



**St. Paul's Hospital
Millennium Medical College**
የቅዱስ ጳውሎስ ሆስፒታል ሚሊኒየም ሕክምና ኮሌጅ

SCHOOL OF PUBLIC HEALTH

KNOWLEDGE, ATTITUDE, AND PRACTICE ON FIRST AID FOR PERSONS SUSTAINING ROAD TRAFFIC ACCIDENT AMONG MEDHANIALEM SECONDARY SCHOOL STUDENTS, GULELE SUB CITY, ADDIS ABABA

By: Dr. Sador Bereket(Medical Intern)

**A RESEARCH PROJECT TO BE SUBMITTED TO THE SCHOOL OF
PUBLIC HEALTH, SPHMMC, IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF DOCTOR OF MEDICINE**

APRIL, 2026

ADDIS ABABA, ETHIOPIA

**ST. PAUL'S HOSPITAL MILLENNIUM MEDICAL
COLLEGE
SCHOOL OF PUBLIC HEALTH**

**KNOWLEDGE, ATTITUDE AND PRACTICE ON FIRST AID FOR
PERSONS SUSTAINING ROAD TRAFFIC ACCIDENT AMONG
MEDHANIALEM SECONDARY SCHOOL STUDENTS, GULELE
SUB CITY, ADDIS ABABA, 2025**

By: Dr. Sador Bereket(Medical Intern)

ADVISOR: Dr. Mitiku Getu(MD,MPH)

Dr. Kalkidan Samuel(Asst.Professor of ECCM)

**A RESEARCH PROJECT TO BE SUBMITTED TO THE SCHOOL OF
PUBLIC HEALTH, SPHMMC, IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF DOCTOR OF MEDICINE**

APRIL, 2026

ADDIS ABABA, ETHIOPIA

Abbreviations and Acronyms

AAEB: Addis Ababa Education Bureau

AAFP: American Academy of Family Physicians

CDC: Centers for Disease Control and Prevention

CPD: Continuous Professional Development

DALYs: Disability-Adjusted Life Years

EMS: Emergency Medical Services

FMoH: Federal Ministry of Health

KAP: Knowledge, Attitude, and Practice

LMICs: Low- and Middle-Income Countries

RTAs: Road Traffic Accidents

UNDP: United Nations Development Programme

UNECA: United Nations Economic Commission for Africa

WHO: World Health Organization

Abstract

Background- Road traffic accidents (RTAs) represent a significant and growing public health challenge in Ethiopia, with a lack of formal pre-hospital Emergency Medical Services (EMS) making bystander first aid a critical intervention. Secondary school students, a highly vulnerable and exposed demographic, are uniquely positioned as potential first respondents. However, a substantial gap exists in the literature regarding their specific first aid knowledge, attitudes, and practices (KAP).

Objective- The aim of this study is to assess the KAP of first aid for RTAs among students at Medhanialem Secondary School in Gulele Subcity, Addis Ababa.

Method- A school-based quantitative cross-sectional study was conducted using a structured, self-administered questionnaire. Data were collected from a randomly selected sample of 361 regular secondary school students (grades 9-12).

Result- The general awareness of first aid was nearly universal (99.4%). The findings revealed that 64.7%(n=225) of the students possessed good theoretical knowledge, and 78.2%(n=272) maintained a positive attitude toward providing first aid. Despite these high levels of awareness, a critical proficiency gap was identified, with only 12.1%(n=42) of participants demonstrating good practice in life-saving procedures. Furthermore, 67% of respondents admitted that they did not feel personally confident or capable of intervening in an emergency, largely due to a fear of causing additional harm to the victim.

Conclusion- Despite high awareness and a positive attitude toward first aid among Medhanialem Secondary School students, there is a significant gap in practical skills and confidence to manage life-threatening emergencies. The inability to perform critical procedures such as airway management and cervical spine protection, combined with fear of causing harm, limits effective bystander intervention. These findings highlight the urgent need for structured, hands-on first aid training within the school setting to bridge the gap between knowledge and practice and improve timely emergency response.

Keywords: Road Traffic Accidents, First Aid, Knowledge, Attitude, Practice, Secondary School Students, Ethiopia

Table of Contents

Abbreviations and Acronyms	3
Abstract	4
1.1. Background	9
1.2. Statement of the Problem	10
1.3. Justification of the Study	10
2. Literature review	12
2.1. Introduction	12
2.2. Road Traffic Accident Worldwide	12
2.2. Road Traffic Accident in Ethiopia	12
2.3. Global and Regional Perspectives on First Aid Knowledge and Skills	13
2.4. First Aid Preparedness Among Adolescent Populations	13
2.5. First Aid Knowledge, Attitude, and Practice in Ethiopia	14
3. Objectives of the study	15
3.1. General Objective	15
3.2. Specific Objectives	15
4. Methods and Materials	16
4.1. Study Design	16
4.2. Study Area	16
4.2.1. Source population	16
4.2.2. Study population	16
4.3. Inclusion and exclusion criteria	16
4.3.1. Inclusion criteria	16
4.4. Sample Size and Sampling Procedure	17
4.5. Sampling method	17
4.6. Study variable	18
4.6.1. Dependent variable	18
4.6.2. Independent variable	18
4.7. Operational definition	18
4.8. Data Collection Procedures	19
4.9. Data processing and analysis	19
4.10. Ethical consideration	20

5. Result	21
5.1. Descriptive characteristics of the study participants	21
5.1.1. Response Rate.....	21
5.1.2. Respondents Profile.....	21
5.2. Knowledge of First Aid for Road Traffic Accidents of Medhaniallem Secondary School students	23
5.3. Attitude of First Aid for Road Traffic Accidents of Medhaniallem Secondary School students.....	30
5.4. Practice of First Aid for Road Traffic Accidents of Medhaniallem Secondary School students.....	32
6. Discussion.....	37
7. Limitation of the study	39
8. Conclusion and Recommendation.....	40
8.1. Conclusion	40
8.2. Recommendations	40
References	42
Annex: Questionnaire	45

List of tables

Table 1 : Socio-demographic characteristics - frequency & percentage of Socio-demographic characteristics of Medhanialem Secondary School students(n=348).....	22
Table 2 : Knowledge of First Aid for RTA Victims - frequency & percentage of Knowledge of First Aid for RTA Victims of Medhanialem Secondary School students(n=348).....	25
Table 3 : Attitude of Students Toward First Aid in RTA - frequency & percentage of Attitude of Students Toward First Aid in RTA of Medhanialem Secondary School students(n=348).....	31
Table 4 : Practice of Students Toward First Aid in RTA - frequency & percentage of Practice of Students Toward First Aid in RTA of Medhanialem Secondary School students(n=348).....	33
Table 5 Factors Associated with Knowledge towards First Aid among Medhanialem Secondary School Students (n = 348)	36
Table 6 Factors Associated with attitude towards First Aid among Medhanialem Secondary School Students (n = 348)	37

List of figures

Figure 1 : Sample size proportion from each grade	18
Figure 2 : Graphical Representation of Participants' Age and Grade Distribution.....	21
Figure 3 : Distribution of Study Participants by Previous First Aid Training Experience	22
Figure 4 : Distribution of Study Participants when they think first aid should be given during RTA	24
Figure 5 : Distribution of Study Participants on How to evacuate a victim from the scene	25
Figure 6 : Distribution of Study Participants in a hypothetical RTA where someone has a suspected broken leg, what would they do? (Multiple Response).....	33

1. Introduction

1.1. Background

Road traffic accidents (RTAs) pose a significant global public health challenge, causing millions of injuries and fatalities annually. Every year, more than 1.2 million people lose their lives in traffic accidents, and millions more suffer severe injuries and long-term health problems. Road traffic injuries are currently estimated to be the ninth leading cause of death worldwide across all age groups, and they are expected to rise to the seventh leading cause of death by 2030[1].

According to the World Health Organization (WHO), RTAs are the leading cause of death for children and young adults aged 5-29 years, making them a major impediment to sustainable development [2]. The economic burden associated with RTAs, including healthcare costs, productivity losses, and long-term care, is substantial, particularly in low- and middle-income countries (LMICs) where over 90% of RTA fatalities occur, in these regions. Ethiopia, like many low-income nations, bears a heavy brunt of this global crisis. Rapid urbanization, increasing vehicle numbers, inadequate road infrastructure, and limited enforcement of traffic laws contribute to a high incidence of RTAs[3].

Secondary school students, are a particularly vulnerable group due to their daily exposure to traffic, either as pedestrians, passengers, or increasingly, as drivers or motorcyclists [4]. Their active involvement in community life also positions them as potential first respondents to RTA incidents occurring in their vicinity. The initial minutes following an RTA are critical, and the immediate application of appropriate first aid can significantly reduce the severity of injuries, prevent complications, and ultimately save lives[5].

In Ethiopia, a 2017 study found that road traffic accidents are responsible for a high proportion of trauma victims in the 15-21 age range, a demographic that includes many secondary school graduates and students[6]. Similarly, research in Arbaminch town indicates a higher proportion of accidents involve people in the 18-30 age group[7]. Basic first aid interventions, such as controlling bleeding, maintaining an open airway, and immobilizing fractures, can make a profound difference in patient outcomes before professional medical help arrives[8].

Despite the undeniable importance of first aid, there is often a lack of adequate knowledge, positive attitudes, and practical skills among the general population, and specifically among adolescents, to effectively respond to RTA emergencies. This deficit can be attributed to various factors, including insufficient formal first aid education in school curriculum,

limited public awareness campaigns, and sociocultural barriers that may hinder intervention[9]. The primary reasons include a lack of formal first aid education within the Ethiopian school curriculum and limited public awareness campaigns tailored to the local population [10]. This study aims to address on these aspects within the context of Medhanialem Secondary School students in Gulele Subcity, Addis Ababa, Ethiopia.

1.2.Statement of the Problem

Road traffic accidents (RTAs) are a major public health concern in Ethiopia, owing to the fact that road transport is the major transportation system in the country[11]. According to a 2024 report from the Ethiopian Government Communication Service, at least 1,358 people died in traffic accidents within six months of the 2023-2024 fiscal year, with more than half of the fatalities involving pedestrians. The majorities of the crashes occur during daytime hours, involve males, and involve persons in the 18-50 age groups[12].

The World Health Organization states that Ethiopia has one of the highest rates of road deaths in the world. The Ethiopian Federal Ministry of Health has also recognized RTAs as a major public health crisis, contributing to significant morbidity, disability, and premature mortality. In cities like Addis Ababa, where there are a lot of people and traffic, the burden of RTAs is made worse by the fact that there are more people and cars. [2].

Secondary school children, who are in a critical and formative developmental period, are almost always present on the roads, presenting them not only as possible victims but also as critical, immediate bystanders in RTA scenarios.

Additionally, there is insufficient evidence regarding the Knowledge, Attitude, and Practice (KAP) of first aid for Road Traffic Accidents (RTAs) among secondary school students in urban Ethiopian contexts. The lack of context-specific data makes it difficult to design effective training programs and include practical first aid education in school curricula.

Therefore, this study aims to assess the KAP of first aid for RTAs among Medhanialem Secondary School students in Gulele Sub-city, Addis Ababa, to bridge the knowledge gap that can support effective interventions and improve emergency response outcome.

