



ST. PAUL'S HOSPITAL MILLENNIUM MEDICAL COLLEGE

DEPARTMENT OF PUBLIC HEALTH

**ASSESSEMENT OF PREVALENCE AND FACTORS
ASSOCIATED WITH SOCIAL ANXIETY DISORDER AMONG
BETHELEHM SECONDARY SCHOOL, ADDIS ABABA
ETHIOPIA**

RESEARCH REPORT

By

Dr. Amanuel Yeneneh (Intern)

**A STUDENT RESEARCH REPORT SUBMITTED TO THE DEPARTMENT OF
PUBLIC HEALTH, ST. PAUL'S HOSPITAL MILLENNIUM MEDICAL
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**August 2018
SPHMMC
Addis Ababa, Ethiopia**



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I- Acronyms and Abbreviations

A.A	Addis Ababa
ADAA	Anxiety Disorders Association of America
AIDS	Acquired immunodeficiency syndrome
AOR	Adjusted odds ratio
CI	Confidence interval
COR	Crude odds ratio
DSM	Diagnostic and Statistical Manual of Mental Disorders
GAD	Generalized anxiety disorder
GHQ	General Health questionnaire
HIV	Human immunodeficiency virus
LSAS	Liebowitz's social anxiety scale
MASC	Multidimensional Anxiety Scale for Children
OCD	Obsessive compulsive disorder
PD	Panic disorder
PTSD	Post-traumatic stress disorder
SAD	Social anxiety disorder
SPHMMC	St. Paul's Hospital Millennium Medical College
SPIN	Social Phobia Inventory
SPSS	Statistical Package for Social Science

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IV- Acknowledgment

First of all I would like to thank God for helping me from the beginning to the end. Next I would like to thank St Paul's Hospital millennium medical college public health department for giving me this opportunity to practice the necessary skills to do research by worldwide acceptable standards. I would also like to send my heartfelt gratitude for my advisors for taking their time and agreeing to advise me in the whole process of my research development. Last but not least I would also like to send my deepest gratitude for my dorm mates who has been helping me by giving me advices and different materials through the whole process of doing this research.

V- Summary

Introduction: - Anxiety is a state of intense apprehension, uncertainty, and fear resulting from the anticipation of a threatening event or situation, often to a degree that normal physical and psychological functioning is disrupted. It is estimated that 13% to 25% of the world adolescents in school face anxiety with Social anxiety disorder (SAD) having a relatively high lifetime prevalence of 7-13% in the general population. More specifically, in Ethiopia SAD has a 27.5% prevalence in a single study done in Woldia but no more research has been done to assess its prevalence in other parts of the country especially in a more urban setup. So the purpose of this research is to assess the extent of this problem in Bethlehem secondary school and put forward a plan to tackle it in the future.

Objective: - To assess the prevalence and factors contributing to Social anxiety disorder among Bethlehem secondary school students.

Methods: - This research is based in Bethlehem secondary school and it was school based analytical cross-sectional study. A total of 302 students were selected using systematic random sampling technique. Data was collected using self-administered questionnaire after obtaining a written consent from students' parents or guardians. The statistical package for social sciences (SPSS) version 21 was used for data entry and analysis. Mean, Standard deviation, percentage and range were used as a descriptive statistics and logistic regression with confidence level (CL) 95% was used to examine the association between categorical variables.

Result: - From 302 study participants, 160 (53%) of them were positive for social anxiety disorder. Being female (AOR = 2.82; 95% CI: 1.67–5.31), being in 9th grade (AOR = 2.806; 95% CI: 1.63–4.81), poor social support (AOR = 25.7; 95% CI: 9.504– 69.58), and living with relatives/alone (AOR = 2.812; 95% CI: 1.32–5.89) were significantly associated with social anxiety disorder. The proportion of social anxiety disorder was found to be higher compared to previous evidences.

Recommendations: - Formulation of school-based youth-friendly mental health services; prepare a campaign to create awareness about Social anxiety disorder to help students with this problem understand the disorder and further studies in order to describe the longitudinal nature of the illness and to identify risk factors to obtain a clear picture of the problem.

1. Introduction

1.1. Background of the study

A certain level of anxiety is a normal occurrence in life. An individual might experience anxiousness when faced with a problem at work, while taking a test or even before meeting new people. This anxiety becomes a problem when it interferes with normalcy of everyday life. Anxiety is defined as a state of intense apprehension, uncertainty, and fear resulting from the anticipation of a threatening event or situation, often to a degree that normal physical and psychological functioning is disrupted [1]. According to American Psychiatric Association anxiety disorders are grouped into seven types: Generalized anxiety disorder (GAD), social anxiety disorder or social phobia (SAD), specific phobia or obsessive compulsive disorder (OCD), post-traumatic stress disorder (PTSD) and panic disorder (PD) [1, 2].

The occurrence of anxiety in an individual is determined by the interactions prone to anxiety and the amount of stress in the situation [2]. Anxiety has been linked with negative consequences on a people's social life, emotional development, academic failure as well as long-term effects on psychological functioning in adulthood, such as anxious feeling, tense, scared, worried, and fearful [2,3].

Anxiety disorders are one of the major psychological disorder facing school adolescents in their everyday life [3, 4]. It is estimated that 13% to 25% of the world adolescents in school face anxiety [3, 5]. However there is significant difference in its estimated prevalence. The variability is because the majority of school adolescents, particularly in developing countries, start and finish their studies without undiagnosed anxiety levels. Based on direct interviews of both children and parents, a three-month rate of 5.7% has been reported among children 9–13 years-old and 2.4% among children 9–16 years-old, and a six-month rate of 13.0% of anxiety was found among children 9–17 years-old [6]. In addition to that anxiety disorders can be found as part of other common psychiatric disorders like mood disorders.

Social anxiety disorder (SAD) is an unrealistic and chronic illness featured by fear of a specific situation or activity or thing with a relatively high lifetime prevalence of nearly 15% in the general population [2, 3]. In Ethiopia SAD has a 27.5% prevalence in a single study done in woldia [7]. Students with SAD tend to be fearful, look foolish, lack the self-confidence of being criticized,

afraid of making mistakes or responding with the wrong answers in the class. Furthermore, it interferes with their concentration and memory which are paramount to a successful academic performance. Social anxiety, if not treated early, can lead to impaired peer relations, missed schooling, substance use, i.e., alcohol and other illicit drugs and anxiety disorder in adulthood [2, 3, 5].

1.2. Statement of the problem

Children and adolescents are our future and to ensure that this future is a bright one we need to pay attention not only to the physical wellbeing but also the psychological wellbeing of our youngsters. One of the commonest psychological illness afflicting children and adolescents is Social anxiety disorder based on the studies conducted in the past. It's a major problem that affects not only their social life but also their academic performance as well. Students with social anxiety disorder have difficulty in their concentration as well as memory which will affect their school performance. The bad school performance by itself is one major source of anxiety which will exacerbate the disorder even more. So if this vicious cycle is not broken early with appropriate professional help it will cripple their lives for years to come.

Social anxiety disorder is as formidable as any other major health problem such as malaria, tuberculosis, pneumonia, maternal death and HIV/AIDS. It has been getting the attention it deserves in developed nations but the same cannot be said for other parts of the world. There is only been one study done on the prevalence and contributing factors of social anxiety disorder among children and adolescents here in Ethiopia. In order to face this problem head on as a country we need to know the extent of the problem especially in an urban set up where expectations are even higher.

Even though it's a major problem, the solution is achievable and manageable with resource this country has to offer. So the purpose of the research is to assess the extent of this problem in Bethlehem secondary school and encourage further study on the study subject.

1.3. Significance of the study

The knowledge generated through this study will provide local data on social anxiety disorder among the youth in the context of the economical, socio-cultural background. It helps policy makers, health program planners and, the stake holders (like parents, school's administrators and those working on adolescents) to design intervention strategies. The result of this investigation will help any concerned body, sector or individual to know the extent of the problem in the study area and carry out interventional activities for reduction of the problem. It may also serve as a baseline for other researchers to study such problems in depth in the study area besides filling the literature gap.

2. Literature review

2.1. Prevalence of social anxiety disorder

In a study conducted on the role of anxiety symptoms in school performance in a community sample of children and adolescents in a predominantly middleclass urban community in Catania, Sicily (Italy). Samples of elementary (N = 131, age 8–10 years), middle (N = 267, age 11–13 years), and high school (N = 80, age 14–16 years) children were recruited from four public schools. Children completed the Multidimensional Anxiety Scale for Children (MASC). Of the 478 children, 35 (7.3%) had a MASC T-score in the anxious range [4].

A cross-sectional health study was conducted in Guangzhou city of the Guangdong Province in southeast China, where high school students aged 13 to 18 years were recruited. The sample was selected from all high schools in the city using a 2-stage random cluster sampling technique. Social interaction anxiety was assessed using the Social Interaction Anxiety Scale. A total of 1083 high school students were recruited from 4 high schools, with a class randomly selected from each grade. The majority of these students were < 16 years (n = 593, 73%), with an even distribution of males and females (49% vs. 51%). Nearly half (n = 513) were satisfied with their self-image and 90 (7%) considered their image as unsatisfactory [6].

