



ST. PAUL'S HOSPITAL MILLENNIUM MEDICAL COLLEGE

DEPARTMENT OF PUBLIC HEALTH

**ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE ON
FIRST AID FOR PERSONS SUSTAINING ROAD TRAFFIC ACCIDENT
AMONG AYER TENA SECONDARY AND PREPARATORY SCHOOL
STUDENTS ,KOLFE KERANIO SUB CITY, ADDIS ABABA,2018**

By: Dr. BEZAWIT NIGUSSIE

**A RESEARCH PROJECT TO BE SUBMITTED TO ST. PAUL'S MILLENNIUM
MEDICAL COLLEGE DEPARTMENT OF PUBLIC HEALTH AS A REQUIREMENT
OF PARTIAL FULFILLMENT OF DEGREE IN DOCTOR OF MEDICINE (MD).**

JULY, 2018

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Assessment of knowledge, Attitude and practice on first aid for persons sustaining road traffic accident among Ayer Tena secondary and preparatory school students ,Kolfe Keranio sub city ,Addis Ababa, 2018

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CDC-centers for disease control and prevention

RTA-road traffic accident

WHO-world health organization

KAP- knowledge, attitude, practice

FA-first aid

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Introduction

Background

Over 1.2 million people die each year on the world's roads, with millions more sustaining serious injuries and living with long-term adverse health consequences. Globally, road traffic crashes are a leading cause of death among young people, and the main cause of death among those aged 15–29 years. Road traffic injuries are currently estimated to be the ninth leading cause of death across all age groups globally, and are predicted to become the seventh leading cause of death by 2030[1].

A huge escalation in global road crash mortality is expected between 2000 and 2020 making it third leading cause of disability-adjusted life years by 2020 [2]. Six years (July 2005 - June 2011) of police-reported crash data done in Ethiopia were analyzed, consisting of 12140 fatal and 29,454 injury crashes on the country's road network. Almost, 35% of deaths occur within 5 minutes of an accident while another 54% would die within 30 minutes. So it is undoubtful that first aid makes a difference. First aid is the immediate assistance provided to a sick or injured person until Professional help arrives. It is concerned not only with physical injury or also with other initial care, including psychosocial support for people suffering from emotional distress caused by experiencing or witnessing a traumatic event [3], it plays a great role in preserving life, preventing the condition from worsening, or in promoting recovery.

First aid has its own organized steps so that to end up with lifesaving results, the first step is to take consent, to gain con the first aid giver first should introduce himself or herself why he or she is with the victim and what he or she is going to do. If the person is unconscious implied consent should be taken implied consent is taken in a situation where the victim is unconscious or consciousness is impaired so that the first aid provider continuous his or her care assuming that he or she gain consent, unfortunately in some scenarios consent may be influenced by victims relative or advance directive of the victim. Advance directive is a recorded statement of the victim usually written like in bracelet mentioning that they don't want to be treated in life threatening conditions, furthermore the care giver should be aware of the environment for potential dangers and should use protective barriers like gloves.

Then first aid provider should follow the rule of ABCD (airway, breathing, circulation ,disability)which is first airway should be checked, especially in unconscious patients for any foreign material, tongue biting or anything else that could potentially block the airway Second breathing should be checked could be done by feeling breathing near patient mouth or observing chest rise and fall, if breathing can't be detected CPR (cardiopulmonary resuscitation) which is 30 regular chest compression with 2 rescue breaths should be given. It should be continued until victim breaths, vomits or medical care provider arrives the third measure is to check for circulation, pulse rate, and any site of bleeding, and should be stopped by applying pressure. Lastly before secondary survey any form of disability should be detected and managed [4]

Statement of the problem

RTA is a major but neglected public health challenge worldwide, according to WHO data, every day around the world, almost 16 000 people die from all types of injuries out of which 25% of deaths are from road traffic injuries. RTA results 1.2 million deaths, 50 million injuries per year and the leading cause of death in the age 15-29 Strikingly road traffic injuries in low-income and middle-income countries takes the lion's share of over 90% of the world's road traffic fatalities [5].

A huge escalation in global road crash mortality is expected between 2000 and 2020 making it third leading cause of disability-adjusted life years by 2020[2]. Furthermore, in economic terms Road traffic injuries place a heavy burden on global and national economies as well as on households. Data suggest that road traffic deaths and injuries cause globally an estimated 3% of GDP and in low- and middle-income countries an estimated 5% of GDP economic losses. The direct economic costs of global road crashes have been estimated at US\$ 518 billion, with the costs in low-income countries – estimated at US\$ 65 billion – exceeding the total annual amount received in development assistance. Since it particularly affect the economically active age group, or those set to contribute to family, society and the workforce in general.

The economic cost also strike hard at a national level, imposing a significant burden on health, insurance and legal systems [6]. Many families are driven deeper into poverty by the loss of a breadwinner, or by the expenses of prolonged medical care, or the added burden of caring for a family member who is disabled from a road traffic injury [1]. A study in Nairobi generalized hospital shows that 80% of RTA victims were in the reproductive age group (15-49)[7].

Coming to Ethiopia a six years (July 2005 - June 2011) of police-reported crash data were analyzed, consisting of 12,140 fatal and 29,454 injury crashes on the country's road network. With a total of 14,542 fatalities, an average of 1.2 road user fatalities per crash. An important and glaring trend that emerges is that more than half of the fatalities in Ethiopia involve pedestrians. The majority of the crashes involve persons in the 18-50 age groups which is Ethiopia's active workforce [6].

Also a study done in Arbaminch general hospital in 2017 RTA accounts as a cause for 47% of traumas victims of the age group 20-49, similarly a study in Arbaminch town also suggests that more number of accidents occurred with the age group of 18-30 years [8].

Coming to Addis Ababa every year, around 300 people are killed on its' roads and 1500 got light and serious injury [6]. Many trauma deaths occur in the pre-hospital setting (20–86%) [9]. Almost, 35% of deaths occur within 5minutes of an accident while another 54% would die within 30 minutes. Undoubtedly, assistance given during the first few minutes after a crash often is of great importance for those who are injured, especially in terms of future health and quality of life. Giving first-aid at the site of the injury decreases death occurrence by 20%, since first aid compensates a considerable amount of time that could pass before an ambulance and professional rescue personnel arrival, which is particularly important in rural areas where there are long response and transport times for emergency medical services (EMS). And so by providing prompt life-saving assistance, an injured person can be saved from a number of causes of death, such as airway obstruction following trauma [9].

In addition to this, in this study done in Saudi Arabia it was proven that for most causes of sudden unexpected death, a bystander's ability and willingness to perform CPR will increase the chance of the victim's survival. For out-of-hospital cardiac arrest, bystander CPR increases the likelihood of survival two to three time, and for drowning, CPR may be all that is required to resuscitate the victim [9].

Significance of the study

In the recent reform of the Ministry of Health, Emergency Medical Service is taken as one of the focus areas in hospital organization but Emergency pre-hospital medical care system is practically non-existent in Ethiopia. So Road traffic accident injuries are transported to the nearest health centre for emergency medical treatments without any health professional care at the accident scene or during transportation. Even though this gap in pre-hospital care is also identified as a critical problem, currently the ministry does not have standards or guidelines with respect to pre-hospital care and emergency service in the country. So in our setup the first person attending a traumatized person at the scene is the bystander.

A study on taxi drivers in Addis Ababa shows that half of the taxi drivers has poor knowledge even if most of them believe that first aid is important in addition first aid practice is found to be poor .But there is no data found in school areas regarding first aid in our setup

So this study will reveal KAP on first aid towards RTA and creates initiation on governmental and non-governmental organization to intervene the problems regarding first aid. And also this research will be a base to conduct further researches for policy makers to develop policy regarding first aid for RTA. Furthermore as there are limited researches conducted on KAP on first aid towards RTA this research will be used as a literature for other studies.

