ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

DEPARTEMENT OF EMERGENCY MEDICENE

Assessment of Knowledge, Attitude and Practice and Associated Factors among Selected Governmental High School Students Towards First Aid In Addis Ababa, Ethiopia

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June, 2018

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Thesis Submitted to the Department of Emergency Medicine in Partial fulfillment of the requirements for the Completion of Masters of Science in Emergency Medicine and Critical Care

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This is to certify that the thesis prepared by Tariku Bekelcho, entitled: Assessment of Knowledge, Attitude and Practice and Associated Factors among Selected Governmental High School Students towards First Aid in Addis Ababa, Ethiopia and submitted in partial fulfillment of the requirements for the degree of Master of Science complies with the regulation of the University and meets the accepted standards with respect to originality and quality

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Advisor (1)	Signature	Date
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Advisor (2)	Signature	Date
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External Examiner	Signature	Date

Acknowledgments

First and foremost, I am grateful to the guidance and commitment of my advisors, Dr.Sofia Kebede and Haymanot Garemawu. The moral encouragement and friendly approach of Dr.Sofia and Haymanot are unforgettable in my future academic carrier.

My special respect goes to Arbaminch University which offered me such a rewarding educational opportunity and sponsored me.

I extend my gratitude to Addis Ababa university department of emergency medicine for enabling me to experience diverse intellectual setting from which I acquired many things for my thesis.

I also provide my thanks to these school management personals those cooperated and provide me all necessary data during my study.

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Acronomies and Abbreviations

ABC	Air way, breathing, circulation
AOR	Adjusted odds ratio
BLS	Basic life support
CDC	Communicable Disease Control
COR	Crude odds ratio
CPR	Cardiopulmonary resuscitation
KAP	Knowledge, attitude, practice
UN	United Nations
FA	First Aid
EMS	Emergency Medical Service
FMOH	Federal Minister of Health
FMOE	Federal Minister of Education
PPE	Personal Protective Equipment
IP	Infection Prevention
TV	Television
RTA	Road Traffic Accident
SPSS	Statistical Package for the Social Sciences

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Abstract

Background: - First aid is immediate help provided to a sick or injured person until professional help arrives. Globally about one million children die from preventable injuries every year (21). This study was intended to determine knowledge, attitude and practice and associated factors among selected governmental high school students in Addis Ababa, Ethiopia.

Methodology: the study was conducted in selected governmental high schools of Addis Ababa, Ethiopia from March 10 to April 1, 2018. School based descriptive cross sectional study design were implemented to select 633 students using multistage cluster sampling. Interviewer administered structured questionnaire were used to collect the data. The collected data was cleaned and entered into epi info version 7 and exported to SPSS Ver.23 for analysis. Binary and Multiple logistic regression models were used to indicate the association between variables.

Results: - From the total 626 study participants, 367(58.6%) were females. The mean age of the participants was 16.29 (SD+ 1.047). Sources of information for the majority of the students were family 486 (77.1%). Only 280(44.7%) of the study subject were knowledgeable about first aid. Majority 583(93.1%) of the study subjects have positive attitude towards first aid. From the total, about 392(62.6%) of study subjects had gave first aid to needy. Maternal educational level AOR 2.670(95% CI; 1.554 - 4.588), Heard about first aid AOR 2.611 (95% CI; 1.529-4.458), had trained on first aid AOR 2.259(95% CI; 1.585- 3.219) were factors significantly associated with knowledge and practice level of study subjects.

Conclusion and Recommendation: -Results reported in this paper suggested the need for immediate and pragmatic steps to be taken to curb the problem of losing of lives that are occurring at schools due to lack of knowledge and skill. In particular, there is urgent need to introduce first aid course into the curriculum to address this public health problem that is claiming to be affecting the lives of economically productive age group.

Key words: - first aid, knowledge, attitude, practice, students

CHAPTER ONE
Introduction

1.1. Back ground

First aid is immediate help provided to a sick or injured person until professional help arrives. It is concerned not only with physical injury or illness but also with other initial care, including psychosocial support for people suffering emotional distress from experiencing or witnessing a traumatic event(1).

First aid is also the provision of limited care for an illness or injury, which could be provided, usually by a lay person, to a sick or injured patient until definitive medical treatment can be accessed, or until the illness or injury is dealt with (as not all illnesses or injuries will require a higher level of treatment) [2].

It generally consists of series of simple, sometimes life saving, medical techniques, which an individual, either with or without formal medical background can be trained to perform with minimal equipment. First aid applies to a broad range of medical situations and consists both of specific knowledge and skills (e.g., what to do for each type of injury or illness) and the ability to assess a situation and make appropriate decisions, (such as when to call for emergency medical assistance) [2].

There is also a broad category in which first aid literally means providing the first aid, e.g., initiating a procedure such as cardio-pulmonary resuscitation (CPR) or defibrillation for a heart attack, which will be taken over by medical professionals as soon as they become available. This is classic first aid [3]. Much of first aid (FA) is a common sense, and people are almost certain to learn some elements as they go through their life, (e.g., knowing to apply an adhesive bandage to a small cut on a finger) [4]. However, effective life-saving first aid requires hands-on training by experts, especially where it relates to potentially fatal illnesses and injuries, such as those requiring CPR, as the procedures may be invasive and brings a risk of further injury to the patient [5].

Knowledge of first aid measures is important for every individual at every age, including school children [6].

First-Aid skills can save many lives and therefore this should be considered as a priority in training staff of all agencies being involved in the management of situations where emergency patients can potentially be met. This training should not be restricted to medical personnel but also extended to public safety personnel (police, fire, security, and traffic enforcers), school teachers, community volunteer, drivers, and industrial workers. On the other hand a more appropriate level of Emergency medical service (EMS) training is required for emergency response organizations like rescue groups of Civil Defense and Ambulance services. As a strategy, first aid training certification can be made as a pre requisite to secure a license or part of pre-employment requirement and be renewed in an annual basis for update [7].

A first aid kit is a collection of supplies and a variety of equipment that may include bandages for controlling bleeding, personal protective equipment (PPE) such as gloves, a breathing barrier for performing rescue breathing, and sometimes instructions on how to perform first aid [8].

World First Aid Day 2009 was held on 12 September, using the theme "First Aid for Humanity". More than 32 National Societies reached over 20 million people globally, and more than 760,000 volunteers and staff were mobilized (1).

In the same year (2009), more than 2.3 million people were trained by 21 National Societies in Europe, and 7 million were trained in certified first aid courses worldwide. More than 36,000 trainers and 770,000 volunteers were active in first aid activities, volunteering more than 4.8 million hours in first aid education and services. More than 46 million people were reached with first aid and preventive messages (1).

At school, according to CDC report in USA in 2010, there were 828,000 nonfatal victimizations among 12- to 18-year-old students (9).

Regardless of public health efforts, the prevalence rates of youth nonfatal assault-injury and almost all behaviors that contribute to youth violence did not change significantly from 2009 to 2011 and from 2011 to 2013 (10).

Evidence-Based African First Aid Guidelines and Training Materials indicate in sub-Saharan Africa, 41% of all deaths and 39% of the morbidity burden can potentially be addressed by first aid (11).

School children learn quickly and are easy to motivate, as well as they able to learn life saving first aid (including cardiopulmonary resuscitation [CPR] – basic life support) as readily as adults (13). Indeed, research has, to varying degrees, supported the efficacy of first aid training for school children when provided by physicians and medical students (12); nursing students (14); and trained school teachers (15-17).

In addition, students are likely to train family members and share materials used in school-based program of first aid at home which can further increase the yield of the program in terms of the total number of members of the community trained per unit of class time expended. Accordingly, many countries have initiated first aid program for school children and much research work has been done to support the justification of first aid in schools (18).

According to Lorem & Palma 2008 study many school systems in other parts of the world have complied with these international standards (19), the situation is different in Ethiopia with no published work on first aid involving the Ethiopian school system to the best of the researcher's knowledge.

Therefore, this study aimed at assessing the knowledge, attitude, and practice and associated factors of first aid among a selected group of high schools students in Addis Ababa, Ethiopia.

1.2 .statement of the problems

Accidents and injuries rank among the leading causes of morbidity and mortality worldwide. However, it is often possible to minimize injury and crash consequences by providing effective pre-hospital services promptly. Appropriate knowledge on prevention, control and management of common illnesses and injuries will play a long way in reducing the morbidity and mortality (20).

Globally about one million children die from preventable injuries every year [21).However, as study conducted in New Zealand shows Students had a poor understanding of the acronyms used for first aid and resuscitation as well only 22% knew what CPR stands for, and 32% understood the meaning of ABC (22).

Furthermore , as study conducted in Tanta University shows that about 75% of students had not any previous Knowledge about first aid and basic life support and only 25% that had knowledge was Received it from school health clinic (23).

In the case of Africa, as survey conducted in Ghana about 30.8% of students were physically attacked one or more times in one year. Of those students who reported being seriously injured one or more times in the preceding 12 months, 32.6% reported that the most serious injury occurred while they were playing or training for a sport, while 25.7% reported that the most serious injury occurred as a result of a fall. Of the those students who reported being seriously injured, 35.7% reported that the most serious injury occurred as a result of them hurting themselves by accident and 25.2% reported that their most serious injury was breaking a bone or dislocating a joint(24).

Illnesses and Injuries is a very important factors that affect school achievement, it is considered the cause of disabilities and death among students. Rapid administration of first aid and basic life support immediately after illness and injury may minimize morbidity and mortality rate that results from it (23).

Furthermore, despite the accidents are common in school students, previous studies (22-24), show that the knowledge, attitude and practice of students on first aid were low in different countries. Even though, the problem is high and preventable by proper first aid provision as done in different countries (20, 23) no similar study was done in our country on this specific area. Consequently their level of knowledge, attitude and practical skill on provision of first aid on emergency cases that may happen in the school among high school students was not assessed yet in our country. Therefore this study was intended to assess or identify the gap of the students' level of knowledge, attitude and practice regarding first aid and associated factors among Addis Ketema, Kirkos and Lideta sub-cities high school students.

1.3 Significance of the Study

Ethiopia becoming middle income country simultaneously with increased need of pre-hospital emergency care which is contrary to developed countries in which integration of pre-hospital life support and emergency trauma care system is responsible for a marked reduction in morbidity and mortality and improving quality of life.

These integrated pre hospital emergency care systems are lacking in all region of Ethiopia including capital city (Addis Ababa).

Nowadays as being important stake holder of the Addis Ababa educational bureau and health bureau with regard to formation of strong emergency medical care system for emergency illnesses and injury prevention (IP), training the school students to administer first aid might be among the first step and because the first person attending accidental illness and injury is likely to be school mates, this may directly present an opportunity for improving first aid at scene.

Also the result will help as baseline information for:-

Ministry of Education will able to use the result to plan appropriate interventions to improve the gap by including first aid course in the curriculum.

Ministry of health will able to use the result to plan appropriate interventions to improve the gap by providing training on first aid in collaboration with minister of education.

This study also will provide baseline information to other researchers to work further in related issues.

CHAPTER TWO

LITERATURE REVIEW

Knowledge of high school students towards first aid

As study conducted by Vipitha V. (2011) to evaluate effectiveness of structured teaching program on knowledge and practice of first aid in Bangalore, about 68% of the students answered less than half of the question correctly. Knowledge among the female students was significantly higher than among males for most areas of first aid knowledge and the overall score. Family income was also related to knowledge level. All other socio-economic variables did not have any impact on first aid knowledge of students. Overall first aid knowledge among the Kuwaiti high school students was poor and varied. There were major misconceptions in dealing with some critical emergency situations. The research pointed to the importance of an educational campaign on first aid knowledge and skills". (25).

As study conducted in Norway on KAP of secondary school on CPR shows that Previous BLS training was common (89 %) in both genders, and 73 % had obtained this at school. More than half of the respondents had attended BLS courses through organizations, work, or other providers. The majority (75%) said they would like to receive more BLS training, with female students showing significantly stronger commitment than male students ($p<0.001$). The answers also suggest that female students express particular interest in attending BLS training outside school if such courses had been more available. The predominant motivation for more training was to prevent avoidable death (81 %). The vast majority (86 %) even supported compulsory BLS training in school, and only 1% expressed the view that BLS training should be an optional activity. The answers indicated that the students understand the importance of bystander CPR, as the majority (96 %) believed that it increased survival by a factor of two or four. However, even if the correct number of chest compressions and ventilations was known by 85.5 % of the respondents, it was less clear to them that compressions precede ventilations in the 2005 BLS algorithm (26).