1.3.Justification of the Study

Emergency Medical Service (EMS) is a major focus area within the Ethiopian Ministry of Health's recent reform efforts, specifically the Health Sector Transformation Plan II (HSTP II) and related initiatives. While emergency care has always been present in hospitals, these reforms aim to formally develop and strengthen the country's pre-hospital care system,

which has historically been inadequate. These efforts include improving ambulance services, establishing dispatch systems, and training specialized emergency medical professionals to provide care before patients reach the hospital. As a result, injuries from road traffic accidents are taken to the nearest health centre for emergency medical treatment, with no on-site or in-transportation care provided [14]. Road traffic accidents continue to be one of the leading causes of injury and death in Ethiopia, with a significant impact on the younger population. Adolescents, particularly secondary school students, represent a critical demographic that is both highly exposed to RTAs and possesses the potential to be effective first respondents. Empowering them with appropriate first-aid skills can enable immediate, life-saving interventions at the scene of an accident before professional medical services arrive.

The significant purpose of this study is to provide context-specific empirical data that can directly inform Gulele Sub city education office and Medhaniallem Secondary School. This study directly addresses the gap by providing empirical evidence on the current state of KAP among students at Medhaniallem Secondary School. The findings will serve as evidence-informed recommendations for the Medhaniallem Secondary School administration and Gulele Sub city education office. The school's role will be to implement targeted first aid training programs, workshops, and awareness campaigns based on the study's recommendations. The Education office can use this data to assess the level of knowledge, attitudes, and practices (KAP) among secondary school students. This information can then be used to develop and inform training programs for secondary schools, with the potential to integrate first aid training into the curriculum across all secondary schools of Gulele Sub city.

2. Literature review

2.1. Introduction

WHO consistently emphasize the paramount importance of early interventions in improving patient outcomes following trauma (WHO 2023). RTA related deaths and injuries have a significant effect on socioeconomic development and overall well-being. RTAs are thought to be responsible for 1.2 million fatalities and 50 million injuries annually, making them one of the major causes of death and injury in the globe (WHO 2004). This section comprehensively reviews existing literature on KAP of first aid, with a specific focus on RTAs and adolescent populations, particularly within the challenging and unique context of Ethiopia.

2.2. Road Traffic Accident Worldwide

Road traffic accidents (RTAs) one of the top 10 cause of death globally. Road traffic accidents have a significant impact on societal wellness and socioeconomic growth, resulting in high expenses. RTAs are a primary source of death and injury globally, resulting in an estimated 1.2 million deaths and 50 million injuries annually[4]. According to a 2023 WHO report, over 1.1 million adolescents (ages 10-19) died in 2023, with road traffic accidents being the major cause of mortality. A CDC report conducted 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, with motor vehicle accidents being the main cause of mortality among unintentional injuries[15]. RTA rates and related deaths and disabilities decrease in developed nations, but rapidly increasing in many low-income countries. RTAs have a significant economic impact on developing nations, costing 1-4% of their GNP annually[16]. Developing countries are responsible for over 92% of global road traffic fatalities[2]. Between 1990 and 2010, overall road injury disability-adjusted life year (DALYs) increased by 2.5%. Pedestrian injury DALYs increased by 12.9%, more than any other category. Identifying the root causes of road traffic accidents is crucial in addressing the rising burden of premature death and disability in emerging countries[17].

2.2. Road Traffic Accident in Ethiopia

According to the African Development Bank (AfDB), Organization for Economic Co-operation and Development(OECD), United Nations Development Programme (UNDP), and United Nations Economic Commission for Africa (UNECA) (2012), Ethiopia has one of Africa's fastest-growing non-oil producing economies with a rising degree of

motorization. There are some particular road safety issues brought on by this quickly growing mobility, although Road traffic accidents in Ethiopia incur considerable losses of both human and economic resources[18]. Economic Cost of Road Traffic Accidents in Ethiopia According to a study by the UN Economic Commission for Africa (UNECA), road traffic accidents had a significant economic impact on Ethiopia. In 2021, the Federal Police Commission recorded 15,034 road accidents during fiscal year starting from 7 July 2021, leaving 4,161 people dead. The WHO reported that Ethiopia recorded the highest road traffic accident, estimated about 4,984.3 deaths per 100,000 vehicles per year[2].

2.3. Global and Regional Perspectives on First Aid Knowledge and Skills

Study undertaken all across the world have repeatedly shown that most of the population lacks basic first aid knowledge and skills. In a systematic review of first aid interventions for trauma victims for instance[14]. Recent Study in Ethiopia have shown that while there is a general awareness and a favourable attitude towards first aid, critical knowledge and practice gaps persist, particularly among key groups like public transport drivers and laypeople. This lack of skill is a significant contributor to poor outcomes in the pre-hospital management of road traffic accidents[10]. These gaps frequently pertain to complex procedures such as proper spinal immobilization, effective control of severe arterial bleeding, or appropriate management of an unconscious victim[19]. Similarly, research conducted found that despite a generally positive attitude towards providing first aid, a large proportion of the population lacked the necessary practical skills to effectively translate their willingness into actionable, life-saving interventions in emergency situations. These findings indicate a crucial worldwide issue: the importance of going beyond mere theoretical understanding to acquire strong, practical skills reinforced by frequent training and lifelike simulations [20].

2.4. First Aid Preparedness Among Adolescent Populations

According to a study conducted on secondary school students' attitudes towards assisting RTA victims were generally positive, but they frequently lacked sufficient knowledge of crucial first aid procedures, such as managing severe bleeding, handling unconsciousness, or handling fractures. The direct advantage of formal education was further supported by this study, which found a substantial positive link between prior first-aid training and higher knowledge and practice scores [19].

A similar study discovered that although students' attitudes and willingness to assist were impacted by their exposure to RTA accidents, their real first aid skills remained severely

limited in the absence of formal and hands-on training[13]. Together, these findings indicate that although teenagers may naturally want to help and have the empathy to do so, a widespread lack of formal education and practical experience often limits their ability to help effectively. One effective way to address this gap is to incorporate first aid into educational programs [2].

2.5. First Aid Knowledge, Attitude, and Practice in Ethiopia

Ethiopia has a significant burden from RTAs, ranking among the top in the world and in Africa for fatalities and injuries[21]. This terrible reality underscores the critical need for improved pre-hospital care, in which educated bystanders can play an important role [22]. Conducted a significant study in Lideta Sub-City, Ethiopia, to examine first aid knowledge and attitude among preparatory school students. A significant study was conducted in Lideta Sub City, Ethiopia, to examine first-aid knowledge and attitudes among preparatory school students [22]. Their findings revealed that the majority of students had only fair overall first-aid knowledge but performed poorly in practical situations [13]. The study strongly advocated incorporating comprehensive first-aid education into the national school curriculum to greatly increase students' competency and responsiveness in emergencies. Similarly, a study was conducted on health science students in Addis Ababa to investigate their knowledge and attitudes about first aid for trauma. While this study focused on a different, more medically inclined population, it still highlighted prevalent misunderstandings and significant knowledge gaps, even among those with some basic healthcare exposure, indicating that a lack of focused first-aid training is widespread across various educational backgrounds in Ethiopia [14]. Furthermore, research by Shetie Workneh on university students in Ethiopia generally found low levels of first-aid knowledge and practice, reinforcing the systemic need for improved first-aid education at various educational levels [11].

3. Objectives of the study

3.1. General Objective

To assess the knowledge, attitudes, and practices regarding first aid in road traffic accidents among Medhanialem Secondary School students in Gulele Subcity, Addis Ababa, Ethiopia.

3.2. Specific Objectives

- To determine the level of knowledge regarding first aid for road traffic accidents among Medhanialem Secondary School students
- To assess the attitudes towards providing first aid for road traffic accidents among Medhanialem Secondary School students
- To assess the practice of first aid for road traffic accidents among Medhanialem Secondary School students

4. Methods and Materials

4.1. Study Design

A school-based quantitative cross-sectional study was conducted to assess students' knowledge, attitudes, and practices regarding first aid in road traffic accidents at Medhanialem Secondary School. This methodology was appropriate for describing the level of knowledge, attitudes, and practices among a specific population at a single point in time.

4.2. Study Area

The study was conducted at Medhanialem Secondary School in the Gulele Sub-city of Addis Ababa, Ethiopia. Addis Ababa, Ethiopia's capital and largest city, is a primary hub for economic and social activity. It has the highest traffic volume and, consequently, the most road traffic accidents in the country[2]. Addis Ababa is divided into 11 sub-cities, with Gulele being one of them. Gulele is known for its high population density and a diverse mix of residential, commercial, and educational areas.

The decision to choose Medhanialem Secondary School was based on two key factors. First, it was a large public institution with a substantial student population from diverse socioeconomic backgrounds, ensuring the study's findings were representative. Second, the school's specific location near busy roads and its placement within a high-traffic urban environment ensured that its student body was regularly exposed to the risks of traffic accidents.

4.2.1. Source population

This study's source population consisted of all regular secondary school students (grades 9-12) who attend Medhanialem Secondary School.

4.2.2. Study population

The study population consisted of randomly selected regular secondary school students (grades 9-12) from Medhanialem Secondary School who were present during the data collection period and provided informed consent.

4.3. Inclusion and exclusion criteria

4.3.1. Inclusion criteria

All students from Medhanialem Secondary School, enrolled in grades 9, 10, 11 and 12 who were willing to participate in the research.

4.3.2. Exclusion criteria

- Students who were absent during the data collection period.
- Students who were not willing to participate in the research.

4.4. Sample Size and Sampling Procedure

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, $w = 0.05$. The sample size was determined using a single population proportion formula by taking the proportion (P) of 50% from a previous study conducted among a similar population (

$$n = (Z\alpha/2)^2 * P(1-P) / d^2$$

$$n = (1.96)^2 * 0.5(1-0.5) / (0.05)^2 \quad n = 3.8416 * 0.25 / 0.0025 \quad n = 0.9604 / 0.0025 \quad n = 384.16 \approx 384$$

❖ Considering a 10% non-response rate, the adjusted sample size will be: Adjusted

$n = 384 + 38 = 422$. Hence, the population is less than 10000, we use the population correction formula, Total population size is 2478

Calculate the Ratio= $422/2478 = 1.1703$, Calculate the Final Corrected Sample Size

$$n = n_0 / 1 + n_0 / N,$$

$$n = 422 / 1.1703 = 360.59 \approx 361$$

4.5. Sampling method

The sampling method was a stratified random sampling technique with proportional allocation. The four grade levels served as the strata. The required number of participants was proportionally allocated to each stratum (grade level) based on its size within the school population. Therefore, a total of 361 students were included in the study.