In a descriptive-analytic study done in Dezful city South West of Iran on the Prevalence of Anxiety and its related Factors among School age Children, 623 children aged 9-12 year-old who were studying in the fourth to sixth grade of elementary school, were selected through multistage random sampling. The data were collected using demographic profile questionnaire and School Anxiety Scale (SAS). Of total 623 students, 36.3% were girls. 232 (37.2%) students had mild anxiety, 304 students (48.8%) had moderate anxiety and 87 students (14%) had severe anxiety [8].

Another study was conducted on the Prevalence and Risk Factors of Anxiety Disorders among Students at the Age of 12-18 Years in prep, secondary and university students from Cairo and Kafr El-Sheikh governorates Egypt. The study included 1200 student (600 from rural area, and 600 from urban area), their age ranged from 12-18 years with a mean age of 13.54 years. Males were

493 represented 44.7% and females were 611 represented 55.3%. The positive cases by GHQ were 186 representing (16.8%) and similar results were obtained by the anxiety scale [10].

In a Cross sectional study conducted among Female Governmental Secondary schools students, in Al-Madinah city, Saudi Arabia in 2014, 376 female students were selected by multistage sampling technique. The researcher used a self-administered questionnaire containing socio-demographic data and anxiety questionnaire developed by AL-Taif Mental Health sector. Overall 64.6% of students showed symptoms of anxiety [11].

In a School-based cross-sectional study conducted at Woldia preparatory school located in Woldia town, Amhara regional state Ethiopia to assess the prevalence of social anxiety disorder among school adolescents, a pretested and self-administered questionnaire was administered to 386 randomly selected students. From 386 study participants, 106 (27.5%) of them were positive for social anxiety disorder [7].

2.2. Factors associated with social anxiety disorder

In a study conducted on the role of anxiety symptoms in school performance in a community sample of children and adolescents in a predominantly middleclass urban community in Catania, Sicily (Italy), the rate of children in the anxious range was 2.3% in elementary, 7.9% in middle, and 15.9% in high school ($p < 0.05$), and was 14.1% among students with insufficient grades, 9.4% among those with sufficient grades, and 3.9% among those with good or very good grades ($p < 0.01$). The study showed that in this community sample of children and adolescents attending elementary through high school, the prevalence of abnormally high self-reported levels of anxiety increased in frequency with age and was negatively associated with school performance [4].

A cross-sectional health study was conducted in Guangzhou city of the Guangdong Province in southeast china among high school students and found that these youngsters scored moderately high on self-esteem, but relatively low on anger and hostility scores. The social interaction anxiety scores of these young persons were also moderately high with a mean score of 42.4 (0.3) and a median of 42 out of a maximum 76. The study showed that lower family income, lower self-esteem, and hostility were significantly associated with social interaction anxiety among

adolescents. Variables identified as risk factors of anxiety disorder in the literature, such as gender, were not associated with social interaction anxiety in this sample [6].

In a descriptive-analytic study done in Dezful city South West of Iran on the Prevalence of Anxiety and its related Factors among School age Children there was a significant relationship between the mean score of children anxiety and the number of children in family ($P < 0.05$) as well as the history of hereditary disease ($P < .05$) and the relationship between the mean score of children anxiety and educational level was not significant ($P > 0.05$). This study showed that the prevalence of anxiety was higher in boys, children who were single children, children who had a family history of hereditary disease, and children who experienced corporal punishment at home [8].

In a Cross sectional study conducted among Female Governmental Secondary schools students, in Al-Madinah city, Saudi Arabia, high morbid anxiety was reported among 25.5% of secondary school girls whereas high not morbid anxiety was reported among 39.1% of them. Lastly the study showed that Socio-demographic characteristics of the school girls were not significantly associated with anxiety [11]. And in a study conducted on the Prevalence and Risk Factors of Anxiety Disorders among Students in prep, secondary and university level at Cairo and Kafr El-Sheikh governorates Egypt, anxiety disorders were most common in females (sex distribution), the age group from 12 to 14 years; Totally, from all studied cases, the positive clinical cases represent 20.6%, anxiety is the most prevalent (6.69%) and the least is behavioral disorder (0.45%). Findings demonstrated the clinical significance of socio demographic factors related to anxiety disorder among adolescent youth, and highlighting on the paternal relations [10].

In descriptive cross sectional study done in Dodoma Region Tanzania on Anxiety and Academic Performance among Secondary School Peoples, 92 children who were studying two public secondary schools where selected by Simple random sampling and among the participants males accounted for 45.8% and females 54.2%. The causes of anxiety among secondary school students were: Administration of corporal punishment in secondary schools was a major cause of anxiety (87.0%), followed by school strict rules and regulations which account for 43.5%, students capacity (8.7%) and inappropriate preparation by students (10.7%). The majority of students experienced sudden heart beat (85.5%), followed by hand trembling (52.4%), body aches (40%), while upset stomach were found to be the lowest sign of anxiety experienced by

secondary school students of all response cases (8.5%). The findings indicated that a considerable number of students were affected by anxiety leading to poor performance. In addition to that, the study revealed that school rules, teachers' practices, and behaviors, corporal punishment as well as peoples irresponsibility were the causes of anxiety disorders experienced by the students [3].

A School-based cross-sectional study conducted at Woldia preparatory school revealed that being female, current alcohol drinking, poor social support, and living with single parent were significantly associated with SAD. The study showed that the proportion of SAD was higher compared to previous evidences [7].

3. Objectives

General objective

To assess the prevalence and factors contributing to Social anxiety disorder among Bethlehem secondary school.

Specific objectives

- ❖ To assess prevalence of Social anxiety disorder among Bethlehem secondary school.
- ❖ To determine the factors contributing to Social anxiety disorder among Bethlehem secondary school.

4. Methods

4.1. Study Setting (Area)

The study was conducted in Bethlehem secondary school. The school is located about 500 meters north of St.Georgie's church in Arada subcity Addis Ababa, Ethiopia. Bethlehem secondary school was established in the year 1962 initially as only primary school. But since 1995 it has also started to teach in grades 9 and 10. Until five years back it was a public school but now it's one of the governmental school of Addis at which point it became only secondary school. This school was randomly selected among the many governmental schools located in A.A. Governmental schools are chosen because they offer a unique perspective as they give access to adolescents in the lower socioeconomic level where expectations as well as pressures are higher predisposing them to anxiety disorders especially in urban setup like A.A.

4.2. Study design

A school based analytical cross-sectional study design was conducted to carry out this research

4.3. Source Population

All students from grade 9 and 10 in Bethlehem secondary school

4.4 Study population with eligibility criteria

All students from grade 9 and grade 10 that are present during the time of data collection in Bethlehem secondary school

Inclusion criteria

- All grade 9 and grade 10 students who attend their class in the regular program.

Exclusion criteria

- Those students who are unable to respond due to different health problems
- Students who haven't completed their questionnaire and those who are absent

4.5. Sample size determination

To calculate the sample size a single population proportion formula, $[n = (Z \alpha/2)^2 p (1-p) / w^2]$, was employed. Proportion of satisfaction value [P] of 27.5% was taken from the finding of a study done in a School-based cross-sectional study conducted at Woldia preparatory school located in Woldia town, Amhara regional state Ethiopia to assess the prevalence of social anxiety disorder. In addition, 95% confidence level with margin of error 5% ($w = 0.05$) were used. Hence, the sample size was calculated as follows

$$\begin{aligned} n_o &= (Z\alpha/2)^2 p (1-p) / D^2 \\ &= (1.96)^2(0.27)(0.73)/(0.05)^2 = 302 \end{aligned}$$

4.6. Sampling procedure

Source of data: school registrar bureau

Type of data: A full list of all the students in Bethlehem secondary school attending grade 9 to grade 10 as well as the number of sections in each grade together with number of students in each class room.

Sampling: Systematic random sampling

Procedure: there were ten sections each for 9th and 10th grades with an average of 45 students in each class. Out of 302 sample size 151 are from grade 9th and the rest from 10th grade. Subsequently the students from each grade were selected with a K value of 3. Initially the homeroom teachers were briefed on the purpose of the research prior to the dissemination the consent to the participants. After checking that the respective parents/guardians have signed the consent, the questionnaire was disseminated to the participants.

4.7. Data collection instruments

Self-administered and pre tested questionnaire was used for data collection. The questionnaire was pretested at the same school involving 10% of the samples size among those who aren't included in the sample. Pretesting was done with an aim to check sequence of question, comprehension of the questions among the participants and duration.