Literature review

Magnitude of RTA

Over 1.2 million people die each year on the world's roads, with millions more sustaining serious injuries and living with long-term adverse health consequences. Globally, road traffic crashes are a leading cause of death among young people, and the main cause of death among those aged 15–29 years. Road traffic injuries are currently estimated to be the ninth leading cause of death across all age groups globally, and are predicted to become the seventh leading cause of death by 2030[1].

According to 2015 WHO report estimated 1.2 million adolescents (age 10-19) died in 2015 being road traffic injuries were the leading cause of death [10]. A CDC report done by an American National Vital Statistics reports (NVSR) in 2018 also shows that unintentional injury is a major cause of mortality among the age of 10-19 years being motor vehicle accident was the leading cause of mortality among unintentional injuries[11].

In addition to deaths on the roads and up to 50 million people incur non fatal injuries each year as a result of road traffic crashes, while there are additional indirect health consequences that are associated with this growing epidemic. Data suggest that Globally an estimate of 3% of GDP and in low- and middle-income countries up to 5% of GDP economic loss caused due to road traffic Deaths and injuries [1].

The population increase of 4% between 2010 and 2013 and an increase of 16% in registered vehicles over the same period suggest that efforts to slow the increase in road traffic deaths may have prevented deaths that would otherwise have occurred [2].

In Africa, fatal road traffic accident is a number 1 threat in Zimbabwe even HIV and other health risks, it is reported that there were 1,037 road fatality during the year of 2006[12]. In Kenya nearly 3000 people killed annually. This translates approximately 68 deaths per 1,000 registered vehicles, which is 30-40 times greater than in highly motorized countries [13]. A study conducted in Ghana shows that only in 2014, there were a total of 14,390 RTA occur resulting 1645 fatality [14].

In Ethiopia a study conducted in one of the main highway (Addis Ababa – Hawassa) showed that the improved road safety applied by the Oromiya national regional state showed 4,053 crashes were registered and among these 1193 (29.4%) were fatal and 24.2% injury crashes and almost half 1880 (46.4%) were property damage[15].

A total of 382 fatal crashes occurred in Addis Ababa in the year 2013/14 among those 382 perpetrators majority 91.9% were men and aged 18 – 30 and 30 – 50 years old 44.7% and 41.5% respectively. Even though, studies show underreporting in sub-Saharan Africa including Ethiopia. However, road traffic accident remains to be one of the critical problems of the road transport of Ethiopia without due consideration. Although the traffic accident death rate per ten thousand motor vehicles (95 in 2007/8) is showing a decreasing trend in recent years, it still puts Ethiopia on the extreme high side of the international road safety scene. According to 2013 WHO report, road fatality rate was 4984.3 deaths per 100, 000 vehicles per year [16].

Road traffic accident in Ethiopia is not only a cause of significant losses of human resource but also economic resources .According to a study done by UN economic commission for Africa The accident cost analysis shows an estimate economic cost of traffic accident between 340-430 million ETB which is 0.8-0.9 % of the gross domestic product in 1999E.c also in the last Ethiopian fiscal year (2007/8),RTA results loss of over 82 million ETB which equivalents to US\$7.3 million ,The study further noted the worsening and the likely more severe situation due to under reporting. It would be impossible to attach a value to each case of human sacrifice and suffering, add up the values and produce a figure that captures the national social cost of road crashes and injuries. However, the economic costs of road traffic accidents are, evidently, a heavy burden for the national economy [17].

According to the World Health Organization report, the economic costs of road crashes and injuries are estimated to be 1% of gross domestic product (GDP) in low-income countries such as Ethiopia. Despite having very low road network density and vehicle ownership, the country has a relatively high accident record which has been indicated as the worst [16].

According to UN ECA report in the year 2007/2008, Addis Ababa faced 8169 RTA out of which 381 were fatal injuries [17]. A retrospective descriptive audit of injuries in public health facilities of Addis Ababa showed that motor vehicle accident is the second overall cause of injuries (first in the age group 15-44 years) and accounts for 34% of all injuries, leading causes of injury related admissions (61%), and 52% of injury related deaths [18]. Another study cited in the strategy document, from the trauma patients in Tikur Anbessa Hospital, Addis Ababa, road traffic injuries accounted for 41% of all cases, among the 10 sub cities in Addis Ababa Kolfe – Keranyo, Yeka and Nefassilk – Lafto sub city were the places 158 (41.4%) of fatal accidents occurred [19]. Transportation of the accident victims are made by the vehicle involved in the accident (if the vehicle is operational), Volunteer driver or ambulance (such as Red Cross Ambulance) if there is any around the accident scene [20].

First aid world wide

One study in India assessing KAP of undergraduate medical students shows that 38% of them to have inadequate knowledge, 58% of them to have negative attitude & 72% of them to have poor practice regarding first aid [21].

Another study in Saudi Arabia high school students concluded that 78.6% of the students have insufficient knowledge regarding first aid [9]. Similarly in one study assessing the KAP of pre-school parents in Hungary it concluded that first aid knowledge is very poor than expected [22]. In contrast a study done on medical college students in India assessing knowledge of first aid skills shows that 68.4% of the participants have moderate level of knowledge [23].

One study done in Palestine on KAP of school teachers regarding first aid showed that two third of the participants correct care for bleeding wound and 50.7% of the participants answered correctly the location of the hands during first aid [24].

In addition, a study assessing KAP of first aid measures among senior school prefects in Galle education division Siralanka senior prefects across two schools had inadequate knowledge on main aims of first aid, primary assessment and Cardio Pulmonary Resuscitation. Poor attitude regarding their ability towards giving first aid, but on the other hand one study in Palestine assessing the Knowledge & attitude of school teachers regarding first aid towards external

bleeding, burn, fracture, CPR & epilepsy shows that their knowledge except CPR is very high[25].

First aid nationally

There is one study which identify baseline KAP of traffic polices on first aid related to RTA in Lideta, Arada and Kirkos sub city it showed that there was gap on knowledge of assessment management of air way problems, ,and practice of management of neck injury for RTA victims. On the other hand, respondents were knowledgeable on management of bleeding and practice of management of victim with bleeding and fracture and they were a positive believe related to application of first aid at scene [18].

In another study done in taxi drivers in Addis Ababa, 50.3% of the participants had adequate knowledge, 80.4% of the participants had appropriate attitude towards first aid and 59.5% of the participants witnessed RTA [26].

Objective of the study

General objective

To assess the Knowledge, attitude and practice towards first aid related to RTA among high school students in Ayertena secondary and preparatory school, Kolfe keranio sub city Addis Ababa on March 2018.

Specific objective

- ✓ To assess knowledge of high school students towards first aid related to RTA
- ✓ To assess attitude of high school students towards first aid related to RTA
- ✓ To assess practice of high school students towards first aid related to RTA

Methods and materials

Study area

Kolfae-keranio sub city it is one of the 10 sub cities in Addis Ababa it covers an area of 61.25 sq.km and it has a population of 546,219. It consists of 15 woredas under it and the total numbers of governmental high schools in the sub city are eight. Ayertena a secondary and preparatory school is one of governmental high school it is found near to ayertena roundabout, the total number of students attending their education at the school is 2,933.

Study design

Cross sectional study design was used.

Population

Source population: All high school students in Addis Ababa school.