Another study conducted in Pune, India on the Knowledge of high School students about first aid and the effect of training, knowledge about first aid services was average among 107(67.7%), good 47(29.7%), and best among 4(2.5%) (27).

Similar survey in Hong Kong, china on secondary school student's KAP on dental trauma showed that about 8.9% had received first aid training, and only 3.0% had learnt about management of dental injury in the training program. Finally, 29.8% of the respondents had acquired information about dental injury management from other sources besides from first-aid training program. Most of the questions were answered incorrectly. 36.6% of the respondents were able to identify the appropriate place for treatment of dental injury. 55.2% of the respondents answered correctly the suitable time for treatment. Only 24.7% of the respondents knew how to correctly manage fractured teeth. Only 23.6% of the respondents knew how to manage displaced teeth. Moreover, 37.1% of the respondents correctly specified at least one of the appropriate media for storing a knocked-out tooth. The mean of the total score was negative, with value 20.17. The median was 0. It showed that secondary school students' knowledge of dental injury treatment was insufficient (28).

Another study in West Bengal, India background data revealed that majority of their parents were educated up to tenth standard (48.7% fathers and 37.8% of mothers); father of 25.2% were farmers, 24.7% were daily laborers, 18.6% were doing business, 26.5% of them were skilled laborers, and 5.0% of them were in service while mothers of all students were homemakers. All of the students had heard of the term "first aid" and out of them, only 14 of them (6 girls and 8 boys) had reported any past practical experience of administering first aid. Among those who had heard about first aid, TV/radio was the major source of information (38.7%), followed by parents (24.3%), teachers (17.4%), friends (11.7%), and relatives (4.8%) (29).

Overall, pre-intervention knowledge on first-aid management was poor with maximum incorrect response for snake bite management, i.e., 218 (96.4%) and minimum incorrect for insect bite management, i.e., 112 (48.7%). After educational intervention, maximum correct response was noted in case of management of burns, i.e., 200 (87%) while minimum correct response was noted for snake bite management, i.e., 55 (67.4%) . There was significant difference between pre- and post-intervention knowledge attainment as revealed by McNemar's Chi-square test on first-aid management of cut injury, (3.5%–86.5%) burns (3.5%–87%), sprain (9.2%–79.1%),

fracture (12.6%–76.9%), dog bite (16.5%–76.1%), snake bite (2.2%–67.4%), nose bleeding (24.3%–60.9%), and foreign body in the eye (28.7%–65.2%)(29).

Another study conducted in Saudi Arabia students more than half of the students' parents 55.3% had a higher than intermediate qualification. One third of the students (33.1%) came from families with monthly income less than SR 5,000, and only 22.5% of students came families with monthly income ≥ SR 10,000.and about 13.6% of students had ever attended previous training courses in first aid. Also, 93 (25.6%) of surveyed students indicated that there is FA group in their schools (30).

In the same study, 83.7% of trained subjects reported familiarity with dealing with bleeding incidents vs. 58.2% untrained subjects who did not know how to do so. Likewise, 81.6% of participants reported positive response to asking about dealing with an injured person compared to 67.2%. Dealing with chocking previous training on first aid had a positive influence upon it which 59.2% of trained had sound choking knowledge, 36.6 did not. Nevertheless, there was no significant difference between the trained and untrained students as regards their knowledge about dealing with epistaxis, cotton use in wound, dealing with heart attack, dealing with diabetic patients and dealing with cases in RTAs. Also, younger students (<17 years) generally had a higher score (62.3%), in comparison to older colleagues (49.3%) , as well students who are living in rented houses were among the group which achieved a higher score 61.5% than those who are living in owned houses 50.5%. Neither the nationality nor the parents' education or the family income had a significant effect on the FA-knowledge score of the students (30).

Study in Nigerian university students showed that the mean knowledge score for the definition of first aid was 1.18 (93%), while that for the aims of first aid, the definition of a first aider, the qualities of a good first aider and the ABCs of first aid were 0.5 (25%), 0.27 (13.7%), 1.2 (60%) and 0.21 (10.5%), respectively . The overall score of the knowledge of first aid in the five assessed areas out of 10 points was 4.04 (40%). The commonest emergency faced by the respondents was injuries (27.5%) from road accidents (31).

As study done in Dehradun in India Out of 441 students, majority (91%) had heard about the first aid of which the proportion of boys and girls were almost similar i.e. 92: 92.2. Only 17% of students' complete knowledge of first aid and 33.3% of students had partial knowledge. On an

average complete knowledge and partial knowledge was present only in 0.04 and 0.06 respectively (32).

Attitude of high school students towards first aid

Study conducted in Nigeria University showed that, majority of students (93%) supported the introduction of first aid into the school curriculum and 83% also want to be trained in first aid (31)

Also as study conducted in Norway revealed that, three out of four students expressed the view that (or "said that") that they would have been more likely to initiate BLS if rescue breathing had been removed from the BLS algorithm (26).

Another study conducted in Turkey, Kirklareli university states that students find necessity first aid education, they answered that find necessity 95,5% . As a result, it has been found that the study group's about first aid some subject knowledge and attitude is not at an adequate level. First aid subject should be handled as a separate and practical course (33).

Furthermore, as Indian study shows Students in that have revealed that first aid study is in the curriculum of the course but it seems from the study that practically no stress is being given in imparting knowledge regarding first aid in these schools (32).

Also another study in Shillong, India done on junior doctors and students in a tertiary care medical institute presented that the 24.36% and 53.45% of participants had scored poorly among the scores of untrained participants as compared to 9.25% and 24.07% in trained groups on theoretical knowledge and practice of BLS respectively in Table 2. Almost all participants (98.76%) thought that BLS is necessary while 94.34% of participants think that it should be a part of the teaching curriculum and the majority of the participants are not hesitant to perform even mouth to mouth breathing; however, 83.38 % of the participants have not performed CPR voluntarily as in (34).

Practice of high school students towards first aid

Study conducted in Norway revealed that majority (83%) answered that they would perform CPR if confronted with cardiac arrest, and lack of BLS skills was the most frequent reason given for not starting CPR in a given situation (79%). Only 6 % reported fear of disease transmission

as a reason for not starting CPR. However, when the students were confronted with realistic cardiac arrest scenarios, both contagious diseases and aversiveness became more prevalent answers (26).

In the same study in India, out of the 25 resident doctors / graduates who have participated in the study, 12 (48%) were untrained; although almost all of them have performed CPR on patients after graduation. Also this study reconfirms the very low prevalence of adequate knowledge and practical skills among the medical and nursing students including graduates (34).

Also another study in Srilanka showed that as a whole, more than 50% of study participants had the basic knowledge on first aid for fainting attack, eye injury, fire and the usage of arm sling. However, these students had poor responses on first aid procedures for cut injury, epistaxis and emergency actions. More than 3/4 of the prefects didn't know that safety of self and others must be the first priority in an emergency. Practices were strongest on practices for fainting attack and weakest on first aid for chocking. Even though, students who did first aid programs before scored higher than those who didn't, the mean±SD score (4.53±1.48) on practical scenarios was low among both categories. There was a significant effect of previous first aid education on practices ($\chi 2=11.47, p<0.05$) of senior prefects(35).

Scandinavian study on Basic life support skills of high school students was found that the teenagers' baseline BLS skills were poor when they entered the training and saw significant improvement after theoretical and practical training course. Also stated that no differences between the overall BLS performance of boys and girls (36).

Furthermore, study in Mekelle, Ethiopia, on KAP of preparatory students on epilepsy revealed that as first aid for a person having seizures, 81.90% of the students would provide match stick smoke while 59%, 27.20%, 22.80% 14% and 11.30% would take them to safe place, force some medicine down the patients throat, put a spoon or cloth in the patients mouth, hold or tie them down and put their head in a toilet hole, respectively. The willingness to give some form of first aid treatment to a patient in crisis indicates that if these students are well educated on epilepsy on what to do when faced with a patient in seizures, they would be ready to respond appropriately (37).

2.1 Conceptual frame work

The Conceptual framework of the study is developed after reviewing previous similar studies to Conceptualize the whole research process and to aid as guide for tool development and analysis.

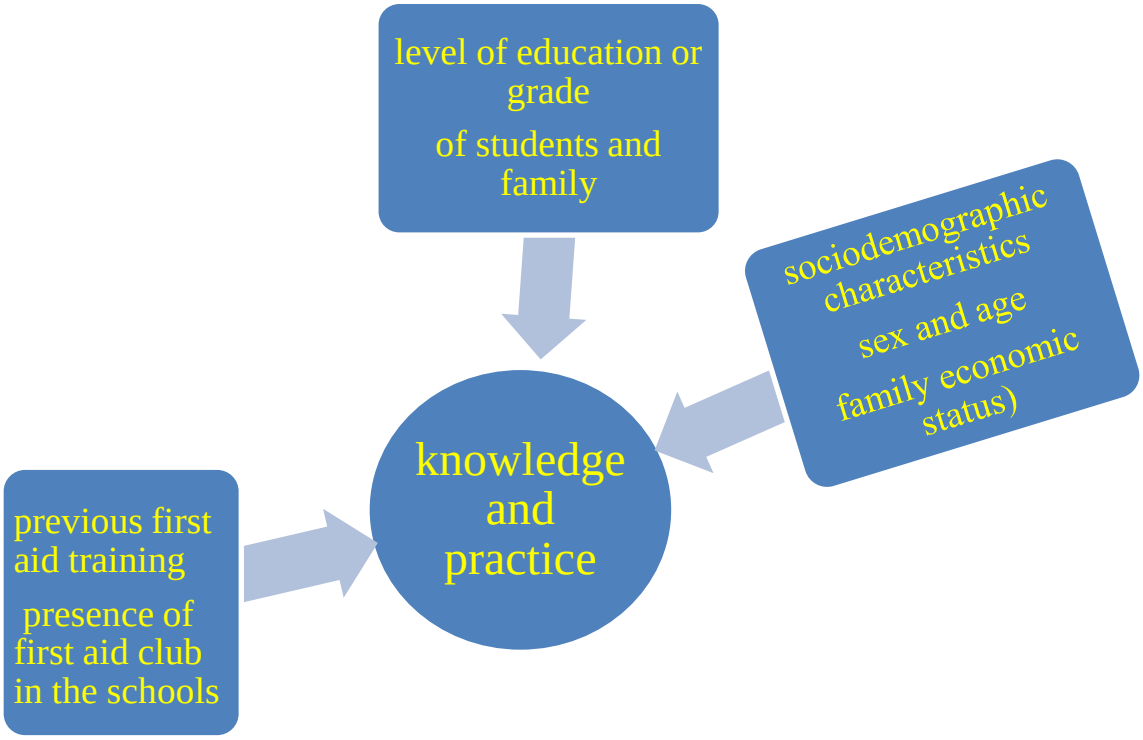


Figure 1. Conceptual framework of factors affecting first aid Knowledge and practice of selected high school students in Addis Ketema, Kirkos and Lideta Sub Cities , Addis Ababa, Ethiopia,2010 E.C.

Socio-demographic characteristic (age, sex, economic status of the family educational level of family), level of education of students, presence of first aid club in school and previous first aid training are factors likely affects the knowledge and practice of the high school students towards first aid [30].

CHAPTER THREE

3. OBJECTIVES

3.1 General Objective

To assess knowledge, attitude and practice and associated factors among governmental high school students in Addis Ababa, Ethiopia, 2018.

3.2 Specific Objectives

- To assess knowledge of high school students towards first aid.
- To explore the attitude of high school students towards first aid
- To determine practical skill of first aid among high school students
- To identify factors that likely affects knowledge and practice of students on first aid

CHAPTER FOUR

4. METHODS

4.1 Study Area

This study was conducted in Addis Ababa the capital city of Ethiopia and the seat for Africa union and UN-Economic Commission for Africa have found in the city. The city administrative areas reorganized into 10 sub-cities which are:-Arada, Addis Ketema, Akaki Kaliti, Bole, Cherkos, Gulele, Kolfe Keranio, Lideta, Nefas Silk and Yeka. According to the 2007 population census, the city has a total population of 2,739,551. Under Addis Ababa city Administration of Education, there are 86 governmental high schools and preparatory and also approximately around 126,881 high school students in Addis Ababa city. Addis ketema, kirkos and Lideta sub cities are some of the ten sub city which were randomly selected as study area and approximately around 11,390 high school students in these three sub-cities and . Ten high schools were found in Addis ketema, kirkos and Lideta sub-cities among these governmental schools. About 5611 high school students were found in these selected 4 high schools. On average about 48 students were enrolled in one class in these schools (38-41).