The format for questioner included demographic information questionnaire that incorporates age, gender, educational level, number of siblings, children's family history of hereditary diseases, children's living status (i.e., whether living with their parents or not), school truancy, children's experience of corporal punishment at home, and school performance based on grade point average. Next Social Phobia Inventory (SPIN) which is a 17-item self-rating scale developed by Connor and his colleagues, which shows the symptom domains of SAD (fear, avoidance, and physiological arousal) and appears to have reliable and valid psychometric properties of screening SAD in adolescents and other populations. It was rated from 0 (not at all) to 4 (extremely) and the sum score ranged from 0 to 68. The Liebowitz's social phobia intensity rating scale was used to assess the intensity of social anxiety disorder. Oslo 3-item social support scale was used to determine the level of social support and the total score ranged from 3 to 14.

4.8. Study variables

Independent variables

- Respondent's Gender
- Age
- Educational level
- Religion
- Mothers educational level
- Fathers educational level
- Grade in class
- Parents monthly income
- Parents marital status
- Number of siblings
- Personal and family psychological illness history
- Ethnicity

- Father's occupation
- Mother's occupation
- Medical history

Dependent variables

- Social anxiety disorder

4.9. Data management and analysis

The completed questionnaire was checked for completeness and consistency by the principal investigator. Code was given to the completed questionnaire. The principal investigator with an experienced data clerk entered the data using SPSS 21 statistical packages. Data cleanup was performed to check for accuracy, consistencies, & values. Any error was then identified and corrected. Central tendency & dispersion was used, and descriptive data was described in the form of frequency tables & depicted graphically. Then by using crosstabs with Chi square test the association between social anxiety disorder and expected associated factors were measured. Next those with P-value <0.05 were further analyzed using multivariate logistic regression in order to obtain the crude odds ratio. Finally the associated factors were further analyzed by controlling the covariates in order to obtain the adjusted odds ratio.

4.10. Data quality assurance

Standard questionnaire was adopted and applied. Prior to the actual data collection, pre-testing was done. After the pretest the questionnaire was checked for its clarity, understandability, completeness, reliability, consistency, sensitivity, time and pattern of response. Then correction was made accordingly.

4.11. Operational definitions

Social Anxiety Disorder: A respondent who scored 20 and above by answering the 17 questions on SPIN.

Intensity of SAD:

Moderate SAD: A respondent who scored 50-65 on Liebowitz's social phobia intensity rating scale.

Marked SAD: A respondent who scored 65-80 on Liebowitz's social phobia intensity rating scale.

Severe SAD: A respondent who scored 80-95 on Liebowitz's social phobia intensity rating scale.

Very severe SAD: A respondent who scored >95 on Liebowitz's social phobia intensity rating scale.

Social support:

Poor support: A respondent who scored 3–8 on Oslo 3-item social support scale.

Moderate support: A respondent who scored 9–11 on Oslo 3-item social support scale.

Strong support: A respondent who scored 12–14 on Oslo 3-item social support scale.

Rank in class: based on a similar studies done school achievement is measured as follows

Good rank: A respondent whose rank in class is between 1 and 10.

Moderate rank: A respondent whose rank in class is between 11 and 30.

Bad rank: A respondent whose rank in class ≥ 40 .

4.12. Dissemination of the result

This research report will be presented to and finally submitted to St. Paul's hospital millennium medical college's public health department. The result will also be disseminated to any organization or institution or individuals who have direct or indirect input to the project. All attempts will be made to present the results of the study on local and/or international Journals.

4.13. Ethical clearance

Ethical approval was obtained from Department of Public Health, SPHMMC. And formal letter was written to Bethlehem Secondary School explaining objectives of the study and its significance, relevant permission was asked to obtain desirable cooperation and necessary information during data collection. At individual level, the purpose of the study was discussed with all participants prior to their participation in this study. Furthermore, the participants were informed that their participation in the study was voluntary and that they were not obliged to answer any question with which they were uncomfortable and was also free to withdraw their participation from the study at any time they want. Participants were assured that confidentiality would be maintained.

5. Result

5.1- Socio-demographic characteristics of the respondents

A total of 302 students were included in the study, of which 133(44%) were male and 169(56%) were female giving male to female ratio of 1 to 1.27. 294(97.4%) of the participants were in the age group between 16 and 19 and only 8(2.6%) were above >19. The mean age of the students was 16.3 with standard deviation of 1.281. Out of the 302 students 50% were 9th grade and 50% 10th grade.

Among the students included in the study, the majority were of Amhara ethnicity accounting for 153(50.7%) of the students. And in terms of religion 222(73.5%) are orthodox in religion, 61(20.4) are Muslim and the rest are protestant and catholic.

In terms of living situation, 171(56.6%) live with both parents while 74(24.5%) and 57(18.9%) live with single parent and relative/alone respectively.

Table 1: Socio-demographic features of students who attended Bethlehem secondary school Addis Ababa Ethiopia from January to July 2018

Variables		Frequency	Percent
Gender	Male	133	44.0%
	Female	169	56.0%
Age	16 – 19	294	97.4%
	>19	8	2.6%
Educational level	Grade 9	151	50%
	Grade 10	151	50%
Rank in class	1-10	100	33.1%
	11-20	104	34.4%
	21-30	70	23.2%
	31-40	24	7.9%
	40-last	4	1.3%
Ethnicity	Amhara	153	50.7%
	Oromo	54	17.9%

	Tigere	48	15.9%
	Gurage	33	10.9%
	Silte	13	4.3%
	Walyata	1	0.3%
Religion	Orthodox	222	73.5%
	Islam	61	20.2%
	Protestant	17	5.6%
	Catholic	2	0.7%
Father's educational status	Unable to read and write	18	6.0%
	Read and write	49	16.2%
	Grade 1-8	30	9.9%
	Grade 8-12	95	31.5%
	Diploma	31	10.3%
	Bachelors' degree	53	17.5%
	Master's degree and above	26	8.6%
Mother's educational status	Unable to read and write	29	9.6%
	Read and write	41	13.6%
	Grade 1-8	54	17.9%
	Grade 8-12	102	33.8%
	Diploma	66	21.9%
	Bachelors' degree	7	2.3%
	Master's degree and above	3	1.0%
Parents marital status	Married	201	66.6%
	Divorced	27	8.9%
	Separated	50	16.6%
	Widowed	24	7.9%
Living situation	Both parents	171	56.6%
	Single parent	74	24.5%
	Relative/Alone	57	18.9%
Do you have siblings?	Yes	29	9.6%
	No	273	90.4%

5.2- Clinical and psychosocial characteristics of the respondents

From the 302 participants six (2%) have personal or family history of past psychiatric illness while 296(98%) have no such history. And seven (2.3%) have personal or family history of known chronic medical illness.

Table 2: Clinical and psychosocial characteristics of students who attained Bethlehem secondary school Addis Ababa Ethiopia from January to July 2018

Variable		Frequency	Percent
Personal or family history of psychiatric illness	Yes	6	2.0%
	No	296	98.0%
History of chronic medical illness	Yes	7	2.3%
	No	295	97.7%

In terms of social support, 73(24.2) have poor social support, 155(51.3%) have moderate social support and 74(24.5%) have strong social support.

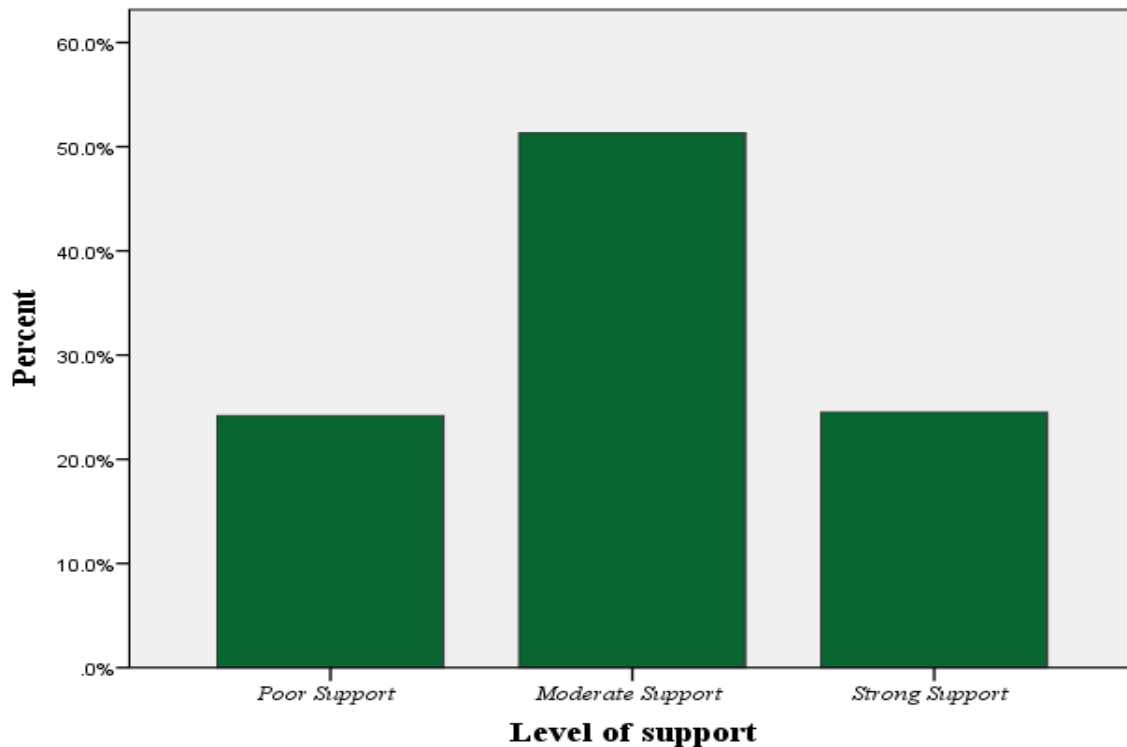


Figure 1: Measure of level of social support among students who attained Bethlehem secondary school Addis Ababa Ethiopia from January to July 2018

5.3- Prevalence and associated factors of social anxiety

The overall prevalence of social anxiety was 53% with 160 students being affected. And among this 66(21.9%) had moderate social anxiety, 54(17.9%) had marked social anxiety, 31(10.3%) had sever social anxiety and 9(3%) had very severe social anxiety.