Study population: Selected High school students in Ayer Tena secondary and preparatory School

Inclusion and exclusion criteria

Inclusion criteria

All students in Ayertena secondary and preparatory school learning in grade 9, 10, 11 & 12, whose age is in range of 15-19

Exclusion criteria

- Students who are mentally ill
- student who are absent during the data collection period

Sample size determination

The sample size was determined by the single population proportion formula by considering 50% of respondents have good knowledge i.e expected prevalence = 50% confidence interval of = 95%, critical value $z = 1.96$ (from significance level $\alpha = 5\%$) and degree of precision, $w = 0.05$.

$$\text{So, Sample size: } n = \frac{(Z_{\alpha/2})^2 p(1-p)}{d^2} = \frac{(1.96)^2 \cdot 0.5(1-0.5)}{(0.05)^2} = 384$$

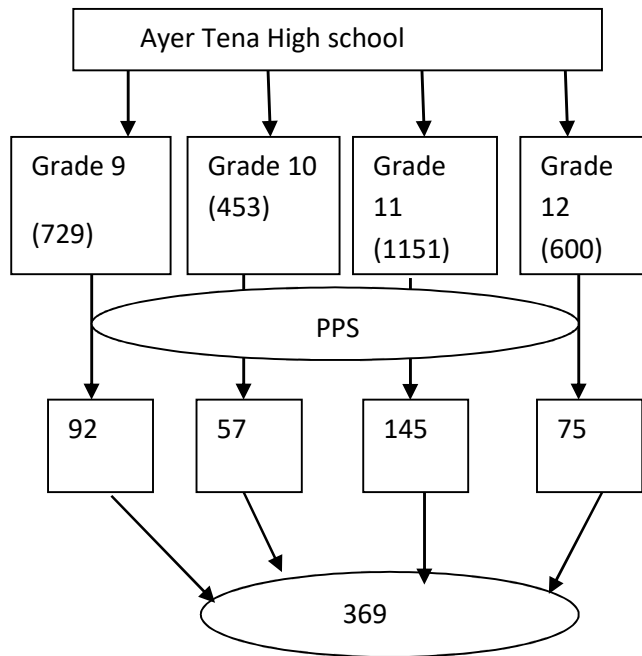
Adding non response rate 10% : $n = 384 + 38 = 422$

Hence the population is less than 10000 we use the population correction formula

$$\begin{aligned} n &= \frac{no}{1 + \frac{no}{N}} \\ &= \frac{2933}{1 + \frac{2933}{422}} \\ &= 369 \end{aligned}$$

Sampling method

Stratified sampling technique was used to select study participants from grade 9 to 12 by proportional to size allocation and study subjects will be selected using simple random sampling by taking students list as sampling frame.



Study variable

Dependent variable

- Knowledge on first aid
- Attitude towards first aid
- Practice of first aid

Independent variable

- Age
- Sex
- Grade level
- Address
- Experience
- Mother, father or guardian profession

- Internet access
- Training status

Operational definition

First aid is the initial assistance or treatment given at the site of accident to someone who is injured or suddenly taken ill, before the arrival of ambulance or standard medical service

RTA: an accident occurs when vehicles collide with other vehicles, with pedestrian and with other stationary obstacles.

- ✓ Knowledge
 - Adequate knowledge is knowledge score above the total mean knowledge score of all the participants
 - Inadequate knowledge is knowledge score is below the mean knowledge score of the participants
- ✓ Attitude
 - good Attitude about first aid is willingness to provide first aid at scene ,believe on necessity of giving first aid immediately at scene and wiling to have training on first aid
 - Bad attitude about first aid is not willing to provide first aid at the scene or not believe on necessity of first aid or not willing to take training on first aid
- ✓ Practice
 - Good practice-if respondent have a faced of road traffic accident victim and provide at least one kind of first aid regarding respiratory problem, heavy bleeding and neck injury and bone fracture
 - Poor practice-if respondent have faced road traffic accident victim but not give any kind of first aid for the RTA victim
 - No practice-if the respondent have no trend of road traffic accident

Data collection procedures

Data were collected by using a pretested self-administered questioner. Which is translated to Amharic language and distributed to students with in a day duration addressing all the samples, it was collected by the researcher with other three facilitators which were selected from the students themselves.

Data processing and analysis

The collected data were manually checked for completeness, accuracy and clarity and then analyzed by using SPSS (version 20). Descriptive statistical methods were used and the data were presented by using graphs and tables.

Ethical consideration

Ethical clearance of this study was obtained from Institutional Review Board after submitting the proposal. And prior to data collection consent was sent to the respective body at Ayertena secondary and preparatory school and woreda 5 main office. The collected data will be kept confidential and used for this research purpose only. Peoples in the exclusion criteria were briefly addressed about the purpose of the research.

Result dissemination

The results of the study will get presented to the Department of Public Health in SPHMMC and following which the final edition will be submitted to the department. The results could be used by different sectors in Ethiopia who involve on RTA prevention program, on first aid awareness development program.

Result

Socio demographic characteristics

Age

From a total of 369 students, Most of the repondants200 (54.2%) are within the age range of 17-18 and 179(48.5% of the respondents were males the rest 190(51.1%) to be females, with highest number of respondents 145 (39.3%) are from grade eleven.

358(97%) are single and 11(3%) are married but no one has a husband or wife who is a healthcare worker. Only 10 of the students (2.7%) and 9(2.4%) of the students fathers and mothers occupation respectively is a health care worker,

196(53.1%) of the participants have internet access however the rest 173(46.9%) do not
Previous First aid training

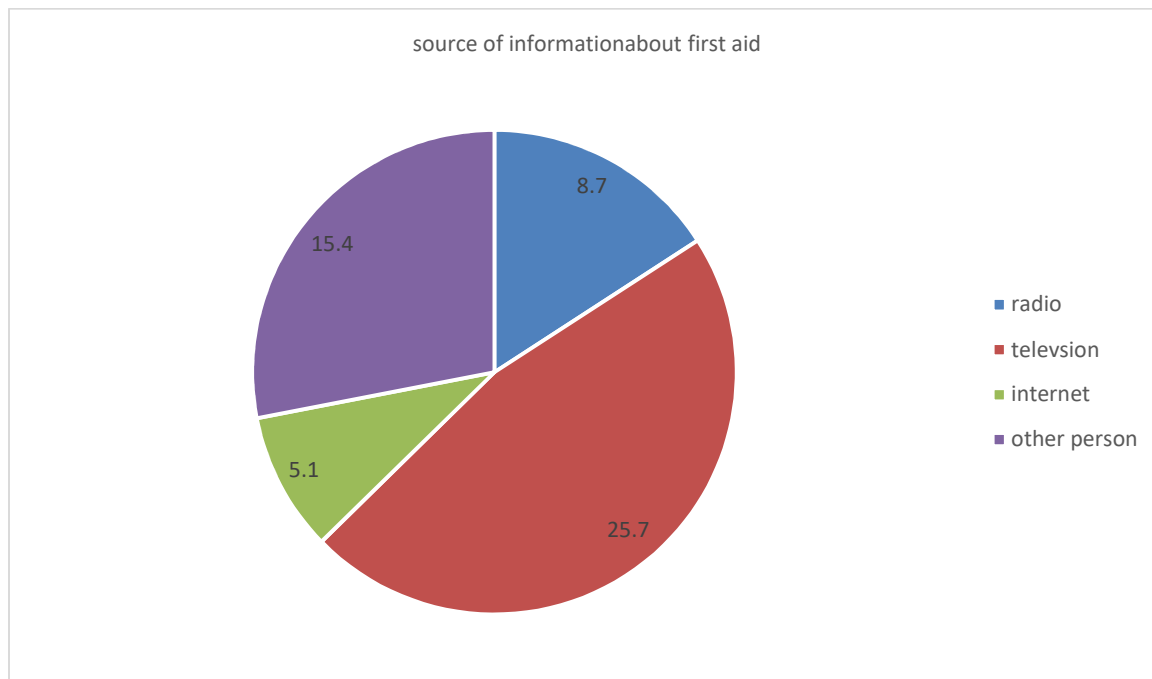
5(1.4%) of the students have taken trainings regarding first aid before, all of them take the training in Amharic language 2 of them by MOH and 3 of them by volunteer health care workers, a year/s back