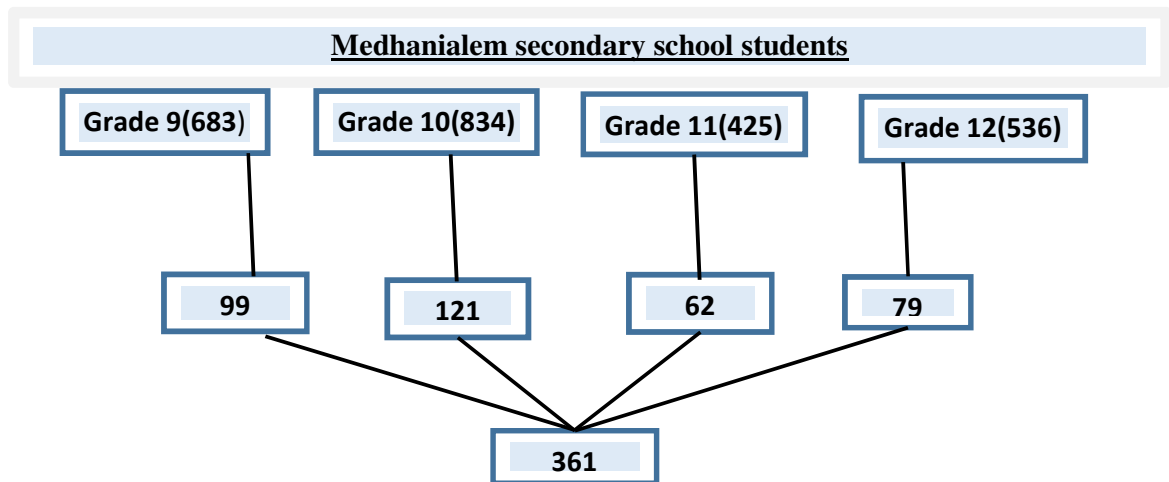


Figure 1 : Sample size proportion from each grade

4.6. Study variable

4.6.1. Dependent variable

- Level of Knowledge on First Aid
- Level of attitude towards first aid
- Level of Practice of First Aid

4.6.2. Independent variable

- **Socio-demographic characteristics:** Age, Sex, Grade level, Parents'/guardians' education level, Parents'/guardians' occupation, Family income. education level, Parents'/guardians' education level, Parents'/guardians' occupation,
- **Exposure to RTAs:** Personal experience as a victim or witness of an RTA.
- **First Aid Training:** Previous formal or informal first aid training.
- **Access to Information:** Sources of first aid information (e.g., media, family, school).
- **Perceived self-efficacy:** Belief in one's ability to provide first aid.

4.7. Operational definition

- ✓ **Knowledge:** Awareness of first aid components, recognition and management of bleeding, positioning of victims during an MCA, and victim transportation. Knowledge of first aid was assessed using 13 knowledge questions. Each correct response was

scored as 1, while incorrect or “I don’t know” responses were scored as 0. The total knowledge score was converted into a percentage[10].

- **Good knowledge:** Respondents who scored $\geq 60\%$ of the total knowledge questions correctly (≥ 8 out of 13).
 - **Poor knowledge:** Respondents who scored $< 60\%$ of the total knowledge questions correctly (< 8 out of 13).
- ✓ **Attitude toward first aid:** Willingness to provide first aid and belief in its necessity at accident scenes. Attitude toward first aid was assessed using 6 attitude questions[10].
- **Positive Attitude:** Respondents who scored $\geq 60\%$ of the total attitude questions.
 - **Negative Attitude:** Respondents who scored $< 60\%$ of the total attitude questions.
- ✓ **Practice of first aid:** Actions taken during incidents involving respiratory problems, severe bleeding, or fractures. Practice of first aid was assessed using 8 practice questions. Each correct or appropriate response was scored as 1, and incorrect or “no action” responses were scored as 0[10].
- **Good Practice:** Respondents who scored $\geq 60\%$ of practice-related questions correctly (≥ 5 out of 8).
 - **Poor Practice:** Respondents who scored $< 60\%$ of practice-related questions correctly (< 5 out of 8).

4.8. Data Collection Procedures

The structured, self-administered questionnaire was developed by adapting and refining relevant, validated questions from prior studies on first-aid Knowledge, Attitudes, and Practices (KAP), specifically tailored to the context of Road Traffic Accidents (RTAs) and secondary school students. The tool, prepared in English and translated into Amharic, integrated questions adapted from established instruments [24]. Data was collected by a paid trained data collectors during regular class hours using printed questionnaire.

4.9. Data processing and analysis

The collected data were carefully reviewed for completeness, accuracy, and clarity, with data cleaning, coding, and entry performed before analysis in SPSS version 26. Descriptive

statistics were computed to summarize the findings. Frequencies and percentages were used to describe categorical variables such as socio-demographic characteristics, knowledge, attitude, and practice of first aid among students. The results were presented using tables, charts, and graphs for clarity and ease of interpretation.

To assess the level of KAP, composite scores were calculated based on the operational definitions. Inferential statistics were applied to examine associations between independent variables and outcome variables. The chi-square test was used to determine the presence of statistically significant associations between categorical variables. A p-value of less than 0.05 was considered statistically significant.

4.10. Ethical consideration

Ethical clearance for this study was obtained from the Institutional Review Board after the proposal was submitted. Consent was obtained from the respective body at Medhanialem Secondary School and informed assent was obtained from each of the study participants to collect the data. The collected data was kept confidential and used solely for this research.

5. Result

5.1. Descriptive characteristics of the study participants

5.1.1. Response Rate

A total of 361 questionnaires were distributed to various study participants. Out of the total population covered, 348 people responded, representing a 96.4% response rate.

5.1.2. Respondents Profile

Out of 348 participants, females were comprised of 52.6% (n=183). The participants, aged 15-19 years, were predominantly 16-year-olds (35.3%, n=123), with the academic distribution peaking among Grade 10 students (35.6%, n=124).

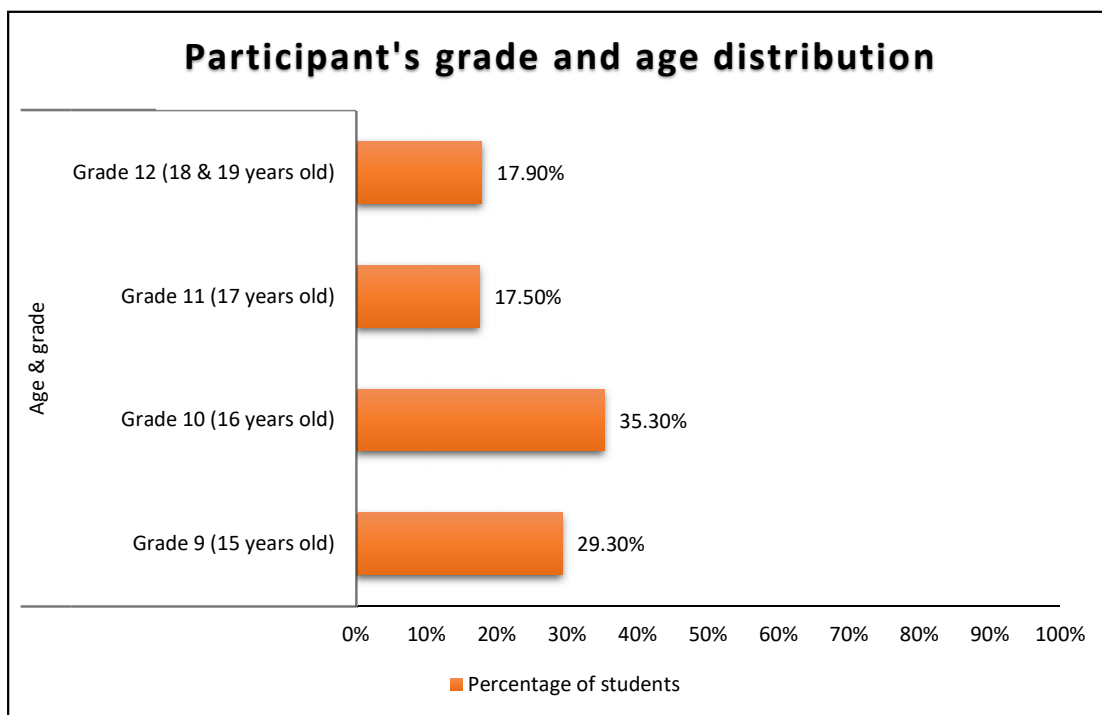


Figure 2 : Graphical Representation of Participants' Age and Grade Distribution

While the study displayed high digital readiness with an overwhelming 85.3% (n=297) maintaining regular internet access, a profound gap in emergency training was observed. Only a small minority of the students (24.1%, n=84) had formal first aid training. Among these prepared individuals, schools (45.2%, n=38) and volunteers (36.9%, n=31) emerged as the primary educational pillars, delivering instruction predominantly in Amharic. Most of this training was reported to have occurred in the year 2017 (12.9%, n=45).

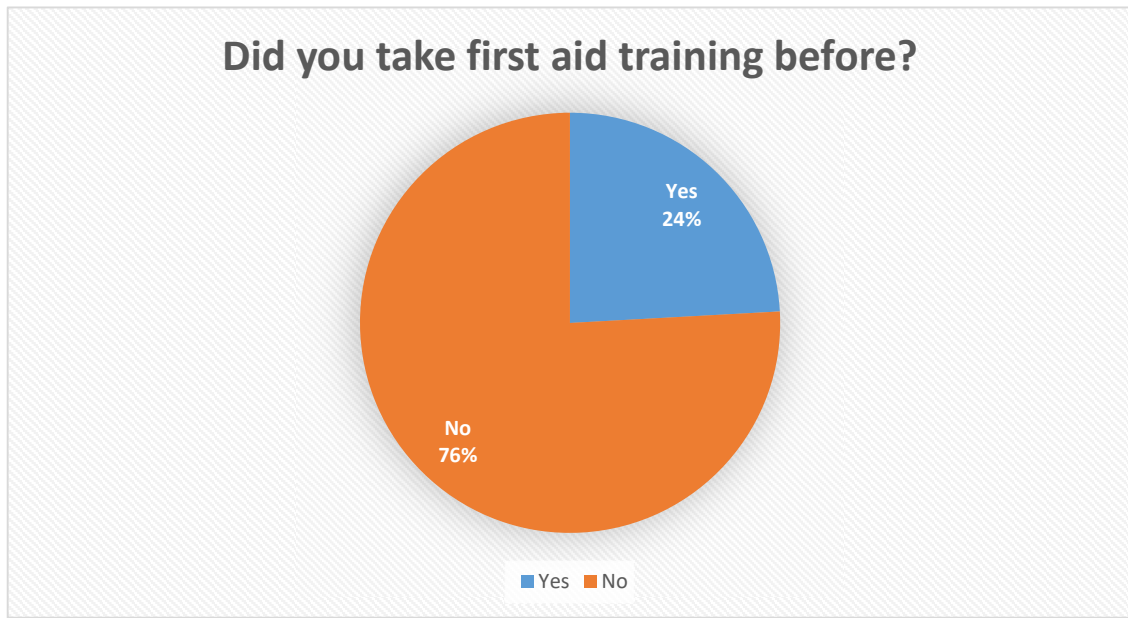


Figure 3 : Distribution of Study Participants by Previous First Aid Training Experience

Table 1 : Socio-demographic characteristics - frequency & percentage of Socio-demographic characteristics of Medhaniale Secondary School students(n=348)

Variable	Category	Frequency (n)	Percentage (%)
Age	15 years	102	29.3
	16 years	123	35.3
	17 years	61	17.5
	18 years	60	17.2
	19 years	2	0.7
Sex	Female	183	52.6
	Male	165	47.4
Educational Level	Grade 9	101	29.0

	Grade 10	124	35.6
	Grade 11	63	18.1
	Grade 12	60	17.3
First Aid Training	Yes	84	24.1
	No	264	75.9
Training Source (n=84)	The school	38	45.2
	Volunteers	31	36.9
	Health Bureau	7	8.3
	Health Facility	6	7.1
	Other	2	2.5
Internet Access	Yes	297	85.3
	Occasional	40	11.5
	No	11	3.2
witnessed RTA	Yes	65	18.7
	No	283	81.3

5.2. Knowledge of First Aid for Road Traffic Accidents of Medhanialem Secondary School students

Almost all of the students (99.4%, n=346) reported prior exposure to the concept. This widespread awareness was primarily driven by mass media and formal education, as television (61.8%) and school (56.3%) emerged as the leading information conduits. 64.7%(n=225) of the students are classified as having Good knowledge. Regarding the

critical timing of intervention, 68.7% (n=239) correctly identified that first aid must be administered immediately [1].