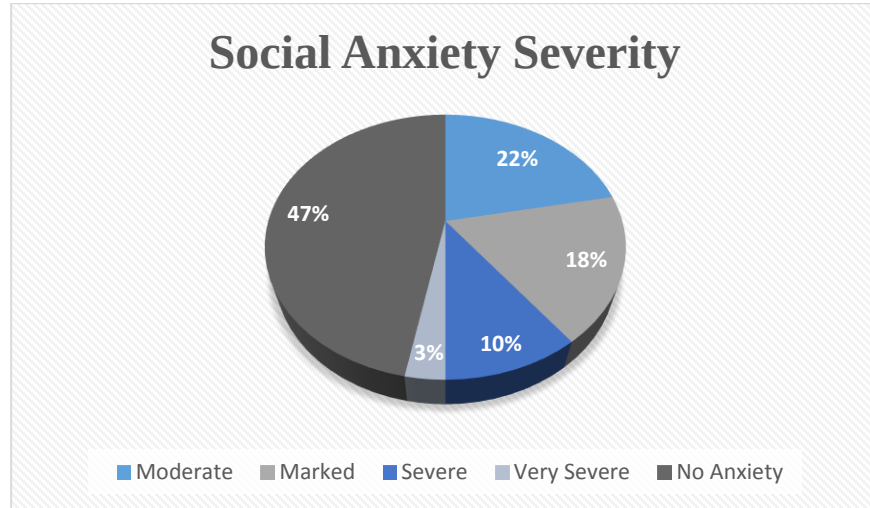


Figure 2: Measure of severity of social anxiety disorder among students who attained Bethlehem secondary school Addis Ababa Ethiopia from January to July 2018

In multivariate logistic regression analysis gender, grade, level of social support and students living with relatives/alone were significantly associated with social anxiety. There is also a significant association between social anxiety and rank in class.

Variable		Social Anxiety		COR	P-value	AOR	P-value
		Yes	No				
Gender	Male	66	67	1.00	-	1.00	-
	Female	113	56	2.048(1.284,3.268)	0.003	2.982(1.67,5.31)	0.001
Grade	9 th	107	44	2.668(1.66,4.28)	0.004	2.806(1.63,4.81)	0.002
	10 th	72	79	1.00	-	1.00	-
Living situation	Both parents	96	75	1.00	-	1.00	-
	Single parent	41	33	0.97(0.56,1.68)	0.033	0.912(0.475,1.74)	0.042
	Relative/Alone	42	15	2.188(1.12,4.24)	0.021	2.812(1.32,5.89)	0.007
Rank in class	Good	50	50	1.00	-	1.00	-
	Moderate	113	61	1.852(1.12,3.05)	0.042	1.482(0.83,2.64)	0.049
	Bad	16	12	1.333(0.57,3.104)	0.016	1.339(0.48,3.69)	0.028
Social support	Poor support	67	6	24.76(9.39,65.2)	0.003	25.71(9.504,69.58)	0.001
	Moderate support	89	66	2.99(1.66,5.37)	0.002	3.317(1.78,6.16)	0.001
	Strong support	23	51	1.00	-	1.00	-

Table 3: Prevalence and associated factors of social anxiety among students who attained Bethlehem secondary school Addis Ababa Ethiopia from January to July 2018

6. Discussion

The sociodemographic picture of the study population has a comparable ratio of male to female Students (1:1.27) and most of the participants are between the ages of 16 and 19(97.4%). Majority of the students' parents are married and about 18.9% of the students live with relatives/alone. These findings are highly analogous to the reported findings in a similar study that employed a school based cross sectional design in Woldia [7] which reflects persistence of these parameters.

The overall prevalence of social anxiety disorder was 53% and it was higher compared with the study done in Woldia preparatory school which was 27.5% [7]. The difference could be attributed to the fact that this study is conducted in the capital city where stress levels are high. The prevalence is even significantly higher than the study conducted in Nigeria, 9.4% [11], Swedish high school students, 21% [13], Iran, 6.2% [14], Delhi, 10.3% [15], and china, 14.1% [16], as well as the national comorbidity survey in USA, 9% [7]. It was also higher compared to a comparative study among high school students in Egypt, Saudi Arabia, and United Arab Emirates where the percentages were 13%, 9.8%, and 7.8%, respectively [7]. This discrepancy might be due to socio cultural differences between those countries and Ethiopia. For instance, in Ethiopia, shyness as a measure of politeness has been emphasized as a dominant cultural norm. The other possible reason for this difference might be the tool used in the current study, which is non diagnostic self-administered tool, and this might overestimate the prevalence of social anxiety disorder among students [18, 19, 20].

In this study, SAD had significant association with Gender, Grade, Level of social support, and students' living status. In female students, the odds of having social anxiety disorder were 3 times more compared to male students and this was congruent by the study done in Woldia [7], Poland [28] and Baghdad [29]. The community's perception towards shyness and politeness as a measure of predominant cultural norm might have high influence on female students' social anxiety disorder status [30]. Students who were in 9th grade were about 2.8 times more likely to have social anxiety disorder as compared with those in 10th grade. And students who have bad grades at school are 1.3 times more likely to have social anxiety than their counterparts.

Social support was another important factor associated with SAD. Students with poor social support had about 25 times and those with moderate social support had about three times more odds to have social anxiety disorder as compared with students who had strong social support and

the finding was in line with the study done in Woldia and Iran [7]. Social connectedness is important for the development of confidence and positive social skills. In addition to poor social support, students who lived with relatives or alone were three times more likely to have social anxiety disorder as compared with students who lived or were raised by both parents. This finding was supported by study done in Saudi Arabia and Woldia [7]. However, students' age, wealth, past psychiatric history, and family history of mental illness as well as educational status of the parents did not show any association with SAD in this study.

7. Limitations of the study

The first limitation of the study may be the fact that we used non diagnostic self-rating screening tool; the prevalence of social anxiety disorder might be overestimated. The other limitation is that we did not measure substance use which showed association in previously done studies. And of course lack of man power and limitation in time resource created a restraint on the investigator to increase the study period and sample size in order to have a better survey of the study population. The last limitation is our design which cannot show the direction of association.

8. Conclusion

The proportion of social anxiety disorder was significantly higher among secondary students in Bethlehem secondary school. The disorder was predicted by female gender, current grade, living with relatives or alone, and having poor social support. Furthermore, it has showed an association with rank in class but the cause and effect relationship is not clear.

9. Recommendation

Based on conclusions of this study, we propose the following measures to be taken:

- ✓ Formulation of school-based youth-friendly mental health service which could be very helpful to tackle this problem
- ✓ Prepare a campaign to create awareness about Social anxiety disorder to help students with this problem understand the disorder.
- ✓ Further longitudinal and interventional studies to describe the longitudinal nature of the illness and to identify risk factors in order to have a clear picture of the problem.

