female	2.31(1.47, 3.63)	2.25(1.06, 4.77)	0.03
School Absenteeism			
3 or less days	1	1	
More than 3 days	1.55(0.93,2.58)	1.05(0.48, 2.29)	0.91
Family Relative wealth			
Below	1	1	
The same	0.29(0.11, 0.77)	2.10(0.49, 8.94)	0.32
Above	0.32(0.09, 1.14)	2.09(0.33, 13.34)	0.44
Living Arrangement			
Lives alone/ with others	1	1	
Lives with family	0.33(0.14, 0.78)	0.33(0.08, 1.37)	0.13
Alcohol			
No	1	1	
Yes	2.52(1.32, 4.81)	1.79(0.71, 4.51)	0.22
Chronic medical illness			
Yes	1	1	
No	0.31 (0.16, 0.61)	0.65(0.25, 1.85)	0.41
Social Support			
Poor	1	1	
Moderate	0.25(0.13, 0.46)	0.43(0.17, 1.06)	0.07
Strong	0.13(0.07, 0.24)	0.26(0.10, 0.64)	0.004
Depression			
No Depression	1	1	
Depression	6.93(4.20,11.43)	2.07(0.91, 4.74)	0.08
Anxiety			
No anxiety	1	1	
Anxiety	6.01(3.70, 9.75)	3.59(1.61, 7.99)	0.002
Bullying victimization			
No	1	1	
Yes	1.66 (1.00, 2.76)	1.08(0.49, 2.37)	0.86

2. Factors Associated with Lifetime Suicide Attempt in participants.

Four factors were significantly associated with suicidal attempt. Gender showed significant association as females had higher odds of attempting suicide than males (AOR = 2.80). Experiencing anxiety is another factor which showed significant association with suicidal attempt with those experiencing having 3.68times higger odds than those who doesn't experience anxiety (AOR = 3.68). The third factor was increased school absenteeism (AOR = 2.20). The last factor was family relative wealth being "Above" the neighbouring family (AOR = 11.77).

On the other hand, moderate to strong social support acted as protective of suicidal attempt. Having moderate support resulted in 0.35 times odds of attempting suicide compared to poor support (AOR = 0.35). Similarly, strong support demonstrated 0.27 times odds of a suicide attempt compared to poor support (AOR = 0.27). Age, alcohol use, chronic medical illness, depression, living arrangements, and bullying victimization did not show statistically significant associations in this model although they had crude association. See the below table for the details.

Table 5. Results of Multivariable logistic regression analysis on suicidal attempt in participants, Arada subcity, Addis Ababa, Ethiopia.

	COR (95% CI)	**AOR (95% CI)**	**P-value**
Age			
14-15years	1	1	
16-17	1.71 (0.80,3.70)	2.14(0.75, 6.13)	0.16
18-19years	2.48(1.18, 5.22)	1.58(0.57, 4.42)	0.38
Gender			
Male	1	1	
Female	2.43(1.46, 4.04)	2.80(1.26, 6.22)	0.011
School Absenteeism			
3 or less days	1	1	
More than 3 days	1.76 (1.05,2.95)	2.20(1.06, 4.58)	0.04
Family Relative wealth			
Below	1	1	
The same	0.75(0.34,1.69)	2.05(0.56, 7.46)	0.28

Above	1.64(0.51.5.27)	11.77(2.05, 67.67)	0.01
Living Arrangement			
Lives alone/ with others	1	1	
Lives with family	0.51(0.25,1.02)	0.69(0.25, 1.90)	0.47
Alcohol			
No	1	1	
Yes	2.07(1.13, 3.78)	1.46(0.63, 3.36)	0.38
Chronic medical illness			
Yes		1	
No	0.40(0.22,0.71)	0.71(0.30, 1.72)	0.45
Social Support			
Poor	1	1	
Moderate	0.41(0.23,0.72)	0.35(0.16, 0.76)	0.01
Strong	0.26(0.14,0.47)	0.27(0.11, 0.64)	0.003
Depression			
No Depression	1	1	
Depression	5.28(2.97,9.38)	1.53(0.63, 3.72)	0.35
Anxiety			
No anxiety	1	1	
Anxiety	6.74(3.80,11.93)	3.68(1.60, 8.47)	0.002
Bullying victimization			
No	1	1	
Yes	1.34(0.80,2.26)	0.98(0.47, 2.03)	0.96

DISCUSSION

The primary objective of the research was to assess prevalence of suicidal behaviors in adolescents attending high school education and its associated factors in Arada subcity of Addis Ababa, Ethiopia.

Life time suicidal thought, plan and attempt were 26.9%, 18.8% and 17.0% in sequence and the one year prevalence of were 14%, 8.7% and 7.2% in sequence. Females had higher percentage of suicidal behaviour than males. Around a third of those who had life time and 12 months history of suicidal attempt indicated that their initial attempt was a serious effort to end their lives. Several factors which have significant association with lifetime suicidal behaviours were identified in this study.

This study showed that 26.9% of high school adolescents had experienced life time suicidal thoughts, which is similar to a study in Vietnam (26.3%) (50). However, our rate is higher than those found in studies of high schoolers in Fitche (20.5%), Dangla (16.2%), and Woldia (16.29%) towns of Ethiopia (11, 14, 29). This difference might be because urban areas, like where our study was conducted, tend to have more stress from school, social expectations, and financial difficulties compared to smaller towns. Also, bigger cities can sometimes mean weaker social connections compared to the stronger community bonds found in smaller towns.

This study's prevalence of suicidal thoughts is also morethan finding of a nationwide health survey of students in Ghana (18.2%), a community study in Germany(10.7%) on adolescents and young people, and a global review indicating suicidal thought's and attempt's mean prevalence in young individuals at 14-23% (7, 24, 26). This can be as a result of variations in the study's context and the population examined. The Ghanan study was a nationwide survey however ours is focused on the one Subcity of a big city making the denominator for the two studies differ aftecting the prevalence rate. Additionally, national averages can mask significant regional variations and tressors. The German community study includes young adults in addition to adolescents while ours only included adolescents which might dilute the prevalence compared to a study focused solely on high school students. Also, Germany has a very different cultural and socioeconomic context than Ethiopia. Factors like access to and cultural attitudes towards mental health and its services and economic conditions could all contribute to the difference. On the other hand the meta-analyses give us average results across many different studies which uses

different methodologies and unlike our study which focuses only a small population of adolescents.

This study found the last 12 months prevalence of suicidal thought to be 14% in high school adolescents. This finding is below the prevalence of suicidal thoughts in adolescents (16.9%) reported from a study conducted in populations within countries with low and middle incomes (22). The 16.9% figure is an average of many countries and individual countries within that study likely have prevalence rates both higher and lower than our study. However, some countries within the 59-country study might have particularly high rates of suicidal ideation due to specific factors like conflict, poverty, or political instability.

Our study found study subjects' lifetime prevalence of suicidal plan as 18.8%. This prevalence is in the range of prevalence of 14-23% in youths which was found in a metanalysis done on the international prevalence of thoughts about suicide and conducting attempts (24). However, our rate exceeds that of study done in Germany which found a 5.0% prevalence of suicide planning in a community-based study (7), and lower than a nationwide health survey of Ghana students in senior high schools, which reported 22.5% prevalence (26). These discrepancy might occure as a result of difference in context and study population between theses studies and ours.

In our reasearch, participants' last one year prevalence of suicidal plan was 8.7%. This prevalence is below the 17.0% prevalence of suicide planning in adolescents in LMIC based on a population-based study across 59 countries (22). The 17.0% figure is an average of many countries and individual countries within that study likely have prevalence rates both higher and lower than our study. However, some countries within the 59-country study might have particularly high rates of suicidal ideation due to specific factors like conflict, poverty, or political instability similar to that for suicidal thought.

Our study found that 17.0% of participants reported attempting suicide in their lifetime. This aligns with prevalence of suicidal attempts in youths ((5-16%) which was found in a metanalysis done on the international prevalence of suicidal attempts (24), as well as a school-based study in Dangla town, which reported high school students suicidal attempt prevalence to be 16.2% (11). This rate exceeds rates documented in community-based studies in Germany (3.4%) (7) and Gondar, Ethiopia (5.5%) (10), as well as high school-based studies in other Ethiopian towns, including Woldia (12.87%) (29), Fiche (12.5%) (14) and Addis Ababa (14.3%) (13). However,

our finding is exceeded by the rates from high schools of Ghana (22.2%) (26). This migh be explained by even within Ethiopia, regional differences in socioeconomic status, cultural practices including stigma associated with suicidal behaviours, and availability of resources may exist resulting in local difference in suicidal behaviour magnitude. On the other hand Germany being a high-income country with a well-developed healthcare system and social safety net which likely contributes to suicide attempts' lesser prevalence when contrasted with countries with lower income such as Ethiopia. The community-based design also likely captures a broader, less at-risk population compared to the school-based studies.

This study found 12 month's suicide attempt prevalence rate to be 7.2%. This is below the prevalence of a study involving 59 countries with low and middle income (22). This might happen because the methodological studies between the two studies and also some individual countries within that larger study likely had higher or lower rates than observed in our study because of different regionally found problems affecting the adolescent population.

The average age at which participants in our study first experienced suicidal behaviors (thoughts, plans, or attempts) was 14 years. This is similar with school based reasarch in Harari region of Eastern Ethiopia which found that suicidal ideation began around the age of 14 (54).

Our study revealed that suicide was attempted three or more times in 16.7% of adolescents with last 12 months suicide attempt history, highlighting the severity and ongoing nature of suicidal behavior in this group. This substantial percentage indicates that many adolescents are not simply experimenting but are repeatedly attempting suicide, significantly increasing their risk of death. The fact that 34.1% believed their initial attempt was nearly fatal emphasizes the serious nature of these actions from the start, challenging the idea that first attempts are mere gestures and underscoring their potential lethality. The high rate of repeat attempts (16.7%) also suggests a critical gap in effective intervention following the initial attempt, implying that the root causes of suicidal behavior are not being adequately addressed.

Life time and 12months prevalence of suicidal behaviours found to show difference with regards to gender, with females reporting higher lifetime and 12-month rates than males. This may be attributed to specific stressors faced by females, such as challenges in interpersonal relationships, societal pressures, and victimization, which could lead to increased suicidal ideation. Females may also be more willing to express emotions and discuss mental health issues, contributing to

higher reported rates of suicidal behaviors.In contrast, males might experience societal pressure to present a strong image resulting in underreporting of suicidal behaviours. Cultural norms related to gender roles may further influence how individuals perceive and report their experiences with suicidal thoughts.

Additionally, a lot study participants in this study reported being uncertain about whether they had experienced suicidal behaviors in their lifetime or not. Notably, more males expressed uncertainty or were unwilling to disclose their experiences compared to females. This reluctance may reflect the stigma surrounding mental health issues. A systematic review indicates that adolescents often hesitate to discuss their mental health due to fear of judgment or misunderstanding, which can worsen their emotional distress. (51).

Suicidal behaviours' associated factors.

Lifetime suicidal behaviours were found to have significant association with several factors. Age showed association with suicidal thought and older adolescents were found to have increased odds of experiencing it than younger ones. This might be due to the fact that when they get older responsibilities of taking care of their matter shifts towards them from care givers more than the younger ones and also the older they are might tend to solve any problems they face than trying to ask for help. These factors creats more stress on them and frustrates them leading to thinking suicide as an escape mechanism.

Gender showed association considered to be significant with thought of commiting suicide with females exhibiting 2.8 times higher odds than than males. This is consistent with different studies done in community and high school based studies done in Ethiopia (10, 11, 14) and in a study done in Nigeria. The female preponderance might be explained by the chance that females being more engaged in housechores on top of their academic responsibility than males affecting the time they have to allocate for academic activites. This in turn might affect their acedmic performance and disappoints and stresses them more. It migh also be related to gender related psychopathology like females are known to have high prevalence of depression than males. On the other hand males might referain reporting about their suicidal behaviours thinking that having it is a sign of weakness and inability to solve their problems as males are precieved to be stronger in most societies.

Anxiety is another factor which showed a significant association with suicidal thought. It increases odds of experiencing suicidal thought. This was also seen in study done in Nigeria (27). This might be occur as a person with anxiety symptoms often have lower capacity tolerating day to day life stressors as they exaggerate the consequences of the problems they faced. Additionally, there is also high chance of having comorbid mental health problems like depression increasing their chance of considering suicidal behaviours as a relief from their problems tha suffering more.