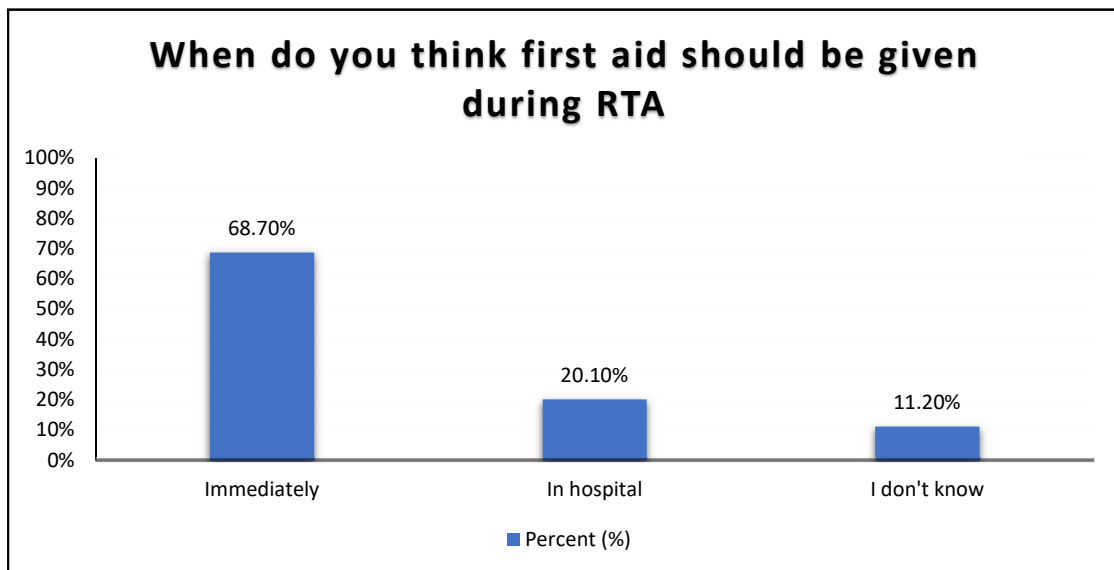


Figure 4 : Distribution of Study Participants when they think first aid should be given during RTA

Only 8.9% (n=31) of the sample correctly identified the combination of noisy breathing, Fast, Slow, and no breathing as critical signs. Overall, no breathing was the most frequently cited individual component across various combination responses, appearing in the selections of 61.2% of the total sample (n=213). A substantial majority, 58.3% (n=203), admitted to having no knowledge of any airway opening procedures, and only a small fraction (28.4%) could correctly identify the Jaw Thrust maneuver. 83.3% (n=290) of the respondents preferred healthcare workers as the primary providers of first aid during a Road Traffic Accident (RTA).

Furthermore, 41.1% identified "mouth-to-mouth" as the primary sole method for rescue breathing. 81.6% of the study participants identified visualizing bleeding from the injured site as sign of haemorrhage, and 55.2% recognized the necessity of neck and back immobilization for safe evacuation .

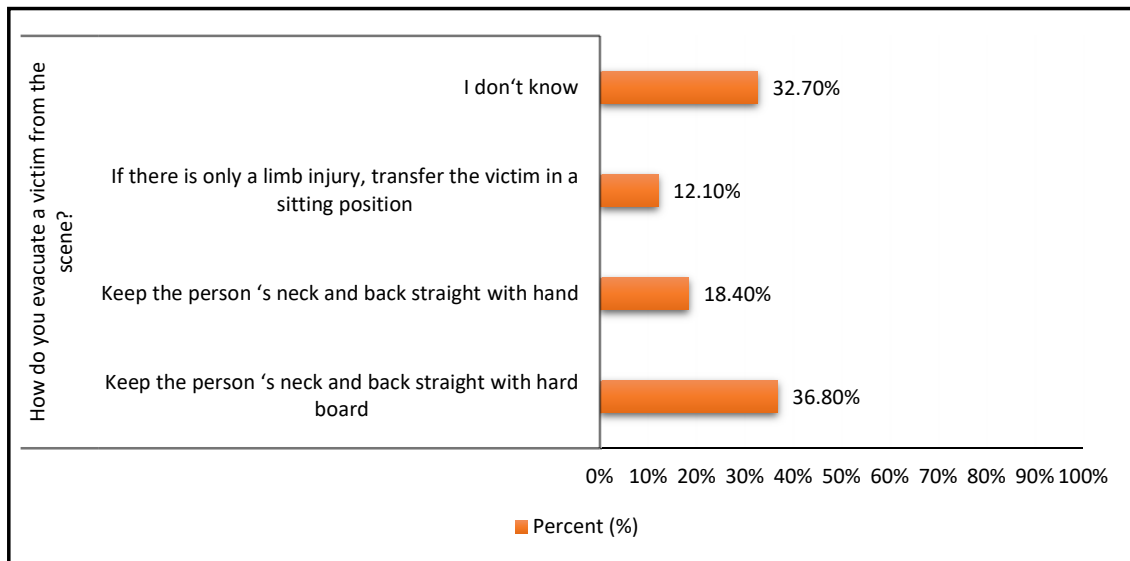


Figure 5 : Distribution of Study Participants on How to evacuate a victim from the scene

Table 2 : Knowledge of First Aid for RTA Victims - frequency & percentage of Knowledge of First Aid for RTA Victims of Medhanialem Secondary School students(n=348)

Knowledge Variable	Category	Frequency (n)	Percent (%)
Have you ever heard about first aid?	Yes	346	99.4%
	No	2	0.6%
If your answer is yes for question 2.0 from where did you hear? (Combined Multiple Response)	Television	215	61.8%
	School	196	56.3%
	Internet	150	43.1%
	From other person	93	26.7%
	Radio	78	22.4%

When do you think first aid should be given during RTA?	Immediately	239	68.7%
	In hospital	70	20.1%
	I don't know	39	11.2%
Who do you think should give first aid during RTA? (Multiple Response)	Health care worker	290	83.3%
	Volunteer trained person	183	52.6%
	Traffic police	152	43.7%
	Scene bystanders	120	34.5%
	I don't know	19	5.5%
Which of the following do you think as a component of first aid? (Multiple Response)	Stopping bleeding	302	86.8%
	Ensuring proper breathing/Airway	198	56.9%
	Moving victims from the accident site	165	47.4%
	Transporting patients to hospitals	124	35.6%
	Providing psychological support	28	8.0%
	I don't know	18	5.2%
Which of the following are sign of air way problem	Slow breathing and No breathing	76	21.8%

for RTA victim? (Multiple Response)	Fast, Slow, and No breathing	46	13.2%
	No breathing (Single selection)	41	11.8%
	Noisy breathing, Fast, Slow, and No breathing	31	8.9%
	Noisy breathing, Fast, and Slow breathing	20	5.7%
	Fast and No breathing	15	4.3%
	Noisy breathing and No breathing	13	3.7%
	Noisy breathing (Single selection)	12	3.4%
	Other combinations	63	18.1%
	I don't know	31	8.9%
Which of the following procedure is/are used for to open air way for RTA victims? (Multiple Response)	I don't know	203	58.3%
	Head tilt and chin lift	104	29.9%
	Jaw thrust	99	28.4%
Which the following are used for giving breath? (Multiple Response)	Mouth to mouth	244	70.1%
	Mask to mouth	145	41.7%
	Mouth to nose	65	18.7%

	I don't know	72	20.7%
When do you suspect cervical injury? (Multiple Response)	pain around the neck	218	62.6%
	tenderness around the neck	126	36.2%
	Any deformity around the neck	94	27.0%
	I don't Know	98	28.2%
How do you evacuate a victim from the scene?	Keep the person 's neck and back straight with hard board	128	36.8%
	Keep the person 's neck and back straight with hand	64	18.4%
	If there is only a limb injury, transfer the victim in a sitting position	42	12.1%
	I don't know	114	32.7%
How do you transfer a patient with cervical injury to a Hospital? (Multiple Response)	Keep the person 's neck and back straight with hard board	175	50.3%
	Keep the person 's neck and back straight with hand	132	37.9%
	If there is only a limb injury, transfer the victim in a sitting position	92	26.4%
	Victim can be transferred just by one-person holding	68	19.5%

	I don't know	108	31.0%
Which of the followings are the sign of bleeding from the injured sight? (Multiple Response)	Visualizing Bleeding from the injured site	284	81.6%
	Victim become unconscious	118	33.9%
	Cold extremities	102	29.3%
	Weak and Fast pulse and increase respiratory rate	96	27.6%
	seizure	28	8.0%
	I don't know	32	9.2%
Which of the followings are important to stop bleeding? (Multiple Response)	Apply pressure and dress	228	65.5%
	Apply tourniquet	146	42.0%
	Lift injured part	104	29.9%
	I don't know	51	14.7%
If a victim has c-spine injury, do you think that moving the neck of victim aggravates his problem?	Yes	109	31.3%
	No	103	29.6%
	Uncertain	136	39.1%
Which of the following is /are part of primary safety?(Multiple Response)	Putting on gloves	288	82.8%
	Ensuring the site is not risky for oneself	243	69.8%

	Waiting for police	124	35.6%
	I don't know	30	8.6%

5.3. Attitude of First Aid for Road Traffic Accidents of Medhaniallem Secondary School students

The psychological assessment showed that 78.2%(n=272) of the study participants maintain a Positive attitude toward bystander intervention. While this high level of support is driven by a strong belief that first aid saves lives(77.0%) and a widespread willingness to participate in school_based training courses(61.2%), a critical confidence gap was identified, as 67.0% (n=233) admitted that they would not feel capable of providing assistance. This hesitation is reflected in the finding that only 42.5% (n=148) expressed a definite willingness to act, while 37.4% remained uncertain. The primary psychological barriers identified were lack of knowledge and fear of harming the victim (34.2%), followed closely by fear of blood or seeing injuries (27.1%).