4.2 Study Design and Period

School based cross sectional descriptive study design was carried out in randomly selected high schools in Addis ketema, kirkos and Lideta sub cities, Addis Ababa city administration, Ethiopia.

The study was conducted from March 10 to April 1, 2018.

4.3 Population

4.3.1 Source of Population

All governmental high school students in Addis Ababa, Ethiopia

4.3.2 Study population

All Selected governmental high school students in Addis ketema, kirkos and lideta Sub Cities, Addis Ababa, Ethiopia

4.3.3. Study Units

All selected students attending the schools in Addis Ketema, Kirkos and Lideta sub cities high schools in Addis Ababa, Ethiopia.

4.4 Inclusion and Exclusion Criteria

4.4.1. Inclusion Criteria

Students who are studying grade 9th and 10th in selected high schools, Addis Ababa.

Students who are available at the time of data collection and volunteer to participate in the study.

4.4.2 Exclusion Criteria

High school students who are absent during data collection and refuse to participate will be excluded**.**

4.5 Sample size Determination and Sampling Procedure

Sample size was determined using the formula for single population proportion based on the following:-

$$ni = \frac{(Z\alpha/2)\, p\,(1-p)}{d2}$$

ni= (1.96)2 0.5(1-0.5)/ (0.05)2 = 384

Where**:** **n**= is the size of the sample

Zα/2= is the standard normal value corresponding to the desired level of confidence

d=error of precision

P=is the estimated proportion of an attribute

Assumptions:

Prevalence of KAP of first aid 50%, since similar study conducted on the same Topic in the study setting is not available, 50% of population proportion is considered.

Margin of error d= 5% is accepted

A confidence interval of 95% is assumed (Zα/2=1.96).

Based on the above calculation the largest sample size (384) was taken and finite population correction formula was not applied since N is greater than 10,000 (11,390).

NF =384

The calculated final sample size is 384 plus a non-response rate of 10%= 384+38= 422

Since multistage cluster random sampling was used, design effect of 1.5 was used to minimize error which results in 422*1.5= 633 final sample size of the study.

Schematic presentation of sampling procedure

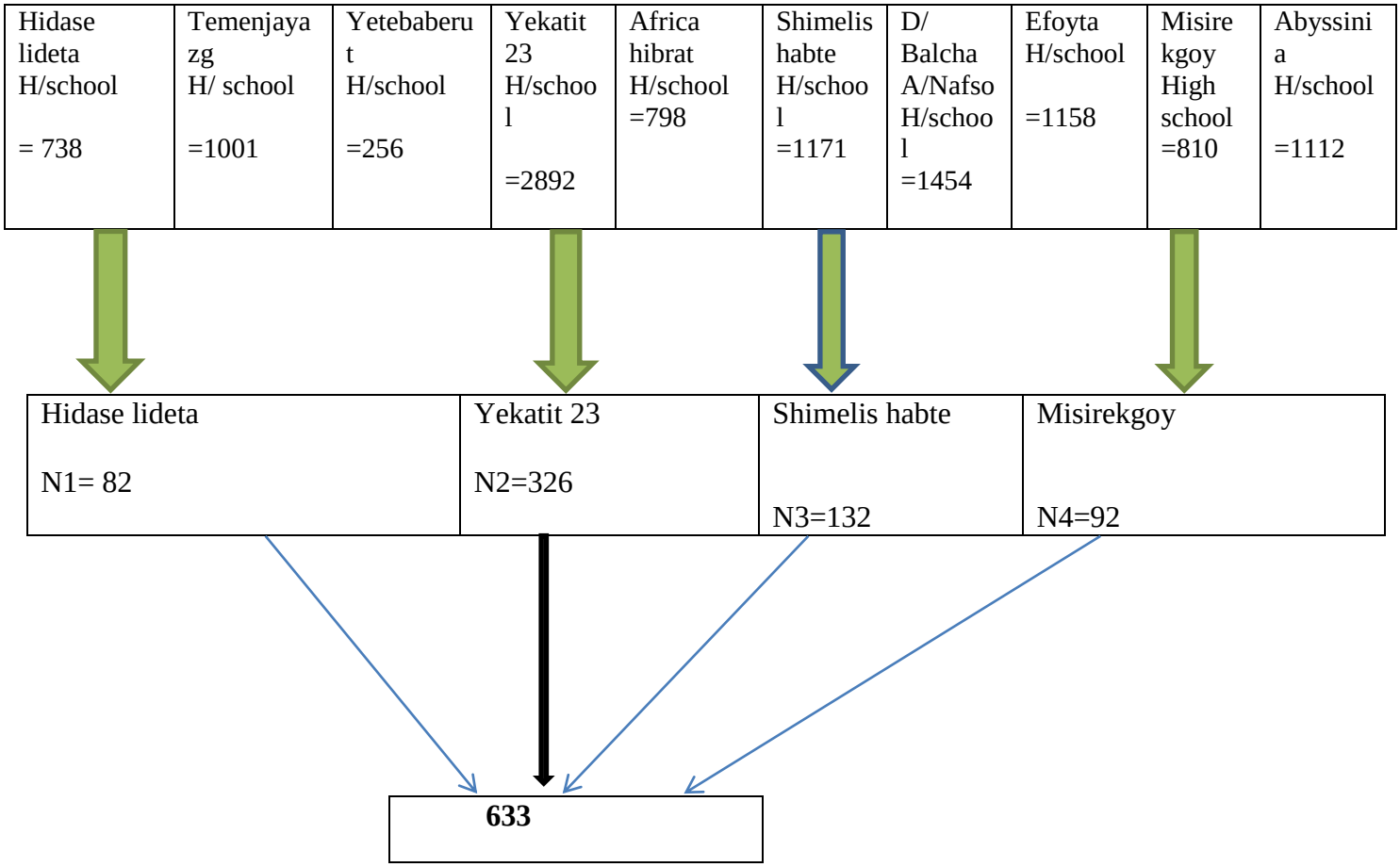


Figure 2: Schematic presentation of Sampling Procedure among study participants in Addis ketema, lideta and kirkos sub cities high school students, Addis Ababa, Ethiopia.

Selection of schools was based on lottery method

We can use proportional allocation formula to select final population from the four schools as follows

$$n = \frac{ni \times nf}{N}$$

n1=738*633/5611= 82

n2=2892 *633/5611= 326

n3=1171*633/5611= 132

n4=810*633/5611= 92

nf =n1+n2+n3+n4= 82+326+132+92=**633**

Where**: - n1-n4** samples from each schools

N= total population of study area

ni =total population in each school

4.6 Sampling procedure

To select 633 students multistage cluster random sampling was used. Primary sampling unit (sub cities:-Addis ketema, Kirkos and Lideta) were selected by simple random sampling by using lottery method. Among 10 governmental high schools in these sub cities 4 were selected by simple random sampling by using lottery method and sample size was allocated proportionally. Depending on the number of proportionally allocated sample size from each school, sections in the selected high schools were randomly selected by lottery method. Among these selected sections about 10, 6, 4 and 4 were selected from Yekatit 23, Shimalis Habte, Hidase Lideta and Misirekgoy high schools respectively. Finally, students from selected sections were selected by simple random sampling by using lottery method and student registration book was used as sampling frame.

4.7 Data Collection Methods

4.7.1 Data Collection Tool

Data was collected by using pretested, structured self-administered questionnaire which consists of socio-demographic information, knowledge questions which consist of 10, Attitude 8 and 6 Practice questions adopted and modified from similar studies. The questionnaire was prepared by English version and was translated to Amharic language and retranslated to English.

4.7.2 Data Collection Procedure

Data was collected by 4 diploma nurses with one BSc supervisor and one facilitator from each school. Training was given for two days on clarification of some terms and assessment tools, aim of the study, concerning need for strict confidentiality of respondent's information, time of data collection and reorganization of the collected data on time. The questionnaire was administered and filled by high school students and the data was collected for approximately 20 days including training and pretest, facilitated by data collection facilitators and supervisors.

4.8 Variables

4.8.1. Dependent Variable

Knowledge

Attitude

Practice

4.8.2. Independent Variables

Age

Sex

Level of education or grade

Previous first aid training

Housing status

4.9 Operational Definitions

Good knowledge (**Knowledgeable):-**if the respondents were able to answer 7 answers out of 10) or more of knowledge questions correctly or 70% and above.

Poor knowledge:-those responded less than 7 knowledge items or 70% of knowledge items

Good practice:-when the study participants were able to answer 4 out of 6 or more practical items or 70% and above.

Poor practice:-when the participants were answer less than 4 or 70% of practice items

Positive attitude: - those responded correctly 6 and above out of 8 or 70% for attitude questions (strongly agree and agree) are considered as positive answers for attitude.

Negative attitude: - those responded less than 6 or 70% for attitude questions.

High school:-a public secondary school usually including grade 9-10.

Preparatory school: - secondary school that comprises grade 11 -12 and prepare students for higher education institutions.

4.10 Data Quality Management

Data quality was ensured during collection, coding, entry and analysis. Before actual data collection, pretest was done on 5% of similar population out of study area in selected Sub-city. During data collection, adequate training and follow up was provided to data collectors and supervisors. Supervision of data collectors was included observation on how the data collectors were administered questionnaires. Codes were given to the questionnaires during the data collection and identified errors were corrected by tracing back using the codes. The filled questionnaires were checked for completeness by data collectors, supervisors and PI on a daily basis. Consequently, any problem encountered was discussed among the survey team and was solved immediately. First data was checked manually for completeness, then coded and entered into Epi-info version 7 statistical software and was cleaned thoroughly before transferred to SPSS version 23 for further analysis.

4.11 Data Processing and Analysis Plan

The collected data was checked for its completeness, consistency and accuracy before analysis. Data was coded, entered and cleaned using Epi-info 7 and exported to SPSS 23 for analysis. It was processed and analyzed by using descriptive statistics like percentage, and frequency. Result was presented by text, table, pie chart and bar chart. Bivariate and Multivariate logistic regression analysis was conducted to identify factors likely affects knowledge and practice of selected high schools students towards first aid. Variables reaching $p<0.05$ at bivariate analysis level was considered further for multiple logistic regression analysis. The statistical significance was declared at $p<0.05$ with 95% confidence level.

4.12 Ethical Consideration

Ethical clearance was obtained from Addis Ababa University, College of Health Science, department of emergency medicine and critical care, Research Review Board Committee and official letter was written to Addis Ababa City Education bureau, and then permission was obtained from Addis ketema, Kirkos and Lideta Sub Cities education bureau. Informed consent was obtained from respondents who were participated in the study. In addition, all the responses

were kept confidential and anonymous by assuring that any information will never be passed to any individual or institution without their agreement and participant are not compel to the study.

4.13 Dissemination of the Result Plan

The results of this study will be disseminated to Addis Ababa University, department of emergency medicine and selected Sub City Education Bureau, Addis Ababa Education Bureau, Federal Ministry of Education, Ministry of Health, Regional health bureau, and other concerned bodies .In addition, it will be submitted to Addis Ababa University health science library. Further efforts will be made to publish the findings on national or international journals.

CHAPTER FIVE: RESULT

Out of the total 633 sampled students who were identified for the study, about 626 students correctly filled the questionnaire and the rest were excluded due to incompleteness and refusal to participate yielding a response rate of 98.8%.

5.1 Socio demographic characteristics of the respondents and their family

From the total 626 study participants, 367(58.6%) were females, resulting in 1.4:1 female to male ratio. The mean age of the participants included in the study was 16.29 (SD+ 1.047). Majority of the respondents, 377(60.2%), were below 17 years old. Similarly, nearly half of the respondents were from grade 9 consisting about 316 (50.5%).

Concerning the respondents religion, majority of the respondents, 436(69.6%), were Orthodox followed by Muslim which accounts about 115(18.4%). Majority, 201(32.1%), of the participants´ had fathers who have learned to high school level of education followed by 166(26.5%) of primary school education level. Similarly majority, 201(32.1%) of the respondents mothers were learned primary school level of education followed by high school level which accounts 183(29.2%) . Vast majority of the respondents' family, 389 (62.1%), had average family income of <5000 birr per month. Most of the respondents were live in their family owned house which account around 267(42.7%) followed by rent house 193(30.8%). **(Table1).**

Table 1: Socio economic and demographic characteristics of the respondents who learns in selected high schools in Addis ketema,kirkos and lideta sub cities, Addis Ababa city, Ethiopia, March 10 to April 1, 2010 E.C

Variable	**Frequency**	**Percentage**
Sex		
Male	259	41.4
Female	367	58.6
Age		
<17	377	**60.2**
≥17	249	**39.8**
Mean ±SD	16.23(±1.047)	
Range	14-20	
Grade level		
9th	316	50.5
10th	310	49.5
Religion		
Orthodox	436	69.6
Protestant	53	8.5
Muslim	115	18.4
Adventist	7	1.1
Catholic	4	0.6
Others	11	1.8
Father's educational level		
Illiterate	97	15.5
Primary school	166	26.5
high school	201	32.1
college diploma	80	12.8
university degree	82	13.1

Mother's educational level		
Illiterate	127	20.3
Primary school	201	32.1
high school	183	29.2
college diploma	69	11.0
university degree	46	7.4
Family's monthly income		
<5000	389	62.1
5000-10000	171	27.3
10001-20000	48	7.7
≥20000	18	2.9
Housing status		
Owned	267	42.7
Rent	193	30.8
Government	166	26.5

5.2 .Training status of students and availability of first aid club in their schools.