In contrast, strong social connections appear to act as a buffer, significantly reducing the likelihood of suicidal thoughts. This aligns with research from community and school based studies (10, 11, 14, 53). This protective effect may stem from the sense of belonging, care, and mutual responsibility that social support provides, potentially lessening the risk of suicidal ideation especially in Ethiopia where people tend to do things together and share their burden and look for a solution together than struggling alone. Additionally, social support can equip individuals with better coping mechanisms for stress and mental health challenges.

Other factors examined, including school absenteeism, family wealth, living arrangements, alcohol use, chronic medical illness, depression, and bullying victimization, showed crude association with suicidal thought but when entered in to the final model , they did not show statistically significant associations.

In this study, being female and experiencing anxiety were found to increase the odds of of engaging in suicidal attempts. The increased odds of suicidal attempt can be due to have similar reasons explained for suicidal thought. Sucidal behaviours lie along a spectrum from suicidal though to commitiing suicide (2) and if not peaked timely and aborted it will progress along the spectrum. So, as being female and having anxiety increases the odds of having suicidal though, if they don’t get help there is a high probability to progress to suicidal attempt then those who don’t have the thought.

Our study result also demonstrated as suicidal attempt had significant association with increased school absenteeism. Study participants with school abscentism of more than three days in the last month had 2.2time odds of suicidal attempt than those with three or less days of school absenteeism. This is in line with other studies which have shown that students who frequently miss school have more risk of developing mental health problems increasing their chance of

experiencing suicidal behaviors (52). Increased school absenteeism increasing the odds of suicidal attempt might be explained by absenteeism can lead to falling behind in school, resulting in academic stress, feelings of inadequacy, and a sense of hopelessness leading to mental health problems and hence suicidal attempts. Additionally missing school can disrupt social connections with peers, leading to feelings of loneliness, isolation, and rejection. On the other hand absenteeism can result from family problems such as economic problem, problems students face at school like bullying or they might have underlying psychiatric problems like depression increasing their chance of making attempts to end their life.

Poor social support showed significant association with suicidal attempt. Social support provides a sense of being loved and cared for and lack of it make adolescents feel isolated and lonely, leading to feelings of worthlessness and hopelessness. Lack of it also reduces their copying mechanisms as social support networks often help individuals cope with stress and difficult life events. Ultimately suicidal attempt might be perceived as an easy way out.

Having family relative wealth being "Above" the neighbouring families was found to increase the odds of attempting suicide in study participants. The possible explanation colud be adolescents from wealthier families may face increased pressure to succeed academically and professionally leading to stress, anxiety, and a fear of failure or may predispose adolescents for lack motivation to work hard or pursue their goals, knowing that they have a financial safety net leading to a lack of purpose and fulfillment. Additionally, adolescents from wealthier families may feel isolated or alienated from their peers who come from less affluent backgrounds as they might not be allowed by their parents to mix and socialize with these students affecting their social network.

In this study, depression did not show statistically significant associations, which differs from findings in previous research. This difference may arise from the use of various assessment methods for depression and suicidal behavior, such as self-report measures, clinical interviews, and diagnostic criteria, all of which can affect the results. Additionally, adolescence is characterized by heightened impulsivity and mood swings, leading individuals to engage in suicidal behaviors even in the absence of depression. Moreover, stigma related to mental health issues may cause some students to underreport their depressive symptoms, resulting in depression showing no association association with suicidal behaviors in our study.

STRENGTHS AND LIMITATIONS

To conduct our study probability sampling method was used except when selecting the study setup and most of the tools used in this study are tools adapted for our for Ethiopian setup which are the strengths of our study. On the other hand there are limitations in our study as most of the adaptaion for tools we used were done for the adult population but not for the adolescent population in Ethiopian. Additionally, study participants filled the questionnaire by themselves which might compromises quality of the collected data and also relies on self-reporting by the study participants again subjecting the information collected to recall bias and social desirability bias.

CONCLUSIONS

The prevalence of suicidal behaviours is high among adolescents in high school in Arada subcity of Addis Ababa and is significant public health concerns. Being female, having anxiety, school absenteeism as well as poor social support increased odds of experiencing suicidal behaviours in high school adolescents in this study. Finding out burden of suicidal behaviours as well as conditions associated with them is very important to develop effective strategies for health promotion and illness prevention or intervention activities concerning mental health realted phenomenon. Future research should focus on identifying specific interventions designed to meet needs of different adolescent populations and evaluation of effectiveness of them in reducing suicidal behavior. The results of our study can be an impotrtant addition to what is known so far about adolescent suicidal behaviours. The finding underscore the urgency of availing mental health related services in schools at the soonest possible time, aiming to reduce stigma and encourage open dialogue about mental health issues among adolescents.

RECOMMENDATION

School-based programs to increase awareness on suicide, suicidal behaviours and factors associated with suicidal behaviours can have the potential of improving the health seaking behaviours for those who faces the problem and reducing stigma associated with health seaking behaviours for adolescents in Arada subcity of Addis Ababa.

Providing trainings for teachers and parents to recognize the signs of adolescent suicidal behavior to link them to mental health services timely and designing strategies to minimize school absenteeism and improving social support of adolescent students can help in reducing suicidal behaviour in adolescent high school students. Improving the general mental health wellbeing of adolescent students by implementing regular mental health well being and mental illness awareness creation programs on including illness preventive and health promotion strategies for adolescent students, teachers and families of students is also very important.

Additionally, it is important to work with health sector closely to devise a mechanism to make arrangements for linkage or referral of students to health facilities timely for those who need the service and also to arrange out reach services by health facilities in schools to do mental health promotion and mental illness disease prevention campaigns.

Finally, I recommend to other reaserchers to conduct studies in high schools at larger scale follow-up studies and see the magnitude of the problem and also to conduct qualitative studies to do indepth exploration of the reason why adolescents engage in suicidal behaviours.

REFERENCES

1. Sadock BJ. Kaplan & Sadock's synopsis of psychiatry: behavioral sciences/clinical psychiatry: Wolters Kluwer Philadelphia, PA; 2015.

2. Scocco P, de Girolamo G, Vilagut G, Alonso J. Prevalence of suicide ideation, plans, and attempts and related risk factors in Italy:: results from the European Study on the Epidemiology of Mental Disorders-World Mental Health study. Comprehensive psychiatry. 2008;49(1):13-21.

3. Organization WH. Suicide in the world: global health estimates. World Health Organization, 2019.

4. Glenn CR, Kleiman EM, Kellerman J, Pollak O, Cha CB, Esposito EC, et al. Annual Research Review: A meta-analytic review of worldwide suicide rates in adolescents. Journal of child psychology and psychiatry. 2020;61(3):294-308.

5. Teti GL, Rebok F, Rojas SM, Grendas L, Daray FM. Systematic review of risk factors for suicide and suicide attempt among psychiatric patients in Latin America and Caribbean. Revista Panamericana de Salud Pública. 2014;36(2):124-33.

6. Quarshie EN-B, Andoh-Arthur J. Suicide attempts among 1,437 adolescents aged 12–17 years attending junior high schools in Ghana. Crisis. 2020.

7. Voss C, Ollmann TM, Miché M, Venz J, Hoyer J, Pieper L, et al. Prevalence, onset, and course of suicidal behavior among adolescents and young adults in Germany. JAMA network open. 2019;2(10):e1914386-e.

8. Kassaw C, Alemayehu S. The Trends of Suicidality Over the Past 10 Years (1999–2022) in the Ethiopian General Population and the Way Forward in Tackling It. Psychology research and behavior management. 2023:3231-6.

9. Bifftu BB, Dachew BA, Tiruneh BT, Guracho YD. Prevalence of suicidal ideation, suicidal attempt and completed suicide in Ethiopia: a systematic review and meta-analysis protocol. Systematic Reviews. 2019;8:1-5.

10. Geremew AB, Gelagay AA, Yeshitila HY, Azale T, Habitu YA, Abebe SM, et al. Suicide attempt and its determinants among youth in central, north, and west Gondar zones, northwest Ethiopia: findings from the youth health project. Frontiers in psychiatry. 2023;13:1031402.

11. Amare T, Meseret Woldeyhannes S, Haile K, Yeneabat T. Prevalence and associated factors of suicide ideation and attempt among adolescent high school students in Dangila Town, Northwest Ethiopia. Psychiatry journal. 2018;2018.

12. Abdu Z, Hajure M, Desalegn D. Suicidal behavior and associated factors among students in Mettu University, South West Ethiopia, 2019: An institutional based cross-sectional study. Psychology research and behavior management. 2020:233-43.

13. Kebede D, Ketsela T. Suicide attempts in Ethiopian adolescents in Addis Abeba high schools. Ethiopian Medical Journal. 1993;31(2):83-90.

14. Giru BW. Prevalence and associated factors of suicidal ideation and attempt among high school adolescent students in Fitche Town, north Shoa, Oromia region, Ethiopia, 2012: Institutional based cross sectional study. Journal of Health, Medicine and Nursing. 2016;23.

15. Ethiopian Public Health Institute - EPHI, Federal Ministry of Health - FMoH, ICF. Ethiopia Mini Demographic and Health Survey 2019. Addis Ababa, Ethiopia: EPHI/FMoH/ICF, 2021.

16. Klonsky ED, May AM, Saffer BY. Suicide, suicide attempts, and suicidal ideation. Annual review of clinical psychology. 2016;12:307-30.

17. Shneidman ES. Suicide as psychache: A clinical approach to self-destructive behavior: Jason Aronson; 1993.

18. Baumeister RF. Suicide as escape from self. Psychological review. 1990;97(1):90.

19. Van Orden KA, Witte TK, Cukrowicz KC, Braithwaite SR, Selby EA, Joiner Jr TE. The interpersonal theory of suicide. Psychological review. 2010;117(2):575.

20. Miller AB, Prinstein MJ. Adolescent suicide as a failure of acute stress-response systems. Annual review of clinical psychology. 2019;15:425-50.

21. Nock MK, Borges G, Bromet EJ, Cha CB, Kessler RC, Lee S. Suicide and suicidal behavior. Epidemiologic reviews. 2008;30(1):133.

22. Uddin R, Burton NW, Maple M, Khan SR, Khan A. Suicidal ideation, suicide planning, and suicide attempts among adolescents in 59 low-income and middle-income countries: a population-based study. The Lancet Child & Adolescent Health. 2019;3(4):223-33.

23. Lovero KL, Dos Santos PF, Come AX, Wainberg ML, Oquendo MA. Suicide in global mental health. Current psychiatry reports. 2023:1-8.

24. Van Meter AR, Knowles EA, Mintz EH. Systematic review and meta-analysis: international prevalence of suicidal ideation and attempt in youth. Journal of the American Academy of Child & Adolescent Psychiatry. 2023;62(9):973-86.

25. Campisi SC, Carducci B, Akseer N, Zasowski C, Szatmari P, Bhutta ZA. Suicidal behaviours among adolescents from 90 countries: a pooled analysis of the global school-based student health survey. BMC public health. 2020;20(1):1-11.

26. Asante KO, Kugbey N, Osafo J, Quarshie EN-B, Sarfo JO. The prevalence and correlates of suicidal behaviours (ideation, plan and attempt) among adolescents in senior high schools in Ghana. SSM-population health. 2017;3:427-34.

27. Adewuya AO, Oladipo EO. Prevalence and associated factors for suicidal behaviours (ideation, planning, and attempt) among high school adolescents in Lagos, Nigeria. European child & adolescent psychiatry. 2020;29(11):1503-12.

28. Bifftu BB, Tiruneh BT, Dachew BA, Guracho YD. Prevalence of suicidal ideation and attempted suicide in the general population of Ethiopia: a systematic review and meta-analysis. International journal of mental health systems. 2021;15(1):1-12.

29. Kassa MA, Srahbzu M, Nenko G, Nakie G, Mekuria K, Feleke SF, et al. Suicidal ideation and attempts among high school students of war-affected area at Woldia town, Northeast, Ethiopia, 2022. BMC psychiatry. 2023;23(1):1-12.

30. Organization WH. Public health action for the prevention of suicide: a framework. 2012.

31. Organization WH. Live life: preventing suicide. World Health Organization, 2018.

32. Yoshimasu K, Kiyohara C, Miyashita K, Hygiene SRGotJSf. Suicidal risk factors and completed suicide: meta-analyses based on psychological autopsy studies. Environmental health and preventive medicine. 2008;13:243-56.

33. McLean J, Maxwell M, Platt S, Harris FM, Jepson R. Risk and protective factors for suicide and suicidal behaviour: A literature review: Scottish Government; 2008.