13(3.5%) claim that they had faced RTA but only 2 of them had been given first aid

Table 1: socio demographic data of Ayertena secondary and preparatory school students

Age	frequency	percent
15	53	14.4%
16	58	15.7%
17	101	27.4%
18	99	26.8%
19	58	15.7%
sex		
male	179	48.5%
female	190	51.5%
grade		
9	91	24.7%
10	58	15.7%
11	145	39.3%
12	75	20.3%

Chart 1 source of information about first aid among ayertena secondary and preparatory school students



Knowledge about first aid related to road traffic accident

To assess the knowledge of the students the questionnaire included closed ended questions in addition to allowing extra answers to be mentioned other than given in the options,

Out of 369 students about 225(61%) of the students believed that scene bystander should give first aid during RTA, 103(27.9%) believe that health care workers should provide first aid while 26(7%) of them respond that first aid should be given by traffic polices but 15(4.1%) don't know who should give first aid.

Participants asked about when is the right time first aid to be given 290(78.6%) of respond that it should be given immediately at the scene 35(9.5%) believe that it should be given at hospital and the remaining 44(11.9%) of participants don't know when actually first aid should be given.

Table 2 knowledge assessment on first aid among Ayertena secondary and preparatory school students

Components of first aid	frequency	percent
Make sure that the victim is breathing	188	50.9%
Evacuating victim from the scene	58	15.7%
Stop bleeding	101	27.4%

Immobilization of fracture	12	3.3%
Taking to hospital	31	8.4%
Other(psychological support, collecting evidence and so on)	12	3.3%
I don't know	0	0%
Signs of airway obstruction		
Noisy breathing	83	22.5%
Fast breathing	86	23.3%
Slow breathing	64	17.3%
No breathing	85	23%
Methods to open airway		
Jaw thrust	109	29.5%
Head tilt chin lift	98	26.6%
I don't know	171	46.3%
Methods to give breath		
Mouth to mouth	286	77.5%
Mouth to nose	133	36%
Mask to mouse	16	4.3%
I don't know	8	2.2%
Signs and symptoms of cervical injury		
Neck pain	222	60.2%
Tenderness around the neck	79	21.4%
Neck deformity	40	10.8%
I don't know	68	18.4%
Methods to transfer victim with c spine injury		
Keep the person's neck and back straight with hand	198	53.7%
Keep the person's neck and back straight with hard board	89	24.1%
If there is only a limb injury, transfer the victim in a sitting position.	34	9.2%
I don't know	77	20.9%
Signs of bleeding		
Visualizing bleeding	348	94.3
Victim becoming unconscious	82	22.2
Decreased heart rate and fast breathing	42	11.4
Cold extremity	52	14.1
Seizure	8	2.2
I don't know	12	3.3
Methods to stop bleeding		
Apply tourniquet	257	69.6%
Apply pressure and dress	246	66.7%

Lift the injured part above the body level	94	25.5%
I don't know	1	0.3%
First aid components for victim having seizure		
to move anything away from the victim	123	33.3%
Gently support the victim's head to prevent it from hitting the ground	197	53.4%
Request that all bystanders move away	39	10.6%
removing any foreign material in the mouth	35	9.5%
I don't know	50	13.6%
First aid components for victim sustaining burn injury after RTA		
Evacuate victim from the scene	199	53.9%
Check vital sign	130	35.2%
Cool with water	82	22.5%
I don't know	26	7%
Components of primary safety		
making sure that the sight is not risky for your self	156	42.3%
put on gloves	196	53.1%
wait until the police comes if there is no bystander other than you	84	22.8%
i don't know	20	5.4%

Attitude

Three hundred and eighteen (eighty six percent) of the participants believe that first aid is necessary while 34(9.2%) of them are uncertain and 17(4.6%) don't believe in the necessity of first aid.

Two hundred and seven(fifty six percent) of the respondents are willing to give first aid while 90(24.4%)are uncertain, the rest 72(19.5%)are not willing to give first aid .out of those who are uncertain and not willing to give first aid , 82(22.2%)are not willing to give first aid because of fear of infection,49(13.3%)because of blood phobia,26(7%)of them because of medico legal issues and 5(1.4%)of them with no known cause aren't willing to give first aid.

Three hundred and seventy (eighty six percent) are willing to take first aid training while the rest 52(14.1%) are not willing to take first aid out of them 29(7.9%) and 23(6.2%) respond that they don't see the relevance of training and even if they no they don't give first aid respectively.

Table 3 attitude assessment of first aid among Ayertena secondary and preparatory school students

attitude	Frequency	Percentage
Believe first aid is necessary	318	86.1%
Believe first aid isn't necessary	17	4.6%
Uncertain in the necessity of first aid	34	9.2%
Willing to give first aid	207	56.1%
Not willing to give first aid	72	19.5%
uncertain	90	24.4%
Reasons not to give first aid		
Fear of infection	82	22.2%
Blood phobia	49	13.3%
Medico legal issues	26	7%
With no known cause	5	1.4%
Willing to take first aid training	317	85.9%
Not willing to take first aid training	52	14.1%
Reasons not to take first aid training		
Don't see the relevance of training	29	7.9%
Don't want to give first aid at all	23	6.2%

Practice

Three hundred and thirty six (ninety percent) of the respondents don't witnessed RTA before while 33(8.9%) faced RTA that needed their first aid out of those, 18(4.9%) of them respond that they have given first aid for the RTA victim but the rest 15(4.1%) of them don't.

Out of the eighteen respondents who give first aid were 6 of them (1.6%) call to 939 while 12(3.3%) of them transfer the victim to the nearby hospital,

In addition, fourteen of them respond that they have faced victim with airway problem, 9 of them respond that they have faced bleeding victim, 7 of them respond that they have faced victim who had c spine injury and 11 of them respond that they have faced a victim with bone fracture

Table 4 assessment of practice of first aid in ayertena secondary and preparatory school

Action taken to open airway	Percentage	Frequency
Remove foreign body	6	1.6%
Head tilt	3	0.8%
Do nothing	5	1.4%
Action taken to stop bleeding		
Apply pressure and dressing	3	0.8%
Elevate the bleeding site	2	0.5%
Apply tourniquet	4	1.1%
Action taken to manage victim with c spine injury		
Immobilize the victim	5	1.4%
Roll the victim	2	0.5%
Action taken to manage bone fracture		
Immobilize fracture	6	1.6%
Nothing	5	1.4%

Discussion

On this study assessment of knowledge indicates that, the mean knowledge of study participants is 13.3 with a maximum score of 39.156(42.2%) have adequate knowledge which is lower than a study done on taxi drivers in Addis Ababa (50.3%), however this study uses a total of 7 questions unlike the current study which uses a total of 13 questions to assess the knowledge of the participants, in contrary This result is than 42% of the people were aware of Concept of First aid. the study conducted in Pakistan on pre-hospital service. Another study in Saudi Arabia high school students concluded that 78.6% of the students have insufficient knowledge regarding first aid and also another study on KAP of school children in India shows only 17% to have sufficient knowledge, takes similar grade level as this study, both of these researches show much lower knowledge compared to this study. This may be due to the difference in the components of the questions to assess the knowledge

Majority of the students (61%) believed that a scene bystander should give first aid, a study done on traffic police in Addis Ababa shows 79.2% of them responded that a scene by stander should give first aid this difference may be because of large exposure of study samples of this study than the current study

A study done o nursing students in India shows that 30% of the respondents to keep the victim safe from injury which is almost similar finding to the current study (33%)

More than half of the respondents (50.9%) respond to asses victim is breathing or not as a component of first aid while 101(27.4%)of the respondents consider managing bleeding as first aid component, however only 12(3.3%)of them consider psychological support as first aid

All of the participants who took first aid training score above the mean score and also achieving the maximum score which implies that first aid training have an impact on first aid knowledge

According to this study 46.3%of the students have good attitude towards first aid.