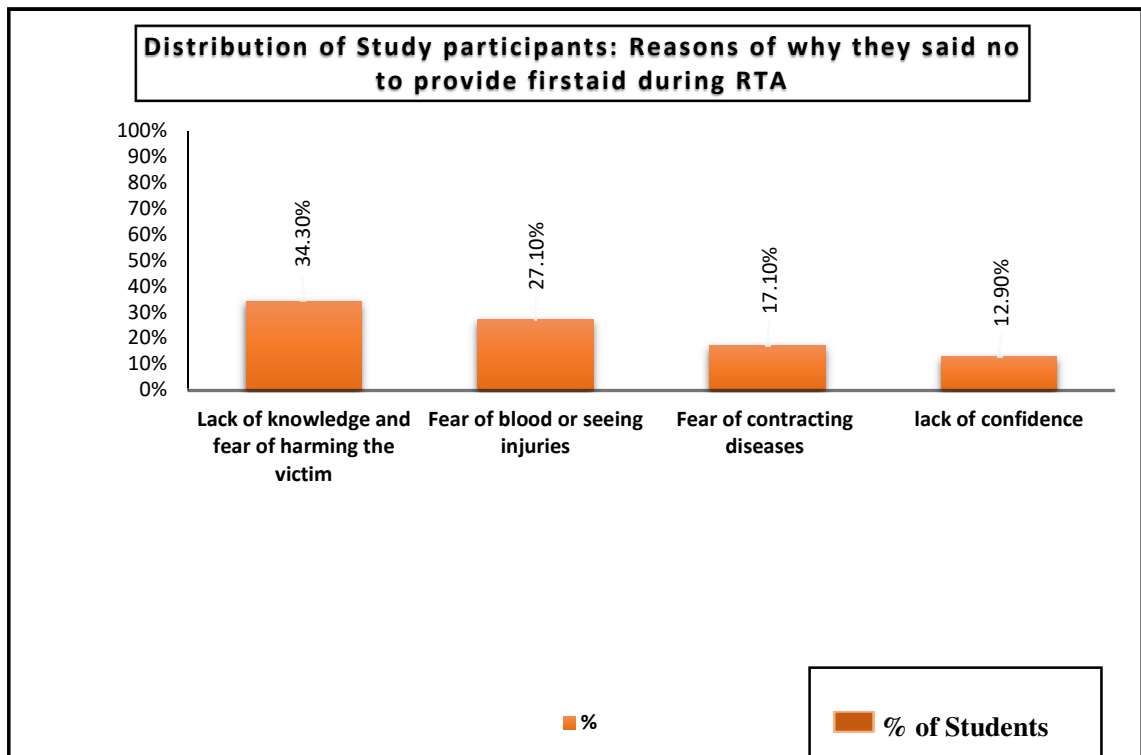


Figure 6 : Distribution of Study Participants: Reasons why they said no to provide First Aid during RTA

Despite these concerns, there was a strong consensus against professional exclusivity, with 56.6% believing laypeople should be involved in emergency care. Crucially, this positive disposition toward intervention is underscored by a high demand for capacity building, with 61.2% (n=213) of participants expressing a definite willingness to undergo formal first aid training if integrated into their school curriculum.

Table 3 : Attitude of Students Toward First Aid in RTA - frequency & percentage of Attitude of Students Toward First Aid in RTA of Medhaniale Secondary School students(n=348)

Attitude Variable	Category	Frequency (n)	Percentage (%)
I believe that knowing first aid can save lives in RTAs	Yes	268	77.0%
	No	30	8.6%
	Uncertain	50	14.4%
Do you have willingness to provide first aid for road traffic accident victim?	Yes	148	42.5%
	No	70	20.1%
	Uncertain	130	37.4%
If your answer for question number 2 is ‘No ‘, what is your reason?	Lack of knowledge and fear of harming the victim	24	34.3%
	Fear of blood or seeing injuries	19	27.1%

	Fear of contracting diseases	12	17.1%
	lack of confidence	9	12.9%
	Legal concerns	6	8.6%
I would feel confident in providing first aid to an RTA victim	Yes	48	13.8%
	No	233	67.0%
	Uncertain	67	19.2%
I believe it is the responsibility of trained professionals only to provide first aid	Yes	85	24.4%
	No	197	56.6%
	Uncertain	66	19.0%
I am afraid of causing more harm if I try to provide first aid in an RTA.	Yes	91	26.1%
	No	189	54.3%
		68	19.5%
I would be willing to attend a first aid training course if offered at my school	Yes	213	61.2%
	No	36	10.3%
	Uncertain	99	28.5%

5.4. Practice of First Aid for Road Traffic Accidents of Medhaniale Secondary School students

Despite the high levels of theoretical knowledge and positive intent, only 12.1%(n=42) of students met the criteria for Good practice. While 18.7% (n=65) of the student population

has experienced a road traffic accident involving someone else who needed first aid, only a small minority, 8.9% (n=31), reported having actively provided first aid in a real-world scenario. When witnessing an emergency, the overwhelming majority prioritized calling for professional services (80.5%), whereas only 15.2% (n=53) of the sample prioritized direct medical intervention. Procedural assessments further revealed critical gaps in trauma management; in a hypothetical leg fracture scenario, although 43.1% (n=150) correctly identified immobilization as the primary action, a concerning proportion of respondents opted for contraindicated and potentially harmful measures.

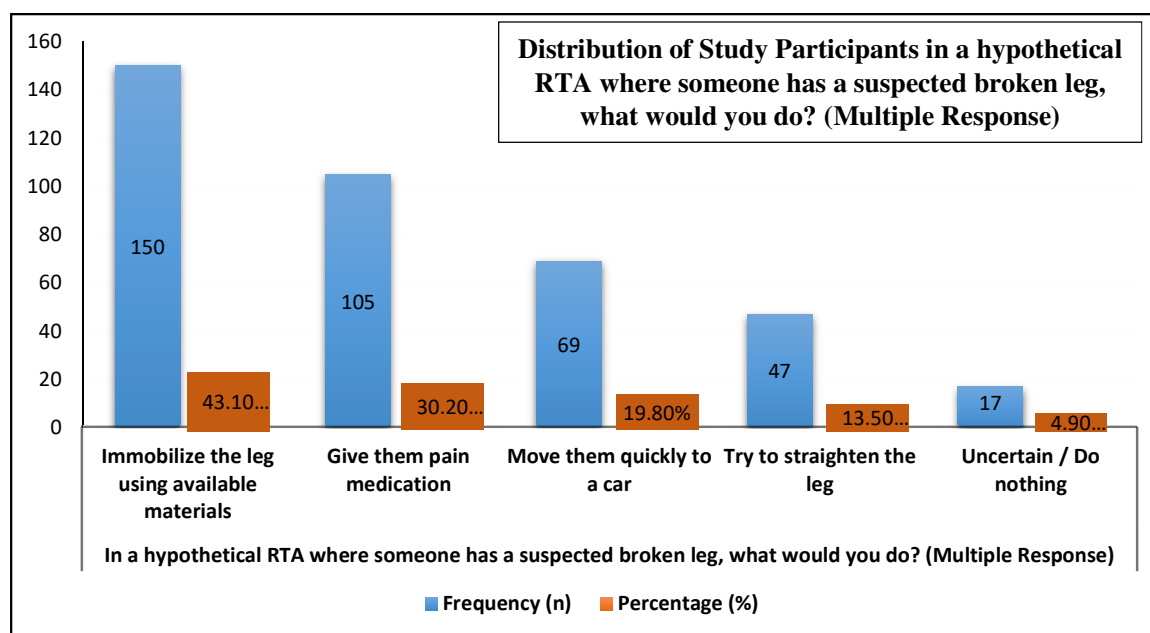


Figure 7 : Distribution of Study Participants in a hypothetical RTA where someone has a suspected broken leg, what would they do? (Multiple Response)

Table 4 : Practice of Students Toward First Aid in RTA - frequency & percentage of Practice of Students Toward First Aid in RTA of Medhanialem Secondary School students(n=348)

Practice Variable	Category	Frequency (n)	Percentage (%)
Have you ever faced road traffic accident on someone else that needs first aid?	Yes	65	18.7%
	No	283	81.3%

If you witnessed an RTA with injured people, what is the first action you would take (Multiple Response)	Call an ambulance/emergency services	280	80.5%
	Try to move the injured person to safety	182	52.3%
	Check for danger around the scene	172	49.4%
	Provide direct first aid to the injured	53	15.2%
	Leave the scene	32	9.2%
Have you ever had to provide first aid assistance in a real RTA incident?	Yes	31	8.9%
	No	317	91.1%
Did you have faced RTA victim with air way problem while giving first aid?	Yes	58	16.7%
	No	290	83.3%
If question No 4.3 is _yes ‘, what did you do? (Multiple Response)	Head tilt-chin lift	32	55.2%
	Removing foreign material from the mouth	26	44.8%
	I do nothing	23	39.7%
Did you have faced RTA victim with bleeds heavily?	Yes	83	23.9%
	No	265	76.1%

If question No4.5 is _yes, what did you do? (Multiple Response)	Dressing the bleeding site	51	61.4%
	Applying direct pressure on the bleeding site	46	55.4%
	Elevating the bleeding site	34	41.0%
	I do nothing	17	20.5%
In a hypothetical RTA where someone has a suspected broken leg, what would you do? (Multiple Response)	Immobilize the leg using available materials	150	43.1%
	Give them pain medication	105	30.2%
	Move them quickly to a car	69	19.8%
	Try to straighten the leg	47	13.5%
	Uncertain / Do nothing	17	4.9%

5.5 Factors Associated with Knowledge and Attitude towards First Aid

Chi-square analysis was conducted to assess the association between selected independent variables and knowledge and attitude towards first aid among students.

Previous first aid training was strongly associated with student's knowledge level ($\chi^2 = 28.9$, $df = 1$, $p = 0.02$). Students who received prior training demonstrated better knowledge, with 71.4% showing good knowledge compared to only 36.7% among those without training.

Age was also significantly related with knowledge ($\chi^2 = 6.45$, $df = 1$, $p = 0.04$). Students aged 17–19 years seems to perform better, with a higher number showing good knowledge (48.6%) compared to those aged 15–16 years (39.1%).

In addition, internet access showed a significant relationship with knowledge ($\chi^2 = 4.02$, $df = 1$, $p = 0.045$). Students who have regular internet access were more likely to have good knowledge (47.1%) than those with limited or no access (33.3%).

Table 5 Factors Associated with Knowledge towards First Aid among Medhanialem Secondary School Students (n = 348)

Variable	Category	Good Knowledge n (%)	Poor Knowledge n (%)	χ^2 (df)	p-value
Previous First Aid Training	Yes	60 (71.4%)	24 (28.6%)	28.9 (1)	0.020
	No	97 (36.7%)	167 (63.3%)		
Age Group	15–16 years	52 (39.1%)	81 (60.9%)	6.45 (1)	0.040
	17–19 years	105 (48.6%)	110 (51.4%)		
Internet Access	Yes	140 (47.1%)	157 (52.9%)	4.02 (1)	0.045
	No/occasional	17 (33.3%)	34 (66.7%)		

Note: χ^2 = Chi-square test; df = degree of freedom; $p < 0.05$ indicates statistical significance.

In terms of attitude, previous first aid training was significantly associated with attitude toward first aid ($\chi^2 = 18.7$, $df = 1$, $p = 0.027$). A significant proportion of students with prior training (73.8%) had a positive attitude compared to those without training (49.6%).

In addition, knowledge level was significantly associated with attitude ($\chi^2 = 22.4$, $df = 1$, $p = 0.004$), indicating that students with good knowledge were more likely to have a positive attitude (70.1%) than to those with poor knowledge (43.5%).

Table 6 Factors Associated with attitude towards First Aid among Medhanialem Secondary School Students (n = 348)

Variable	Category	Positive Attitude n (%)	Negative Attitude n (%)	χ^2 (df)	p-value
Previous first aid training	Yes	62 (73.8%)	22 (26.2%)	18.7(1)	0.027
	No	131 (49.6%)	133 (50.4%)		
Knowledge Level	Good	110 (70.1%)	47 (29.9%)	22.4 (1)	0.004
	Poor	83 (43.5%)	108 (56.5%)		

Note: χ^2 = Chi-square test; df = degree of freedom; p < 0.05 indicates statistical significance.

6. Discussion

This study provides an essential assessment of the knowledge, attitudes, and practices regarding first aid for road traffic accidents (RTAs) among students at Medhanialem Secondary School. The results demonstrate that while awareness of first aid is high, specific technical knowledge regarding life-saving interventions remains significantly deficient. Specifically, this study shows that the components of first aid, as well as the knowledge required for the assessment and management of compromised airways and heavy bleeding, were not correctly identified by the majority of participants.