34. Ayele BY, Megento TL, Habetemariam KY. Assessing green infrastructure spatial plans in Addis Ababa, Ethiopia. Socio-Ecological Practice Research. 2022;4(2):85-101.

35. Goda E, Boshera T, Aredo M. Examining the Effect of Urban Household Food Insecurity on Fertility in Lideta Sub-City, Addis Ababa, Ethiopia: A Cross-Sectional Study. Int J Womens Health Wellness. 2023;9(157):2474-1353.

36. Abiola T, Udofia O, Zakari M. Psychometric properties of the 3-item oslo social support scale among clinical students of Bayero University Kano, Nigeria. Malaysian Journal of Psychiatry. 2013;22(2):32-41.

37. Kocalevent R-D, Berg L, Beutel ME, Hinz A, Zenger M, Härter M, et al. Social support in the general population: standardization of the Oslo social support scale (OSSS-3). BMC psychology. 2018;6(1):1-8.

38. Zuckerbrot RA, Cheung A, Jensen PS, Stein RE, Laraque D, Levitt A, et al. Guidelines for adolescent depression in primary care (GLAD-PC): Part I. Practice preparation, identification, assessment, and initial management. Pediatrics. 2018;141(3).

39. Richardson LP, McCauley E, Grossman DC, McCarty CA, Richards J, Russo JE, et al. Evaluation of the Patient Health Questionnaire-9 Item for detecting major depression among adolescents. Pediatrics. 2010;126(6):1117-23.

40. Nandakumar AL, Vande Voort JL, Nakonezny PA, Orth SS, Romanowicz M, Sonmez AI, et al. Psychometric properties of the patient health questionnaire-9 modified for major depressive disorder in adolescents. Journal of child and adolescent psychopharmacology. 2019;29(1):34-40.

41. Adjorlolo S. Generalised anxiety disorder in adolescents in Ghana: Examination of the psychometric properties of the Generalised Anxiety Disorder-7 scale. African Journal of Psychological Assessment. 2019;1(1).

42. Hagborg JM, Kalin T, Gerdner A. The Childhood Trauma Questionnaire—Short Form (CTQ-SF) used with adolescents–methodological report from clinical and community samples. Journal of Child & Adolescent Trauma. 2022;15(4):1199-213.

43. Tarafa H, Alemayehu Y, Bete T, Tarecha D. Bullying victimization and its associated factors among adolescents in Illu Abba Bor Zone, Southwest Ethiopia: a cross-sectional study. BMC psychology. 2022;10(1):260.

44. Humeniuk R, Henry-Edwards S, Ali R, Poznyak V, Monteiro MG, Organization WH. The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST): manual for use in primary care. 2010.

45. Molla A, Mengesha A, Derajew H, Kerebih H. Suicidal ideation, attempt, and associated factors among patients with tuberculosis in Ethiopia: a cross-sectional study. Psychiatry journal. 2019;2019.

46. Rashid E, Kebede D, Alem A. Evaluation of an Amharic version of the composite international diagnostic interview (CIDI) in Ethiopia. Ethiopian journal of health development. 1996;10(2).

47. Singh JA, Siddiqi M, Parameshwar P, Chandra-Mouli V. World Health Organization guidance on ethical considerations in planning and reviewing research studies on sexual and reproductive health in adolescents. Journal of Adolescent Health. 2019;64(4):427-9.

48. Spitzer RL, Kroenke K, Williams JB, Löwe B. A brief measure for assessing generalized anxiety disorder: the GAD-7. Archives of internal medicine. 2006;166(10):1092-7.

49. Silverman MM, Berman AL, Sanddal ND, O'carroll PW, Joiner Jr TE. Rebuilding the tower of Babel: a revised nomenclature for the study of suicide and suicidal behaviors. Part 2: Suicide-related ideations, communications, and behaviors. Suicide and Life-Threatening Behavior. 2007;37(3):264-77.

50. Nguyen DT, Dedding C, Pham TT, Wright P, Bunders J. Depression, anxiety, and suicidal ideation among Vietnamese secondary school students and proposed solutions: a cross-sectional study. BMC public health. 2013 Dec;13:1-0.

51. Duffy, M., O'Connor, R. C., & McGilloway, S. (2019). Stigma and help-seeking for mental health issues in adolescents: A systematic review. Journal of Adolescence, 72, 163-174.)

52. Mental Health, Suicidality, and Connectedness Among High School Students During the COVID-19 Pandemic - Adolescent Behaviors and Experiences Survey, United States, January-June 2021 | MMWR

53. Aboagye RG, Ahinkorah BO, Seidu AA, Okyere J, Frimpong JB, Kumar M. In-school adolescents' loneliness, social support, and suicidal ideation in sub-Saharan Africa: Leveraging

Global School Health data to advance mental health focus in the region. PloS one. 2022 Nov 9;17(11):e0275660.

54. Towfik Z, Dingeta T, Dheresa M. *Suicidal Behavior and Associated Factors among High School Adolescents in Harari Region, Eastern Ethiopia* (Doctoral dissertation, Haramaya University).

APPENDIXES

Appendix I. Participant Information Sheet and Informed consent form in English

Participant Information Sheet

1. **Information form for study subjects**

Department REC Reference Number:

You will receive a copy of the information form.

Title of study: Magnitude and factors associated with suicidal beahviors among highschool adolesents**.**

Principal Investigator: Dr Dureti Kassim

Supervisor: Dr Fikirte Girma and Dr Awoke Mihretu

Coordinating office: Addis Ababa University, Schools of Medicine, Department of Psychiatry

We invite you to take part in this study. Participation is entirely voluntary; opting out will not affect you in any way. Before making your decision, it's essential to understand the purpose of the research and what your involvement entails. Please read the following information thoroughly and feel free to discuss it with others. If you have any questions or need more details, don't hesitate to ask us.

Addis Ababa University is conducting this study.

Goals of this study

Suicide and suicidal behaviours are a public health problem globally and near three fourth of suicides deaths take place in low- and middle income countries including our nation. It affects all age groups and adolescents are among thehighly affects segments of the population. There are multiple identifiable risk factors associated with it which can serve as warning signs. However, data is lacking about the problem in the nations where the majority of suicide occurs. This study is designed to produce evidence locally concerning the magnitude of suicidal behaviours in high school adolescents and factors contributing for it to devise appropriate preventive strategies.

Who are we recruiting?

We are recruiting highschool adolescent students, care givers of highschool adolescent students and school counselors to participate in our reaseach.

What will occur if you consent to take part?

The data collection will be conducted through interviewer administered questionnair and if we get your consent to participate, we will ask you to give your answer to each variable on our questionnair. Answering the questions will take about 40-50 minutes.

Risks due to participating in the reasearch

No significant risks are anticipated but you could feel distressed with some of the questions which might remind you experiences you might not want to remember. Additionally, you will spend some of your time which you might use for other personal issues.

Potential advantages

We aim for the information gathered to enhance mental health services in our nation and similar nations. When the study is finished, we will share our findings to you with any possible means such as arranging a meeting, handing you a pamphlet or sharing publicly in the district.

Privacy and Confidentiality

The study records will be maintained confidentialy. Your name is not going to be used during data collection process and instead code will be used. But there will be a record of your Consent Information Sheet matching with your interview questionnaire code which will be kept with the PI to help the investigator trace you if there comes a situation in which your health condition necessitates urgent medical intervention. All collected data will be stored in confidential conditions and no personal identifier will be used in any result dessimination forums including publications.

Voluntary Participation:

If you volunteer to take part in the research, we will make you sign consent document to be provided to you next.

What we will do with your data

We will present the result of our research to schools which participated in the research and different organizations that facilitate the study. It will also be presented in scientific conferences and published in a scientific journal.

Concerns or Questions

You are entitled to inquire about the study and receive responses from the principal investigator Dr Dureti Kassim before, during or after the research.

Main researchers:

Dr Dureti Kassim. You can contact me at Black lion Hospital on phone number ********,on weekdays within business hours.

The choice to participate is yours. You can stop your participation at any moment without needing to provide justification evenif you consented to participate initially.

If you have experienced any harm from this reasearch, you can reach out to the Department of Psychiatry at the College of Health Sciences, Addis Ababa University, using the contact information provided below.

- Department of Psychiatry, School of health sciences, Addis Ababa University

  Contact Number:

- You can remove your data from the project at any point before it is transcribed for the final report.
- In case you choose to participate, we will give you this information templet to keep and a consent to sign.

2. Participant Information Sheet for caregivers of students recruited to participate in a study

Department REC Reference Number:

You will receive a copy of this information templet.

Title of the project: Magnitude and factors of suicidal beahviors in highschool adolesents.

Principal Investigator: Dr Dureti kassim

Supervisor: Dr Fikirte Girma and Dr Awoke Mihretu

Coordinating office: Addis Ababa University, Schools of health sciences, Department of Psychiatry

The principal investigator would love to invite your child to take part in this original study. He/she will be involved in the study only if you wish; opting out doesn't cause him/her any harm. Prior to deciding to let him/her to be involved, it is essential for you to know the purpose of this study with what his/her involvement will include. it is advised if you take a moment to read the information provided thoroughly and you can talk about it with others if you want. If you have any questions or need further clarification, don't hesitate to reach out to us.

Addis Ababa University is conducting this study.

Goals of this study

Suicide and suicidal behaviours are a public health problem globally and near three fourth of suicides deaths take place in low- and middle income countries including our nation. It affects all age groups and adolescents are among thehighly affects segments of the population. There are multiple identifiable risk factors associated with it which can serve as warning signs. However, data is lacking about the problem in the nations where the majority of suicide occurs. This study is designed to produce evidence locally concerning the magnitude of suicidal behaviours in high school adolescents and factors contributing for it to devise appropriate preventive strategies.

Who are we recruiting?

We are recruiting highschool adolescent students, care givers of highschool adolescent students and school counselors to participate in this study.

What will happen if you consent for your child to be part of the study?

The data collection will be conducted through interviewer administered questionnair and if we get your consent for your son/daughter to participate, we will ask your son/daughter to give his/her answer to each variable on our questionnair.. Answering the questions asked on the questionnair will take about 40-50 minutes.

Risks due to participating in the reasearch

No significant risks are anticipated but your son/daughter could feel distressed with some of the questions which might remind him/her experiences he/she might not want to remember. Additionally, he/she will spend some of his/her time which he/she might use for other personal issues.

Potential advantages

We aim for the information gathered to enhance mental health services in our nation and similar nations. When the study is finished, we will share our findings to you with any possible means such as arranging a meeting, handing you a pamphlet or sharing publicly in the district.

Privacy and Confidentiality

The study records will be maintained confidentialy. Your son's/daughter's name is not going to be used during data collection process and instead code will be used. But there will be a record of your son's/daughter's Consent Information Sheet matching with your interview questionnaire code which will be kept with the PI to help the investigator trace him/her if there comes a situation in which his/her health condition necessitates urgent medical intervention. All collected data will be stored in confidential conditions and no personal identifier will be used in any result dessimination forums including publications.

Voluntary Participation:

If you volunteer to take part for your son/daughter in the research, we will make you sign consent document to be provided to you next.

What we will do with data collected from your son/daughter

We will present the result of our research to schools which participated in the research and different organizations that facilitate the study. It will also be presented in scientific conferences and published in a scientific journal.

Questions and Concerns

You are entitled to inquire about the study and receive responses from the principal investigator Dr Dureti Kassim before, during or after the research.

Main researchers:

Dr Dureti Kassim. You can contact me at Black lion Hospital on phone number *********, on weekdays within business hours.

The choice to have your son/daughter participate is yours. You can make your son/daughter to stop your participation at any moment without needing to provide justification even if you consented initially.

If your son/daughter has experienced any harm from this reasearch, you can reach out to the Department of Psychiatry at the College of Health Sciences, Addis Ababa University, using the contact information provided below.

- Department of Psychiatry, School of health sciences, Addis Ababa University

  Contact Number:

- You can remove your son's/daughter's data from the project at any point before it is transcribed for the final report.
- In case you choose for your son/daughter to participate, we will give you this information templet to keep and consent to sign.

B) Informed consent document

Kindly fill out this consent form once you have reviewed and/or heard about informations on the Information templet.

Title of study: Magnitude and factors associated with of suicidal beahviors in highschool adolesents**.**

REC Ref number:

Thanks a lot for your consideration to be part of this study. The researcher is obliged to provide you with explanation of the study prior to getting your consent to participate. Please make sure addressing any queries you have regarding the information you gathered from the Information Sheet or the provided explanations with the researcher prior to making a decision to participate. We will provide you with a copy of this consent document to retain to refer to whenever needed.