10. Reference

1. American Psychiatric Association, "Anxiety disorders," in Diagnostic and Statistical Manual of Mental Disorders, American Psychiatric Association, Washington, DC, USA, 5th edition, 2013.
2. Jesse C, Craig L. Anxiety Disorders of Childhood and Adolescence: Pediatric psychiatry network; 2012.
3. Yusuph k. Anxiety and Academic Performance among Secondary School Peoples in Tanzania. British Journal of Education, Society & Behavioral Science. 2016; 14(3): 1-7.
4. Luigi M, Francesca D, Maria CS, Eleonora P, Valentina GD and Benedetto V. The role of anxiety symptoms in school performance in a community sample of children and adolescents. BMC Public Health. 2007; 7(347): 1471-2458.
5. Fahad K. Magnitude of Social Anxiety Disorder, and Impact on Quality of Life among Medical Students, Taif City-KSA. Journal of Psychology and Clinical Psychiatry. 2017; 7(5): 00454.
6. ZW Peng, LT Lam, J Jin. Factors Associated with Social Interaction Anxiety among Chinese Adolescents. East Asian Arch Psychiatry. 2011; 21:135-41.
7. Kindie.M, Haregwoin M, Habtamu D, Tesfa M, Wubalem F, Amsalu B, Solomon Y, Getasew L, Melak M, Asmamaw G, Simegnew K. High Magnitude of Social Anxiety Disorder in School Adolescents. Hindawi Psychiatry Journal, 2017
8. Banaeipour Z, Rostami Sh, Zarea K, Cheraqian B. The Prevalence of Anxiety and its related Factors among School-age Children in South West of Iran. International Journal of Pediatrics. 2016; 4(6): 2019-25.
9. Anselme D, Francis TT, Thierry A, Iréti NA, Chérifath NA, Prosper G. Associated Factors and Impacts of Social Phobia on Academic Performance among Students from the University of Parakou (UP). Open Journal of Psychiatry. 2016; 6: 151-157.
10. Ismail A, Abdelgaber A, Hegazi H, Lotfi M, Kamel A, Ramdan M. The Prevalence and Risk Factors of Anxiety Disorders in an Egyptian Sample of School and Students at the Age of 12-18 Years. Journal of Psychiatry. 2015; 18:5.

11. F. R. Schneier, T. E. Foote, D. S. Hasin et al., "Social anxiety disorder and alcohol use disorder co-morbidity in the National Epidemiologic Survey on Alcohol and Related Conditions," *Psychological Medicine*. 2010, vol. 40, no. 6, pp. 977–988.
12. Al-Qahtani AM, Al-Harbi MB. Prevalence and Risk Factors of Anxiety among Female Governmental Secondary Schools Students in Al-madinah, Saudi Arabia. *Indian J of Pharmaceutical Education and Research*. 2017; 51(1):136-43.
13. Mehrdadi A, Sadeghian SH, Direkvand-Moghadam A, Hashemian A. The prevalence and risk factors of mental disorders among students in Ilam: A cross-sectional study. *Int J Epidemiol Res*. 2017; 4(1): 31-36.
14. N. Dodangi, N. Habibi Ashtiani, and B. Valadbeigi, "Prevalence of DSM-IV TR psychiatric disorders in children and adolescents of Paveh, a Western City of Iran," *Iranian Red Crescent Medical Journal*. 2014, vol.16, no.7, ArticleIDe16743.
15. V. Chhabra, M. Bhatia, S. Gupta, P. Kumar, and S. Srivastava, "Prevalence of Social Phobia in school-going adolescents in an urban area," *Delhi Psychiatry Journal*. 2009, vol.12, no.1, pp.18–25.
16. Y.Jin, L.He, Y.Kangetal, "Prevalence and risk factors of anxiety status among students aged 13–26years," *International Journal of Clinical and Experimental Medicine*. 2014, vol.7, no.11, pp.4420–4426.
17. L. Wetterberg, "Social anxiety in 17-year-olds in Stockholm, Sweden—a questionnaire survey," *South African Psychiatry Review*. 2004, vol.7, no.2, pp.30–32.
18. K. Ranta, R. Kaltiala-Heino, P. Rantanen, M. T. Tuomisto, and M. Marttunen, "Screening social phobia in adolescents from general population: the validity of the Social Phobia Inventory (SPIN) against a clinical interview," *European Psychiatry*. 2007, vol.22, no. 4, pp. 244–251.
19. K.M.Connor, J.R.T.Davidson, L.ErikChurchill, A.Sherwood, E. Foa, and R. H. Weisler, "Psychometric properties of the social phobia inventory (SPIN). New self- rating scale," *British Journal of Psychiatry*. 2000, vol.176, no.4, pp.379–386.
20. M. M. Antony, M. J. Coons, R. E. McCabe, A. Ashbaugh, and R. P. Swinson, "Psychometric properties of the social phobia inventory: further evaluation," *Behaviour Research and Therapy*. 2006, vol.44, no.8, pp.1177–1185.

21. Spence S, Zubrick S, Lawrence D. A profile of social, separation and generalized anxiety disorders in an Australian nationally representative sample of children and adolescents: Prevalence, comorbidity and correlates. *Australian & New Zealand Journal of Psychiatry*. 2017; 00(0):1-15.
22. Connor K. Psychometric Properties of the Social Phobia Inventory. *Br. J. Psych.* 2000; 176: 379-386.
23. Liebowitz MR. Social phobia. *Mod Probl pharmacopsychiatry* 1987; 22: 141-173.
24. Shen M, Gao J, Liang Z. Parental migration patterns and risk of depression and anxiety disorder among rural children aged 10–18 years in China: a cross-sectional study. *BMJ Open*. 2015; 5: 1-8.
25. Sarason I, Levine H, Basham R. Assessing social support: The Social Support Questionnaire. *Journal of Personality and Social Psychology*. 1983; 44: 127-139.
26. Social anxiety disorder More Than Just Shyness: National Institute of Mental Health; 2016.
27. Dowrick C, Casey P, Dalgard O. Outcomes of Depression International Network (ODIN). *Br J Psychiat*. 1998; 172: 359-363.
28. J. Bracik, K. Krysta, and A. Zaczek, “Impact of family and school environment on the development of social anxiety disorder: a questionnaire study,” *Psychiatria Danubina*. 2012, vol.24, no.1, pp. 125–127. Anxiety disorders in children: The Anxiety Disorders Association of America (ADAA); 2010.
29. B. F. Hummadi and A. K. AlObaidi, “Social phobia among secondary school students in Baghdad/Iraq,” *Journal of the Canadian Academy of Child and Adolescent Psychiatry*. 2014, vol.23, no. 1, pp. 70–71.
30. S. D. Messing and J. S. Prince, “Health practices in Ethiopian pre-urban communities,” *Journal of Health and Human Behavior*. 1966, vol.7, no.4, pp.272–276.

11. Annex

11.1- Questionnaire

የቅዱስ ጳውሎስ ሆስፒታል ሚሊኒየም ሜዲካል ኮሌጅ
የህብረተሰብ ጤና ዲፓርትመንት

መጠይቅ

ስምምነት

ይህ ስምምነት በእያንዳንዱ የዚህ ምርምር ተሳታፊ ተነበና ተፈርሞ፤ የዚህ ስምምነት አንድ ቅጂ ለተሳታፊው ይሠጠዋል፡፡

መግቢያ

የዋና ተመራማሪው ሥም፡ ዶ/ር አማኑኤል የኔነህ

የምርመር ተቋሙ ሥም፡ የቅዱስ ጳውሎስ ሆስፒታል ሚሊኒየም ሜዲካል ኮሌጅ

እኔ _____ በቅዱስ ጳውሎስ ሆስፒታል ሚሊኒየም ሜዲካል ኮሌጅ የመመረቂያ ምርመራን (*Assesment of Prevalence and Factors Affecting Social Anxiety Disorder among Bethелеhm Primary and Secondary School, A.A Ethiopia*) በሚል ርዕስ በማከናወን ላይ ለሚገኘው ለዶ/ር አማኑኤል የኔነህ ለምርመራ የሚያስፈልጉትን መረጃዎች በመስብሰብ ላይ ነኝ፡፡

ይህ/ይህች ተማሪ መረጃውን ለመስብሰብ ከተመረጡት 302 ተሳታፊዎች ውስጥ አንዱ/አንዷ ተሳታፊ ነው/ነች፡፡

የምርመራ ዓላማ፡

ይህ ምርመር በተማሪዎች ላይ ሊከሰት የሚችለውን ጭንቀትና ይህንን ሊያስከተሉ የሚችሉ ሁኔታዎችን በማጥናት የመፍትሄ ሃሳብ ለመጠቀም የታለመ ጥናት ነው፡፡ በተጨማሪም የሃገሪቱ ወጣቶች የዚህ ችግር ተጠቂ ሳይሆኑ ለሀገራቸው ጠቃሚ ዜጎች ለመሆን የሚያችላቸውን ዕውቀትና ክህሎት እንዲያገኙ የመፍትሄ አቅጣጫዎችን ይጠቁማል፡፡

(ይህን ጥናት በተመለከተ ማንኛውንም ጥያቄ መጠየቅና ተጨማሪ ማብራሪያ ማግኘት ይችላሉ)

የቃለመጠይቁ መመሪያ

በዚህ መጠይቅ ውስጥ ስለተማሪው ቤተሰብ ሁኔታ፣ አጋጣሚያቸው ስለሚያውቅ ጭንቀት፣ የሚያስጨንቁ ሁኔታዎችን ለማስወገድ የቻሉበት መፍትሄና ይህንን በተመለከተ ያገኙት ማህበራዊ ድጋፍን የተመለከተና የመሳሰሉትን ጥያቄዎች ተካተዋል፡፡ ለተሳታፊነት የተመረጡ ተማሪዎች በዚህ ምርመራ ላይ የመካፈል ወይም ያለመካፈል መብታቸው የተረጋገጠ ነው፡፡ ምንም ምክንያት ማቅረብ ሳያስፈልጋቸው ያለመሳተፍ መብታቸው የተረጋገጠ ነው፡፡