Chi-square analysis indicated that prior first aid training, age, and internet access were significantly correlated with students' knowledge, whereas prior training and knowledge level were significantly associated with attitudes toward first aid. Students with prior training consistently demonstrated better knowledge and a more positive attitude compared to those without training, highlighting the importance of exposure to basic life-saving skills. A study conducted in Nigerian high school also confirms that this that first aid training greatly increases both knowledge and willingness to give emergency care (22).

Regarding students' psychological and attitudinal dispositions, the study found that the majority believed it is necessary to provide first aid immediately at the scene of an accident.

Most participants expressed a willingness to provide assistance; however, for those who hesitated, the primary barriers cited were a lack of knowledge, fear of harming others, and a significant fear of blood or seeing injuries. In Ethiopia, RTA injuries are typically transported to the nearest health centre without any professional medical care at the scene or during transportation. Victims are often moved by the vehicles involved in the accident, volunteer drivers, or ambulances that may lack trained medical professionals. Consequently, the death rate remains high due to a lack of intervention during the "Golden Hour." In countries lacking formal emergency response systems, the importance of layperson interventions is critical, as many avoidable trauma deaths occur in the pre-hospital setting

The study revealed a strong preference for professional intervention, with 83.3% (n=290) of respondents identifying healthcare workers as the primary providers of first aid during a Road Traffic Accident (RTA). While over half of the participants (52.6%) recognized the value of trained volunteers, there was a notable decline in the perceived role of immediate respondents on the scene, such as traffic police (43.7%) and bystanders (34.5%)[2]. This suggests a reliance on formal medical expertise and potentially highlights a lack of confidence in the "First Respondents" chain, where the actions of those immediately present at the scene are often the most critical for survival before professional help arrives, and also regarding the identification of airway emergencies in RTA victims. The results indicate a significant deficit in comprehensive knowledge[2]. Only 8.9% (n=31) of respondents correctly identified the full clinical picture, including noisy, fast, slow, and absent breathing as potential indicators of an airway problem. While various subgroups recognized respiratory arrest or slow breathing, the critical sign of "noisy breathing" (an early warning of partial obstruction) was largely overlooked. This fragmented awareness suggests that many students may fail to intervene during the early stages of airway compromise, only recognizing the emergency once breathing has ceased entirely [3].

Furthermore, a significant majority of students, 67.0% (n=233), admitted they would not feel confident in providing first aid. Procedural knowledge was also identified as a significant weakness; only 28.4% of respondents correctly identified the jaw thrust maneuver as the preferred method for RTA victims. Based on the data, the overall proficiency in identifying the primary signs of heavy bleeding is relatively low [1]. While a strong majority of students (81.6%) recognized the obvious visual presence of blood,

there was a significant "knowledge gap" regarding the systemic physiological indicators of haemorrhage. Only a minority of participants correctly identified critical symptoms of hypovolemic shock. This suggests that while students are aware of the external evidence of injury, fewer than one-third possess a comprehensive understanding of the life-threatening internal responses to blood loss [4].

The study also observed that most respondents lacked experience or knowledge in managing airway and neck injuries. Since they did not know how to assess these specific problems, many reported doing nothing to stop bleeding. The results show that 65.5% (228) of participants correctly identified applying pressure and dressing as an important step to stop bleeding. However, recognition of secondary life-saving measures was notably lower, with only 42.0% selecting the application of a tourniquet and 29.9% identifying the benefit of lifting the injured part [5]. While the majority understand basic direct pressure, the data indicate a lack of comprehensive knowledge regarding the full suite of bleeding control methods. Overall, the participants' attitude toward administering first aid to RTA victims was supportive and indicative of a positive future impact. Those who felt otherwise mentioned that their hesitation was due to a lack of knowledge and fear of infection. However, the majority displayed a willingness to attend a first aid training course if offered at their school [6].

7. Limitation of the study

This study has some limitations to consider. First, the use of self-reported data is subject to recall bias, as participants may not accurately remember or misinterpret past experiences related to road traffic accidents and first-aid practices. This may partly explain the observed discrepancy where only 65 participants reported witnessing a road traffic accident, while higher numbers reported specific conditions such as heavy bleeding (n=83) and airway obstruction (n=58), suggesting possible recall of events from non-RTA contexts or generalized trauma exposure.

Second, the cross-sectional study design limits the ability to establish causal relationships or statistical associations among knowledge, attitudes, and practices. Because data were collected at a single point in time, the findings represent only a snapshot and cannot determine temporal relationships or causality.

Further limitation in this study is that the sample size was determined using an expected prevalence of 50% to ensure a maximum sample size in the absence of site-specific data for medhaniale secondary school. Although this is a standard conservative approach, it is acknowledged that utilizing prevalence rates from existing local literature could have provided a more refined and population-specific sample size estimation. Consequently, the calculation may not have fully accounted for the low baseline of technical first-aid proficiency identified during the study's actual data analysis.

8. Conclusion and Recommendation

8.1. Conclusion

Medhaniale secondary school students have a strong theoretical understanding and a very positive attitude toward helping RTA victims, yet they lack the necessary technical skills to manage life threatening emergencies. Most participants are unable to correctly perform procedures for airway management and C-spine protection, which are critical for survival after a road traffic accident. Although there is a strong belief that bystander intervention is vital, a lack of personal confidence prevents many from acting. This hesitation is mainly due to the fear of making a victim's injury worse.

The study showed that there is a dangerous dependency on professional medical staff, which often leads to lost time during the critical minutes after an accident. The result indicates that while students have a positive attitude toward helping, they struggle to turn their willingness into actual life-saving actions. Since a large number of students are eager to participate in formal training, there is a clear opportunity to improve safety by adding practical, hands-on first aid lessons to the school curriculum.

8.2. Recommendations

Based on the findings of this study and the gaps identified, the following recommendations are proposed to enhance the first aid response capacity among secondary school students:

For Gulele Sub City Education Office

- First-aid training programs should be introduced in schools to fill the knowledge and practice gap. This can be achieved through collaboration with health institutions

such as St. Paul's Hospital Millennium Medical College to ensure the sustainability and quality of training.

For the school administration

- First aid training clubs should be established within the compound as platforms for peer-to-peer learning, skill development, and regular practice, thereby enhancing students' readiness to respond effectively to RTA emergencies.

For Students and Parents

- Proactive Engagement: Students should be encouraged to use short, illustrative educational videos on first-aid practices that could be developed and disseminated locally.
- Home Preparedness: Parents should support student participation in volunteer training, emphasizing that first aid is a civic responsibility, not just a professional one.

References

1. Organização Mundial da Saúde. Global status report on road safety 2013: Supporting a decade of action. Geneva: World Health Organization; 2013.
2. WHO. Road traffic injuries. [Internet]. 2024. Available from: <https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries>
3. Endalew A, Zewdu T, Mekonnen T. Road traffic accidents and associated factors in Addis Ababa, Ethiopia: a retrospective study. BMC Public Health. 2021;21(1):1–10.
4. WHO. World Report on Road Traffic Injury Prevention. Geneva: World Health Organization; 2004.
5. Www.Ifrc.Org. Saving Lives, Changing Minds. [Internet]. 2024. Available from: <https://www.ifrc.org/>
6. Ashagrie H. Assessment of knowledge and attitude of road traffic accidents and first aid management among high school students in Debre Markos town, Northwest Ethiopia: a cross-sectional study. Emerg Med Open Access. 2017;7(4):1–7.
7. Misiker G. Magnitude and factors associated with road traffic accident among traumatized patients in Arbaminch General hospital, leaving a critical gap concerning the adolescent population in a school setting. Glob J Med Res. 2018;18(3).
8. IFRC. International First Aid, Resuscitation and Education Guidelines. [Internet]. 2024. Available from: <https://www.ifrc.org/>
9. Khan H, Ali H, Junaid M, et al. Knowledge, attitudes, and practices of first aid among medical students in Karachi, Pakistan. J Pak Med Assoc. 2019;69(1):15–20.
10. Alemayehu MT, Bekele TG, Kefyalew M, Tuli W. Knowledge, Attitude, Practice, and Associated Factors of First Aid Services Related to Motorcycle Accidents among Motorcycle Drivers in Dilla Town, Southern Ethiopia: A Cross-Sectional Study. Ethiopian Journal Health Science. 2025;35(5):363.
11. Asrat M, Zewdu F, Amogne K. Assessment of knowledge, attitude and practice of first aid among public transport drivers in Gondar town, Ethiopia: a cross sectional study. BMC Emerg Med. 2021;21(1):1–8.
12. Shetie Workneh S, Abebaw B, Kefelegn A. Knowledge, attitude and practice of first aid for road traffic accident among university students in Addis Ababa, Ethiopia. Emerg Med Open Access. 2018;8(5):1–5.

13. Road Traffic Accidents in Ethiopia -. [Internet]. 2024. Available from: <https://www.gcs.gov.et/>
14. Tugo A. Knowledge and attitude of health science students in Addis Ababa about first aid for trauma. *Emerg Med Open Access*. 2021;11(2):1–7.
15. Zwi A. Road traffic accidents: a major public health issue in developing countries. *BMJ*. 2004;328(7439):534–535.
16. Murray C, Vos T, Lozano R, et al. Disability-adjusted life years (DALYs) for 291 diseases and injuries in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet*. 2012;380(9859):2197–2223.
17. African Economic Outlook 2012. Road traffic accidents and their economic costs in Ethiopia. [Internet]. 2012. Available from: <https://www.afdb.org/en/>
18. WHO. GLOBAL STATUS REPORT ON ROAD SAFETY 2018 SUMMARY. [Internet]. 2018. Available from: <https://www.who.int/>
19. Ganfure Y, Teklehaymanot Y, Hailu F. First aid knowledge and attitude among preparatory school students in Lideta Sub-City, Addis Ababa, Ethiopia. *Int J Sci Basic Appl Res*. 2016;25(1):1–10.
20. Murphy S, Xu J, Kochanek K. Deaths: Final Data for 2018. *Natl Vital Stat Rep*. 2019;69(13).
21. Health Facilities Distribution Mapping in Addis Ababa, Ethiopia | Global Journal of Human-Social Science. [Internet]. 2024. Available from: <https://www.socialscienceresearch.org/>
22. Olumide AO, Asuzu MC, Kale OO. Effect of first aid education on first aid knowledge and skills of commercial drivers in South West Nigeria. *Prehospital and disaster medicine*. 2015 Dec;30(6):579-85.

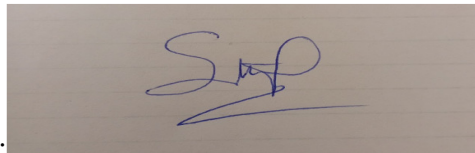
Declaration

The undersigned agrees to accept responsibility for the scientific, ethical, and technical conduct of the research Project and for the provision of required progress reports as per the terms and conditions of the Research and Publication Directorate and/or /and School of Public Health of St Paul's Hospital Millennium Medical College.