Majority of the students 451 (72%) had ever attended previous training on first aid and only 175(28%) were not trained. Also, 408 (65.1%) of surveyed students indicated that there is first aid club or group in their schools and 218(34.9%) said there was no first aid club in their school. (**Figure 3).**

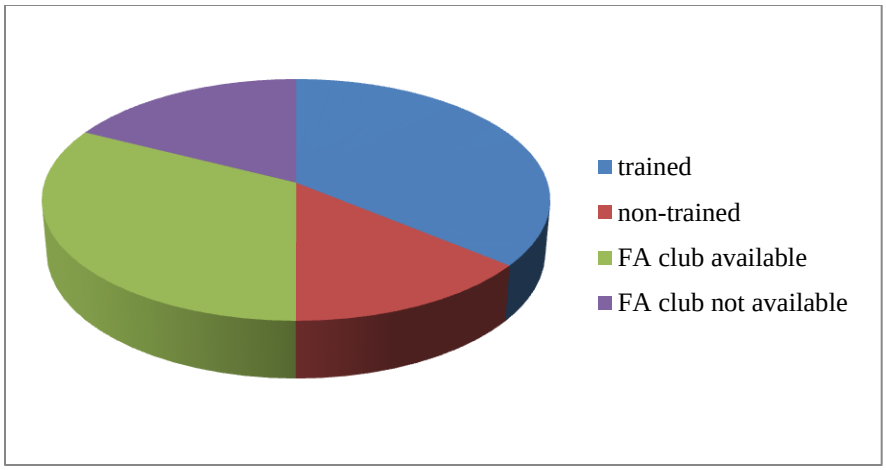
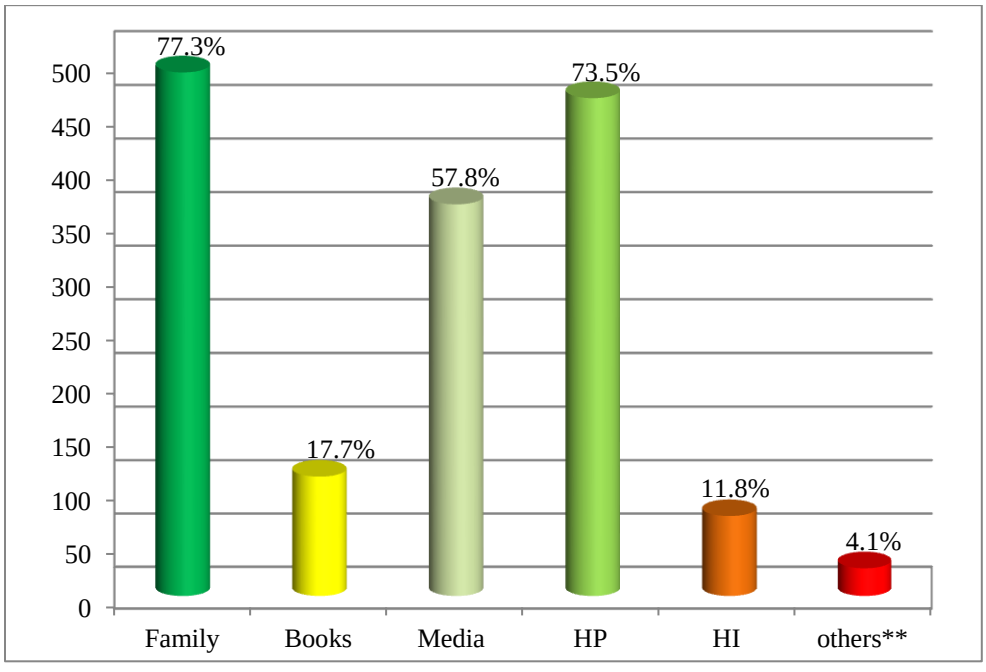


Figure 3:-Training status of the students on FA and availability of FA club in selected Addis ketema, Kirkos and Lideta sub cities high schools students, Addis Ababa city, Ethiopia, March 10 to April 1, 2010 E.C

5.3. Source of information about first aid

Among 626 study subjects, 549(87.7%) had heard about first aid and 77 (12.3%) did not. The source of information for the majority of the students were family 486 (77.1%) followed by health professionals 463(73.2%) (Figure 4).



Key: - HP-health professionals, HI-health institutions, **-sport teachers, friends, sport centers

Figure 4:-Source of information about first aid among respondents who learn in selected Addis ketema ,Kirkos and Lideta sub cities high schools , Addis Ababa city, Ethiopia, March 10 to April 1 ,2010 E.C

N.B. the source of information cannot sum up to hundred due to multiple responses

5.4. Respondents' Knowledge about First Aid

Out of 626 participants, majority, 550(87.9%), of the respondents were responded correctly the definition of the first aid. Among the study subjects about 448(71.0%) of the study participants were reported that as bleeding needs first aid ,which is followed by swallowed poison which accounts about 402(63.4%). Concerning the knowledge of respondents on the management of specific injuries, about 546(87.0%) of them responded first aid to stop bleeding and 314(50.2%) for Epileptic victims correctly. When the respondents were asked about first aid of fainting, chocking and breathing difficulty as well ,study subjects were answered correctly for fainting about 303 (48.4%), chocking 270 (43.1%) and 243(38.8%) respectively. Out of 626 study subjects, majority 346(55.3%) of the study subjects were not knowledgeable (i, e. they were responded less than 7 out of 10 knowledge items) and only 280(44.7%) of the study subject were knowledgeable about first aid(Table2**).**

Table 2: knowledge on first aid among respondents' who learn in selected Addis ketema, Kirkos and Lideta sub cities high schools, Addis Ababa city, Ethiopia, March 10 to April 1, 2010

Variables	**Frequency**	**Percentage**
FA is		
Immediate care given before health center.	550	87.9
care given only in H/I	34	5.4
The care given only by H/P	37	5.9
Other**	5	0.8
Injuries/accidents needs first aid		
Bleeding	448	71.0
Fracture	359	56.7
Epilepsy	336	53.0
Human/animal bite	113	17.9
Burning	367	58.1
Nose bleeding	324	51.2
Choking	368	58.1
Neck and back injury	152	24.0
Fainting	395	62.4
Swallowed poison	402	63.4
Breathing difficulty	223	35.0
Others*	2	0.3
Firm Pressing is FA to stop bleeding		
Yes	546	87
No	80	13
Keeping NPO is FA for fainting student.		
Yes	303	48.4
No	323	51.6
clearing air way and placing on the side is FA for Epileptic		
Yes	314	50.2
No	312	49.8

chest encircling and squeezing is the FA for choking		
Yes	270	43.1
No	356	56.9
Avoiding mov't is FA for neck and back injury		
Yes	374	59.7
No	252	40.3
Cleansing wound with soap and water is FA for human bite.		
Yes	252	40.3
No	374	59.7
Sitting slightly forward and applying pressure is FA for epistaxis		
Yes	189	30.2
No	437	69.8
Sitting, slow breath and deeply is FA for the difficulty of breathing		
Yes	243	38.8
No	383	61.2
Knowledge score or level of the respondents		
Knowledgeable (Good knowledge)	280	44.7
Not knowledgeable (poor knowledge)	346	55.3

*stub injury, gunshot , ** I don't know. H/I -health institutions, H/P- health professionals

N.B: injuries needs first aid cannot be sum up to100% because multiple responses were possible.

5.5. Respondent's attitude towards first aid

Out of 626 participants,. Majority of the students 436(69.6%) were strongly agreed to learn first aid. Concerning the training majority of the respondents 384(61.3%) strongly agree and 182(29.1%) were also agree as it is useful if federal minister of health give first aid as it is useful. Majority 583(93.1%) of the study subjects have positive attitude towards FA (i, e responded 6 and above for attitude items out of 8) and only 43(6.9%) of students have negative attitude towards first aid

Table 3: Attitude towards FA among respondents' who learn in selected Addis ketema, Kirkos and Lideta sub cities high schools , Addis Ababa city, Ethiopia, March 10 to April 1, 2010 E.C.

Variables	**Frequency**	**Percent**
Giving FA to needy person is fair		
strongly agree	500	79.9
agree	110	17.5
disagree	11	1.8
strongly disagree	5	0.8
Giving first aid is unpleasant		
Strongly Agree	51	8.1
Agree	53	8.5
Disagree	205	32.8
Strongly Disagree	317	50.6
Giving first aid to you is very good		
Strongly agree	409	65.3
Agree	180	28.8
Disagree	29	4.6
Strongly disagree	8	1.3

It is good for you to learn first aid		
Strongly agree	436	69.6
Agree	164	26.2
Disagree	15	2.4
Strongly disagree	11	1.8
It is useful for you to learn first aid		
Strongly agree	433	69.2
Agree	169	27
Disagree	18	2.9
Strongly disagree	6	0.9
It is important for you to learn first aid.		
Strongly agree	401	64.0
Agree	194	31.0
Disagree	20	3.2
Strongly disagree	11	1.8
FA training for all is useful.		
Strongly agree	384	61.3
Agree	182	29.1
Disagree	44	7.0
Strongly disagree	16	2.6
FA training is mandatory only for few teachers		
Strongly agree	39	6.2
Agree	38	6.1
Disagree	246	39.2
Strongly disagree	304	48.5

Attitude of the respondents towards first aid		
Positive attitude	583	93.1
Negative attitude	43	6.9

N.B. agree and strongly agree responses were considered as positive attitude towards first aid.

5.6. Practice level of the Respondent's on First Aid

Out of 626 study participants, majority 408(65.2%) of them encountered victims in need of first aid and 392 (62.6%) of them had gave first aid to needy (Figure 5 and Table 4).

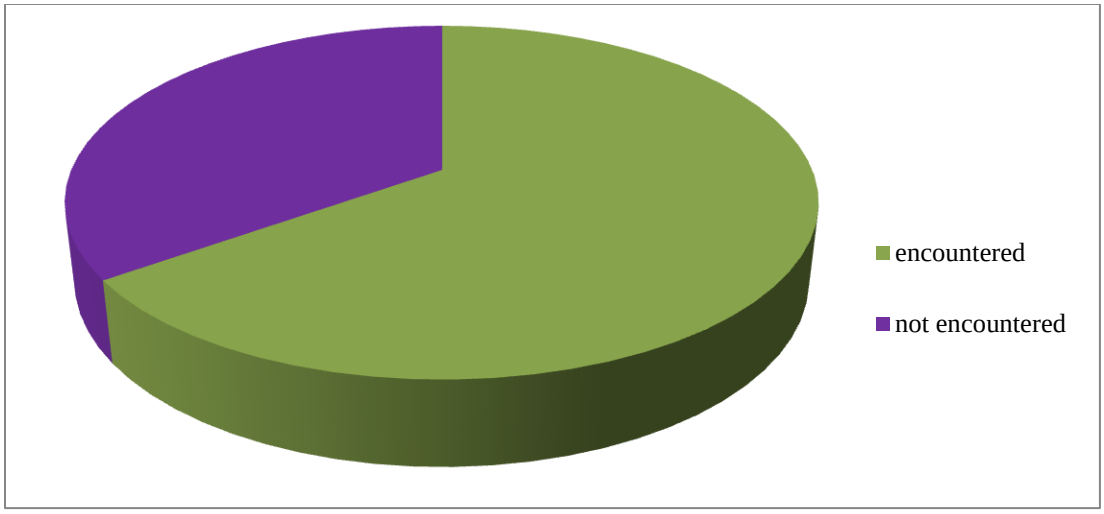


Figure 5:-exposure of the study subjects to the victim in need of first aid in selected Addis ketema, Kirkos and Lideta sub cities high schools, Addis Ababa city, Ethiopia, March 10 to April 1, 2010 E.C.