- I recognize that this project is part of a postgraduate degree and fulfills part of the requirements for a subspecialty certificate in child and adolescent psychiatry.
- It was made clear for me if I want for myself or for my child to stop taking part in this project anymore, I can inform the researchers and exit the study the moment I decided to do so without providing a reason. Additionally, I understood as I can takeout my data or my son's/daughter's data until it is published.
- I consent to the processing of my personal or my son's/daughter's information as outlined to me. It is clear for me as such data will bemanaged according to the nation's data protection regulations.
- If I or my child is chosen for a more detailed interview, I consent to the interview being audio recorded.
- The report format of the information you provided will be published. Be assured that confidentiality and anonymity will be preservedensuring that you can't be identifies in any published materials.
- I give my consent to the researchers to use the anonymized data in the future for researches.

Participant of the study's Aggreement

I _____acknowledge as I have got enough explanation about the study and I consent to participate in it. I have read about the study from the notes provided above and the Information document and got good understanding about what the study involves.

Signature_____ Date_____ Tel.Number_____

Name of primary care giver_____ Tel. Number_____

Testimony of a witness for a participant who is not literate:

I _____acknowledge as _____ have got enough explanation about the study and he/she consent to participate in it. The reasearchers have read for him/her about the study from the notes provided above and the Information document and he/she has got good understanding about what the study involves.

Signature_____ Date_____ Tel.Number_____

Name of primary care giver_____ Tel. Number_____

Participant's care giver Statement

I _____care giver of student _____ acknowledge as I have got enough explanation about the study and I consent forhim/her to participate in it. I have read about the study from the notes provided above and the Information document and got good understanding about what the study involves.

Signature_____ Date_____ Tel.Number_____

Investigator's Statement:

I, Dr Dureti kassim, affirm that I have fully outlined the nature, requirements and any possible risks (if relevant) of the proposed study to the study subject.

Signature _____ Date_____

Appendix II. Participant Information Sheet and Informed consent form, Amharic version

ሀ) የተሳታፊዎች የመረጃ ቅጽ

የትምህርት ክፍሉ REC Reference Number:

የዚህ የመረጃ ቅፅ አንድ ኮፒ ይሰጥሀል/ይሰጥሻል

የፕሮጀክቱ ርእስ: በሁለተኛ ደረጃ ትምህርትቤት ያሉ ተማሪዎች እራስን የማጥፋት ባህሪያት መጠን እና ከእሱጋር ቁርኝት ስላላቸው ነገሮች

ዋናተመራማሪ: _ዶ/ር ዱሬቲ ቃሲም(ሳይካትሪስት)

ሱፐርቫይዘር: ዶ/ር ፍቅርተ ግርማ እና ዶ/ር አወቀ ምህረቱ

ማስተባበሪያ ቢሮ: አዲስ አበባ ዩኒቨርሲቲ፤ የሕክምና ትምህርት ቤት፤ የሥነ አእምሮ ትምህርት ክፍል

በዚህ የምርምር ፕሮጀክት ላይ እንድትፈል/እንድትካፈዱ ልንጋብዝህ/ሽ እንፈልጋለን። መሳተፍ ያለብህ/ሽ ፍቃደኛ ከሆንክ/ሽ ብቻ ነው፡፡በዚህ ጥናት ላለመካፈል መምረጥህ/ሽ በምንም መንገድ የሚደርስብህ/ሽ ጉዳት የለም። በዚህ ምርምር ለመካፈል ከመወሰንህ/ሽ በፊት ምርምሩ ለምን እየተደረገ እንደሆነና ተሳትፎ ማድረግ ምን ነገሮችን እንደሚያካትት መረዳት አስፈላጊ ነው። እባክህ/ሽ ጊዜ ወስደህ/ሽ የሚከተሉትን መረጃዎች በጥንቃቄ አንብብ/ቢ፤ ከፈለግክ/ሽ ከሌሎች ጋር ልትወያይበት ትችላለህ/ሽ። ግልጽ ያልሆነ ጉዳይ ካለ ወይም መረጃ እንዲጨመርለት ካስፈለጎት እኛን መጠየቅ ይችላሉ፡፡

ጥናቱ የሚካሄደዉ በአዲስአበባ ዩኒቨርስቲ ነው።

የጥናቱ ዓላማ

እራስን ምጥፋት እና እራስን የማጥፋት ባህሪያት አለም አቀፍ የማህበረሰብ የጤና ችግር ናቸው፡፡ በአለም ላይ ከሚከሰቱት እራስን ማጥፋቶች 77% የሚሆኑት አነስተኛ ነደ መካከለኛ ገቢ ባላቸው ሀገራት ውስጥ ነው የሚከሰተው፡፡እራስን እራስን የማጥፋት ችግር በሁሉም የእድሜ ደረጃ ያሉ ሰዎችን የሚያጠቃ ሲሆነ በጉርምስና እድሜ ላይ ያሉ ሰዎችን ግን የበለጠ የተጠቁ የማህበረሰቡ ክፍል ናቸው፡፡ ለዚህ ችግር እንደ ማስጠንቀቂያ ሊያገለግሉ የሚችሉ ብዙ አጋላጭ ነገሮች፡፡ ይሁን እንጂ አብዛኛው እራስን ማጥፋት በሚከሰትባቸው ሀገራት በችግሩ ዙሪያ የመረጃ እጥረት አለ፡፡ ይህ ጥናት የተዘጋጀው በ2ኛ ደረጃ ትምህርት ቤት የሚማሩ በጉርምስና እድሜ ያሉ ተማሪዎች ስለ እራስን የማጥፋት ባህሪያት ችግር መጠንና ከእሱ ጋር ተያያዥነት ያላቸው ነገሮች አከባቢያዊ መረጃ ለመፍጠር እና ይህንን መረጃ፡፡በተጨማሪም ይህ መረጃ ችግሩን ለመከላከያ ተገቢ የሆኑ ዘዴዎችን ለመቀየስ እነዲጠቅም ታስቦ ነው፡፡

ለጥናቱ የምንመለምለው ማንን ነው?

ከ9ኛ እስከ 12ኛ ክፍል የሚገኙ የሁለተኛ ደረጃ ትምህርት ቤት ተማሪዎች ይመልማሉ

በዚህ ጉዳይ ለመካፈል ከተስማሙ ምን ይሆናሉ?

ይህ ጥናት መጠይቆችን በማስሞላት ይሰራል፡ እርስዎም በጥናቱ ለመሳተፍ ፍቃደኛ ከሆኑ መጠይቆቹን በራሶት ይሞላሉ፡ ጥያቄዎቹን ለመመለስ በአማካይ 30-40 ደቂቃ ይፈጃል

በጥናቱ በመሳተፎ ምክንያት የሚመጡ ጉዳቶች፡-በዚህ ጥናት ከመሳተፍ ጋር ተያይዘው የሚመጡ የጎሉ ጉዳቶች የሉም።ነገረ ግን ለጥያቄዎቹ መልስ ሲሰጡ ምናልባት አንዳንድ ጥያቄዎች በህይወትዎ ውስጥ ያጋጠምዎትን ጥሩ ያልሆኑ አጋጣሚዎች እና

ሊያስታውሱዋቸው የማይፈልጉዋቸውን ትዝታዎች ሊቀሰቅሱ ይችላሉ። በተጨማሪም ለሌላ ጉዳይ ሊያውሉት ከሚችሉትን ሰአት በጥናቱ ላይ ይውላል።

በጥናቱ ሊገኙ የሚችሉ ጥቅሞች፡ የተገኘው መረጃ በኢትዮጵያም ሆነ በሌሎች ተመሳሳይ ሀገራት የአዕምሮ ጤና አገልግሎትን ለማሻሻል እንደሚረዳ ተስፋ እናደርጋለን። አጠቃላይ ጥናቱ ከተጠናቀቀ በኋላ ያገኘነውን ውጤት ስብሰባ ላይ እንድትገኙ በመጋበዝ፣ በራሪ ወረቀቶችን በመስጠት አሊያም በትምህርት ቤቱ ውስጥ ያገኘነውን ውጤት በአካባቢው ውስጥ ላሉ ማህበረሰቦች በማሳወቅ እናዲደርሳቹ እንደርጋል።

ግላዊነት እና ምስጢራዊነት - ይህ የጥናቱ መረጃ በሚስጥር ይያዛል። መጠይቆቹ ላይ ስሞ ሣይሆን ኮድ ነው የምንጠቀመው አይጠቀስም: ነገር ግን ምናልባት የጤናዎጉዳይ የህክምና እርዳታ ያስፈልገዋል ተብሎ ከታሰበ እርሶን መልሶ ለማግኘት ይረዳ ዘንድ ለተሳትፎ ፈቃድኝነቶትን የፈረሙብተ ቅጽ ላይ የመጠይቆ ኮድ የሚሞላ ይሆናል:: የግል መረጃዎ ተቆልፎበት ዋናው ተመራማሪ ጋር ብቻ በሚስጥር ይቀመጣል። የምርምሩ ውጤት ይፋ ሲደረግ ማንነቶትን ሊያሳውቅ የሚችል መረጃ በምንም መልኩ ይፋ አይደረግም።

የተሳትፎ ፈቃድኝነት- ተሳትፎ በፈቃደኝነት ላይ የተመሰረተ ነው።በምርምሩ ለመካፈል ፈቃደኛ ከሆኑ ቀጥሎየሚሰጦት የፈቃደኝነት ስምምነት ላይ ይፈርማሉ።

ከእናንት የተሰበሰበውን መረጃ ምን እናደርግበታለን- የዚህ ጥናት ውጤት በጥናቱ ለተሳተፉ ትምህርት ቤቶች እን ይህ ጥናት እንዲሳለጥ ላደረጉ ድርጅቶች ሁሉ ይቀርባል ።በተጨማሪም በሳይንሳዊ ስብሰባዎች ላይ የሚቀርብ እና በሳይንሳዊ መጽሄቶች(ጆርናሎች) ላይ ይታተማል.

ጥያቄዎች እና ሲጋቶች

በጥናቱ ዙሪያ ጥናቱ ከነጀመሩ በፊት፣ ጥናቱ እየተካሄደ እያለ ወይም ጥናቱ ካለቀ በሁዋላ ማንኛውንም ጥያቄ የመጠየቅ እና ለጥያቄዎች መልስ ከዋናዋ ተመራማሪ ዶ/ር ዱሬቲ ቃሲም የማግኘት መብት አሎት።

ዋና ተመራማሪ: ዶ/ር ዱሬቲ ቃሲም. ከሰኞ እስከ ዓርብ በስራ ሰዓት በጥቁር አንበሳ ሆስፒታል በስነአዕምሮ ህክምና ክፍል ሊያገኙኝ ይችላሉ

በዚህ ለመካፈል ወይም ላለመሳተፍ የመወሰን መብት የእርስዎ ነው።በዚህ ለመካፈል ከወሰኑም በሁዋላ በማንኛውም ጊዜም ሆነ ምንም ምክንያት ሳይሰጡ ተሳትፎዎን የማቆም ነፃነት አለዎት።

ይህ ጥናት በማንኛውም መንገድ ጉዳት ካደረሰባችሁ ከዚህ በታች ያሉትን አድራሻ በመጠቀም ዝርዝር ምክሮችና መረጃዎች ማግኘት ይችላሉ፤

- የስነ-አእምሮ ህክምና ክፍል, የጤና ሳይንስ ኮሌጅ, አዲስአበባ ዩኒቨርስቲ
- ስልክቁጥር: ……
- ጥናቱ እስኪታተም ድረስ መረጃዎቹን ከጥናቱ ማውጣት ይችላሉ ።
- በዚህ ጥናት ለመካፈል ከወሰኑ, ይህ የመረጃ ቅጽ እንዲወስዱት የሚሰጦት ሲሆን ለተሳትፎ የፈቃደኝነት መጠየቂያ ቅጽ እንዲፈርሙ ይጠየቃሉ::

ለ) የፈቃደኝነት መጠየቂያ ቅጽ

ስለጥናቱ ማብራሪያ የተዘጋጀውን የመረጃ ቅጽ ካነበቡ ወይም ከሰሙ በሁዋላ እባክዎን ይህንን ቅጽ ይሙሉ፡፡

የጥናቱ ርእስ: በሁለተኛ ደረጃ ትምህርትቤት ያሉ ተማሪዎች እራስን የማጥፋት ባህሪያት መጠን እና ከእሱጋር ቁርኝት ስላላቸው ነገሮች