Name of Student: Dr. Sador bereket

Date: April 16, 2026

Signature:



Approval of Advisor(s)

Public Health Advisor

 Recoverable Signature

X 

Mitiku Getu Moges, MD, MPH
Asst. Prof. Health Systems, Policy, and Managem...
Signed by: ede9d0dd-8297-4e5e-bad6-91b3fb759fe4

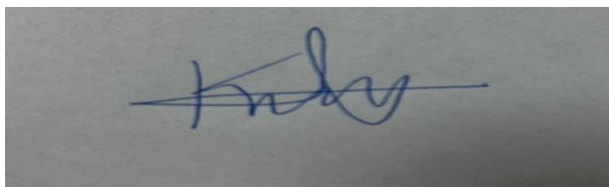
Date: April 16, 2026

Signature:

Clinical Advisor

Name: Dr Kalkidan Samuel

Signature:



Date: April 16, 2026

Annex: Questionnaire

Dr. Sador Bereket

Phone number:0962100470

Email address: Sadorbereket4@gmail.com

Study Participant

Study Title: Assessment of knowledge, attitude and practice on first aid for persons sustaining road traffic accident among medhanialem Secondary and Preparatory School students, Gulele Sub city, Addis Ababa,2025

Individual consent form

Practice on First Aid for Road Traffic Accidents among Medhaniallem Secondary School Students, Gulele Subcity, Addis Ababa, 2025," conducted to assess the level of knowledge, attitudes, and practices regarding first aid for RTA victims, thereby providing crucial data to improve pre-hospital care in Addis Ababa. Your honest participation in filling out this questionnaire is greatly appreciated as it is essential for the study's success. The survey consists of a self-administered questionnaire. We want to assure you that your name will not be recorded, all information will be kept strictly confidential and will not be shared with any third party. There are no anticipated risks or harms associated with this study, and your answers will be used for research purposes only and will not be graded or have any impact on your academic performance or other school-related activities. Your participation is entirely voluntary, and you have the full right to refuse to participate, skip any question, or withdraw from the study at any time without any penalty.

Part one: Demo-graphical Information

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

Are you be willing to participate in the study?

YES ☐

NO ☐

S.NO	Question	Response	Remark
1.0	Age (in years)	_____	
1.1	Sex	1, Male 2, Female	
1.2	Educational level	1.grade 9 2. grade 10 3. grade 11 4.grade 12	
1.3	Did you take first aid training before?	1. Yes 2. No	
1.4	If your answer for question no 1.3 is yes , who give you the training?	1, The school 2, Health bureau 3, A health facility 4, Volunteers	
1.5	If your answer for question no 1.3 is yes ,when do you get trained		
1.6	If your answer for question no 1.3 is yes , in which language do you get the training?	1.Amharic 2.English 3.Other,specify_____	
1.7	Do you have internet access? This can be from a Wi-Fi connection at your school or home, or through a mobile data plan on your phone	1. yes 2. no	
1.8	Have ever faced Road Traffic Accident (RTA) ?	1yes 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. School 6. other specify _____
2.2	When do you think first aid should be given during RTA?	1. Immediately 2. In hospital 3. I don't know
2.3	Who do you think should give first aid during RTA?	1. Health care worker 2. Traffic police 3. Scene bystanders 4. volunteer trained person 5. I don't know
2.4	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).....
2.5	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.....
2.6	Which of the following procedure is/are used for to open air way for RTA victims?	1. Jaw thrust 2. Head tilt and chin left 3. I don't know 4. Other, specify.....
2.7	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 5. Other, specify.....
2.8	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.....
2.9	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...

2.10	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.....
2.11	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
2.12	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.....
2.13	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
2.14	Which of the following is /are part of primary safety	1.making 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

3.1	I believe that knowing first aid can save lives in RTAs	(Yes) (No) (Uncertain)
3.2	Do you have willingness to provide first aid for road traffic accident victim?	(Yes) (No) (Uncertain)
3.3	If your answer for question number 2 is _No_, what is your reason?	
3.4	I would feel confident in providing first aid to an RTA victim	(Yes) (No) (Uncertain)
3.5	I believe it is the responsibility of trained professionals only to provide first aid	(Yes) (No) (Uncertain)
3.6	I am afraid of causing more harm if I try to provide first aid in an RTA.	(Yes) (No) (Uncertain)
3.7	I would be willing to attend a first aid training course if offered at my school	(Yes) (No) (Uncertain)

PART IV PRACTICE QUESTIONS

4.1	Have you ever faced road traffic accident on someone else that needs first aid?	(Yes) (No)
4.2	If you witnessed an RTA with injured people, what is the first action you would take? (Select all that apply)	a) Check for danger around the scene. b) Call an ambulance/emergency services. c) Try to move the injured person to safety.

		d) Ask bystanders for help. e) Provide direct first aid to the injured. f) Leave the scene.
4.3	Have you ever had to provide first aid assistance in a real RTA incident?	(1) Yes (2) No If yes, briefly describe what you did: _____
4.4	Did you have faced RTA victim with air way problem while giving first aid?	1. Yes 2. No
4.5	If question No 4.3 is _yes ‘, what did you do?	1. Removing foreign material in mouth 2. Head tilt-chin lift 3. I do nothing 4. If other specify
4.6	Did you have faced RTA victim with bleeds heavily?	1. Yes 2. No
4.7	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

4.8	In a hypothetical RTA where someone has a suspected broken leg, what would you do?	1, Try to straighten the leg. 2, Immobilize the leg using available materials 3, Give them pain medication. 4, Move them quickly to a car. 5. Other specify
-----	--	---

AMHARIC VERSION

አባሪ: ቃለመጠይቆች

Dr. Sador Bereket

Phone number:0962100470

Email address: Sadorbereket4@gmail.com

የጥናቱ ተሳታፊ

የጥናቱ ርዕስ: የመድሃኒክ ሁለተኛ ደረጃና የመሰናዶ ትምህርት ቤት ተማሪዎች በመንገድ ላይ የትራፊክ አደጋ ወቅት በሚሰጡ የመጀመርያ ደረጃ እርዳታዎች ዙርያ ያላቸውን እውቀት፣ አመለካከትና የትግበራ ክህሎታቸውን መገምገም፣ ጉለሌ ክፍለ ከተማ፣ አዲሲበባ፣ 2025

የስምምነት ቅጽ

ይህ ጥናት በመንገድ ላይ የትራፊክ አደጋ ወቅት ስለሚሰጡ የመጀመርያ እርዳታ ተግባራት ተማሪዎች ያላቸውን የእውቀት ደረጃ፣ አመለካከትና የትግበራ ልምምድን የሚገምግምና በአዲስ አበባ ውስጥ የህክምና ተቁዋሚ ሳይደርሱ በፊት ለተገኝዎች ስለሚሰጡ አገልግሎቶችን ዳታ ለመሰብሰብ ታልሞ የተዘጋጀ ነው። ስለተሳተፈዎችሁ እያመሰገንኩ በግልጽነት የምትሰጡኝ አስተያየቶች ለጥናቱ መሳካት የማይተካ አስተዋጾ ይኖራቸዋል። ቃለመጠይቁ በራሳችሁ የሚሞሉ ጥያቄዎችን ይዘል፡፡ በዚህ ጥናት ውስጥ ስማችሁን ማስገባት የማይጠበቅባችሁ ሲሆን የምትሞሉዎቸው መጠይቆችም ለሶስተኛ ወገን ተላልፎ የማይሰጡና ምስጢራዊነታቸው የተጠበቀ መሆኑን አረጋግጥላችሁታለሁ። ይሄንን ጥናት ከመሙላት ጋር የተያያዙ የሚያጋጥሙ ምንም ዓይነት አደጋዎች አይኖሩም። ቃለ መጠይቆቹ ለሳይንሳዊ ጥናት ብቻ የሚያገለግሉ፣ ከትምህርታችሁም ሆነ ከ ዉጤታችሁ ጋር በፍጹም የማይገናኙና ከመማር ማስተማር ተግባራችሁ ጋር ተያያዥ ያልሆኑ

ጥያቄዎች ናቸው። በዚህ ጥናት ውስጥ ያለው ተሳትፎዎችሁ ሙሉ በሙሉ በፈቃደኝነታችሁ ብቻ የተመሰረተ እና በማንኛውም ሰአት ጥናቱን የማቋቋረጥ፣ ጥያቄዎችን የመዝለል ወይም ከነጭራሹ ያለመሳተፍ መብታችሁ ያለቅድመሁኔታና ቅጣት የተጠበቀ መሆኑን አረጋግጥላችሁዋለሁ።

ክፍል አንድ፡ የስነህዝብ መረጃ

መመሪያ፡ በጥያቄዎቹ ስር ካሉት አማራጮች የተስማሟችሁን መልሶችን የያይዙትን አክብቡ። ደረቅ ጥያቄ ያላቸውን ደግሞ በተሰጠው ክፍት ቦታ ላይ መልሱን አስፍሩ።

በጥናቱ ለመሳተፍ ፈቃደኛ ነህ/ሽ? አዎ ☐ አይደለሁም ☐

ተራቁጥር	መጠይቆች	መልስ	አስተያየት
1.0	እድሜ (በ አመት)	_____	
1.1	ጾታ	1, ወንድ 2, ሴት	
1.2	የትምህርት ደረጃ	1. 9 ክፍል 2. 10 ክፍል 3. 11 ክፍል 4. 12 ክፍል	
1.3	ከዚህ በፊት የመጀመርያ እርዳታ አሰጣጥ ስልጠና ወስዳችሁ ታቃላችሁ?	1. አዎ 2. የለም	
1.4	ለጥያቄ ቁጥር 1.3 መልሳችሁ አዎ ከሆነ ስልጠናውን ማን ሰጣችሁ?	1, ትምህርት ቤቱ 2, የጤና ቢሮ 3, የጤና ተቋም 4, በጎ ፈቃደኞች	
1.5	ለጥያቄ ቁጥር 1.3 መልሳችሁ አዎ ከሆነ ስልጠናውን መቼ ወሰዳችሁ?		
1.6	ለጥያቄ ቁጥር 1.3 መልሳችሁ አዎ ከሆነ ስልጠናውን የወሰዳችሁበት ቋንቋ ምን ነበር?	1. አማርኛ 2. English 3. ሌላ, ግለጹ _____	
1.7	የኢንተርኔት አገልግሎት ተጠቃሚ ናችሁ? ይሄ በትምህርት ቤታችሁ ግቢ ውስጥ ያለን የዋይፋይም ሆነ በስልካችሁ ዳታ የምትጠቅሙትን ኢንተርኔት ጭምር ያካትታል	1. አዎ 2. የለም	

1.8	የመንገድ ላይ የትራፊክ አደጋ አጋጥሞባችሁ ያቃል?	1አዎ 2 የለም	
-----	---------------------------------	--------------	--

ክፍል 2 የእውቀት መለኪያ ጥያቄዎች			
2.0	ስለመጀመርያ እርዳታ ሰምታችሁ ታቃላችሁ?	1. አዎ 2. የለም	
2.1	ለጥያቄ ቁጥር 2.0 መልሳችሁ አዎ ከሆነ የት ነበር የሰማችሁት?	1. ሬዲዮ 2. ቴሌቪዥን 3. ኢንተርኔት 4. ከሌላ ሰው 5. ትምህርት ቤት 6. ሌላ ግለጹ_____	
2.2	የመንገድ ላይ የትራፊክ አደጋ ሲያጋጥም የመጀመርያ ደረጃ እርዳታ መቼ መሰጠት አለበት ብላችሁ ታስባላችሁ?	1. ወድያውኑ 2. ሆስፒታል ውስጥ 3. አላውቅም	
2.3	የመንገድ ላይ የትራፊክ አደጋ ሲያጋጥም የመጀመርያ ደረጃ እርዳታ መስጠት ያለበት ማንው ብላችሁ ታስባላችሁ?	1. የጤና ባለሙያ 2. የትራፊክ ፖሊስ 3. አልፎ ሂደጆች 4. የሰለጠነ በጎፈቃደኛ 5. አላውቅም	
2.4	ከሚከተሉት ውስጥ የመጀመርያ ደረጃ እርዳታ ያቀፋቸው የሚመስሉዎቹሁ ተግባራት የትኞቹ ናቸው?	1. ተጎጂው በትክክል መተንፈሱን ማረጋገጥ 2. ተጎጂዎችን ከአደጋው ስፍራ ፈቀቅ ማድረግ 3. የሚደሙ ከሆነ ደማቸውን ማስቆም 4. ስብራታቸውን እንዳይንቀሳቀስ ማድረግ 5. ተጎጂዎችን ወደ ሆስፒታል ማድረስ 6. የስነልቦና ድጋፍ መስጠት 7. አላውቅም 8. ሌላ, (ግለጹ).....	
2.5	ለትራፊክ አደጋ ተጎጂዎች የመተንፈሻ አካላቸው ችግር ውስጥ መሆኑን የሚጠቁመው ከሚከተሉት የቱ ይመስላችሁዋል?	1. ሲተነፍሱ ማቃሰት/ድምጽ ማውጣት 2. ቶሎቶሎ መተንፈስ 3. በቀስታ መተንፈስ 4. ትንፋሽ አለመኖር 5. አላውቅም 6. ሌላ, ግለጹ.....	