Concerning to the first actions respondents took to the victim in need were gave first aid which accounts about 190(71.1%) followed by 109(41.1%) of transfer to hospital. When we come to specific injury/illnesses about 370(59.1%) of the study subjects were encountered victims with breathing difficulty and majority 167(45.0%) of respondents encouraged the student to sit quietly followed by breath slowly and deeply 115(30.6%). About 451(72.04%) of study respondents

were faced epistaxis and majority 360 (79.36%) of them Placed student sitting comfortably with slightly forward (Table 4).

Table 4:- Practice level of respondents' who learn in selected Addis ketema, Kirkos and Lideta sub cities high schools, Addis Ababa city, Ethiopia, March 10 to April 1, 2010 E.C

Variables	**Frequency**	**Percent**
Did you give any support or first aid		
Yes	392	62.6
No	234	37.4
What was your first action		
Called ambulance (939)	54	20.71
Transferred to hospital	109	41.1
Gave first aid	190	71.1
Transferred to police station	28	10.2
Other*	11	4.07
faced a child with difficulty of breathing		
Yes	370	59.1
No	256	40.9
you did for breathing difficulty		
Called ambulance	54	14.6
Encouraged the student to sit quietly	167	45.0
Breath slowly and deeply	115	30.6
Contacted responsible school authority	85	23.1
Others**	5	1.3
Ever faced a student with fainting		
Yes	200	31.9
No	426	68.1

What did you do for fainting		
Called EMS/Ambulance	83	42.0
Kept student on flat position	198	98.2
Loosen clothing around the neck and waist	156	78.2
Kept air way clear and monitored breathing	109	54.7
Gave nothing by mouth	82	40.6
Contacted responsible school authority	103	50
Others***	3	1.5
Ever faced a student with epistaxis		
Yes	451	72.04
No	175	27.96
What did you do for epistaxis		
Called ambulance	73	16.1
Placed student sitting	360	79.36
comfortably with slightly forward		
Laid on side with head raised on pillow	128	28
Applied pressure by pressing nostrils together	264	58
Applied ice to nose	59	13.1
Contacted responsible school authority	74	16.6
Others****	45	9.9
Ever faced a student with bleeding		
Yes	315	50.3
No	311	49.7

What did you do for bleeding		
Called ambulance	76	24.3
Pressed firmly with clean bandage	204	64.5
Elevated bleeding body part gently	113	35.8
Bandaged bleeding wound	132	42
Covered student with blanket	46	15
Contacted responsible school authority	58	18.6
Others*****	6	1.9
Practice level of the study subjects		
Good practice	268	42.8
Poor practice	358	57.2

* shout for help, gave money. ** laid on the side, gave support from the back.***shout for help, brought food stuffs.**** gave tissue paper, gave water, supported to take a rest. ***** gave water, transferred to hospital.

5.7. Factors affecting respondents' knowledge on First aid

On binary logistic regression, respondents' mother education and having heard about first aid were found to have statistically significant association with participants' knowledge of first aid.

To control the effect of possible confounder, multiple logistic regression was computed. The odds of knowledge of first aid among those respondents whose mothers are university degree holders were about 3 times (AOR=2.670, 95%CI= (1.554, 4.588)) higher than those respondents whose mothers are illiterate. The odds of the knowledge of first aid among those respondents who were heard about first aid were about 3 times (AOR=2.61, 95%CI= (1.529, 4.458)) higher than those respondents who were not heard about first aid (table 5).

Table 5: Binary and Multiple logistic regression analysis for factors associated with students' knowledge on first aid among respondents of selected Addis ketema, Kirkos and Lideta high schools in Addis Ababa city, Ethiopia, March 10 to April 1, 2010 E.C

Factors	Knowledge on first FA		COR(95%CI)	P-value	AOR(95%CI)	P-value
	Poor Knowledge (%)	Good Knowledge (%)				
Sex						
Male	138(53.3)	121(46.7)	1.127(0.82,1.55)	0.461		
Female	210(56.6)	161(43.4)	Ref			
Age						
<17	203(53.8)	174(46.2)	0.885(.642,1.22)	0.457		
≥17	142(57.0)	107(43.0)	Ref			
Grade level						
9th	175(55.4)	141(44.6)	Ref			
10th	170(54.8)	140(45.2)	1.009(0.737,1.380)	0.957		
Father's education						
illiterate	64 (66.0)	33(34.0)	**Ref**			
primary school	88 (53)	78(47)	0.543(0.296,0.995)	0.048		
high school	105(52.2)	96(47.8)	0.979(0.577,1.661)	0.936		
college diploma	45(56.3)	35(43.8)	0.990(0.593,1.654)	0.970		
university degree	43(52.4)	39(47.6)	0.858(0.462,1.592)	0.626		
Mother's education						
illiterate	82 (64.6)	45(35.4)	Ref		Ref	
primary school	108 (53.7)	93(46.3)	1.561(0.990,2.463)	0.055	1.928(.994, 3.742)	
high school	101 (55.2)	82(44.8)	1.519(0.955,2.415)	0.077	1.973(1.011,3.852)	
college diploma	35 (50.7)	34(49.3)	1.763(0.975,3.188)	0.061	1.583(.736, 3.408)	
university degree	18 (39.1)	28(60.9)	**2.904(1.451,5.813)***	**0.003**	**2.670(1.554,4.588)***	**0.004**

Monthly income						
<5000	216(55.5)	173(44.5)	Ref			
5000-10,000	99(57.9)	72(42.1)	.881(.613,1.266)	0.493		
10,000-2000	22(45.8)	26(54.2)	1.538(.846,2.794)	0.158		
>20000	8(44.4)	10(55.6)	1.392(.553,3.501)	0.482		
Housing status						
owned	148(55.4)	119(44.6)	.932(.633,1.373)	0.721		
Rent	105(54.4)	88(45.6)	.974(.644,1.472)	0.899		
government home	90(54.2)	76(45.8)	Ref			
Training						
Yes	251(55.7)	200(44.3)	0.915(0.645,1.298)	0.618		
No	92 (52.6)	83(47.4)	Ref			
Club in school						
Yes	221(54.2)	187(45.8)	1.144(.823,1.591)	0.424		
No	124(56.9)	94(43.1)	Ref			
Heard about FA						
Yes	288(52.5)	261(47.5)	**2.611(1.529,4.458)***	**<0.001**	**2.670(1.554,4.588)***	**<0.001**
No	56(72.7)	21(27.3)	Ref			

* Strongly associated. Ref-reference, COR-crude odd ratio, AOD-adjusted odd ratio.

5.8. Factors affecting respondents' practice of first aid

On binary logistic regression, respondents 'previous training on first aid was found to have statistically significant association with participants' practice on first aid. To control the effect of possible confounder, multiple logistic regression was computed. The odds of practice of first aid

among those respondents who were had training on first aid were about 2 times (AOR=2.259, 95%CI= (1.58, 3.22)) higher than those respondents who were not trained (Table 6).

Table 6 : Binary and Multiple logistic regression analysis for factors likely associated with student's practice on first aid among respondents of selected Addis Ketema , Kirkos and Lideta high schools in Addis Ababa city, Ethiopia, March 10 to April 1, 2010 E.C

Variable	**Practice level**		**COR(95%CI)**	**P-value**	**AOR(95%CI)**	**P-Value**
	Poor practice	**Good practice**				
	Frequency (%)	**Frequency (%)**				
Sex						
Male	136(52.5)	123(47.5)	1.127(0.820,1.550)	0.461		
Female	221(60.2)	146(39.8)	Ref			
Age						
<17	214(56.8)	163(43.2)	1.029(.746,1.420)	0.862		
≥17	143(57.4)	106(42.6)	Ref			
Grade level						
9th	174(55.1)	142(44.9)	Ref			
10th	184(59.4)	126(40.6)	0.836(.610,1.146)	0.265		
Father's education						
illiterate	56(57.7)	41(42.3)	Ref			
Prim. school	99(59.6)	67(40.4)	0.9450(.568,1.572)	0.828		
high school	118(58.7)	83(41.3)	0.981(0.601,1.602)	0.939		
diploma	38(47.5)	42(52.5)	1.575(0.867,2.860)	0.136		
degree	45(54.9)	37(45.1)	1.172(0.647,2.122)	0.601		

Maternal education						
illiterate	75(59)	52(41)	Ref			
primary school	124(61.7)	77(38.3)	0.865(.551,1.359)	0.529		
high school	99(54.1)	84(45.9)	1.181(.750,1.860)	0.473		
C/diploma	32(46.4)	37(53.6)	1.703(.947,3.062)	0.075		
U/degree	27(58.7)	19(41.3)	1.009(.509,1.999)	0.979		
Monthly income in birr						
<5000	225(57.8)	164(42.2)	Ref			
5000-10,000	92(53.8)	79(46.2)	1.147(.799,1.645)	0.457		
10,000-2000	28(58.3)	20(41.7)	0.953(.521,1.743)	0.876		
>20000	11(61.1)	7(38.9)	0.806(.311,2.091)	0.658		
Housing status				0.083		
owned	137(51.3)	130(48.7)	1.413(.956,2.088)	0.712		
Rent	120(62.2)	73(37.8)	.923(.605,1.409)			
Gov't home	100(60.2)	66(39.8)	Ref			
Training						
Yes	284(62.9)	167(37.1)	**2.267(1.592,3.231)**	**<0.001***	**2.259(1.585,3.219)**	**0.002 ***
No	78(44.6)	97(55.4)	Ref		Ref	
Club in school						
Yes						
No	229(56.1)	179(43.9)	1.143(.821,1.592)	0.430		
	129(59.2)	89(40.8)	Ref			
Heard about first aid						
Yes	310(56.5)	239(43.5)	1.328(.815,2.161)	0.255		
No	48(63.3)	29(36.7)	Ref			

***strongly associated. Ref-reference,COD-crude odd ratio, AOD- adjusted odd ratio

CHAPTER SIX: DISCUSSION

Assessing knowledge, attitude and practice is an important strategy in determining the gap in knowledge, attitude and practice. Knowledge of first aid is one of important prerequisites for having positive attitude and practically equipped.

Study done in Dehradun in India revealed that out of 441 students, majority (91%) had heard about the first aid (32). This is slightly higher than this study which was showed that among 626 study subjects, 549(87.7%) had heard about first aid and 77 (12.3%) haven't heard .It could be due to the difference in study environment and teaching facilities ,media and technology coverage.

In this study the major source of information regarding first aid was family 486 (77.1%) followed by health professionals 463(73.2%). This finding is different with the finding of the study conducted in West Bengal, India, among those who had heard about first aid, media was the major source of information (38.7%), followed by parents (24.3%) (29).

Concerning training and availability of first aid club in school, about 451(72%) of study subjects were reported that as they were trained on first aid which is higher than study conducted in Saudi Arabia which accounts 13.6% of respondents had ever attended previous training courses in first aid and also, about 408 (65.1%) of surveyed students in this study reported that there is first aid club or group in their schools which is higher than similar study conducted in Saudi Arabia, (25.6%) of surveyed study subjects reported that there was FA group in their schools (30).

Study in Nigeria showed that the knowledge score for the definition of first aid was (93%) which is slightly consistent with current study which accounts about 550 (87.9%) study subjects were reported correct definition for first aid. This study found that study subjects which were knowledgeable about first aid by scoring seven and above knowledge questions out of ten was generally low 280 (44.7%) among high school students even though it was slightly higher than study conducted in Pune, India on158 students from class VIII and IX Patil Public School which was revealed that among 158 study subjects only about 47(29.7%), of the study subjects were have good knowledge (knowledgeable) on first aid (27). Also overall score of the knowledge of first aid was 40% in same study conducted in Nigeria which is similar with current study (31). The difference on knowledge level with India study could be due to difference on educational level which was expected to know more from grade 10 students than grade 8 and 9 students.

Same study in Nigeria majority of students (93%) supported the introduction of first aid into the school curriculum and 83% also want to be trained in first aid (31). But in this study slightly lower amount of study respondent s were reported the importance of first aid in the curriculum 401(64%) and 566(90.4%) want to be trained in first aid. The possible reasons for the difference between study respondents might be difference in understanding of subject matter of first aid and increased prevalence of the accidents and injury, which might be increased the need for training simultaneously.