REC Ref number:

በዚህ ጥናት ለመካፈል ስላሰባችሁ አመሰግናችኋለሁ ። የጥናቱ አስተባባሪ በዚህ ሥራ ለመካፈል ከመስማማትዎ በፊት ስለ ፕሮጀክቱ እንዲያስረዳዎት ይጠበቃል። ከመረጃ ወረቀት ወይም ቀደም ሲል ከቀረበው መረጃ ጥያቄ ከኖሮት፤ ለመሳተፍ ወይም ላለመሳተፍ ከመማቀዶት አስቀድመው እባክዎ ጥናቱን አድራዚውን ሰው ይጠይቁ፡፡ በየትኛውም ወቅት ለመመልከት እንዲችሉ የዚህን ስምምነት ፎርም ቅጂ ይሰጥዎታል።

የጥናቱአስተባባሪ በዚህ ሥራ ለመካፈል ከመስማማትዎ በፊት ስለ ፕሮጀክቱ ለእርስዎ ማስረዳት ይኖርበታል። ከመረጃ ወረቀትወይምቀደምሲልከተሰጠዎት ማብራሪያ የሚነሱ ጥያቄዎች ካሉዎት፤ ለመሳተፍ ወይም ላለመሳተፍ ከመወሰንዎ በፊት እባክዎ ተመራማሪውን ይጠይቁ፡፡ እንዲያስቀምጡት እና በማንኛውም ጊዜ ለመመልከት እንዲችሉ የዚህን ስምምነት ፎርም ቅጂ ይሰጥዎታል።

- ይህ የምርምር ስራ በልጆች እና ወጣቶች ስነአእምሮ ጤና የሰብ ስፔሻሊቲ ድህረ ምረቃ ዲግሪ ከፊል ማማያ የሚሰራ እንደሆነ ተረድቻለሁ፡፡
- ከዚህ በኋላ ተሳትፎ ማድረግ ካልፈልኩ ወይም ልጄ በዚህ ፕሮጀክት ላይ እንዲሳተፍ ካልፈልኩ ጉዳዩ ለሚመለከታቸው ተመራማሪዎች ማሳወቅና ምንም ምክንያት ሳይሰጥ ወዲያውኑ ከጥናቱ መዉጣት እንደምችል ተረድቻለሁ። ከዚህም በተጨማሪ፤ መረጃዎቼ እስኪታተሙ ድረስ ከጥናቱ ማውጣት እንደምችል ተረድቻለሁ ።
- ለተገለፁልኝ ዓላማዎች የግል መረጃዎቼን ለመስጠት እስማማለሁ። እንዲህ ዓይነቱ መረጃ በሀገሪቱ የመረጃ ጥበቃ ደንብ መሰረት እንደሚስተናገድ ገብቶኛል።
- የሰጡን መረጃ እንደ ሪፖርት ይታተማል። እባክዎን ምስጢራዊነቱ እና ማንነትዎ በማይታወቅ መልኩ እንደሚዘጋጅና እና ከማንኛውም ጽሑፍ የእርስዎን ማንነት ለይቶ ማወቅ እንደማይቻል ልብ ይበሉ፡፡
- የምርምር ቡድኑ ወደፊት ለሚደረጉ ምርምሮች ስምሳይገለጽ መረጃዎችን ሊጠቀም ይችላል በሚለው ሐሳብ እስማማለሁ።

የተሳታፊ ስምምነት መግለጫ

እኔ_____ከላይ የተገለጸው ጥናት በሚገባ ስለተብራራልኝ በጥናቱ ለመካፈል ስምምነቴን ሰጥቻለሁ ።ከላይ የተከተቡትን ማስታወሻዎችም ሆነ ስለጥናቱ መረጃ ቅጽ አንብቤ፣ የምርምር ጥናቱ ምን እንደሚያካትት ተረድቼአለሁ።

ፊርማ_____ ቀን_____ስ.ቁ-

_____

የዋና አሳዳጊ ስም_____ስ.ቁ_____

የምስክር ቃል (*መፃፍ* እና *ማንበብ* ለማይችል የጥናቱ ተሳታፊው)

እኔ_____ ከላይ የተገለጸው ጥናት በሚገባ ለ_____ (ተሳታፊ) እንደተብራራላትና በጥናቱ ላይ ለመሳተፍ መስማማቷን ተመልክቻለሁ። ከላይ የተፃፉት ማስታወሻዎችም ሆኑ ስለፕሮጀክቱ የኢንፎርሜሽን ወረቀት ለተሳታፊዋ ተነበዉላታል። የምርምር ጥናቱ ምን እንደሚያካትትም ተረድታለች።

ፊርማ_____

ቀን_____

የዋና አሳዳጊ ስም_____ስ.ቁ_____

የተሳታፊ ወላጅ/ አሳዳጊ ስምምነት መግለጫ

እኔ_____የተማሪ _____ወላጅ/ አሳዳጊ

ከላይ የተጠቀሰው የምርምር ፕሮጀክት በሚገባ ስለተብራራልኝ ልጄ በጥናቱ እንዲካፈል/እንድትካፈል ተስማምቻለሁ።ከላይ የተጻፉትን ማስታወሻዎችም ሆነ ስለፕሮጀክቱ መረጃ ቅጽ አንብቤ፣ የምርምር ጥናቱ ምን እንደሚያካትት ተረድቼአለሁ።

ፊርማ_____ ቀን_____ስ.ቁ-

_____

የምስክር ቃል የተሳታፊ ወላጅ/ አሳዳጊ *መፃፍ* የማይችል ከሆነ)

እኔ_____

ከላይ የተጠቀሰው የምርምር ፕሮጀክት በሚገባ ለ_____ (ተሳታፊ) እንደተብራራላትና በጥናቱ ላይ ለመሳተፍ መስማማቷን ተመልክቻለሁ። ከላይ የተፃፉት ማስታወሻዎችም ሆኑ ስለፕሮጀክቱ የኢንፎርሜሽን ወረቀት ለተሳታፊዋ ተነበዉላታል። የምርምር ጥናቱ ምን እንደሚያካትትም ተረድታለች።

ፊርማ_____

ቀን_____

ሐ) የተሳታፊዎች ተማሪዎች ወላጆች/ አሳዳጊዎች የመረጃ ቅጽ

Department REC Reference Number:

የዚህ የመረጃ ቅፅ አንድ ኮፒ ይሰጥዎታል

የፕሮጀክቱ ርእስ: በሁለተኛ ደረጃ ትምህርትቤት ያሉ ተማሪዎች እራስን የማጥፋት ባህሪያት መጠን እና ከእሱጋር ቁርኝት ስላላቸው ነገሮች

ዋናተመራማሪ: _ዶ/ር ዱሬቲ ቃሲም(ሳይካትሪስት)

ሱፐርቫይዘር: ዶ/ር ፍቅርተ ግርማ እና ዶ/ር አወቀ ምህረቱ

ማስተባበሪያ ቢሮ: አዲስ አበባ ዩኒቨርሲቲ፤ የሕክምና ትምህርት ቤት፤ የሥነ አእምሮ ትምህርት ክፍል

በዚህ የምርምር ፕሮጀክት ላይ ልጅዎ እንዲካፈል/እንድትካፈል ልንጋብዛት እንፈልጋለን። ልጅዎ በጥናቱ መሳተፍ ያለበት/ያለባት እሱ/እሳ ፍቃደኛ ከሆነ/ከሆነች እና እርሶም ከፈቀዱ ብቻ ነው፡፡ልጅዎ በጥናቱ ላለመካፈል መምረጣችሁ በምንም መንገድ ልጅዎ ላይ የሚደርስበት ጉዳት የለም። ልጅዎ በዚህ ጥናት እንዲካፈል ከመወሰንዎ በፊት ምርምሩ ለምን እየተደረገ እንደሆነና ልጅዎ በጥናቱ ተሳትፎ ማድረጉ/ምድረጋ ምን ነገሮችን እንደሚያካትት መረዳት አስፈላጊ ነው። እባክዎ ጊዜ ወስደው የሚከተሉትን መረጃዎች በጥንቃቄ ያንብቡ፤ ከፈለጉ ከሌሎች ጋር ሊወያዩበት ይችላሉ። ግልጽ ያልሆነ ጉዳይ ካለ ወይም መረጃ እንዲጨመርሎት ካስፈለጎት እኛን መጠየቅ ይችላሉ፡፡

ጥናቱ የሚካሄደዉ በአዲስአበባ ዩኒቨርስቲ ነው።

የጥናቱ ዓላማ

እራስን ምጥፋት እና እራስን የማጥፋት ባህሪያት አለም አቀፍ የማህበረሰብ የጤና ችግር ናቸው፡፡ በአለም ላይ ከሚከሰቱት እራስን ማጥፋቶች 77% የሚሆኑት አነስተኛ ነደ መካከለኛ ገቢ ባላቸው ሀገራት ውስጥ ነው የሚከሰተው፡፡እራስን እራስን የማጥፋት ችግር በሁሉም የእድሜ ደረጃ ያሉ ሰዎችን የሚያጠቃ ሲሆነ በጉርምስና እድሜ ላይ ያሉ ሰዎችን ግን የበለጠ የተጠቁ የማህበረሰቡ ክፍል ናቸው፡፡ ለዚህ ችግር እንደ ማስጠንቀቂያ ሊያገለግሉ የሚችሉ ብዙ ኢጋላጭ ነገሮች፡፡ ይሁን እንጂ አብዛኛው እራስን ማጥፋት በሚከሰትባቸው ሀገራት በችግሩ ዙሪያ የመረጃ እጥረት አለ፡፡ ይህ ጥናት የተዘጋጀው በ2ኛ ደረጃ ትምህርት ቤት የሚማሩ በጉርምስና እድሜ ያሉ ተማሪዎች ስለ እራስን የማጥፋት ባህሪያት ችግር መጠንና ከእሱ ጋር ተያያዥነት ያላቸው ነገሮች አከባቢያዊ መረጃ ለመፍጠር እና ይህንን መረጃ፡፡በተጨማሪም ይህ መረጃ ችግሩን ለመከላከያ ተገቢ የሆኑ ዘዴዎችን ለመቀየስ እነዲጠቅም ታስቦ ነው፡፡

ለጥናቱ የምንመለምለው ማንን ነው?

ከ9ኛ እስከ 12ኛ ክፍል የሚገኙ የሁለተኛ ደረጃ ትምህርት ቤት ተማሪዎች ይመልማሉ

በዚህ ጥናት ልጅዎ እንዲካፈል/እንድትካፈል ከተስማሙ ምን ይሆናሉ?

ይህ ጥናት መጠይቆችን በማስሞላት ይሰራል፡ ልጅዎም በጥናቱ ለመሳተፍ ፍቃደኛ ከሆነ/ች እና እርሶም ከፈቀዱ ልጅዎ መጠይቆቹን በራሱ/በራሷ ይሞላል/ትሞላለች፡ ጥያቄዎቹን ለመመለስ በአማካይ 30-40 ደቂቃ ይፈጃል

በጥናቱ በመሳተፎ ምክንያት የሚመጡ ጉዳቶች፡-በዚህ ጥናት ከመሳተፍ ጋር ተያይዘው የሚመጡ የጎሉ ጉዳቶች የሉም።ነገረ ግን ለጥያቄዎቹ መልስ ሲሰጡ ምናልባት አንዳንድ ጥያቄዎች ልጅዎ በህይወቱ ውስጥ ያጋጠመው ጥሩ ያልሆኑ አጋጣሚ እና ሊያስታውሳቸው የማይፈልጋቸው ትዝታዎች ሊቀሰቅሱ ይችላሉ። በተጨማሪም ለሌላ ጉዳይ ሊያውለው ከሚችሉትን ሰአት በጥናቱ ላይ ይውላል።

በጥናቱ ሊገኙ የሚችሉ ጥቅሞች፡ የተገኘው መረጃ በኢትዮጵያም ሆነ በሌሎች ተመሳሳይ ሀገራት የአዕምሮ ጤና አገልግሎትን ለማሻሻል እንደሚረዳ ተስፋ እናደርጋለን። አጠቃላይ ጥናቱ ከተጠናቀቀ በኋላ ያገኘነውን ውጤት ስብሰባ ላይ እንድትገኙ በመጋበዝ፣ በራሪ ወረቀቶችን በመስጠት አሊያም በትምህርት ቤቱ ውስጥ ያገኘነውን ውጤት በአካባቢው ውስጥ ላሉ ማህበረሰቦች በማሳወቅ እናዲደርሳቹ እናደርጋል።