318(86.2%) believe that first aid is necessary, however a study done on traffic polices in Addis Ababa shows 98.5% believe in the necessity of first aid this could be due to higher level of training status of the participants in the second study. Another study on taxi drivers also shows slightly higher result (99%) this could be due to highest exposure of the taxi drivers compared to the students, in this study 207(56.1%) of the respondents are willing to give first aid but it is higher among the traffic polices (73.8%) are willing to give first aid again this could be related to the higher level of training status and so higher level of believe in the necessity leading to more great willingness to give first aid,

In this study only 1.4% of the students take training which is even much lower than a study conducted in medical students in India which shows 11.2% of the students take training which could be due to better training opportunities' of medical students than high school students

91.1% of the students had no practice since they don't face RTA victim ever, even if 8.9% of the students faced RTA victim only 4.9% of them give some kind of first aid which is very low compared to a study done on taxi drivers in Addis this might be due to less exposure of the students compared to the taxi drivers in which more than 50% of the participants had witnessed RTA and much more training status than participants of the current study

However in this study In contrary to the researcher expectation, Those who take first aid training had no better out come in practice level compared to those who don't take first aid training before which could be due to ineffective and informal trainings as most of them given by volunteers and also insignificant number of students out of the total population to assess the impact of training.

Conclusion and recommendation

More than half of the students have inadequate knowledge and poor practice; however, in contrast to this majority of them are willing to give first aid and believe in the necessity of first aid and also they are willing to take first aid training, indicating that First aid training programs should be introduced at schools in order to fill the knowledge and practice gap and so as to decrease the early mortality and morbidity of road traffic accidents

Strength

The research questioner addresses most of first aid components which helps the students to have some awareness while assessing KAP of the students regarding first aid.

Limitation

This study uses a mean to assess the knowledge of the participants being those who are below the mean to be considered to have inadequate knowledge

There was lack of references regarding this research topic nationwide in addition it was difficult to find Amharic translation of some words while preparing the Amharic version of the questioner...

Work plan

[illegible]

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Annex: Questionnaire

ST. PAUL'S MILLENNIUM MEDICAL COLLEGE

DEPARTMENT OF PUBLIC HEALTH

Questionnaire for the assessment of knowledge, attitude and practice on first aid for persons sustaining road traffic accident among Ayer Tena Secondary and Preparatory School students, kolfekeranio sub city, Addis Ababa, 2018

Individual consent form

This is a questionnaire prepared to conduct a research on the assessment of knowledge, attitude and practice on first aid for persons sustaining road traffic accident among Ayer Tena Secondary and Preparatory School students, kolfekeranio sub city, Addis Ababa, 2018. the objective of the research is to assess Knowledge, Attitude and Practice among Ayertena secondary and preparatory school students regarding to first aid for person sustaining RTA.

To attain this purpose, your genuine participation in filling the questionnaire with real information is very important and highly appreciated. I would like to assure you, your name will not be written on this form and all the information gathered will be kept strictly confidential. You have full right to refuse, to take part of, or to interrupt the study at any time. But the information that you will give is quite useful to achieve the study and to bring change in pre hospital care service in Addis Ababa.

Investigator

Dr. Bezawit Nigussie

Tell. No 0932279866

Did you agree to participate? 1. Yes, *if yes please go to the questions on the next page*

2. No, *if no thank you! You can return the questionnaire.*

Thank you!!!

Instruction: Choose and Circle the answer that seems best for you from the alternatives that are under each question and for those that you give direct answer, write the answer in the space provided

SOCIO DEMOGRAPHIC CHARACTERISTICS

S.NO	Question	Response	Remark
1.1	Age	_____	
1.2	sex	1. Male 2. Female	
1.3	Educational level	1. grade 9 2. grade 10 3. grade 11 4. grade 12	
1.4	Marital status	1. Single 2. married 3. divorced 4. widowed	
1.5	Did you taken first aid training before?	1. Yes 2. No	If no Skip to question 1.9
1.6	If your answer for question no 1.5 is _yes_, who give you the training?	_____	
1.7	If your answer for question no 1.5 is _yes_, when do you get trained		
1.8	If your answer for question no 1.5 is _yes_, in which language do you get the training?	1. Amharic 2. English 3. Other, specify _____	
1.9	Do you have any internet access? (internet is accessible if you have Wifi in the school or at home or you have a mobile which has data connection)	1. yes 2. no	

1.10	What is the profession of your father or guardian?	_____	
1.11	What is the profession of your mother or guardian?	_____	
1.12	Have ever faced RTA?	1 yes 2 no	

PART II KNOWLEDGE QUESTIONS			
2.0	Have you ever heard about first aid	1. yes 2. no	
2.1	If your answer is yes for question 2.0 from where did you hear?	1. Radio 2. Television 3. Internet 4. from other person 5. other specify _____	
2.2	If your answer is yes for Q1.10 did anyone gives you first aid by the time?	1 yes 2 No	
2.3	When do you think first aid should be given during RTA?	1. Immediately 2. In hospital 3. I don't know	
2.4	Who do you think should give first aid during RTA?	1. Health care worker 2. Traffic police 3. Scene bystanders 4 volunteer trained person 4. I don't know	
You can give more than two answers for the following questions (3-9):			

2.5	Which of the following do you think as a component of first aid?	1. Making sure that patient is breathing properly 2. Moving patients from accident site 3. Stopping bleeding 4. immobilizing fractures 5. Transporting patients to hospitals 6.giving psychological support for the victim 7 I don't know 8. Other, (specify).....	
2.6	Which of the following are sign of air way problem for RTA victim?	1. Noisy breathing 2. Fast breathing 3. Slow breathing 4. No breathing 5. I don't know 6. Other, specify.....	
2.7	Which of the following procedure is/are used for to open air way for RTA victims?	1. Jaw trust 2. Head tilt and chin left 3. I don't know 4. Other, specify.....	
2.8	Which the following are used for giving breath?	1. Mouth to mouth 2. Mouth to nose 3. Mask to mouth 4. I don't know	
2.9	When do you suspect cervical injury?	1. pain around the neck 2. tenderness around the neck 3. Any deformity around the neck 4. I don't Know 5. Other, specify.....	
2.10	How do you evacuate a victim from the scene?	1. Keep the person's neck and back straight with hand 2. Keep the person's neck and back straight with hard board 3. If there is only a limb injury, transfer the victim in a sitting position. 4. Victim can be transferred just by one person holding 5. I don't know 6. Other, specify.....	

