Assessment of Knowledge Attitude and Practices of Military Personnel Regarding First Aid Measures in Northern Command 21st Division

By: *Legese Mebrahtu (BSc. RN)*

A thesis submitted to Addis Ababa University School of Graduate Studies Faculty of Medicine Department of Emergency Medicine in Partial Fulfillment for the requirements for Masters of Emergency Medicine and Critical Care

Advisor: *Dr .Assefu W/Tsadik (M.D, Anesthesiologist, Asst. professor, ER fellow)*

Ato Haimanot Geremew (BSc. RN, MSc on Adult Health Nursing ,Lecturer, AAU Emergency Medicine)

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Addis Ababa Ethiopia

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Table of contents

Contents pages

Acknowledgments I

Table of contents........ II

List of abbreviations IVV

List of Tables V

List of figures........ V

Abstract VII

Introduction 1

Back ground review 1

Statement of the problem 3

Literature review 5

Relevance of the study 14

Objectives 15

General objectives........ 15

Specific objectives 15

Methodology........ 16

Study design and period 16

Study area 16

Source and study population 16

Target population 16

Sampling technique 16

Study variables 16

Independent variable........ 16

Dependent variable 16

Inclusive criteria: 16

Exclusive criteria........ 16

Sample size determination 17

Data collection technique 19

Data quality assurance........ 19

Operational definition 19
Data analysis 19
Ethical consideration 19
Dissemination and communication of the results........ 20
Results 21
Discussion 31
Limitation........ 34
Conclusion........ 35
Recommendations 36
References .... **Error! Bookmark not defined.**
Annex 1:English version of the survey tool 40
Annex 2 Amharic version of the survey tool 48
Annex 3 Declaration 61

List of abbreviations

AAU	Addis Ababa University
DCHS	Defense College of Health Sciences
FA	First Aid
FMoH	Federal Ministry of Health
HSDP	Health Service Development Program
IRB	Institutional Research Board
KAP	Knowledge Attitude and Practice
LMIC	Low- and Middle-Income Countries
NIMSS	National Injury Mortality Surveillance System
PVT	Private
PS	Potentially Survivable
Pre-MTF	Pre -Medical Treatment Facility
RTA	Road Traffic Accident
SD	Standard Deviation
SGT	Sergeant
US	United state

List of Tables

s. No	Tables	Page number
1	Frequency distribution of selected socio-demographic characteristicsof21st division military personnel, February 2014 G.C	21
2	Frequency distribution showing the knowledge of first aid measures of 21st division military personnel, February 2014 G.C	25
3	Frequency distribution showing the attitude of first aid measures of 21st division military personnel, February 2014 G.C	28
4	Frequency distribution showing the practice of first aid measures of 21st division military personnel, February 2014 G.C	30

List of figures

s. No	Figures	Page number
1	Graph 1: Shows distribution of participants by their FA attained areas of 21st division military personnel, February 2014 G.C	24
2	Graph 2: Shows knowledge of participants regarding respiratory FA priority 72% of the participants give first priority to the air way of 21st division military personnel, February 2014 G.C	27

Abstract

Back ground: First aid is the initial treatment or help given to sick particularly injured individual before professional medical care becomes available with the materials at hand. Such intervention aims in reducing the situations that threaten the victim until a professional arrives or the sick individual is brought to health facility. The first minutes after a serious injury represent only a short time during which potentially lifesaving measures can be initiated. Many deaths from blocked airways or external bleeding can be avoided with quick action such as opening a blocked airway, assisting breathing and applying direct pressure to a wound to reduce bleeding.

Objective: to assess knowledge, attitude and practices of military personnel regarding first aid measures.

Method: The study site was northern command, 21st division military personnel. Descriptive cross-sectional study design was employed on sample size of 375 military personnel from February 20 - 30, 2014 G.C study period.

Results: A total of 375 military personnel‟s, all were males and the response rate was 100%. The mean ± SD age of the study participants was (26.7 ± 7.14) years and with majority rank was Private 162 (43.2%).From the participant 160 (42.7%) attended FA training. Most of them had trained on the military training center. Priorities to respiratory problem causality giving FA 272 (72.5%) have correct answer. Majority knew fractured FA and 365(96.8%) knew one or more than one bleeding control methods. Attitude to first aid was thought to be positive, majority of the respondents were ready to be trained and 312(83.2%) were interest to give FA to others, but 375(48.5%) of them thought that FA could be performed by any person.