ግላዊነት እና ምስጢራዊነት - ይህ የጥናቱ መረጃ በሚስጥር ይያዛል። መጠይቆቹ ላይ የልጅዎ ስም ሣይሆን ኮድ ነው የምንጠቀመው: ነገር ግን ምናልባት የልጆ የጤና ጉዳይ የህክምና እርዳታ ያስፈልገዋል ተብሎ ከታሰበ እርሶን መልሶ ለማግኘት ይረዳ ዘንድ ልጅዎ በጥናቱ

ለተሳትፎ ፈቃድኝነቶትን የፈረመበት ቅጽ ላይ የመጠይቁ ኮዱ የሚሞላ ይሆናል፡፡ ልጅዎ የግል መረጃ ተቆልፎበት ዋናው ተመራማሪ ጋር ብቻ በሚስጥር ይቀመጣል። የምርምሩ ውጤት ይፋ ሲደረግ የልጅዎ ማንነትን ሊያሳውቅ የሚችል መረጃ በምንም መልኩ ይፋ አይደረግም።

የተሳትፎ ፈቃድኝነት- ተሳትፎ በፈቃደኝነት ላይ የተመሰረተ ነው።ልጅዎ በምርምሩ እንዲካፈል ፈቃደኛ ከሆኑ ቀጥሎ በሚሰጦት የፈቃደኝነት ስምምነት ላይ ይፈርማሉ።

ከእናንት የተሰበሰበውን መረጃ ምን እናደርግበታለን- የዚህ ጥናት ውጤት በጥናቱ ለተሳተፉ ትምህርት ቤቶች እን ይህ ጥናት እንዲሳለጥ ላደረጉ ድርጅቶች ሁሉ ይቀርባል ።በተጨማሪም በሳይንሳዊ ስብሰባዎች ላይ የሚቀርብ እና በሳይንሳዊ መጽሄቶች(ጆርናሎች) ላይ ይታተማል.

ጥያቄዎች እና ሲጋቶች

በጥናቱ ዙሪያ ጥናቱ ከመጀመሩ በፊት፣ ጥናቱ እየተካሄደ እያለ ወይም ጥናቱ ካለቀ በሁዋላ ማንኛውንም ጥያቄ የመጠየቅ እና ለጥያቄዎች መልስ ከዋናዋ ተመራማሪ ዶ/ር ዱሬቲ ቃሲም የማግኘት መብት አሎት።

ዋና ተመራማሪ: ዶ/ር ዱሬቲ ቃሲም. ከሰኞ እስከ ዓርብ በስራ ሰዓት በጥቁር አንበሳ ሆስፒታል በስነአዕምሮ ህክምና ክፍል ሊያገኙኝ ይችላሉ

በዚህ ጥናት ላይ ልጅዎ እንዲካፈል ወይም እንዳይካፈል የመወሰን መብት የእርስዎ እና የልጅዎ ነው። ልጅዎ በዚህ እንዲካፈል ከወሰኑም በሁዋላ በማንኛውም ጊዜም ሆነ ምንም ምክንያት ሳይሰጡ ልጅዎ ተሳትፎዎውን የማስቆ ነፃነት አለዎት።

ይህ ጥናት በማንኛውም መንገድ ልጅዎ ልይ ጉዳት ካደረሰ ከዚህ በታች ያሉትን አድራሻ በመጠቀም ዝርዝር ምክሮችና መረጃዎች ማግኘት ይችላሉ፤

- የስነ-አእምሮ ህክምና ክፍል, የጤና ሳይንስ ኮሌጅ, አዲስአበባ ዩኒቨርስቲ
- ስልክቁጥር: ……
- ጥናቱ እስኪታተም ድረስ መረጃዎቹን ከጥናቱ ማውጣት ይችላሉ ።
- በዚህ ጥናት ልጅዎ እንዲካፈል ከወሰኑ, ይህ የመረጃ ቅጽ እንዲወስዱት የሚሰጦት ሲሆን ለተሳትፎ የፈቃደኝነት መጠየቂያ ቅጽ እንዲፈርሙ ይጠየቃሉ፡፡

Appendix III. Structured English version Questionnaire

1. Study subject demographic related variables

SN	Questions	Classifications
1.	How old are you?	_____years
2.	Gender	Male ------1 Female ------2
3.	Educational status at the moment	9th grade----------1 10th grade----------2 11th grade----------3 12th grade----------4
4.	What was your rank in your class last year?	_____
5.	How did you feel about your result(rank)	Good----------1 Medium---------2 Not good-------3
6.	How many days were you not in school in the previous month?	----------days
7.	What faith do you follow?	Muslim----------1 Orthodox-------2 Protestant -----3 Catholic --------4 Other (specify)------5
8.	In what relationship condition are you currently?	Single ----------1 In a relationship-----2 Married ----------3 Divorced----------4 Widowed ----------5 Other((specify) ------6
9.	What is your family's relative wealth?	Below other families in your living area--------1 Below other families in your living area--------2 Above other families in your living area--------3
0.	With whom are you living currently?	Alone----------1 With my family--------2 With relatives---------3 With my friend(s)-----4 Others(specify)-------5

2. Suicidal behavior screening- CIDI Suicide- questionnaire

SN	Questions	Classifications
	The next few questions are about thoughts of hurting yourself.	
1.	Have you ever seriously thought about committing suicide?	Yes.....1 No.....2 Don't know.....8 Refused 9
	If the answer is yes How old were you the first time this happened?	_____ Years old Don't know.....998 Refused 999
2.	Have you seriously thought about committing suicide at any time in the past 12 months?	Yes.....1 No.....2 Don't know.....8 Refused 9
	If the answer is yes How old were you the last time this experience happened to you?	_____ Years old Don't know.....998 Refused 999
3.	Have you ever made a plan for committing suicide?	Yes.....1 No.....2 Don't know.....8 Refused 9
	If the answer is yes How old were you the first time this happened?	_____ Years old Don't know.....998 Refused 999
4.	Did you make a plan for committing suicide at any time in the past 12 months?	Yes.....1 No.....2 Don't know.....8 Refused 9
	If the answer is yes How old were you the last time this experience happened to you?	_____Years old Don't know.....998 Refused 999
5.	Have you ever attempted suicide?	Yes.....1 No.....2 Don't know.....8 Refused 9
	If the answer is yes How many times have you attempted suicide in your lifetime?	_____Number of times Don't know.....998 Refused 999
6.	How old were you the first time?	_____Years old Don't know.....998 Refused 999

7.	There are three statements i will read out loud. Please tell me which of these three statements best describes Your situation when you attempted suicide the first time – one, two, or three? "one, i made a serious attempt to kill myself and it was only luck that i did not succeed." "two, i tried to kill myself, but knew that the method was not fool-proof." "three, my attempt was a cry for help, i did not intend to die."	I made a serious attempt to kill myself and it was only luck that i did not succeed .....1 I tried to kill myself, but knew that the method was not fool-proof .....2 My attempt was a cry for help. I did not intend to die.....3 Don't know.....8 Refused 9
8.	Have you attempted suicide in the past 12 months?	Yes.....1 No.....2 Don't know.....8 Refused 9
	How old were you (when/the last time) you attempted suicide?	_____ Years old Don't know..... ....998 Refused 999
9.	Did it result in an injury or poisoning?	Yes.....1 No.....2 Don't know.....8 Refused 9
0.	Did it require medical attention?	Yes.....1 No.....2 Don't know.....8 Refused 9
1.	Did it require overnight hospitalization?	Yes.....1 No.....2 Don't know.....8 Refused 9

2.	There are three statements i will read out loud. Please tell me which of these three statements best describes your situation when you attempted suicide (the last time) – one, two, or three? "one, i made a serious attempt to kill myself and it was only luck that i did not succeed." "two, i tried to kill myself, but knew that the method was not fool-proof." "three, my attempt was a cry for help, i did not intend to die."	I made a serious attempt to kill myself and it was only luck that i did not succeed .....1 I tried to kill myself, but knew that the method was not fool-proof .....2 My attempt was a cry for help. I did not intend to die.....3 Don't know.....8 Refused 9
3.	What method did you use? (just give me the letter.)	A. Gun..... .....1 B. Razor, knife or other sharp instrument..... .....2 C. Overdose of prescription medications.....3 D. Overdose of over-the-counter medications .....4 E. Overdose of other drug (e.g. Heroin, crack, alcohol) .....5 F. Poisoning (e.g. Carbon monoxide, rat poison).....6 G. Hanging, strangulation, suffocation..7 H. Drowning... .....8 I. Jumping from high places .....9 J. Motor vehicle crash ....10 K. Other (please describe) .....11 Don't know .....98 Refused.....99

3. Study subjects Social Support - Oslo Social Support Scale,OSSS-3

SN	Questions	Classifications
1.	How easy is it to get practical help from your family or relatives if you should need it?	Very difficult ----------1 Difficult----- ----------2 Possible ----------3 Easy ----------4 Very easy----------5
2.	How many people are so close to you that you can count on them if you have great personal problems?	None----------1 1-2----------2 3-5----------3 More 5----------4
3.	How much interest and concern do people show in what you do?	None ----------1 Little----------2 Uncertain----------3 Some----------4 A lot----------5

4. Mental illness realted screening questionnaire

A) Depression screening questions – PHQ 9 teen version

SN	Questions	Classifications			
How often have you been bothered by each of the following symptoms during the past two weeks?		Not At All [0]	Several Days [1]	More Than Half the Days [2]	Nearly Every Day [3]
1.	Feeling down, depressed, irritable, or hopeless?				
2.	Little interest or pleasure in doing things?				

3.	Trouble falling asleep, staying asleep, or sleeping too much?				
4.	Poor appetite, weight loss, or overeating?				
5.	Feeling tired, or having little energy?				
6.	Feeling bad about yourself – or feeling that you are a failure, or that you have let yourself or your family down?				
7.	Trouble concentrating on things like school work, reading, or watching TV?				
8.	Moving or speaking so slowly that other people could have noticed? Or the opposite – being so fidgety or restless that you were moving around a lot more than usual?				
9.	Thoughts that you would be better off dead, or of hurting yourself in some way?				
0.	In the past year have you felt depressed or sad most days, even if you felt okay sometimes?	Yes		No	
		0		1	
1.	If you are experiencing any of the problems on this form, how difficult have these problems made it for you to do your work, take care of things at home or get along with other people?	Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
		0	1	2	3

B) Anxiety screening questions- GAD 7

SN	Questions	Classifications			
Over the last 2 weeks, how often have you been bothered by any of the following problems?		Not at all [0]	Several Days [1]	More than half the days [2]	Nearly every day [3]
2.	Feeling nervous, anxious or on edge	0	1	2	3
3.	Not being able to stop or control worrying	0	1	2	3
4.	Worrying too much about different things	0	1	2	3
5.	Trouble relaxing	0	1	2	3
6.	Being so restless that it is hard to sit still	0	1	2	3
7.	Becoming easily annoyed or irritable	0	1	2	3
8.	Feeling afraid as if something awful might happen	0	1	2	3

5. Substance use related screening -ASSIST questionnaire

SN	**Questions**	Classifications
501	In your life, which of the following substances have you ever used (non-medical use only)?	
	1. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0.No 1.Yes
	2. Alcoholic beverages (beer, wine, spirits, etc.)	0.No 1.Yes
	3. Amphetamine-type stimulants	0.No 1.Yes
	4. Cannabis (marijuana, pot, grass, hash, etc.)	0.No 1.Yes
	5. Tramadol or other drugs	0.No 1.Yes
If all answers are "No" to all items, stop interview. If the answer is "Yes" to any of these items, answer the following questions		

502	In the past three months, how often have you used the substances you mentioned (first drug, second drug, etc)?	Never	Once or twice	monthly	weekly	Daily or almost daily
	1. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	2	3	4	6
	2. Alcoholic beverages (beer, wine, spirits, etc.)	0	2	3	4	6
	3. Amphetamine-type stimulants	0	2	3	4	6
	4. Cannabis (marijuana, pot, grass, hash, etc.)	0	2	3	4	6
	5. Tramadol or other drugs	0	2	3	4	6

7. History of mental illness and suicide in the Family

SN	**Questions**	Classifications
1.	Do you have anyone in your close family member with mental illness history?	1)No 2)Yes
2.	Is there anyone in your close family member has substance addiction (including alcohol)?	1)No 2)Yes
3.	Did anyone in your close family has suicide attempt history?	1)No 2)Yes
4.	Did any member of your close family commit suicide?	1)No 2)Yes