2.11	How do you transfer a patient with cervical injury to a Hospital?	1. Keep the person's neck and back straight with hand 2. Keep the person's neck and back straight with hard board 3. If there is only a limb injury, transfer the victim in a sitting position. 4. Victim can be transferred just by one person holding 5. I don't know 6. Other, specify.....	
2.12	Which of the followings are the sign of bleeding from the injured sight?	1. Visualizing Bleeding from the injured site 2. Victim become unconscious 3. Weak and Fast pulse and increase respiratory rate 4. Cold extremities 5. seizure 6. I don't know 7. Other, specify	
2.13	Which of the followings are important to stop bleeding?	1. Apply tourniquet 2. Apply pressure and dress 3. lift the injured part above the body level 4. I don't know 5. Other, specify.....	
2.14	If a victim has c-spine injury, do you think that moving the neck of victim aggravates his problem?	1. Yes 2. No 3. uncertain	

2.15	Which of the following is /are the right step to give first aid, if victim has seizure after sustaining RTA	1. to move anything away from the victim such as chairs or other objects not to injure the victim 2. Gently support the victim's head to prevent it from hitting the ground 3. Request that all bystanders move away 4.removing any foreign material in the mouth 5. I don't know 6. if other specify	
2.16	Which of the following is /are the right step to give first aid, if victim has burn injury after sustaining RTA	1 to evacuate the victim from sight of burn 2.to check the airway, breathing pattern and pulse of the victim 3.cool the burn with copious amount of clean water 4.I don't know 5.If other specify	
2.17	Which of the following is /are part of primary safety	1making sure that the sight is not risky for your self 2.put on gloves 3.wait until the police comes if there is no bystander other than you 4.i don't know 5.if other specify	
Part III: Attitude questions			
3.0	Do you believe that it is necessary to provide first aid immediately for road traffic Accident victim at scene?	1. Yes 2. No 3. uncertain	

3.1	Do you have willingness to provide first aid for road traffic accident victim?	1. Yes 2. No 3. uncertain	
3.2	If your answer for question number 2 is _No', what is your reason?	1. Blood phobia 2. Fear of infection and communicable diseases 3. Medico legal reason 4. I don't know how to give first aid 5. Other,Specify.....	
3.3	Do you think you should restrain yourself from giving first aid if the scene is risky for your life	1. Yes 2. No 3. uncertain	
3.4	If your answer is no for question No. what is the reason?	_____	
3.5	Do you believe that it is important to suspect high probability of c spine injury in all road traffic accident victims	1. Yes 2. No 3. uncertain	
3.6	Do you want to be trained on how to give first aid	4. yes 5. no	
3.7	If your answer is no what is your reason	_____	
	PART IV PRACTICE QUESTIONS		
4.0	Have you ever faced road traffic accident on someone else that needs first aid?	1. Yes 2. No	

4.1	If answer for question No. 4.0 is yes', did you gave first aid for persons sustaining RTA up on the last accident you witnessed ?	1. . yes 2. no	If your answer for q.No. 4.0 is yes continue the rest of questionnaire if not leave the rest of the questions
4.2	If answer for question no. 4.1 is yes, what was your action?	1. Call to 939 2. Transfer to near hospital 3. . Give first aid 4. Take plan 5. Transfer to police station 6. I do nothing 7. If other specify	
4.3	Did you have faced victim with air way problem while giving first aid?	1. Yes 2. No	
4.4	If question No 4.3 is __yes', what did you do?	1. Removing foriegen material in mouth 2. Head tilt-chinlift 3. I do nothing 4. If other specify	
4.5	Did you have faced victim with bleeds heavily?	1. Yes 2. No	
4.6	If question No4.5 is __yes', what did you do?	1. Applying pressure on the bleeding site 2. Dressing bleeding site 3. Elevating bleeding site 4. I do nothing 5. Other specify	

4.7	Have you ever faced a victim with c- spine injury?	1. Yes. 2. No	
4.8	If question no 4.7 is __yes‘, what did you do?	1. Avoid mobilizing spine and the patient 2. Rolling the patient 3. I do nothing 4. Other specify	
4.9	Did you have a trend victim with bone fracture?	1. Yes 2. No	
4.10	If question No 4.9is __yes‘, what did you do?	1. immobilizing the fractured site 2. I do nothing 3. If other specify	

AMHARIC VERSION

ቅዱስዳውሱስሚሲ ኒየምሚ ዲ ካሲህክምናኮሲ ጅዮህብረተሰብጤናሳደንስክፍሰ

በመኪናስደጋስተረፍሰዎችበሚሰጥየመጃመረዎስርዳታዙረዎበስየርጤናሁስተኛደረጃናመሰናደት/ቤትየሚገኙተማሪዎችንያቸውንስውቀት፣ስመሰካክትናስምድስመዳስስየተዘጋጃመጠደቀ

ደህመጠየቀበመኪናስደጋስተረፍሰዎችበሚሰጥየመጃመረዎስርዳታዙረዎበስየርጤናሁስተኛደረጃናመሰናደት/ቤትየሚገኙተማሪዎችንያቸውንስውቀት፣ስመሰካክትናስምድስመዳስስየተዘጋጃመጠደቀሲሆንደህንንጥናትውጤታማሰማድረግስርሶደህንንመጠደቀስንዲሞሉተመርጠዋለ::የስርሶትክክሰኛመረጃበጣምጠቃሚ

ነው::ስለሆነምየስርሶትምበመጠደቀሳደስደጠቀስምበተጨማሪምመረጃውሚሰጥራዊነውስናምበጥናቱሳደ

ደስመሳትፍ፤በመሃልየማቋረጥውስመብትስሎትነገርግንየስርሶትበጥናቱመሳተፍበጣምጠቃሚበመሆኑናበጤናስገለሎትስርዓቱሳደትስቀስውጥየሚያመጣናበትራፊክስደጋየሚሞቱሰዎችንቁጥርበመቀነስትስቀስስተዋደስሰው::

ስጥኚ

ቤዛዊት ንጉሴ

0932279866

በጥናቱስደስመሳተፍፍቃደኛኖት?

ስዎ□□ስደደስሁም□

ጊዜዎትንመሰዋስትስድርገውስስተሳተፍክስብስመሰግናስሁ!!

የመረጃስብሳቢውስምናፎርማ

ስም ፊርማ

ቀን.....

ተረቀቀ	ጥያቄዎች	መሰረት	ተጨማሪ መሰረት መስጫ
1.1	ሰድሞ		
1.2	ደታ	1. ወንድ 2. ሴት	
1.3	የትምህርት ደረጃ	1. ዘጠነኛ 2. ስህረዊ 3. ስህረ-ከንዳኛ 4. ስህረ-ሁለተኛ	
1.4	የጋብቻ ሆኑት	1. ያገባ/ች 2. ያሳገባ/ች 3. የፈታ/ች 4. ባለወደምሳሌት የሞተበት/ባት	
1.5	ከዚህ በፊት ስለመጸመሩ ደታ ስለመኖር ስደው ያውቃሉ	1. ስምወሰኝ ስህተት 2. ስለወሰዱትም	መሰረት ስለወሰዱትም ከሆነ ወደ ጥያቄ ቁጥር 1.7 ይሂዱ
1.6	ስምደቀቁጥር 1.5 መሰረት ስምደቀቁጥር ነበር ስለመኖሩን የሰ ጥምት		
1.7	ስምደቀቁጥር 1.5 መሰረት ስምደቀቁጥር ነበር ስለመኖሩን የወ ሰዱት		
1.8	ስምደቀቁጥር 1.5 መሰረት ስምደቀቁጥር ነበር ስለመኖሩን ወን የወሰዱት	1. በስማርት 2. በስንግሊዝ 3. ሲባካስ ደግሞ	
1.9	በስራ ስምደቀቁጥር ነበር ስለመኖሩን ተደራሽነት/ቤት ወደምጣት ወሰን የገመዱ ስምደቀቁጥር ነበር ስለመኖሩን (የደፋዩ) ካለ ወደምጣት ነበር ስለመኖሩን የገመዱ ስምደቀቁጥር ነበር ስለመኖሩን	1. ስምደቀቁጥር 2. የስም	
1.10	የወሳኝ ስምደቀቁጥር ወደምጣት የሰደዱ ስምደቀቁጥር		
1.11	የወሳኝ ስምደቀቁጥር ወደምጣት የሰደዱ ስምደቀቁጥር		
1.12	የመኪና ስምደቀቁጥር ስምደቀቁጥር ያውቃሉ	1. ስምደቀቁጥር 2. ስምደቀቁጥር	
የስምደቀቁጥር ስምደቀቁጥር			
2.0	ከመኪና ስምደቀቁጥር ስምደቀቁጥር ስምደቀቁጥር ጸመር ደታ ስምደቀቁጥር	1. ስምደቀቁጥር 2. ስምደቀቁጥር	
2.1	ስምደቀቁጥር 2.1	1. በፊደል	