Study in India done on junior doctors and students in a tertiary care medical institute presented that the 24.36% and 53.45% of participants had scored poorly among the scores of untrained participants as compared to 9.25% and 24.07% in trained groups on theoretical knowledge and practice of BLS .majority of participants (98.76%) thought that first aid is necessary while 94.34% of participants think that it should be a part of the teaching curriculum and the majority of the participants were not hesitant to perform even mouth to mouth breathing; however, 83.38 % of the participants have not performed CPR voluntarily (34). Another study conducted in Turkey, Kirklareli university students stated that necessity of first aid education, they reported that necessity of first aid was 95,5% which is consistent with current study, majority of the study respondents 602(96.2%) also reported that as learning first aid is useful(necessary) and about 589(94.1%) of the respondents believed that giving first aid was very good. The difference between the study respondents' responses could be their training level and underestimating the subject matter by medical students which they were expected to know more than high school students.

Furthermore, another study done in Indian on knowledge and attitude of first aid among school children have revealed that first aid study was in the curriculum of the course but practically no stress was being given in imparting knowledge regarding first aid in these schools (32) which is not similar with this study because there is no first aid study course in the curricula of education system for high school students ,but being not governmental area of focus shows somehow similarity between these studies .

Concerning practice level of the study subjects out of 626 study participants, about 408(65.2%) of them encountered a victim in need of first aid and about 392 (62.6%) had gave first aid to needy . among those who gave first aid for bleeding students about 204(64.5%) of them pressed firmly with clean bandage, 132(42%), 113(35.8%), 76(24.3%) and 58(18.6%) bandaged bleeding wound, elevated bleeding body part gently, called ambulance and contacted responsible body respectively, which is comparable with study conducted in Mekelle on KAP of first aid among preparatory students on Epilepsy which accounted about 81.90% of them provided match stick smoke while 59%, 27.20%, 22.80% 14% and 11.30% would take them to safe place, force some medicine down the patients throat, put a spoon or cloth in the patients mouth, hold or tie them down and put their head in a toilet hole, respectively (37).Their willingness to give some form of first aid treatment to a patient in crisis indicates that if these students were well educated on basic knowledge and skill about general first aid on what to do when they came up with a patient in emergency condition, they would be ready to respond appropriately.

Different literatures showed that there are different factors associated with knowledge and practice of first aid. The result on multiple logistic regression in this study revealed that respondents maternal education, previously hearing about first aid and training were found to have statistically significant association with knowledge and practice of first aid. On the other hand, the study conducted in Saudi Arabia found that training, availability of first aid group in school and housing status were the major factors to have significant association with the knowledge and practice of first aid (30). Also another similar study conducted in Bangalore, Kuwaiti high school students on knowledge and practice of first aid showed that family income was related to knowledge level and all other socio-economic variables did not have any impact on first aid knowledge of students(25) .This difference might be due to the main source of information about first aid was from family in this study which might indirectly related to maternal educational level in contrary to study of Saudi Arabia which was from school first aid club and training centers .

Generally, maintaining and improving the source of information and opportunity of training on FA might be considered as some of the factors which are helpful in improving FA knowledge and skills of high-school students.

6.1 .Limitation and strength of the study

Strength: Employing multiple logistic regression analysis to control the effect of possible confounder is one of this study strength.

Limitations: The present findings could be interpreted in the context of a number of potential limitations. The data were obtained from high school students in Addis Ababa, among whom, cultural backgrounds, environmental settings and other characteristics are different from other students with whom their study findings were compared due to absence of the similar literature done on the same topic on similar respondents and from same country to be compared with. Also Since this study touches health related issues which the study participants were not very familiar with and Practice of the study respondents was accessed by self-administered questionnaire, the possibility of reporting errors cannot be ruled out

CHAPTER SEVEN

CONCLUSION AND RECOMMANDATION

7.1. CONCLUSION

The knowledge, attitude and practice among high school students in Addis ketema, Kirkos and Lideta sub-cities, Addis Ababa city using cross sectional study were assessed. The results indicated that majority of the respondents had heard about first aid and the key source of information was family. Also majority of the study subjects have positive attitude towards first aid which they might adopted from community as helping each other which is one of tradition in Ethiopia. However, their way of helping the victim was not training based and non-scientific due to lack of knowledge and practical skill on different emergency situations. Also, they seems ready to give first aid treatment to the victim or patient in emergency condition if they would well trained or educated on basic principles and subject matter of the first aid. These data also, indicated that significantly associated factors with knowledge and practice were maternal education, previous training and having source of information to hear about first aid.

Generally ,these data indicated that level of knowledge and practice of selected high school students in Addis ketema, Kirkos and Lideta was below average which could be comparable to knowledge and practice level of high school students in another sub cities since their educational level is similar and using the same curriculum. As a comment further study is needed to be done in different private high schools and preparatory and governmental preparatory students in Addis Ababa to make a sound impact on minister of education and minister of health policies on first aid.

7.2. RECOMMENDATION

Based on the findings of the study, the following recommendation are suggested

For education Bureau and school managers

As to information and educational program, the school teachers have good relation with students and they have better opportunity to provide students with necessary information and life skill education in school.

Therefore, it is important if efforts are made by education bureau and school managers to educate on basic facts about first aid in collaboration with health bureau to improve their knowledge and practice of first aid and thereby reduce morbidity and mortality due to preventable injuries and illnesses by first aid.

Each school should develop standard operating procedures for first aid and emergency care for students within their school.

For minister of Education and minister of health

Addis Ababa health bureau should work in collaboration with the school manager, so that the health workers can give useful and through information about basics of First aid for the students on regular basis.

Federal minister of education in collaboration with federal minister of health should try to make first aid and basic life support training program should be integral part of high school study programs so as to ensure that young students could grasp enough knowledge and have capability to help the people in emergency situations and disasters.

First aid and basic life support guidelines should be available to all students at school in order to decrease the early morbidity and mortality due accidents and emergency illnesses

Regular workshops are necessary for students in high schools to know the practical aspects of cardiopulmonary resuscitation on dummies and refresh their knowledge continuously.

Lastly any interested researcher could conduct further and broad research up on this topic in such a way that includes preparatory students and different school types.

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ANNEXS

ANNEX I- Participant Information Sheet and informed Voluntary Consent Form

Dear respondent my name is _____. I am working as data collector for the study being conducted in this high school by Tariku Bekelcho, who is studying for his Master degree at Addis Ababa University, College of Health Science, and Department of Emergency Medicine. I am collecting data from high school students about knowledge, attitude and practice of first aid in order to generate information necessary for the policy makers to provide feedback for their policy, and other researchers to draw base line finding for further investigation in the area. To attain this objective, your cooperation to be honest and genuine participant by responding to the question prepared is very important and highly appreciated.

I will proceed to the interview after you understand the following points

Objective – To assess knowledge, attitude and practice towards first aid service provision among governmental high school students in Addis Ababa, Ethiopia

Benefit: The study may have no direct benefit for the participants. But the information generated from the study help the government administrator's to make policy concerning first aid training as a course in the curriculum in school to fulfill the gap in the area among high school students and other level of education, to minimize the burden accident and sudden illnesses on economy and human resources. Moreover, it is used as base line data for further investigation.

Harm: The participants do not have any harm by participating to the study or for not participating to the study, except taking few minute from your time. There wouldn't be any direct payment for participating in this study.

Procedures and duration: questionnaire may be given to Participants once and the questions may be answered within 30-40 minutes. So, I kindly request you to spare me this time to answer the questions.

Alternatives to participation: You do not have to take part in this research if you do not wish to do so, and refusing to participate will not affect you. If you have question that is unclear you have a right to ask for clarification. If you have also a question that you don't want to answer you can skip it. You may stop participating in the research at any time

Confidentiality: Your answers are completely confidential. Your name will never be used in connection with any information you tell us. The questionnaire will be coded to exclude showing names. All information given by you will be kept confidential.

Informed consent: I have read this form or it has been read to me in the language that I understand. I understand all conditions stated above. Therefore, I am willing to participate in this study. If there is any question any time about the study or the procedures, please contact:

Name of Principal investigator: Tariku Bekelcho

Address: Tell +251960958927

E-mail:tarikubekelcho@gmail.com

Name of data collector _____

Signature _____

Result of interview:

1. Completed
2. Refused
3. Partially completed

Checked by:

Supervisor Name----------signature----------Date---------

Annex -II- Information Sheet and Informed Consent Form for Heads of schools

Preamble: My name is Tariku Bekelcho, MSc student at Addis Ababa University. I am here to conduct the study in your school. I will conduct a study under Addis Ababa University, college of health sciences for partial fulfillment of Master of Science in Emergency Medicine and Critical Care. The study will have a paramount importance to identify level of knowledge, attitude and practice towards first aid in Ethiopia. So, I kindly request your permission to do the study on students this school.

Study title: Assessment of Knowledge, Attitude and Practice and associated factors among governmental high School Students towards First Aid Service Provision in Addis Ababa, Ethiopia

Objective – To assess knowledge, attitude and practice and associated factors towards first aid service provision among governmental high school students in Addis Ababa, Ethiopia

Benefit: The study may have no direct benefit for the participants. But the information generated from the study help the government administrator's to make policy concerning first aid training

as a course in the curriculum in school to fulfill the gap in the area among high school students and other level of education, to minimize the burden of accident and sudden illnesses on economy and human resources. Moreover, it is used as base line data for further investigation.

Harm: The participants do not have any harm by participating to the study or for not participating to the study, except taking few minute from your time. There wouldn't be any direct payment for participating in this study.

Procedures and duration: The study will be conducted from March10 to April 1, 2018 on students of this school. To access the knowledge, attitude and practice the data collector will get the informed consent from study participant, then he/she orient the study participant on how to answer on the questionnaire and deliver it to selected study units.

Confidentiality The information gathered from participants will be confidential. The finding of this study will be general for the study community and will not reflect anything particular of individual persons. The questionnaire will be coded to exclude showing names. No reference will be made in written reports that could link participants to the research.

Rights :-Participation in this study is voluntary basis. Considering the importance of the research to your school you are free to decide on it. If any violation of rules and conduct is seen throughout the study, your school has full right to withdraw the study at any time.

If there are any questions or enquires at any time about the study or the procedures, please contact:

Principal investigator
Name: **Tariku Bekelcho**
Tel: 0960958927
E- mail: tarikubekelcho@gmail.com sign_____

Name of school_____
Head of the school:_____
Tel: _____
E-mail:_____ sign_____

Annex-III- English Version Questionnaire

Addis Ababa University College of Health Sciences

Department of Emergency Medicine

Preamble

Dear respondent! The purpose of this questionnaire is to collect data about Knowledge, Attitude and Practice towards First Aid Service Provision in this school. Questions included in this questionnaire enable researcher to get information pertaining to the Knowledge, Attitude and Practice towards First Aid Service Provision. Information you give will serve only this stated academic purpose and confidentiality will also be strictly kept. Your genuine response to the questions is very important in achieving goal of the study. Thus, I cordially ask your cooperation for interview on this questionnaire honestly.

General instruction: For close ended questions choose the appropriate response that reflect your knowledge and attitude and write the number or letter of your choice in the corresponding provided space. For open ended question, specify your view and write on space provided.

Certification

Data collectors' Name: _____

Signature: _____

Date western (D-M-Y): _____

Field Supervisors Name: _____

Signature: _____

Name of the school: _____

Questionnaire ID Number_____

Part I: Socio-demographic and socio –economic characteristics

1. Sex a. Male b. Female
2. Age _____ in years
3. Class section or grade ____ a. 9 b. 10.
4. Religion a. Orthodox b. Protestant c. Muslim .D. Adventist E. Other (specify) _____
5. What is your father's educational level?