8. Physical illness related screening of the study participants

SN	Questions	Classifications
1.	Do you have history of any chronic physical (medical) illness?	1)Yes 2)No

9- Bullying victimization screening - Forms of Bullying Scale Victimization Version (FBS-V)

SN	Questions	Classification				
How often were you bullied (including cyberbullying) by one or more young people in the following ways		This did not happen to me [1]	Once or twice [2]	Every few weeks [3]	About once a week [4]	Several times a week or more [5]
1.	I was TEASED in nasty ways	1	2	3	4	5
2.	SECRETS were told about me to others to hurt me	1	2	3	4	5
3.	I was hurt by someone trying to BREAK UP A FRIENDSHIP	1	2	3	4	5
4.	I was MADE TO FEEL AFRAID by what someone said he/she would do to me	1	2	3	4	5
5.	I was deliberately HURT PHYSICALLY by someone and/or by a group GANGING UP on me	1	2	3	4	5
6.	I was CALLED NAMES in nasty ways	1	2	3	4	5

7.	Someone told me he/she WOULDN'T LIKE ME UNLESS I DID what he/she said	1	2	3	4	5
8.	My THINGS were deliberately DAMAGED, DESTROYED or STOLEN	1	2	3	4	5
9.	Others tried to hurt me by LEAVING ME OUT of a group or NOT TALKING TO ME	1	2	3	4	5
0.	LIES were told and/or FALSE RUMOURS spread about me by someone, to make my friends or others NOT LIKE me	1	2	3	4	5

Appendix IV. Structured Amharic version Questionnaire

ክፍል አንድ- ስለማህበራዊና ስለህዝባዊ ሁኔታ የሚመለከቱ ጥያቄዎች::

ተ.ቁ	ጥያቄ	ምርጫዎች
1.	እድሜህ/ሽ---- ስንት ነው?	-------አመት/በሙሉ አመት ይገለፅ
2.	ፆታህ/ጸታሽ ምንድን ነው?	ወንድ------1 ሴት--------2
3.	የትምህርት ደረጃህ/ሽ ምን ያህል ነው?	9ኛ ክፍል----------1 10ኛ ክፍል---------2 1ኛ ክፍል----------3 12ኛ ክፍል---------4
4.	ባለፈው ዓመት ከክፍልህ ስንተኛ ደረጃ ወጣህ/ሽ?	_____
5.	ከደረጃህ ጋር በተያያዘ ምን ተሰማህ?	ጥሩ----------1 መካከለኛ----------2 ጥሩ ያልሆነ--------3
6.	ባለፈው ወር ውስጥ ስንት ቀን ከትምህርት ቤት ቀርተሀል/ሻል?	---------- ቀናት
7.	ሀይማኖትህ/ሽ ምንድን ነው?	ሙስሊም----------1 ኦርቶዶክስ----------2 ፕሮቴስታንት-------3 ካቶሊክ----------4 ሌላ ካለ ይገለፅ-----5
8.	በአሁኑ ወቅት የጋብቻ ሁኔታህ/ሽ እንዴት ነው?	ያላገባ ወይም ያላገባች----------1 ያልተጋቡ ጥንዶች-----2 ያገባ ወይም ያገባች----------3 የተፋታ ወይም የተፋታች----------4 ሚስት የሞተችበት/ባል የሞተባት-----5

		ሌላ ካለ (ይገለፅ-------6
9.	ጠቅላላ የቤተሰብህ/ሽ የሀብት መጠን በአካባቢው ካሉ ሌሎች ቤተሰቦች ጋር ሲወዳደር ምን ያህል ነው?	ያነሰ ነው ተመጣጣኝ ነው የበለጠ ነው
0.	በአሁን ሰዐት የምትኖረው ከማን ጋር ነው?	ብቻዬን----------1 ከቤተሰቦቼ ጋር--------2 ከዘመድ ጋር----------3 ከገደኛዬ/ ከገደኞቼ ጋር----------4 ሌላ ካለ (ይገለፅ)------5

ክፍል 2. እራስን ከማጥፋት ባህሪያት ጋር የተያያዙ ማጣሪያ ጥያቄዎች - CIDI Suicide- questionnaire

ተ.ቁ	ጥያቄዎች	መልስ ሊሆኑ የሚችሉ ምርጫዎች
	ከዚህ ቀጥለው የሚመጡት ጥቂት ጥያቄዎች እራስን ስለመጉዳት ሀሳቦች ናቸው፡፡	
1.	በህይወት ዘመንህ/ሽ እራስህን ስለማጥፋት በቁምነገር አስበህ/ሽ ታውቃለህ/ሽ	1) አዎ 2) አይድለም 8) አላውቅም 9) ፍቃደኛ አይድለሁም
	መልሱ አዎ ከሆነ ይህ ሀሳብ ለመጀመሪያ ጊዜ ሲከሰት እድሜህ/ሽ ስንት ነበር	_____ ዓመት 998) አላውቅም 999) ፍቃደኛ አይድለሁም
2.	ባለፉት 12 ወራት ውስጥ እራስህን/ሽን ስለማጥፋት በቁምነገር አስበህ/ሽ ታውቃለህ/ሽ	1) አዎ 2) አይድለም 8) አላውቅም 9) ፍቃደኛ አይድለሁም
	መልሱ አዎ ከሆነ ይህ ሀሳብ ለመጨረሻ ጊዜ ሲከሰትብህ/ሽ እድሜህ/ሽ ስንት ነበር?	_____ ዓመት 998) አላውቅም 999) ፍቃደኛ አይድለሁም
3.	በህይወት ዘመንህ/ሽ እራስህን ስለማጥፋት እቅድ አውጥተህ/ሽ ታውቃለህ/ሽ	1) አዎ 2) አይድለም 8) አላውቅም 9) ፍቃደኛ አይድለሁም

	መልሱ አዎ ከሆነ ይህ ሀሳብ ለመጀመሪያ ጊዜ ሲከሰት እድሜህ/ሽ ስንት ነበር	_____ ዓመት 998) አላውቅም 999) ፍቃደኛ አይድለሁም
4.	ባለፉት 12 ወራት እራስህን ለማጥፋት እቅድ አውጥተህ/ሽ ታውቃለህ/ሽ	1) አዎ 2) አይድለም 8) አላውቅም 9) ፍቃደኛ አይድለሁም
	መልሱ አዎ ከሆነ ይህ ሀሳብ ለመጨረሻ ጊዜ ሲከሰት እድሜህ/ሽ ስንት ነበር?	_____ ዓመት 998) አላውቅም 999) ፍቃደኛ አይድለሁም
5.	በህይወት ዘመንህ/ሽ እራስህን ስለማጥፋት ሞክረህ/ሽ ታውቃለህ/ሽ	1) አዎ 2) አይድለም 8) አላውቅም 9) ፍቃደኛ አይድለሁም
	መልሱ አዎ ከሆነ በህይወት ዘመንህ/ሽ እራስህን/ሽን ስለማጥፋት ስንት ጊዜ ሞክረህ/ሽ ታውቃለህ/ሽ	_____ ዓመት 998) አላውቅም 999) ፍቃደኛ አይድለሁም
6.	የመጀመሪያ ጊዜ እድሜህ/ሽ ሰንት ነበር	_____ ዓመት 998) አላውቅም 999) ፍቃደኛ አይድለሁም
7.	ለመጀመሪያ ጊዜ እራስህን/ሽን ስለማጥፋት በሞከርክ/ሽ ጊዜ የነበርክበትን /የነበርሽበትን ሁኔታን ከነዚህ ሶስት ላረፍት ነገሮች ውስጥ የትኛው በደንብ እንደሚገልጽ እባክህን/ሽን ንገረኝ/ንገሪኝ	1) እራሴን ለማጥፋት በጽኑ ሞክሬ ነበር እና የእድል ጉዳይ ሆኖ ነው ያልተሳካልኝ 2) እራሴን ለማጥፋት ሞክሬ ነበር ነገር ግን የተጠቀምኩት መንገድ አስተማማኝ እንዳል ነበረ አውቅ ነበር 3) ሙከራዬ እርዳታ የማግኘት ለቅሶ ነበር, የመሞት እቅድ አልነበረኝም 8) አላውቅም 9) ፍቃደኛ አይድለሁም
8.	ባለፉት 12 ወራት እራስህን የማጥፋት ሙከራ አድርገህ ታውቃለህ/ታውቂያለሽ	1) አዎ 2) አይድለም 8) አላውቅም 9) ፍቃደኛ አይድለሁም
	እራስህን/እራስሽን የማጥፋት ሙከራ ለመጨረሻ ጊዜ ስታደርግ/ስታደርጊ እድሜህ/ሽ ስንት ነበር?	_____ ዓመት 998) አላውቅም 999) ፍቃደኛ አይድለሁም

9.	ጉዳት ወይም መመረዝ አድርሷል?	1) አዎ 2) አይድለም 8) አላውቅም 9) ፍቃደኛ አይድለሁም
0.	የህክምና እርዳታ አስፈልጎታል?	1) አዎ 2) አይድለም 8) አላውቅም 9) ፍቃደኛ አይድለሁም
1.	በሆስፒታል ማደር አስፈልጎት ነበር?	1) አዎ 2) አይድለም 8) አላውቅም 9) ፍቃደኛ አይድለሁም
2.	ለመጀመሪያ ጊዜ እራስህን/ሽን ስለማጥፋት በሞከርክ/ሽ ጊዜ የነበርክበትን /የነበርሽበትን ሁኔታን ከነዚህ ሶስት አረፍት ነገሮች ውስጥ የትኛው በደንብ እንደሚገልጽ እባክህን/ሽን ንገረኝ/ንገሪኝ፡	1) እራሴን ለማጥፋት በጽኑ ሞክሬ ነበር እና የእድል ጉዳይ ሆኖ ነው ያልተሳካልኝ” 2) እራሴን ለማጥፋት ሞክሬ ነበር ነገር ግን የተጠቀምኩት መንገድ አስተማማኝ እንዳል ነበረ አውቅ ነበር 3) ሙከራዬ እርዳታ የማግኘት ለቅሶ ነበር, የመሞት እቅድ አልነበረኝም 8) አላውቅም 9) ፍቃደኛ አይድለሁም
3.	ምን ዘዴዎችን ተጠቀምክ/ተጠቀምሽ? (የመጨረሻውን ንገረኝ/ንገሪኝ	1). ሽጉጥ 2)ምላጭ ቢላዋ ወይም ሌላ ስለታማ መሳሪያዎች 3)በባለሙያ የታዘዙ መድሀኒቶችን ከመጠን በላይ በመውሰድ 4)በባለሙያ ያልታዘዙ መድሀኒቶችን ከመጠን በላይ በመውሰድ 5)ሌላ መድሀኒቶችን ከመጠን በላይ በመውሰድ (ምሳሌ ሄሮይን፣ክራክ፣አልኮል) 6) መመረዝ (ምሳሌ ካርበን ሞኖአክሳይድ፣ የአይጥ መርዝ) 7) መሰቀል፣ መታነቅ፣ መታፈን 8) በውሀ መስመጥ 9) ከከፍታ ቦታ መዝለል 10) የሞተር ተሽከርካሪ ግጭት 11) ሌላ(ይገለጽ)_____ 98)አላውቅም 99)ፍቃደኛ አይድለሁም

ክፍል 3- ኦስሎ 3 ኢይተም ማህበራዊ ድጋፍ መመዘኛ ጥያቄዎች

ተ.ቁ	ጥያቄዎች	መልስ ሊሆኑ የሚችሉ ምርጫዎች
1.	ከቤተሰቦችሽ/ህ, ከዘመዶችህ ወይም ከጎረቤቶችህ እርዳታ/ድጋፍ ቢያስፈልግህ/ሽ ማግኘት ምን ያህል ቀላል ነው?	በጣም አስቸጋሪ-----1 አስቸጋሪ --------2 ቀላልም ባይሆን የሚቻል----------3 ቀላል ---------4 በጣም ቀላል---------5
2.	ከፍተኛ ችግር ቢያጋጥምዎ የቅርብ የሆኑ እና ይረዱኛል ብለው የሚተማመኑባቸው ምን ያህል ሰዎች ይኖራሉ?	ምንም----------1 1-2----------2 3-5----------3 5+----------4
3.	ሌሎች ሰዎች ስለ እርሶ ጉዳይ ምን ያህል ግድ ይላቸዋል ወይም ያስቡልዎታል?	ምንም -------1 ትንሽ----------2 አላውቅም----3 የተወሰነ ------4 በጣም -------5