	መሰረተኛ የሥራ ስልጣን (ክፍል) ክፍሉን	2. በቴሌቪዥን 3. በኢንተርኔት 4. ክፍሉ 5. ሲቪክስ ድጋፍ	
2.2	ስራዎች መሰረተኛ የሥራ ስልጣን በመስጠት የሚጠቀሙ ስልጣኖች ደጋፊ የሥራ ስልጣን	1. ስራዎች 2. ስልጣኖች	
2.3	በመኪና አገልግሎት ስልጣን ስራዎች የሚጠቀሙ ስልጣኖች መሰረተኛ የሥራ ስልጣን ስልጣኖች ስልጣኖች	1. ወደ ድረው 2. ለኢንተርኔት 3. ስልጣኖች	
2.4	በመኪና አገልግሎት ስልጣን ስራዎች የሚጠቀሙ ስልጣኖች መሰረተኛ የሥራ ስልጣን ስልጣኖች ስልጣኖች	1. የሚጠቀሙ ስልጣኖች 2. የተፈጻሚነት ስልጣኖች 3. በአገልግሎት ስልጣኖች የሚጠቀሙ ስልጣኖች 4. ስልጣኖች	

ስራዎችን የሚጠቀሙ የሥራ ስልጣኖችን የሚጠቀሙ የሥራ ስልጣኖች

2.5	ስራዎችን የሚጠቀሙ የሥራ ስልጣኖች መሰረተኛ የሥራ ስልጣን	1. ተገዢው በተከፈለ የሥራ ስልጣኖች ስልጣኖች 2. ተገዢው ከሥራ ስልጣኖች ስልጣኖች 3. የሚጠቀሙ የሥራ ስልጣኖች 4. የሥራ ስልጣኖች ስልጣኖች 5. ተገዢው የሥራ ስልጣኖች ስልጣኖች 6. ስልጣኖች 7. ሲቪክስ ድጋፍ	
2.6	በሥራዎች የሚጠቀሙ የሥራ ስልጣኖች ሥራዎችን የሚጠቀሙ የሥራ ስልጣኖች	1. የሚጠቀሙ የሥራ ስልጣኖች 2. በሥራዎች ስልጣኖች 3. በሥራዎች ስልጣኖች 4. ተገዢው የሥራ ስልጣኖች 5. ስልጣኖች 6. ሲቪክስ ድጋፍ	
2.7	በተገዢው የሥራ ስልጣኖች ንግድን ለመክፈት የሥራ ስልጣኖች	1. ተገዢው የሥራ ስልጣኖች 2. ተገዢው የሥራ ስልጣኖች 3. ስልጣኖች 4. ሲቪክስ ድጋፍ	
2.8	መተንተኛ የሥራ ስልጣኖች ደጋፊ የሥራ ስልጣኖች	1. ስራዎችን የሚጠቀሙ የሥራ ስልጣኖች 2. ስራዎችን የሚጠቀሙ የሥራ ስልጣኖች 3. ስራዎችን የሚጠቀሙ የሥራ ስልጣኖች 4. ስራዎችን የሚጠቀሙ የሥራ ስልጣኖች	
2.9	የሥራ ስልጣኖች የሥራ ስልጣኖች ስራዎችን የሚጠቀሙ የሥራ ስልጣኖች	1. ስራዎችን የሚጠቀሙ የሥራ ስልጣኖች 2. ስራዎችን የሚጠቀሙ የሥራ ስልጣኖች 3. ስራዎችን የሚጠቀሙ የሥራ ስልጣኖች 4. ስራዎችን የሚጠቀሙ የሥራ ስልጣኖች	

		5. ሲባካስደጥቀሱ	
2.10	የአከርካፊ የሳይኛው ክፍል የተገዳገሰው እንዲትከስ ዲጋይታይዝሎት ማውጣት ይቻላል	1. የተገኝ ውንክንገት እንዲደንቀሳቀስ በስጅ በመደገፍ 2. የተገኝ ውንክንገት እና ጂኦጣቀጥ አድራሻ በጠንካራ ቦርድ መግኝት 3. እንዲኖረው እጅግ ደረጃ ሲከሰቱ የተገዳው የተገኝ ውንክንገት ቀመጠመው ሲድ 4. ስላውቅም 5. ሲባካስደጥቀሱ	
2.11	የአከርካፊ የሳይኛው ክፍል የተገዳገሰው እንዲትወደድ ዲጋይታይዝሎት ማውጣት ይቻላል	1. የተገኝ ውንክንገት እንዲደንቀሳቀስ በስጅ በመደገፍ 2. የተገኝ ውንክንገት እና ጂኦጣቀጥ አድራሻ በጠንካራ ቦርድ መግኝት 3. እንዲኖረው እጅግ ደረጃ ሲከሰቱ የተገዳው የተገኝ ውንክንገት ቀመጠመው ሲድ 4. ስላውቅም 5. ሲባካስደጥቀሱ	
2.12	የሳይኛው የጂኦጣቀጥን ተክፍል የተገዳገሰው ሳይኖር የተገኝ ውንክንገት ማንቀሳቀስ ችግሩን ያባብሰው ሰው ያስባሉ	1. አዎ ያባብሰው 2. አዎ ያባብሰውም 3. እርግጠኛ አይደለም	
2.13	ከተገዳው የሰውነት ክፍል ሳይደምስ የፈሰሰ ስመሆኑን በምን እርግጠኛ መሆኑን ይቻላል	1. ከተገዳው አካባቢ ደምሲፊስ በማየት 2. ተገኝ ውክሉን 3. መጠኑን እና ጥንቱ የቀነሰ የሰውነት እና ፍጣን የአተነፋፊ ሰርድን 4. የእጅግ ደረጃ የጊዜ መቀዝቀዝ 5. የሰውነት መንቀጥቀጥ 6. ስላውቅም 7. ሲባካስደጥቀሱ	
2.14	ከሚከተሉት የትኛው ተግባር ደምን ሰማቅ ምደጠቅ ማለት	1. ደም የሚፈሰበትን የተገዳ ክፍል ማሰር 2. ደም የሚፈሰበትን የካሳ ክፍል ተጭኖ መያዝ እና መሸፈን 3. ደም የሚፈሰበትን የካሳ ክፍል ወደ ሳይኛው አድራሻ መያዝ 4. ስላውቅም 5. ሲባካስደጥቀሱ	