A. illiterate
B. primary school
C. high school level
D. college diploma
E. university degree

6. What is your mother's educational level?

A. illiterate
B. primary school
C. high school level
D. college diploma
E. university degree

7. What is your family's monthly income?

a. <5000 b. 5000-10,000 c. 10,000-2000 d.>20000

8. What is your housing status? A. owned B. rent. C. government home

9. Do you have training on first aid? a. Yes b. No

10. Is there first aid group or club in your school? a. Yes b. No

Part II: Questions to assess Knowledge of high school students towards First aid, Addis Ababa, 2017/18

1. Have you ever heard about first aid?	a. Yes b. No
2. If yes for Q 1, from where did u hear? You can choose more than one option	a. Family b. books c. media d. health professionals e. health institution f. others, specify_____
3. Yes for Q 1, what is first aid?	a. The immediate care given for a person who sustained any injury or accident before the victim arrive health institution. b. The care given only in health institution c. The care given only by health profession d. Other specify, _____
4. What type of injuries/accidents needs first aid? You can choose more than one option	a. Bleeding b. Fracture c. Epilepsy d. Human/animal bite e. Burning f. Nose bleeding g. Choking h. Neck and back injury i. Fainting j. Swallowed poison k. Breathing difficulty l. Others specify……
5. Do you know that one measure to stop bleeding is pressing firmly with clean bandage on the bleeding part?	a. Yes b. No
6. Do you know giving nothing by mouth is one of the first aid measures for fainting student?	a. Yes b. No
7. Do you know one of the first aid measures for Epileptic student is keeping air way clear by placing the child on the side?	a. Yes b. No
8. Do you know standing behind the student encircling the child's chest by hands and squeezing is the first aid measure for choking student?	a. Yes b. No
9. Do you know for child with neck and back injury Avoiding head and neck movement and keeping	a. Yes b. No

body straight is one measure of first aid?	
10. Do you know, in case student has bitten by his friend, cleansing wound with soap and water for 5 A minute is one measure of first aid for human bite.	a. Yes b. No
11. Do you know one of the first aid measures for nose bleed/epistaxis is placing student sitting comfortably with slightly forward and applying uninterrupted pressure by pressing nostrils together.	a.Yes b. No
12. Do you know encouraging the student to sit quietly, breathe slowly and deeply in through the nose and out through the mouth is first aid measure for the student with difficulty of breathing?	a.Yes b.No

Part III: questions to Assess attitude of high school students towards first, Addis Ababa, 2017/18

1. Giving first aid to needy person is fair	a. Strongly agree b. Agree c. Disagree d. Strongly disagree
2. giving first aid to needy person is unpleasant	a. Strongly agree b. Agree c. Disagree d. Strongly disagree
3. giving first aid to you is very good	a. Strongly agree b. Agree c. Disagree d. Strongly disagree
4. It is good for you to learn first aid	a. Strongly agree b. Agree c. Disagree d. Strongly disagree
5. It is useful for you to learn first aid	a. Strongly agree b. Agree c. Disagree d. Strongly disagree
6. It is important for you to learn first aid.	a. Strongly agree b. Agree c. Disagree d. Strongly disagree
7. If Ministry of health give first aid training for all	a. Strongly agree

it is useful.	b. Agree c. Disagree d. Strongly disagree
8.First aid training is mandatory only for few teachers	a. Strongly agree b. Agree c. Disagree d. Strongly disagree

Part IV: Questions to assess practice of high school students towards first aid in Addis Ababa, 2017/188

1. Have you ever faced a child with in need of first aid in your school?		a. yes b. no
2. If yes for Q 1, did you give first aid?		a. yes b. no
3. If yes for Q 2, what was your first action?	a. Called 939	a. yes b. no
	b. Transferred to hospital	a. yes b. no
	c. Gave first aid	a.yes b. no
	d. Transferred to police station	a. yes b. no
	e. Other, specify,	
4. Have you ever faced a child With difficulty of breathing?		a. Yes b. no If NO skip to Q. 6
5. If your answer for Q 4 is "yes", What did you do? You can choose more than one option	a. Called EMS/ambulance	a. yes b.no
	b. Encouraged the student to sit quietly	a. yes b. no
	c. Breath slowly and deeply in through the nose and out through the mouth	a. yes b .no
	d. Contacted responsible school authority and parent or legal guardian	a. yes b. no
	e. Others, specify ____	
6. Have you ever faced a student with fainting?		a. yes b. no If NO skip to Q.8

7. If your answer for Q#.6 is "Yes", what did you do? You can choose more than one options	a. Called EMS/Ambulance	a. yes b. no
	b. Kept student on flat position	a. yes b. no
	c. Loosen clothing around the neck and waist	a. yes b. no
	d. Kept air way clear and monitored breathing	a. yes b. no
	e. Gave nothing by mouth	a. yes b. no
	f. Contacted responsible school authority and parent or legal guardian	a. yes b. no
	g. Others, specify	
8. Have you ever faced a student With bleeding from his/her nose?		a. yes b. no If NO skip to Q. 10
9. If your answer for Q 8 is "yes", What did you do? You can choose more than one option	a. Called EMS/ambulance	a. yes b. no
	b. Placed student sitting comfortably with slightly forward	a. yes b. no
	c. Laid on side with head raised on pillow	a. Yes b. no
	d. Applied uninterrupted pressure by pressing nostrils together	a. yes b. no
	e. Applied ice to nose	a. yes b. no
	f. Contacted responsible school authority and parent or legal guardian	a. yes b. no
	g. Others, _____	
10. Have you ever faced a student With bleeding on his/her body?		a. yes b. no
11. If your answer for Q#. 10 is "Yes", what did you do? You can choose more than one options.	a. Called EMS/Ambulance	a. yes b. no
	b. Pressed firmly with clean bandage to stop bleeding.	a. yes b. no

	c. Elevated bleeding body part gently	a. yes b .no
	d. Bandaged bleeding wound without interfering circulation	a. yes b. no
	e. Covered student with blanket	a. yes b. no
	f. Contacted responsible school authority and parent or legal guardian	a. yes b .no
	g. others_____	

አማርኛ መጠይቅ

ቅፅ 1-በፍቃደኝነት ላይ የተመሰረተ የጥናቱ ተሳታፊዎች መረጃ መጠየቂያ ፎርም

ዉድ የጥናቱ ተሳታፊዎች ስሜ ----------የተባልኩት ግለሰብ በ **emergency medicine and critical care** አድስ አበባ ዩኒቨርስቲ ጥቁር አንበሳ ህክምናና ጤናሳይንስ ኮሌጂ ማስተርስ ተማሪ በሆነዉ በታሪኩ በከልቾ በኩል የሚደረገዉን የመመረቂያ ፅሑፍ ጥናትን ያስመለከተ መጠይቅ ለመጠየቅ ተገኝቻለሁ፡፡ ጥናቱ የሚካሔደዉ በመንግስት ከፍተኛ ደረጃ ትምህርት ቤት ተማሪዎች ላይ ሲሆን የጥናቱም ዋና አላማ በመንግስት የከፍተኛ ደረጃ ትምህርት ቤት ተማሪዎች ስለ የመጀመሪያ ሕክምና ዕርዳታ ያላቸዉን ግንዛቤ፣አመለካከት እና ትግበራን መረጃ በመዉሰድ እና ጥናት በማድረግ አስፈላጊዉን ምላሽ ለመስጠት ነዉ፡፡ለመጠይቁ ምላሽ ለመስጠት የሚወስደዉ ጊዜ ከ15-20 ደቂቃ ሲሆን ጥያቄ የመጠየቅ፣ በጥናቱ ያለመሳተፍ ፣በማንኛዉም ሰአት ከጥናቱ የመዉጣት፣ ምንም አይነት ስም መፃፍ እንደማያስፈልግና ለምሰጡት ምላሽ የማያስጠይቅ ና ሚስጥር የተጠበቀ መሆኑን እገልፃለሁ፡፡

ይህ ጥናት ከተጠናቀቀ በኃላ የተለያዩ ፖሊሲዎችን ለማሻሻል እና ለሌሎች ተመሳሳይ ጥናት ለሚያጠኑ አካላት እንደመነሻ ሐሳብ ሆኖ ያገለግላል፡፡ስለሆነም ዉድ የጥናቱ ተሳታፊ ተማሪዎች የተሰጣችሁን መጠይቆች በትግስት እና በታማኝነት በመሙልት ትብብር እንድታደርጉልኝ ስል በትህትና እጠይቃለሁ፡፡

የጥናቱ ባለቤት ስም፡ ታሪኩ በከልቾ

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መጠይቁን የሚያካሒደዉ ስምና ፊርማ-------- የትምህርት ቤቱ ስም----------

የመጠይቁ መለያቁጥር----------

መጠይቁን ያረጋገጠዉ ስም እና ፊርማ፡----------ቀን----------

አጠቃላይ መመሪያ፡መልስ ስትፅፉ ለምርጫ ጥያቄዎች መልሱን በማክበብ እና ለግለፅ ጥያቄዎች በተሰጠዉ ባዶ ቦታ በመሙላት ይተባበሩን፡፡

ክፍል 1፡ማህበረሰባዊ ና ግላዊነክ ነክ ኔታዎችን የሚመለከቱ መጠይቆች 2010 ዓ.ም

1. ፆታ ሀ. ወንድ ለ. ሴት

2. እድሜ ----------አመት

3. የትምህርት ደረጃ ሀ.9ኛ ለ.10ኛ

4. ሐይማኖት ሀ. ኦርቶዶክስ ለ. ፕሮቴስታንት ሐ. ሙስሊም

መ.አድቨንቲስት ረ. ካቶልክ ሠ. ሌላ ካለ ይጥቀሱ

5. ከሚከተሉት ዉስጥ የአባትህ የትምህርት ደረጃ የትኛዉ ነዉ?

ሀ. የትምህርት ደረጃ የሌለዉ ለ.አንደኛ ደረጃ ሐ. የሁለተኛ ደረጃ

መ.ኮሌጂ ድፕሎማ ሠ.ዩኒቨርስቲ ድግሪ

6. ከሚከተሉት ዉስጥ የእናትህ የትምህርት ደረጃ የትኛዉ ነዉ?

ሀ. የትምህርት ደረጃ የሌላት ለ. አንደኛ ደረጃ ሐ. የሁለተኛ ደረጃ

መ. ኮሌጂ ድፕሎማ ሠ. ዩኒቨርስቲ ድግሪ

7. የቤተሰቦችህ/ችሽ የወር ገቢ ስንት ነዉ?

ሀ. < 5000 ለ. 5000-10,000 ሐ. 10,000 -20000 መ. >20000

8. የምትኖሩበት ቤት ሀ. የግል ቤት ለ. ክራይ ቤት ሐ. የቀበሌ መ. ሌላ ካለ ይጥቀሱ

9. የመጀመሪያ ሕክምና ዕርዳታ ስልጠና ወስደዉ ያዉቃሉ? ሀ. አዎ ለ. አላዉቅም

10. በትምህርት ቤታችሁ የመጀመሪያ ሕክምና ዕርዳታ ክለብ አለ? ሀ.አዎ ለ.የለም

ክፍል 2፡በአድስ አበባ ከተማ የሁለተኛ ደረጃ ት/ቤት ተማረዎች የመጀመሪያ ሕክምና ዕርዳታ ያላቸውን ግንዛቤ የሚዳስስ መጠይቆች ፤2010 ዓ.ም.

1. ስለ የመጀመሪያ ሕክምና ዕርዳታ ሰምተህ ታዉቃለህ/ሽ?	ሀ. አዎ ለ. አላዉቅም
2. በተራ ቁጠር 1 መልሳችሁ አዎ ከሆነ ከየት ሰማችሁ? አንድ እና ከዛ በላይ መልስ ያሉትን መስጠት ይችላሉ፡፡	ሀ. ከቤተሰብ ለ. ከመፅሐፍ ሐ. ከሚዲያ

	መ. ከጤና ባለሞያዎች ሠ.ከጤና ተቋማት ረ.ሌላ ካለ ይጥቀሱ
3. በተራ ቁጠር 1 መልሳችሁ አወ ከሆነ የመጀመሪያ የድንገተኛ ህክምና እርዳታ ማለት ምን ማለት ነው?	ሀ. ማንኛዉም ድንገተኛ አደጋ በደረሰባቸው ሰዎች ላይ ወደ ጤና ተቋማት ከመድረሳቸዉ በፊት የሚሰጥ አፋጣኝ እርዳታ ለ. በጤና ተቋማት ብቻ የሚሰጥ እርዳታ ሐ. በጤና ባለሞያዎች ብቻ የሚሰጥ እርዳታ መ.ሌላ ካለ ይጥቀሱ
4. የትኛዉ ድንገተኛ አደጋ ወይም ጉዳት የመጀመሪያ ሕክምና ዕርዳታ ይፈልጋል፡፡ መልስ ያሉትን አንድ እና ካዛ በላይ መምረጥ ይችላሉ፡፡	ሀ. የሚደማ ለ. ስብራት ሐ. የሚጥል በሽታ መ. የሰዉ ልጂ ንክሻ ረ. ቃጠሎ ሠ. ነስር ሸ. ትንታ ቀ. የአንገት እና የወገብ ጉዳት በ. እራስ መሳት ተ. መርዝ መዉሰድ ቸ. መተንፈስ የሚያስቸግረዉ ኀ. ሌላ ካለ ይጥቀሱ
5. መድማትን ለማስቆም ከምንወስዳቸዉ የመጀመሪያ ሕክምና ዕርዳታ ዕርምጃዎች ዉስጥ አንዱ በመድማት ላይ ያለዉን ቦታ በንጹህ ጨርቅ (bandage) አጥብቆ መያዝ መሆኑን ያዉቃሉ?	ሀ. አወ ለ. አላዉቅም
6.መድማትን ለማቆም ከምንወስዳቸዉ የመጀመሪያ ሕክምና ዕርዳታ ዕርምጃዎች ዉስጥ አንዱ በመድማት ላይ ያለዉን ቦታ በንጹህ ጨርቅ (bandage) አጥብቆ መያዝ መሆኑን ያዉቃሉ?	ሀ. አወ ለ. አላዉቅም
7. ራሱን ስቶ ላለ ልጅ በአፍ ምንም አይነት ፈሳሽ ወይም ምግብ እንዳይ ወስድ ማድረግ በመጀመሪያ ሕክምና ዕርዳታ ከሚወሰዱ ዕርምጃዎች አንዱ መሆኑን ያዉቃሉ?	ሀ. አወ ለ. አላዉቅም
8. የትንታ አደጋ ላጋጠመዉ ልጅ ከልጁ ጀርባ በመሆን ሁለት እጅህን/ሽን በማጣመር የልጁን ደረት በጥንቃቄ በመጫን የገባዉን ባዕድ ነገር እንዲወጣ	ሀ. አወ ለ. አላዉቅም