ክፍል-4 ከአዕምሮ ህመም ጋር የተያያዙ መጠይቆች

4.1 ስለ ድብርት ስሜቶች ማጣሪያ መጠይቅ- ፒኤች ኪው 9 ቲን ቨርሽን -PHQ-9 teen version

ተ.ቁ	ጥያቄዎች	መልስ ሊሆኑ የሚችሉ ምርጫዎች			
	ባለፉት ሁለት ሳምንታት ከታች በተዘረዘሩት ገጠመኞች ምን ይህል ተቸግረው ነበር	በፍፁም [0]	ብዙ ቀናት [1]	ከግማሽ ቀናት በላይ [2]	በየቀኑ [3]
1.	የበታችነት፣የጭንቀት፣የመደበር ወይንም ተስፋ የመቁረጥ ስሜት ነበረዎት?				
2.	ነገሮችን ሲሰሩ ፍላጎትዎ ወይም የሚያገኙት ደስታ በጣም ትንሽ (እምብዛም) ነበረ?				
3.	እንቅልፍ ለመተኛት ወይም ተኝቶ የመቆየት ችግር ወይንም ብዙ ከመጠን በላይ የመተኛት ችግር ነበረዎት?				
4.	የምግብ ፍላጐት አለመኖር ወይንም በጣም ብዙ				

	የመብላት ችግር ነበረብዎት?				
5.	ድካም የመሰማት ወይንም አቅም የማነስ ሁኔታ ነበረዎት?				
6.	ራስዎን የመጥላት ወይም ዋጋ የለኝም ብሎ የማለት ወይም ራሴንም ሆነ ቤተሰቤን አሳዝኛለሁ የሚል ስሜት ተሰምትዎት ነበር?				
7.	በሚሰሩት ስራ ላይ ሃሳብዎን መሰብሰብ/ ትኩረት መስጠት አስቸግርዎት ነበር? (ለምሳሌ፣ ከሰዎች ጋር ሲጨዋወቱ ትኩረት ሰጥቶ ማዳመጥ)				
8.	ለሌሎች ሰዎች አስኪታወቅ ድረስ በእንቅስቃሴዎ ወይም በንግግርዎ በጣም ቀስ ብለው ነበር ወይም ለሌሎች ሰዎች እስኪታወቅ ድረስ መረጋጋት አቅትዎት፣ አንድ ቦታ አርፎ መቀመጥ ወይም መቆም እስከማይችሉ ድረስ ሆነው ነበር?				
9.	ከምኖር ብሞት ይሻለኛል ብለው አስበው ወይም ራስዎን በሆነ መንገድ ሊጎዱ አስበው ነበር?				
0.	አሁን ከተነጋገርነው በተጨማሪ ባለፉት 12 ወራት ውስጥ ሁለት ሳምንትና ከዚያ በላይ የቆየ የመደበር/ የመደበት እና በብዙ ነገሮች ፍላጎት ማጣት ተሰምቶት ነበር?	አዎን		አይ	
		0		1	
1.	ከላይ ከተዘረዘሩት ጥያቄዎች መካከል ለአንዳቸውም አዎ የሚል ምላሽ ከሰጡ የሚከተለውን ጠይቅ በእነዚህ ችግሮች ምክንይት ስራዎን ለመስራት፣ የቤት ሀላፊነትዎን ለመወጣት ወይም ከሰዎች ጋር ተስማምተው ለመኖር ም7ን ያህል አስቸጋሪ ሆኖብዎት ነበር?	በጭራሽ አልተቸገርኩም	በመጠኑ ተቸግሬ ነበር	በጣም ተቸግሬ ነበር	እጅግ በጣም ተቸግሬ ነበር
		0	1	2	3

3.2 ስለ ስለ ጭንቀት ስሜቶች ማጣሪያ መጠይቅ- ጂኤዲ ሰቨን- GAD-7 version

ተ.ቁ	ጥያቄዎች	መልስ ሊሆኑ የሚችሉ ምርጫዎች			
	ባለፉት 2 ሳምንታት ውስጥ በሚከተሉት ችግሮች ምን ያህል ጊዜ ተረብሸዋል?	በፍፁም	ብዙ ቀናት	ከግማሽ ቀናት በላይ	በየቀኑ
2.	ስለ የተለያዩነ ገሮች ከመጠን በላይ መጨነቅ	0	1	2	3
3.	ጭንቀትን ማቆም ወይም መቆጣጠር አለመቻል	0	1	2	3
4.	ዘና ለማለት መቸገር	0	1	2	3
5.	በጣም እረፍት የሌለው መሆን ወይም ዝም ብሎ መቀመጥ ከባድ መሆን	0	1	2	3
6.	በቀላሉ የሚናደድ ወይም ብስጩ መሆን	0	1	2	3
7.	አንድ አስከፊ ነገር እንደሚከሰት የመፍራት ስሜት	0	1	2	3
8.	የመረበሽ ስሜት፣ የመሸጋት ወይም በተጠንቀቅ የመሆን ስሜት	0	1	2	3
	ከነዚህ ከጠቀስናቸው ችግሮች አጋጥሞዎት ከነበር፣ ችግሮቹ ስራዎትን ለመስራት፣ ቤትዎ ያለን ነገር ለመንከባከብ፣ ራስዎን ለመጠበቅ ወይንም ከሌሎች ሰዎች ጋር ባለዎት ግንኙነት ለእርስዎ ምን ያህል አስቸጋሪ ነበሩ?	ምንም አስቸጋሪ አልነበሩም 0	በተወሰነ ደረጃ ብቻ 1	በጣም አስቸጋሪ ነበሩ 2	እጅግ በጣም አስቸጋሪ ነበሩ 3

ክፍል 5: የመጠጥ ፥ ማጨስና ዕጽ ተጠቃሚነት መለኪያ(መማዕተመ 3.1)

ተ.ቁ	ጥያቄዎች	መልስ ሊሆኑ የሚችሉ ምርጫዎች	
.	ከሚከተለት ውስጥ በህይወት ዘመንዎ የትኛውን ንጥረ ነገር ተጠቅመዋል?		
		አልተጠቀምኩም	ተጠቅሜያለሁ
	1. የትምባሆ ምርቶች /ሺሻ፣ሲጋራ፣የሚታኝክ ትመባሆ፣ኮሸ	0	1
	2. የአልኮል መጠጦች /ጠላ፣ጠጅ፣አረቄ፣ቢራ፣ወይን፣ወዘተ	0	1

	3. ጫት	0	1
	4. ሀሺሽ፣ ጋንጃ፣ ካናቢስ፣ ዊድ	0	1
	5. ትራማዶል ወይም ሌላ መድሀኒት	0	1

2. የሁለም ጥያቄዎች መልስ አልተጠቀምኩም ከሆነ የሚከተሉትን ጥያቄዎች ዘለው ወደ ክፍል 5 ይሂዱ። ለአንድ ወይም ከዚያ በላይ ጥያቄ ‘‘ተጠቅሜያለሁ’’ የሚል መልስ ከሰጡ የሚከተሉትን ጥያቄዎች ይመልሱ።

		በጭራሽ	አንድ ወይም ሁለት ጊዜ	በየወሩ	በየሳምንቱ	በየቀኑ (ከሞላጎደል በየቀኑ
	1. የትምባሆ ምርቶች /ሺሻ፤ሲጋራ፤የሚታኘክ ትመባሆ፤ኮሸ	0	2	3	4	6
	2. የአልኮል መጠጦች/ጠላ፣ጠጅ፣አረቄ፣ቢራ፣ወይን፣ወዘተ	0	2	3	4	6
	3. ጫት	0	2	3	4	6
	4. ሀሺሽ፣ ጋንጃ፣ ካናቢስ፣ ዊድ	0	2	3	4	6
	5. ትራማዶል ወይም ሌላ መድሀኒት	0	2	3	4	6

ክፍል-7. የቤተሰብ አዕምሮ ህመም እና እራስን አጥፍቶ መሞት ታሪክ ጋር የተያያዘ መጠይቅ

No	Questions	Coding classification
1.	ከቅርብ ቤተሰብ የሚታወቅ የአይምሮ ህመም ያለበት ሰው አለ?	1)የለም 2)አለ
2.	ከቅርብ ቤተሰብ ውስጥ ሱስ አምጪ ንጥረ ነገሮችንአልኮልን ጨምሮ) በብዛት የሚጠቀም(ሱስ ያለበት) ሰው አለ?	1)የለም 2)አለ
3.	ከቅርብ ቤተሰብ ራሱን ለማጥፋት ሞክሮ የሚያውቅ ሰው አለ?	1)የለም 2)አለ
4.	ከቅርብ ቤተሰብ ራሱን አጥፍቶ የሞተ ሰው አለ?	1)የለም 2)አለ

ክፍል-8 ስር የሰደዱ የውስጥ ደዌ ህመሞች ጋር የተያያዙ ጥያቄዎች

ተ.ቁ	ጥያቄዎች	መልስ ሊሆኑ የሚችሉ ዝርዝሮች
1.	ስር የሰደደ የውስጥ ደዌ ህመም አለህ/ሽ?	1)አዎ 2-)የለኝም

ክፍል 9- ከማሸማቀቅ (bullying) ጋር የተያያዙ የማጣሪያ ጥያቄወች - Forms of Bullying Scale Victimization Version (FBS-V)

ተ.ቁ	ጥያቄዎች	መልስ የሚሆኑ ምርጫዎች				
በሚከተሉት መንገዶች በአንድ ወይም በብዙ ልጆች ምን ያህል ጊዜ ማሸማቀቅ (bullying) ደርሶብህ ነበር (በኤሌክትሮኒክ መገናኛዎች/ cyberbullying ጨምሮ)		ይህ በእኔ ላይ አልደረሰም [1]	አንዴ ወይ ሁለቴ ደርሶብኛል [2]	በየጥቂት ሳምንታት ይደርስብኛል [3]	በሳምንት አንድ ጊዜ ገደማ ይደርስብኛል [4]	በሳምንት ብዙ ጊዜ ወይም ከዛ በላይ ይደርስብኛል [5]
1.	በአስቀያሚ መንገዶች አብሽቀውኝ ነበር	1	2	3	4	5
2.	እኔን ለመጉዳት ስለ እኔ ሚስጥሮች ለሌሎች ተነግሯል	1	2	3	4	5
3.	ጓደኝነትን ለማቋረጥ (ለመጣላት) በሚሞክር ሰው ተነድቻለሁ	1	2	3	4	5
4.	የሆነ ሰው እኔ ላይ አደርስብሀለሁ ባለው ነገር የተነሳ ፍርሀት እንዲሰማኝ ተደርጌያለሁ	1	2	3	4	5
5.	በሆነ ሰው እና/ወይም በተባበሩብኝ ቡድኖች ሆን ተብሎ አካላዊ ጉዳት ደርሶብኛል	1	2	3	4	5
6.	በአስቀያሚ መንገዶች ስም ተሰቶኛል (ተጠርቻለሁ)	1	2	3	4	5
7.	የሆነ ሰው እሱ/እሷ ያለውን/ያለችውን ካልፈጸምኩ በስተቀር እንደማይወደኝ ነግሮኛል/ነግራኛለች	1	2	3	4	5

8.	ንብረቶቼ ሆን ተብሎ ተጎድተዋል፣ ወድመዋል ወይም ተሰርቀዋል	1	2	3	4	5
9.	ሌሎች እኔን ከቡድን ውስጥ በማግለል ወይም ባለማዋራት ሊጎዱኝ ሞክረዋል	1	2	3	4	5
0.	ጓደኞቼ ወይም ሌሎች ሰዎች እኔን እንዳይወዱኝ ለማድረግ ስለ እኔ ውሸት ተነግረዋል እና/ወይም የውሸት አሉባልታዎች በሆነ ሰው ተሰራጭቷል	1	2	3	4	5

ASSURANCE OF PRINCIPAL INVESTIGATOR

Declaration of original work

I, the undersigned, declare that this thesis proposal is my original work, where my work is indebted to the work of others, it has not been accepted or presented for a degree in this or any other university and that all sources of materials used for the thesis have been fully acknowledged.

Name of Investigator: Dr. Dureti Kassim_____

Signature: _____

Date of submission: _____

This thesis proposal has been submitted to DOP with my approval as a supervisor

- ✓ Name and Signature of the first Supervisor: Dr. Fikirte Girma
- ✓ Name and Signature of the second supervisor: Dr. Awoke Mihretu