ሥጋቶችና አመቺ ያልሆኑ ሁኔታዎች፡

በዚህ ምርመራ ላይ ተሳታፊ የሚሆኑ ተማሪዎች ምንም ዓይነት ሥጋት አይኖርባቸውም፡፡ ምንም እንኳን በባህላችን እንደነዚህ ዓይነት ርዕሶች ላይ የሚቀርቡ ጥያቄዎች ላይ በግልጽ ሃሳብን መግልጽ የተለመደ ባይሆንም፤ የዚህ ምርመራ ተሳታፊዎች ሥም በማንኛውም የዚህ ጥናት ሕትመት ውስጥ አይገለጽም፡፡ ይህ የስምምነት ሠነድም በሚሰጠው የሚጠበቅ ይሆናል፡፡

ሚስጠራዊነት

በዚህ መጠይቅ ውስጥ የሚሰጡት ማንኛውም መረጃ ሚስጠራዊነቱ የተጠበቀ ነው። በማንኛውም የጥናት ሰነድ ላይ የተማሪው ስም በፍጹም አይጠቀስም። የመጠይቁ ሰነዶችና ይህ የስምምነት ሰነድም በሚሰጠር የሚጠበቁ ይሆናሉ።

ተሳታፊነትን ስለማቋረጥ

በዚህ ምርምር መሳተፍ በሙሉ ፈቃደኝነት ላይ የተመሠረተ ሲሆን፤ ያለምንም ቅድመ ሁኔታ በዚህ ምርምር ያለመሳተፍ ወይም ተሳተፎን ማቋረጥ የሚቻል ሲሆን፤ ይህም መንም ዓይነት ተጽእኖ አያስከትልም።

የምርምር ርዕስ

Assessment of Prevalence and Factors Affecting Social Anxiety Disorder among Bethelehem Primary and Secondary School, A.A Ethiopia

የተመራማሪው ሥም _____ ዶ/ር አማኑኤል የኔነህ

የዚህን ምርምር ተሳትፎ በተመለከተ ከላይ የተገለጸውን መብራሪያና የሚኖሩኝን ጥያቄዎች ተመራማሪውን ለመጠየቅ የተሰጠኝን አጋጣሚዎች ሁሉ መጠቀም እንደምችል በመረዳት፤ በዚህ ምርምር መሳተፍም በሙሉ ፈቃደኝነት ላይ የተመሰረተ መሆኑንና በፈለኩት ጊዜም ተሳተፎዬን ለማቋረጥ የምችል መሆኑንና ማቋረጤም በትምህረትቤቱ ውስጥ ምንም ዓይነት ተጽዕኖ እንደማይደረስብኝ ተረድቻለሁ።

ይህ ምርምር ምንም ዓይነት ስጋት የማያስከትልብኝ መሆኑን፤ በመጠየቁ የምሰጠውንም መረጃ ሚስጠራዊነት፤ የምሰጠውም መረጃ ለዚህ ምርምር የመመረቂያ ጽሁፍና ወደፊት ለሚደረጉ ተመሳሳይ ጥናቶች ብቻ በግብአትነት የሚያገለግል መሆኑን በመረዳት፤ በዚህ መጠይቅ ለመሳተፍ ተስማምቻለሁ።

ልጄ ተማሪ _____ በዚህ መጠይቅ እንዲሳተፍ/እንድትሳተፍ ፈቅጃለሁ።

የወላጅ/አሳዳጊ ሥም _____

የወላጅ/አሳዳጊ ፊርማ _____

የተማሪው/የተማሪዋ ሥም _____

የተማሪው/የተማሪዋ ፊርማ _____

ክፍል 1 –ማህበራዊ መገለጫዎች

ይህ የዳሰሳዊ ጥናት በተማሪዎች ዙሪያ ብቻ የሚያጠነጥን ነው፡፡ እያንዳንዱን ጥያቄ በጥሞና በማንበብ ትክክለኛውን መልስ ስጥ/ጪ፡፡ በዚህ መጠይቅ ላይ ስምህን/ሽን መጻፍ አስፈላጊ አለመሆኑን በድጋሚ እንልጻለሁ፡፡

ቁ.	ጥያቄዎች	ምርጫዎች
01.	ጾታ	1.ወንድ 2.ሴት
02.	ዕድሜ_____	
03.	ብሔር	_____
04.	ሐይማኖት	1. እስልምና 2.ኦርቶዶክስ 3.ፕሮቴስታንት 4.ካቶሊክ 5. ሌላ (ግለጽ)_____
05.	የትምህርት ደረጃ	1.7ኛ ክፍል 2.8ኛ ክፍል 3.9ኛ ክፍል 4.10ኛ ክፍል
06.	አሁን ባሉበት ክፍል ስንተኛ ደረጃ ወጣህ/ሽ?	1. 1-10 2. 11-20 3. 21-30 4. 31-40 5. 40-መጨረሻ
07.	ከጎረቤቶችህ/ሽ ጋር በንጽጽር ሲታይ ቤተሰብህ/ሽ ያለው የገቢ ደረጃ እንዴት ይመዘናል?	1.እጅግ ዝቅተኛ ገቢ 2.ዝቅተኛ ገቢ 3.ተመሳሳይ ገቢ 4.የተሻለ ገቢ 5.ባለጸጎች 6. በጣም ባለጸጎች
08.	በአንተ/ቺ ቤተሰብ ውስጥ በጋራ የሚኖሩት ሰዎች ስንት?	_____

09.	የወላጆችህ/ሽ ያሉበት የትዳር ሁኔታ እንዴት ይገለጻል?	1. እናት እና አባት አብረው ይኖራሉ 2. በፍቺ ተለያይተዋል 3. እናት/አባት በሞት የተለየ 4.. ተለያይተው የሚኖሩ
10.	አንተ/ቺ ከማን ጋር እየኖርክ/ሽ ነው?	1. ከአባት እና እናት 2. ከአባት ብቻ 3. ከእናት ብቻ 4. ከዘመዶች 5. ከጓደኞች 6. በብቸኝነት 7. ሌላ (ግለጽ)_____
11.	ወንድም እና እህት አለህ/ሽ?	1. የለኝም፤ እኔ ብቸኛ ልጅ ነኝ 2. አዎ አዎ ካልክ/ሽ፤ ስንት ናቸው_____
12.	የአባትህ/ሽ የትምህርት ደረጃ እንዴት ይገለጻል?	1. ማንበብ እና መጻፍ የማይችል 2. . ማንበብ እና መጻፍ የሚችል 3. ከ1-8 ክፍል 4. ከ 8-12 ክፍል 5. ዲፕሎማ 6. የመጀመሪያ ዲግሪ (Bachelors degree) 7. ሁለተኛ ዲግሪ (Masters degree) እና ከዚያ በላይ
13.	የእናትህ/ሽ የትምህርት ደረጃ እንዴት ይገለጻል?	1. ማንበብ እና መጻፍ የማይችል 2. ማንበብ እና መጻፍ የምትችል 3. ከ1-8 ክፍል 4. ከ 8-12 ክፍል 5. ዲፕሎማ 6. የመጀመሪያ ዲግሪ (Bachelors degree) 7. ሁለተኛ ዲግሪ (Masters degree) እና ከዚያ በላይ

14.	ከዚህ ቀደም አንተ/ቺ ለአእምሮ ህመም አጋሞህል/ሻል ወይም ከቤተሰብ አባል ውስጥ ያጋጠመው ሰው አለ?	1. የለም 2. አዎ አዎ ከሆነ፣ ግለጽ_____
15.	ከዚህ ቀደም ለሞት ሊዳርግ የሚችል የሚታወቅ ህመም አለብህ/ሽ?	1. የለም 2. አዎ አዎ ከሆነ፣ ግለጽ_____

ክፍል II- ማህበራዊ ኑሮ ላይ የሚያጋጥም አሉታዊ የፍርሃት ስሜት

ቀጥሎ ከተዘረዘሩት የማህበራዊ ትግሮች መካከል ባለፈው ሳምንት ያጋጠመህ/ሽ ይቱ እንደሆነ ግለጽ/ጪ። ለሁሉም ጥያቄዎች ከአረፍተ ነገሩ አጠገብ በሚገኘው ክፍት ቦታ ላይ ትክክለኛውን መልስ የሚወክለውን ቁጥር በመሙላት መልስ/ሺ።