መሞከር በመጀመሪያ ሕክምና ዕርዳታ ከሚወሰዱዕርምጃዎች አንዱ መሆኑን ያዉቃሉ?	
9.የአንገትና የጀርባ ድንገተኛ አደጋ ላጋጠመዉ ልጅ ከምንወስዳቸዉ የመጀመሪያ ሕክምና ዕርዳታ ዕርምጃዎች አንዱ ያልተገባ እንቅስቃሴ ከማድረግ መቆጠብና የልጁ ሰዉነት ቀጥብሎ እንዲቆይ ማድረግ መሆኑን ያዉቃሉ?	ሀ. አወ ለ. አላዉቅም
10. አንድ ልጅ በጓደኛዉ ቢነከስ የተነከሰዉን ቦታ በዉሃና በሳሙና ለአምስት ደቂቃ መታጠብ በሰዉ ለመነከስ ከሚደረጉ የመጀመሪያ ሕክምና ዕርዳታ አንዱ መሆኑን ያዉቃሉ?	ሀ. አወ ለ. አላዉቅም
11.ነስር(የአፍንጫመድማት) ላገጠመዉ ልጅ ከሚደረጉ የመጀመሪያ ሕክምና ዕርዳታዎች ዉስጥ ልጁን አመቻችቶ በተወሰነ መልኩ ወደፊት ጋደል አርጎ ማስቀመጥና አፍንጫዉን ተጭኖ መያዝ መሆኑን ያዉቃሉ?	ሀ. አወ ለ. አላዉቅም
12. የመተንፈስ ችግር ላጋጠመዉ ልጅ ከሚደረጉ የመጀመሪያ ሕክምና ዕርዳታዎች ዉስጥ ልጁ ተረጋግቶ እዲቀ መጥማ ድረግ፣ ቀስ አድረጎ በአፍንጫዉ በደንብ አየር እንድያ ስገባና በአፍ እንዲያስወጣ ማድረግ እንደሆኑ ከዚህ በፊትያዉቃሉ?	ሀ. አወ ለ. አላዉቅም

ክፍል 3፡በአድስ አበባ ከተማ የሁለተኛ ደረጃ ት/ቤት ተማረዎች የመጀመሪያ ሕክምና ዕርዳታ ላይ ያላቸዉን አመለካከት የሚዳስስ መጠይቆች፤ 2010 ዓ.ም

1. የመጀመሪያ ሕክምና ዕርዳታ ማድረግ ጥሩ ነዉ።።	ሀ. በጣም እስማማለሁ ለ. እስማማለሁ ሐ. አልስማማም መ. በጣም አልስማማም
2. የመጀመሪያ ሕክምና ዕርዳታማድረግጥሩ አይደለም።።	ሀ. በጣም እስማማለሁ ለ. እስማማለሁ ሐ. አልስማማም መ. በጣም አልስማማም
3. የመጀመሪያ ሕክምና ዕርዳታ ማድረግ በጣም ጥሩ ነዉ።።	ሀ. በጣም እስማማለሁ ለ. እስማማለሁ ሐ. አልስማማም መ. በጣም አልስማማም

4. የመጀመሪያ ሕክምና ዕርዳታ መማር ጥሩ ነዉ።።	ሀ. በጣም እስማማለሁ ለ. እስማማለሁ ሐ. አልስማማም መ. በጣም አልስማማም
5. የመጀመሪያ ሕክምና ዕርዳታ መማር ጠቃሚ ነዉ።።	ሀ. በጣም እስማማለሁ ለ. እስማማለሁ ሐ. አልስማማም መ. በጣም አልስማማም
6.የመጀመሪያ ሕክምና ዕርዳታ መማር አስፈላጊ ነዉ።።	ሀ. በጣም እስማማለሁ ለ. እስማማለሁ ሐ. አልስማማም መ. በጣም አልስማማም
7. ጤና ጥበቃ ሚኒስትር የመጀመሪያ የህክምና እርዳታ ቢሰጥ አስፈላጊ ነዉ።።	ሀ. በጣም እስማማለሁ ለ. እስማማለሁ ሐ. አልስማማም መ. በጣም አልስማማም
8.የመጀመሪያ የህክምና እርዳታ ስልጠና የሚያስፈልገዉ ለጥቂት መምህራን ብቻ ነዉ።።	ሀ. በጣም እስማማለሁ ለ. እስማማለሁ ሐ. አልስማማም መ. በጣም አልስማማም

ክፍል 4፡ በአድስ አበባ ከተማ የሁለተኛ ደረጃ ት/ቤት ተማሪዎች የመጀመሪያ ሕክምና ዕርዳታ ላይ ያላቸዉን የተግባር ችሎታ የሚዳስስ መጠይቆች፤ 2010 ዓ.ም

1.በትመህርትቤታችሁየመጀመሪያ ህክምና ዕረዳታ የሚያስፈልገዉ ልጅ ዐጋጥሞት ያዉቃሉን?		ሀ. አዎ ለ. አያዉቅም
2. ለጥያቄ ቁ. 1 ምላሽዎ“አዎ”ከሆነ የመጀመሪያ ህክምና ዕርዳታ ሰጥተዋል?		ሀ. አዎ ለ. አልሰጠሁም
3. ለጥያቄ ቁ. 2 ምላሽዎ“አዎ”ከሆኔ መጀመሪያ የወሰዱት ዕረምጃ ምን ነበር?	ሀ.አምቡላንስ ጠረሁ	ሀ. አዎ ለ. አይ
	ለ.ወደሆስፒታል እንዲሔድ	ሀ. አዎ

	አደረኩ	ለ. አይ
	ሐ. የመጀመሪያ ህክምና ዕርዳታ ሰጠሁ	ሀ. አወ ለ. አይ
	መ.ወደ ፖሊስ ጣቢያ እንዲሄድ አደረኩ	ሀ. አወ ለ. አይ
	ሠ. ሌላ ካለ ይጥቀሱ	
4.ድንገተኛ የመተንፈስ ችግር ያጋጠመዉ ልጅ አጋጥሞት ያዉቃሉን?		ሀ..አዎ ለ.አይ ምላሽዎ “አይ”ከሆኔ ወደ ጥያቄ ቁ.6ይሂዱ
5. ለጥያቄቁ.4 ምላሽዎ“አዎ”ከሆኔ ያደረጉት ነገር ምን ነበር? ከአንድ ምላሽ በለይ መስጠትይችላሉ	ሀ.አመቡላንስ ጠረሁ	ሀ..አዎ ለ.አይ
	ለ.ልጁ ተረጋግቶ እንዲቀመጥ አደረኩ	ሀ..አዎ ለ.አይ
	ሐ.በዝግታ ብዙ አየር በአፍንጫዉ እያስገባ በአፉ እንዲያስ ወጣ አደረኩ	ሀ..አዎ ለ.አይ
	መ.የትምህርትቤቱሃላፊና የልጁወላጅ /አሳዳጊ እንዲያዉቁ አደረኩ	ሀ..አዎ ለ.አይ
	ሠ.ሌላ ካለ ይጥቀሱ	
6. ራሱን በድንገት የሳተ ልጅ አጋጥሞት ያዉቃሉን?		ሀ.አዎ ለ.አይ ምላሽዎ “አይ”ከሆኔ ወደ ጥያቄ ቁ.8 ይሂዱ
7. ለጥያቄቁ.6ምላሽዎ“አዎ”ከሆኔ ያደረጉ ነገር ምን ነበር? ከአንድ ምላሽ በለይ መስጠትይችላሉ	ሀ.አንቡላንስ ጠረሁ	ሀ..አዎ ለ.አይ
	ለ. ልጁን የተስተካከለ ቦታ ላይ እዲተኛ አደረኩ	ሀ..አዎ ለ.አይ

	ሐ.አንገቱና ወገቡ አካባቢ ያሉ አልባሳትን እንዲላሉ አደረኩ	ሀ..አዎ ለ.አይ
	መ.የአየር ቧንቧዉ ክፍት እነዲሆን በማድረግአተነፋፈሱን ተከታተልኩ	ሀ..አዎ ለ.አይ
	ሠ. በአፉ ምንም አይነት ፈሳሽና ምግብ እንዳይወስድ አደረኩ	ሀ..አዎ ለ.አይ
	ረ.የትምህርት ቤቱ ሃላፊና የልጁ ወላጅ /አሳዳጊ እንዲያዉቁ አደረኩ	ሀ..አዎ ለ.አይ
	ሰ.ሌላ ካለ ይጥቀሱ	
8.በአፍንጫዉ ደም እየፈሰሰዉ(እያነሰረዉ) ያለ ልጅ አጋጥምዎት የዉቃሉን?		1.አዎ 2.አይ ምላሽዎ “አይ”ከሆኔ ወደጥያቄ ቁ.10ይሂዱ
9. ለጥያቄቁ.8ምላሽዎ“አዎ”ከሆኔ ያደረጉት ነገርምን ነበር? ከአንድምላሽበለይ መስጠትይችላሉ	ሀ.አንቡላንስ ጠረሁ	ሀ.አዎ ለ.አይ
	ለ.ልጁን አመቻችቼ በማስቀመጥ በትንሹ ወደ ፊት ዘንበል (ጋደል) እንዲልአደረኩ	ሀ.አዎ ለ.አይ
	ሐ.በጎኑእነዲተኛበማድረግጭንቅላቱን በትራስ ደገፍኩት	ሀ.አዎ ለ.አይ
	መ.አፍንጫዉን ተጭኘ በመያዝ እንዳይ ደማ አደረኩት	ሀ.አዎ ለ.አይ
	ረ.በረዶ አፍንጫዉ ላይ አደረኩ	ሀ.አዎ ለ.አይ
	ሠ.የትምህርት ቤቱ ሃላፊና የልጁ ወላጅ /አሳዳጊ እንዲያዉቁ አደረኩ	ሀ.አዎ ለ.አይ
	ሰ.ሌላ ካለ ይጥቀሱ----------	
10. በድንገተኛ ጉዳት ከሰዉነቱ እየደማ ያለ ልጅ አጋጥሞት ያዉቃሉን?		ሀ..አዎ ለ.አይ ምላሽዎ “አይ”ከሆኔ ወደ ቀጠዩ ጥያቄ ሂዱ .

11. ለጥያቄ ቁ.10 ምላሽዎ “አዎ” ከሆነ ያደረጉት ነገር ምን ነበር? ከአንድምላሽ በለይ መስጠት ይችላሉ	ሀ.አንቡላንስ ጠራሁ	ሀ.አዎ ለ.አይ
	ለ.በመድማት ላይ ያለዉን ቦታ በንፁህ ጨርቅ (bandage) በመጫን እዳይደማ አደረኩ	ሀ..አዎ ለ.አይ
	ሐ. በመድማት ላይ ያለዉን አካል ከፍ እንዲል አደረኩ	ሀ..አዎ ለ.አይ
	መ. በንፁህ ጨርቅ (bandage) የሰዉነቱን የደም ፍሰት በማያስተጓጉል መልኩ አሰርኩት (ሸፈንኩት)	ሀ..አዎ ለ.አይ
	ረ.ተማሪውን በብርድልብስ ሸፈንኩት	ሀ..አዎ ለ.አይ
	ሰ.የትምህርትቤቱ ሃላፊና የልጁ ወላጅ /አሳዳጊ እንዲያዉቁ አደረኩ	ሀ..አዎ ለ.አይ
	ሸ.ሌላ ካለ ይጥቀሱ.....	