2.6	ከሚከተሉት የህክምና ዘዴዎች የተዘጋ የመተንፈሻ አካልን የሚከፍተው/የሚከፍቱት የትኛው/የትኞቹ ይመስሉዎቸዋል?	1. መንጋጋን ወደላይና ወደፊት መጎተት/Jaw Trust 2. ራስን አዘንብሎ አገጭን ወደላይ መሰብ/Head tilt and chin left 3. አላውቅም 4. ሌላ, ግለጹ.....
2.7	ከሚከተሉት የትኛው የትንፋሽ መስጫ መንገድ ይመስላችሁዎል?	1. አፍ ለአፍ/mouth to mouth 2. ከአፍ ወደ አፍንጫ/Mouth to nose 3. ከማስክ ወደ አፍ/Mask to mouth 4. አላውቅም 5. ሌላ, ግለጹ.....
2.8	የአንገት መጎዳት እንደተከሰተ እንድትገምቱ ምን ሊያደርጋችሁ ይችላል?	1. በአንገት ዙርያ ህመም ስሜት መኖር 2. አንገት አካባቢ ስትነኩዎቸው ተጎጂዎቹ ማቃሰት 3. አንገት አካባቢ ያለ ማናቸውም ያልተለመደ ቅርጽ 4. አላውቅም 5. ሌላ, ግለጹ.....
2.9	ተጎጂዎቹን ከአካባቢው እንዴት ልታርቁዎቸው ትችላላችሁ?	1. የተጎጂውን አንገትና ወገብ በእጅ በመደገፍ ቀጥ እንዲል በማድረግ 2. የተጎጂውን አንገትና ወገብ በጠንካራ ደረቅ ካርቶን በመደገፍ ቀጥ እንዲሉ በማድረግ 3. እግሮቻቸው ከተጎዱ ተቀምጠው ሳለ በማንቀሳቀስ 4. ተጎጂው ባንድ ሰው ድጋፍ ብቻ መንቀሳቀስ ይችላል 5. አላውቅም 6. ሌላ, ግለጹ...
2.10	አንገቱ የተጎዳን ሰው እንዴት ወደ ሆስፒታል ምታደርሱት ይመስላችሁዎል?	1. የተጎጂውን አንገትና ወገብ በእጅ በመደገፍ ቀጥ እንዲል በማድረግ 2. የተጎጂውን አንገትና ወገብ በጠንካራ ደረቅ ካርቶን በመደገፍ ቀጥ እንዲሉ በማድረግ 3. እግሮቻቸው ከተጎዱ ተቀምጠው ሳለ በማንቀሳቀስ 4. ተጎጂው ባንድ ሰው ድጋፍ ብቻ መንቀሳቀስ ይችላል 5. አላውቅም 6. ሌላ, ግለጹ

2.11	ከተጎዳ የአካል ክፍል ደም እየፈሰሰ መሆኑን የትኛው ሊያመለክታችሁ ይችላል?	1. ከተጎዳ የአካል ክፍል ደም ሲወጣ ማየት 2. የተጎደው ራሱን መሳት 3. ደካማና ፈጣን የልብ ትርታና ተጎደው በላይ በላይ መተንፈስ 4. ቀዝቃዛ እግርና እጆች 5. መንቀጥቀጥ/seizure 6. አላውቅም 7. ሌላ, ግለጹ
2.12	ከሚከተሉት የትኛው የሚፈስ ደምን ለማስቆም ጠቃሚ ይመስላችሁዋል?	1. ጥብቅ አድርጎ ማሰር/ Apply tourniquet 2. የሚፈሰውን ቦታ ጫን ብሎ መያዝና መሸፈን 3. የተጎዳውን ቦታ ከፍ አድርግጥ መያዝ 4. አላውቅም 5. ሌላ, ግለጹ.....
2.13	ተጎደው የአንገት አጥንት ስብራት ቢኖርበት የተጎደውን አንገት ማንቀሳቀስ የበለጠ እንዲጎዳ ያደርገዋል ብላችሁ ታስባላችሁ?	1. አዎ 2. የለም 3. እርግጠኛ አይደለሁም
2.14	የቅድመ ጥንቃቄ አባል የሆነው/የሆኑት የትኛው/የትኞቹ ይመስሉዎታል?	1. በታው ራሳችሁን የማይጎዳ መሆኑን ማረጋገጥ 2. ጉዋንን መልበስ 3. አጠገባችሁ ሰው ከሌለ ፖሊስ እስኪመጣ መጠበቅ 4. አላውቅም 5. ሌላ ካለ ግለጹ

ክፍል 3: አመለካከትን ሚመዝኑ ጥያቄዎች

3.1	በትራፊክ አደጋ ወቅት ስለሚያጋጥም የመጀመርያ እርዳታ አሰጣጥ ማወቅ ህይወትን ሊያድን እንደሚችል አምናለሁ	(አዎ) (የለም) (እርግጠኛ አይደለሁም)
3.2	በትራፊክ አደጋ ለተጎዳ ሰው የመጀመርያ እርዳታ ለመስጠት ፈቃደኛ ነህ/ነሽ?	(አዎ) (የለም) (እርግጠኛ አይደለሁም)
3.3	ለጥያቄ ቁጥር 2 መልሳችሁ “የለም” ከሆነ ምክንያታችሁ ምንድን ነው?	
3.4	ለ መንገድ ላይ ትራፊክ አደጋ ተጎደው የመጀመርያ እርዳታ ለመስጠት ብቁ ነኝ ብዬ አምናለሁ	(አዎ) (የለም) (እርግጠኛ አይደለሁም)
3.5	እርዳታ መስጠት ያለባቸው የሰለጠኑ ባለሙያዎች ብቻ ናቸው ብዬ አምናለሁ	(አዎ) (የለም) (እርግጠኛ አይደለሁም)
3.6	መንገድ ላይ የትራፊክ አደጋ ተጎደው እርዳታ በመስጠት ከመርዳት ይልቅ ተጎደው ላይ የበለጠ ጉዳት አደርሳለሁ ብዬ እፈራለሁ	(አዎ) (የለም) (እርግጠኛ አይደለሁም)

3.7	የመጀመርያ እርዳታ አሰጣጥ ስልጠና ትምሕርት ቤቱ ውስጥ ቢሰጥ ለመካፈል ዝግጁ ነኝ	(አዎ) (የለም) (እርግጠኛ አይላሁም)
-----	---	--------------------------

ክፍል አራት: የተግባራዊ ልምምድን ሚመዝኑ ጥያቄዎች

4.1	የመጀመርያ ደረጃ እርዳታ የሚያስፈልገው የመንገድ ላይ ትራፊክ አደጋ ያጋጠመው ሰው አጋጥሞባችሁ ያውቃል?	(አዎ) (የለም)
4.2	የመንገድ ላይ የትራፊክ አደጋ የደረሰባቸው ሰዎች ቢያጋጥሙባችሁ ምን የምታደርጉ ይመስላችሁዋል? (ልታደርጉ የምትችሉትን ሁሉ ምረጡ)	a) በካባቢው አደጋ መኖሩን አለመኖሩን ማረጋገጥ b) አንቡልንስ ወይም ድንገተኛ አገልግሎቶችን መጥራት c) የተጎዳውን ሰው ደህንነቱ ወደጠጠበቀ ስፍራ ማዛወር d) አልፎሂያጅን ለርዳታ መጥራት. e) ለተጎጂው ቀትተኛ የመጀመርያ እርዳታ መስጠት f) ከአካባቢው በፍጥነት መሸሽ
4.3	በእውነትኛ የትራፊክ አደጋ ወቅት የመጀመርያ እርዳታ ድጋፍ የመስጠት እድል አጋጥሞባችሁ ያቃል?	(1) አዎ (2) የለም አዎ ከነበር ምን እንዳደረጋችሁ ባጭሩ ግለጹ _____ _____
4.4	የትራፊክ አደጋ ወቅት የመጀመርያ እርዳታ እየሰጣችሁ እያለ የመተንፈሻ የአካል ክፍል ህመም ያጋጠመው ተጎጂ አጋጥሞባችሁ ያውቃል?	1. አዎ 2. የለም
4.5	ለጥያቄ ቁጥር 4.4 መልሳችሁ አዎ ከነበር ምን ነበር ያደረጋችሁት?	1. ከ አፍ ውስጥ ባእድ ነገሮችን ማውጣት 2. ራስን ዘንበል አድርጎ አገጭን ማቃናት/ Head tilt-chin lift 3. ምንም አልሰራሁም 4. ሌላ ካለ ግለጹ
4.6	የትራፊክ አደጋ ወቅት በከባድ ሁኔታ የሚደማ ተጎጂ አጋጥሞባችሁ ያውቃል?	1. አዎ 2. የለም
4.7	ለጥያቄ ቁጥር 4.6 መልሳችሁ አዎ ከነበር ምን ነበር ያደረጋችሁት?	1. የሚደማውን የአካል ክፍል ጫን አድርጎ መያዝ 2. የሚደማውን የአካል ክፍል መሸፈን 3. የሚደማውን የአካል ክፍል ከፍ አድርጎ መያዝ 4. ምንም ነገር አልደረግም 5. ሌላ ካለ ግለጹ

4.8	በምናባዊ የትራፊክ የመኪና አደጋ እግሩ የተሰበረ ሰው ቢመጣ ምን ታደርጋለችሁ?	1, እግሩን ቀጥ ለማድረግ እሞክራለሁ 2,ያገኘሁቸውን ቁሳቁሶች ተጠቅሜ እግሩን እንዳይንቀሳቀስ ለማሰር እሞክራለሁ 3, የህመም ማስታገሻ እስጣቸዋለሁ 4, ወደ መኪና ቶሎ ብያ እወስዳቸዋለሁ 5.ሌላ ካለ ግለጹ.....
-----	---	---