0 = የለም 1 = በጥቂቱ 2 = በመጠኑ 3 = በጣም 4 = እጅግ በጣም

1. በኃላፊነት ላይ ያሉ ሰዎችን እፈራለሁ	
2. በሰዎች ዘንድ ስቀርብ አይኖሩ በመሆኔ እጨናነቃለሁ	
3. ፓርቲዎች እና ብዙ ሰዎች የሚታደሙበት ዝግጅቶች እጅግ ያስፈሩኛል	
4. ከማላውቃቸው ሰዎች ጋር ከማውራት እቆጠባለሁ	
5. ሰዎች አሉታዊ ሂስ ሲሰጡኝ ከፍተኛ ፍርሃት ይሰማኛል	
6. ምናልባት በሰዎች ፊት ተሳስቼ ሀፍረት ይፈጠርብኛል ብዬ ስለምሰጋ ነገሮችን ከማድረግ ወይም ከሰዎች ጋር ከማውራት እቆጠባለሁ	
7. ከሰዎች ፊት እያለሁ ሰውነቴን በሚያልብኝ ጊዜ ለጭንቀት እዳረጋለሁ	
8. ፓርቲዎች ላይ አለመገኘትን እመርጣለሁ	
9. የትኩረት ማእከል እኔ በምሆንባቸው ተግባራት ላይ አለመገኘትን እመርጣለሁ	

10. ከማላውቃቸው ጸጉረ ልውጥ ሰዎች ጋር ማውራት እጅግ ያስፈራኛል	
11. በሰዎች ፊት ንግግር ማድረግን አልሻም	
12. በሰዎች እንዳልተች ለማድረግ የማልፈጽመው ነገር አይኖርም	
13. በሰዎች ተከብቤ በምገኝበት ቅጽበት የልቤ ትርታ ሲጨምር የሚፈጥረው ድምጽ ያስጨንቀኛል	
14. ሰዎች እየተመለከቱኝ መሆናቸውን ሳስብ ነገሮችን ለመስራት ፍርሃት ይፈጠርብኛል	
15. በሰዎች ፊት መዋረድ ወይም ጅል መስሎ መታየት እጅግ ከሚያስፈራኝ ነገሮች ውስጥ ተጠቃሽ ናቸው	
16. በስልጣን ላይ ካለ ከማንም ሰው ጋር አለማውራትን እመርለሁ	
17. በሌሎች ሰዎች ፊት ሆኖ መርበትበት ወይም መንቀጥቀጥ ለጭንቀት ይዳርገኛል	

ክፍል III- የሊቦውትዝ የፍርሃት ደረጃ ጠቋሚ (Liebowitz social anxiety scale)

ቀጥሎ ከተዘረዘሩት ምርጫዎች መካከል ተገቢ መልሶችን ከሚወክሉት ቁጥሮች መካከል በመምረጥ በክፍት ቦታው ላይ መሳተፍ:: መልስ ለመስጠት ባለፈው ሳምንት ውስጥ በግልህ/ሽ የተፈጠሩትን ሁኔታዎች መሰረት በማድረግ ለሁሉም ጥያቄዎች መልስ ስጥ/ጪ::

ፍርሃት ወይም ጭንቀት	ነገሮችን ከማድረግ መቆጠብ
0= ምንም	0= የለም/በጭራሽ/ (0)
1= በመጠኑ	1= አልፎአልፎ (1%-33% ጊዜ)
2= መካከለኛ	2= ብዙጊዜ (33%-67% ጊዜ)
3= ከፍተኛ	3= ዘወትር (67%-100% ጊዜ)

ሁኔታዎቹን መገንዘብ	ፍርሃት ወይም ጭንቀት	ከነገሮች መቆጠብ
1. በህዝብ መስብሰቢያዎች ስልክ ማውራት_ በህዝብ መስብሰቢያ ስፍራዎች በሰዎች ፊት ሆኖ በስልክ መነጋገር		
2. ጥቂት ሰዎች ባሉበት ቡድን ውስጥ ተሳትፎ ማድረግ_ ከሌሎች ጥቂት ሰዎች ጋር ሆኖ ውይይት ማድረግ		
3. በህዝብ መስብሰቢያዎች (በአደባባይ ስፍራ) መመገብ_ በመሰል ሁኔታ ውስጥ ምግብ ይዘው መታየት ጭንቀት ወይም የመደናገር ስሜት ይፈጥርብሃል/ሻል		
4. በህዝብ መስብሰቢያዎች (በአደባባይ ስፍራ) ከሌሎች ጋር ሆኖ መጠጣት_ አልኮል መጠጥን ጨምሮ ማንኛውንም እይነት መጠጥ ይመለከታል		
5. ከባለስልጣናት ወይም ኃላፊዎች ጋር ማውራት_ ለምሳሌ ከስራ ኃላፊ፣ ወይም መምህር		
6. በታዳሚያን ፊት ሆኖ መተወን፣ ወይም ንግግር ማድረግ_ በርካታ ሰዎች የሚታደሙበት መድረክን ይመለከታል		
7. ፓርቲ ላይ መገኘት_ አንተ/ቼ ልትታደሙ/ሚው የሚገባ ሆኖ፣ ከተሳታፊዎች መካከል ከጥቂቶቹ ጋር ትውውቅ ቢኖርህም/ሽም ከሁሉም ጋር አይደለም		
8. ሰዎች እየተመለከቱህ/ሽ መስራት— የቤት ስራን ጨምሮ ማንኛውንም የቤት ውስ የዘወትር ተግባር ሊሆን ይችላል		
9. ሰዎች እየተመለከቱህ/ሽ መጻፍ_ ለምሳሌ በባንክ ውስጥ በቼክ ላይ እንደመፈረም		
10. በደንብ የማታውቀውን/ቂውን ሰው መጥራት		
11. በደንብ የማታውቃቸው/ቂያቸው ሰዎችን ማነጋገር		
12. ከአዲስ ሰዎች ጋር መተዋወቅ_ ሌሎች ሰዎች ያላቸው አስፈላጊነት ለአንተ/ቼ አማካይ ሆኖ በሚታሰብበት ሁኔታ ውስጥ ብለን እናስብ		
13. በህዝብ መጻዳጃ ቤት ውስጥ መሸናገት_ በተለመደው ሁኔታ እንደሚያጋጥመው ሌሎች ሰዎችም በመጻዳጃ ቤት ውስጥ አልፎ አልፎ ሊኖሩ ይችላሉ ብለን እናስብ		
14. ሌሎች ሰዎች ስፍራቸውን ይዘው ከተቀመጡ በኋላ ወደ ክፍሉ መግባት_ ጥቂት ሰዎች ብቻ ያሉበት ሆኖ፣ ማንም ሰው ወንበርብ አያመቻችልህም/ሽም ብለን እናስብ		
15. የነገሮች የትኩረት ማእከል መሆን_ ሰብሰብ ብለው ለሚገኙ ሰዎች የሆነ ታሪክ መናገር		
16. በስብሰባ ላይ ንግግር ማድረግ_ ጥቂት ተሳታፊዎች ባሉበት ስብሰባዎች ላይ ከወንበር መነሳት ሳይኖርብህ/ሽ መናገር ወይም በርካታ ተሰብሳቢዎች ባሉበት ቆሞ ማውራት		
17. የጽሁፍ ፈተና መፈተን		
18. በደንብ የማታውቀው/ቂው ሰው ስህተት መስራቱን ወይም ትክክል አለመሆኑን ለመግለጽ ወይም ተገቢ የሆነውን ተቃውሞህን/ሽን መግለጽ		
19. በደንብ የማታውቀው/ቂው ሰው ዓይን ማየት_ ይህ ተገቢውን የዓይን ለዓይን መተያየት ሁኔታ ይመለከታል		
20. በቡድን ፊት ሆኖ ሪፖርት ማቅረብ_ ጥቂት አባላት ባሉት ቡድን ፊት ቆሞ ቢቃል የሚቀርብ ሪፖርት ይመለከታል		
21. ከአዲስ ሰው ጋር መቀራረብ_ ለብቻ ያለን ሰው ቀረብ ብሎ ከመተዋወቅ እና ከአዲስ ሰው ጋር ግኑኝነት ከመመስረት ጋር የተያያዘ ነው		
22. እቃዎችን ወደ መጋዘን መመለስ፣ ይህም በተለመደው ሁኔታ እቃዎች ሲመለሱ ርክክብ የሚፈጸምበት ስፍራ ነው		
23. ሰዎች በነጻነት የሚገኙበትን ፓርቲ ማዘጋጀት		
24. የሽያጭ ባለሙያ እንድንገዛው ሲወተውትህ/ሽ እምቢ ለማለት መቸገር		

ክፍል IV- የማህበራዊ ድጋፍ መመዘኛ

ትክክለኛ መልስ የሚወክሉትን ምርጫዎች በመመላት ለሁሉም ጥያቄዎች መልስ ሰጥ/ጪ።

- 1- ከጎረቤት ድጋፍ መጠየቅ ቢያስፈልግህ/ሽ በቀላሉ ለማግኘት ያለህ/ሽ ብቃት እንዴት ይለካል?
 - A. በጣም በቀላሉ
 - B. በቀላሉ
 - C. እችላለሁ
 - D. ይከብደኛል
 - E. በጣም ይከብደኛል
- 2- እስከ የከፋ ችግር ቢፈጠር ድጋፍ ሊሰጡህ/ሽ የሚችሉ ምን ያህል የቅርብ ሰዎች አሉህ/ሽ?
 - A. የለም
 - B. 1-2
 - C. 3-5
 - D. 5+
- 3- ሰዎች አንተ/ቺ ስለምትፈጽመው/ሚው ነገር ስጋት እንደፈጠረባቸው ምን ያህል ጊዜ ይገልጻሉ?
 - A. በጣም ብዙ
 - B. አልፎ አልፎ
 - C. ግልጽ አይደለም
 - D. ጥቂት ጊዜ
 - E. የለም

St. Paul's Hospital Millennium Medical College
Department of Public Health
Questionnaire

Consent

This document is to be read to or by each prospective participant in a language (s)he best understands.