2.15	ተጎጂው ከመኪና አደጋ በታሳታይነት የሚገኝበት የጥቅም ስልጣን ሲኖረው፤ ከሚከተሉት የመጀመሪያ ስርዓት መመሪያዎች የተገኙት ከነዚህ ነው፡	1. ከተጎጂው አካባቢ ያሉ ስቃዎችን መቆጣጠር 2. ተጎጂው በሚገኝበት የጊዜ ማንኛውንም ጊዜ ሊገኝ ይችላል 3. በቦታው ያሉ ተመሳሳይ ሰዎችን ከቦታው መቆጣጠር 4. በተጎጂው አካባቢ ስለሚገኝ ጥቃቅን ምልክት ማመልከት 5. ስላውቅም 6. ሲሳካ ስለሚኖር	
2.16	ተጎጂው ከመኪና አደጋ በታሳታይነት የሚገኝበት የጥቅም ስልጣን ሲኖረው፤ ከሚከተሉት የመጀመሪያ ስርዓት መመሪያዎች የተገኙት ከነዚህ ነው፡	1. ተጎጂውን ተመሳሳይ ሰዎች ከቦታው መቆጣጠር 2. የተጎጂውን የአድራሻ ግብ፣ የአካባቢውን ስልክ ቁጥር፣ የሰዎችን ስምና የሰዎችን አድራሻ መመዝገብ 3. በቦታው በተገኘው ጥቃቅን ምልክት ላይ ማመልከት 4. ስላውቅም 5. ሲሳካ ስለሚኖር	
2.17	የመጀመሪያ ስርዓት መመሪያዎች በሚገኙበት ጊዜ ስራ ላይ ማመልከት የሚገባቸው ጥንቃቄዎች የተገኙት ከነዚህ ነው፡	1. ቦታው ስርዓት ስለሚገኝበት ጊዜ ማመልከት 2. የአደጋውን ማመልከት 3. በቦታው ስርዓት ስለሚገኝበት ጊዜ ስራ ላይ ማመልከት 4. ስላውቅም 5. ሲሳካ ስለሚኖር	
የአመራር ክትትል ስርዓት መመሪያዎች			
3.0	በመኪና አደጋ በተገኘው የመጀመሪያ ስርዓት መመሪያዎች መሰረት በቦታው ስርዓት መመሪያዎች መሰረት ስራ ላይ ማመልከት	1. ስምተገቢነት 2. ተገቢ ስራ ስለሆነ 3. ስርዓት መመሪያዎች መሰረት	
3.1	በመኪና አደጋ በተገኘው የመጀመሪያ ስርዓት መመሪያዎች መሰረት በቦታው ስርዓት መመሪያዎች መሰረት ስራ ላይ ማመልከት	1. ስምተገቢነት 2. ስራ ስለሆነ 3. ስርዓት መመሪያዎች መሰረት	
3.2	ከሳካ ስርዓት መመሪያዎች መሰረት በቦታው ስርዓት መመሪያዎች መሰረት ስራ ላይ ማመልከት	1. የሰዎችን ስም 2. ተገቢ ስራ ስለሆነ 3. ከሰዎች መካከል ስራ ላይ ማመልከት 4. የመጀመሪያ ስርዓት መመሪያዎች መሰረት 5. ሲሳካ ስለሚኖር	
3.3	አደጋው የተከሰተበት ቦታ የመጀመሪያ ስርዓት መመሪያዎች መሰረት በቦታው ስርዓት መመሪያዎች መሰረት ስራ ላይ ማመልከት	1. ስምተገቢነት 2. ስራ ስለሆነ 3. ስርዓት መመሪያዎች መሰረት	
3.4	ስምተገቢነት 3.3 መመሪያዎች መሰረት በቦታው ስርዓት መመሪያዎች መሰረት ስራ ላይ ማመልከት		
3.5	በመኪና አደጋ በተገኘው የመጀመሪያ ስርዓት መመሪያዎች መሰረት በቦታው ስርዓት መመሪያዎች መሰረት ስራ ላይ ማመልከት	1. ስምተገቢነት 2. ተገቢ ስራ ስለሆነ 3. ስርዓት መመሪያዎች መሰረት	

	ባሉ		
3.6	የመጽሐፍ ስርዓታዊ ልማት የሚሰጥ ስልጠና ንስሙው ስርዓቱ ስርዓቱ	1. ስም ስርዓቱ 2. ስርዓቱ	
3.7	ስም ስርዓቱ 3.6 መሰረት ስርዓቱ ስርዓቱ ንስሙ		
የስም ስርዓቱ ስርዓቱ			
4.0	የመጽሐፍ ስርዓቱ ስርዓቱ የሚሰጥ ስልጠና ንስሙ ስርዓቱ ስርዓቱ	1 ስም ስርዓቱ 2. ስርዓቱ	
4.1	ስም ስርዓቱ 4.0 መሰረት ስርዓቱ ስርዓቱ ንስሙ ስርዓቱ ስርዓቱ	1. ስም ስርዓቱ 2. ስርዓቱ	ስም ስርዓቱ 4.1 መሰረት ስርዓቱ ስርዓቱ
4.2	ስም ስርዓቱ 4.1 መሰረት ስርዓቱ ስርዓቱ ንስሙ ስርዓቱ	1.939 ደግሞ 2. ስርዓቱ ስርዓቱ 3. ስርዓቱ ስርዓቱ 4. ስርዓቱ ስርዓቱ 5. ስርዓቱ ስርዓቱ	
4.3	የመጽሐፍ ስርዓቱ ስርዓቱ የሚሰጥ ስልጠና ንስሙ ስርዓቱ ስርዓቱ	1 ስም ስርዓቱ 2. ስርዓቱ	
4.4	ስም ስርዓቱ 4.3 መሰረት ስርዓቱ ስርዓቱ ንስሙ ስርዓቱ	1. ስርዓቱ ስርዓቱ 2. ስርዓቱ ስርዓቱ 3. ስርዓቱ ስርዓቱ 4. ስርዓቱ ስርዓቱ	
4.5	የመጽሐፍ ስርዓቱ ስርዓቱ የሚሰጥ ስልጠና ንስሙ ስርዓቱ ስርዓቱ	1. ስም ስርዓቱ 2. ስርዓቱ	
4.6	ስም ስርዓቱ 4.5 መሰረት ስርዓቱ ስርዓቱ ንስሙ ስርዓቱ	1. ስም ስርዓቱ 2. ስም ስርዓቱ 3. ስም ስርዓቱ 4. ስም ስርዓቱ 5. ስም ስርዓቱ	
4.7	የመጽሐፍ ስርዓቱ ስርዓቱ የሚሰጥ ስልጠና ንስሙ ስርዓቱ ስርዓቱ	1. ስም ስርዓቱ 2. ስርዓቱ	

	ሞት ያውቃል		
4.8	በጥያቄ 4.7 መሰረት የሚከተሉትን ፍቃድ ይገባል፡ ደንብ ለመፍጠር የሚያስፈልጉትን ፍቃድ ይገባል	1. ተገዢውን ከሚገኝበት የሰው ሀብት 2. ተገዢውን በሚገኝበት የሰው ሀብት 3. ተገዢውን በሚገኝበት የሰው ሀብት 4. ምንም እንኳን ፍቃድ ይገባል 5. ሌላ ማንኛውም ፍቃድ	
4.9	በመኪና አደጋ ምክንያት የሰው ሀብት ለመፍጠር የሚያስፈልጉትን ፍቃድ ይገባል	1. ስያሜው 2. ስያሜው	
4.10	በጥያቄ 4.9 መሰረት የሚከተሉትን ፍቃድ ይገባል፡ ደንብ ለመፍጠር የሚያስፈልጉትን ፍቃድ ይገባል	1. የሰው ሀብት ለመፍጠር የሚያስፈልጉትን ፍቃድ ይገባል 3. ምንም እንኳን ፍቃድ ይገባል 4. ሌላ ማንኛውም ፍቃድ	

እና መሳሪያዎች!!!