One copy of the signed consent form is to be given to each participant.

Introduction

Name of Principal Investigator: DR. Amanuel Yeneneh

Name of the Institution: ST. PAUL'S HOSPITAL MILLENNIUM MEDICAL COLLEGE

I am working for Dr. Amanuel Yeneneh, who is a final year medical student in under graduate program of medicine at St. Paul's Hospital Millennium Medical College. We are conducting a study to assess Assessment of Prevalence and Factors Affecting Social Anxiety Disorder among Bethelehem Secondary School, A.A Ethiopia. You have been randomly selected to be part of 302 adolescents of the school. This project will take 1 month.

Purpose:

This study will assess social anxiety disorder and factors contributing to its prevalence among adolescents. The information collected from this study will be used to assist other youth in the future and provide guidance in ways that may be protective towards their health. It will also help us in designing ways to help our youth in a way that best suits our country.

{Please ask me any question you may have about the study}

Procedures:

You will fill this self-administered questionnaire. In the questionnaire you will be asked questions about your home settings, stress encountered, reaction to stressful situation, as well as social support. Participating in this research is voluntary and you have a right to decline without giving any reason.

Risks and discomforts:

You will not have any additional risks by participating in this study as all the information you give will be confidential. We shall not use your name or student number in our records. I understand

that this is a sensitive matter to speak about in our culture. None of the information you provide will be shared with anyone, including your parents and guardians.

Confidentiality:

Any information you provide during the study will be kept strictly confidential. None of your names will appear on any study document. Questionnaires will be coded with a unique number. Questionnaires will be stored either in locked cabinets in secured rooms or in a password protected, secured computer. Questionnaires and consent forms will be stored separately in locked spaces.

Right to Refuse or Withdraw:

You are free to choose whether or not you wish to participate. You will suffer neither penalties nor loss of any benefit should you decide not to participate.

Who to Contact:

If you have any questions you may ask now or later during the study. If you wish to ask questions later, you may contact my supervisor.

Research Title: Assessment of Prevalence and Factors Affecting Social Anxiety Disorder among Bethelehem Secondary School, A.A Ethiopia.

Researcher's Name: Dr.Amanuel Yeneneh

I have read the participation information sheet and have had the opportunity to ask the researcher any further questions I may have had. I understand that my participation in this research is voluntary and I may withdraw at any time from the study without affecting my treatment at school in any way.

I understand that the risks to me are minimal in this study and have read the information sheet and asked any questions I may have about the risks. My name will not be used to identify my comments or work in the study.

I understand that information from me will be used for a thesis and possibly other published studies and I consent for it to be used in this manner.

I give permission for my child _____ to participate in this research.
(child's name)

Parent/ Guardian Signature _____ Date _____

Name _____

Child's signature _____

Part I – Socio demographic Characteristics

This survey is intended only to school youths. Please read each question carefully and answer them genuinely. I want to remind you that writing your name is not necessary.

No.	Questions	Coding Categories
01.	Sex	1.Male 2.Female
02.	Age in years_____	
03.	Ethnicity	1.Agnuak 2.Nuer 3.Mejengir 4.komo 5-opo 6-Amhara 7-tigre 8-oromo 9.Other(Specify)_____
04.	Religion	1. Islam 2.Orthodox 3.Protestant 4.Catholic 5. Other (Specify)_____
05.	Educational Level	1.Grade 7 2.Grade 8 3.Grsde 9 4.Grade 10

06.	What is your rank in your current grade?	1. 1-10 2. 11-20 3. 21-30 4. 31-40 5. 40-last
07.	Relative to your neighbors how do you rate your family economic status?	1. Very poor 2. Poor 3. Simillar 4. Better of 5. Rich 6. Very rich
08.	How Many people are living with you in your family?	_____
09.	What is your parents' marital status?	1. Mother and Father live together 2. Divorced 3. Widowed (Mother/Father died) 4.. Separated
10.	With whom do you live at present?	1. With Father and Mother 2. With Father only 3. With Mother only 4. With Relatives 5. With Friends 6. Alone 7. Other(Specify)_____

11.	Do you have any siblings?	1. NO, am an only child 2. YES If yes, how many_____
12.	What is your father's educational status?	1.Un able to read and write 2.Read and write 3.Grade 1-8 4. Grade 8-12 5. Diploma 6. Bachelors degree 7. Masters degree and above
13.	What is your mother's educational status?	1.Un able to read and write 2.Read and write 3.Grade 1-8 4. Grade 8-12 5. Diploma 6. Bachelors degree 7. Masters degree and above
14.	Is there family or personal history of known psychiatric illness?	1. NO 2. YES If yes, specify_____
15.	Do you have known chronic medical illness?	1. NO 2. YES If yes, specify_____

Part II- Social phobia inventory

Please indicate how much the following problems have bothered you during the past week. Write the number corresponding to your choice in the box provided next to each question, and be sure to answer all items.

0 = Not at all 1 = A little bit 2 = Somewhat 3 = Very much 4 = extremely

1. I am afraid of people in authority	
2. I am bothered by blushing in front of people	
3. Parties and social events scare me	
4. I avoid talking to people I don't know	
5. Being criticized scares me a lot	
6. Fear of embarrassment causes me to avoid doing things or speaking to people	
7. Sweating in front of people causes me distress	
8. I avoid going to parties	
9. I avoid activities in which I am the center of attention	
10. Talking to strangers scares me	
11. I avoid having to give speeches	
12. I would do anything to avoid being criticized	
13. Heart palpitations bother me when I am around people	
14. I am afraid of doing things when people might be watching	
15. Being embarrassed or looking stupid is among my worst fears	
16. I avoid speaking to anyone in authority	
17. Trembling or shaking in front of others is distressing to me	

Part III- Liebowitz social anxiety scale

Fill out the following questions with the most suitable answer listed below. Base your answers on your experience in the past week. Be sure to answer all items.

Fear or Anxiety	Avoidance
0 = None	0 = Never (0%)
1 = Mild	1 = Occasionally (1%-33% of the time)
2 = Moderate	2 = Often (33%-67% of the time)
3 = Severe	3 = Usually (67%-100% of the time)

Understanding the situation	Fear or anxiety	Avoidance
1. Telephoning in public_ speaking on the telephone in a public place		
2. Participating in small groups_ having a discussion with few others		
3. Eating in public places_ do you tremble or feel awkward handling food		
4. Drinking with others in public places_ refers to any beverage including alcohol		
5. Talking to people in authority_ for example, a boss or teacher		
6. Acting, performing or giving a talk in front of an audience_ refers to large audience		
7. Going to party_ an average party to which you may be invited, assume you know some but not all people at the party		
8. Working while being observed_ any type of work you might do including school work or housework		
9. Writing while being observed_ for example, signing a check in a bank		
10. Calling someone you don't know very well		
11. Talking with people you don't know very well		
12. Meeting strangers_ assume others are of average importance to you		
13. Urinating in a public bathroom_ assume that others are sometimes present, as might normally be expected		
14. Entering a room when others are already seated_ refers to a small group and nobody has to move seats for you		
15. Being the center of attention_ telling a story to a group of people		
16. Speaking up at a meeting_ speaking from your seat in a small meeting or standing up in place in a large meeting		
17. Taking a written test		
18. Expressing appropriate disagreement or disapproval to people you don't know very well		
19. Looking at people you don't know very well in the eyes_ refers to appropriate eye contact		
20. Giving a report to a group_ refers to an oral report to a small group		
21. Trying to pick up someone_ refers to a single person attempting to initiate a relationship with a stranger		
22. Returning goods to a store where returns are normally accepted		
23. Giving an average party		
24. Resisting a high pressure salesperson		

Part IV- Social support scale

Pleas fill out the questions with the most suitable answer listed, and be sure answer all items.

- 1 How easy can you get help from neighbors if you should need it?
 - F. Very easy
 - G. Easy
 - H. Possible
 - I. Difficult
 - J. Very difficult
- 2 How many people are so close to you that you can count on them if you have serious problems?
 - E. None
 - F. 1-2
 - G. 3-5
 - H. 5+
- 3 How much concern do people show in what you are doing?
 - F. A lot
 - G. Some
 - H. Uncertain
 - I. Little
 - J. No