Conclusion

The study participant‟s (military personnel) are expected to know first aid measures more because of their mission. But the result showed that there were gabs on preferable position of unconscious patients, FA of penetrating objects on the abdomen, FA of chemical burn, FA of penetrating eye injury, FA of priority, FA of protruded intestine, seizure, choking, cardiac arrest, fractured. Also half of the participants believed FA activity was performed only by health workers. So it is important to evaluate the first aid training programs of military training center to improve knowledge, practice and attitude of the military personnel‟s regarding basic life support.

Introduction

Back ground review

First aid is the emergency care given to the sick, injured, or wounded before being treated by medical personnel. The term *first aid* can be defined as "urgent and immediate lifesaving and other measures. Several conditions that require immediate attention are an inadequate airway, lack of breathing, and excessive loss of blood (circulation). A casualty without a clear airway or who is not breathing may die from lack of oxygen. Excessive loss of blood may lead to shock, and shock can lead to death; therefore, you must act immediately to control the loss of blood. All wounds are considered to be contaminated, since infection-producing organisms (germs) are always present on the skin and clothing, and in the soil, water, and air. Any missile or instrument (such as a bullet, shrapnel, knife, or bayonet) causing a wound pushes or carries the germs into that wound. Infection results as these organisms multiply. You must dress and bandage a wound as soon as possible to prevent further contamination (1).

Every year, approximately 5 million people worldwide die from injuries. In 2002, road traffic-related injuries, self-inflicted injuries, interpersonal violence, burns and drowning were among the 15 leading causes of death occurring among people aged between 5 and 44 years. In addition to the millions who die each year, millions more are temporarily or permanently disabled. This toll is expected to increase in coming years. Most deaths in the first hours after injury are the result of airway compromise, respiratory failure or uncontrolled hemorrhage. All three of these conditions can be readily treated using basic first aid measures (2).

Almost all 186 Red Cross Red Crescent National Societies provide first aid training and have first aid as their core activity .Between 2006 and 2009, the number of people trained in first aid by the Red Cross Red Crescent National Societies increased by 90%. In 2009, more than 2.3 million people were trained by 21 National Societies in Europe, and 7 million were trained in certified first aid courses worldwide. The continual building of knowledge and skills, together with pooling of additional resources, strengthens the capacity within each community to cope with day-to-day crisis and disasters (3).

First-Aid skills can save many lives and therefore this should be considered as a priority in training staff of all agencies being involved in the management of situations where emergency patients can potentially be met. This training should not be restricted to medical personnel but also extended to public safety personnel (police, fire, security, and traffic enforcers), schoolteachers, community volunteer, drivers, and industrial workers. On the other hand a more appropriate level of EMS training is required for emergency response organizations like rescue groups of Civil Defense and Ambulance services. As a strategy, first aid training certification can be made as a pre requisite to secure a license or part of pre-employment requirement and be renewed in an annual basis for update (4).

Evidence-Based African First Aid Guidelines and Training Materials indicate in sub-Saharan Africa, 41% of all deaths and 39% of the morbidity burden can potentially be addressed by emergency care. Road traffic injuries may dramatically increase this burden in the coming years (5).

Ethiopia has the highest rate of RTAs, owing to the fact that road transport is the major transportation system in the country. The Ethiopian traffic control system archives data on various aspects of the traffic system, such as traffic volume, concentration, and vehicle accidents. With more vehicles and traffic, the capital city of Addis Ababa takes the lion"s share of the risk, with an average of 20 accidents being recorded every day and even more going unreported (6).

Statement of the problem

According to the World Health Organization, unintentional injuries were responsible for over 3.9 million deaths and over 138 million disability-adjusted life-years in 2004, with over 90% of those occurring in low- and middle-income countries (LMIC). The year 2004 World Health Organization Global Burden of Disease Study estimates to illustrate the global and regional burden of unintentional injuries and injury rates, stratified by cause, region, age, and gender. The worldwide rate of unintentional injuries is 61 per 100,000 populations per year. Overall, road traffic injuries make up the largest proportion of unintentional injury deaths (33%). When standardized per 100,000 population, the death rate is nearly double in LMIC versus high-income countries (65 vs. 35 per 100,000), and the rate of disability-adjusted life-years is more than triple in LMIC (2,398 vs. 774 per 100,000) (7).

The US Armed forces Medical Examiner Service Mortality Surveillance Division was used to identify operation Iraqi Freedom and Operation Enduring Freedom combat causalities from October 2001 to June 2011 who died from injury in the deployed environment. The stratification mortality demonstrated that 87.3% of all injury mortality occurred in the pre-MTF environment. Of the pre-MTF, 75.7 %(n=3,040) were classified as non-survivable, and 24.3 %(n= 976) were deemed potentially survivable (PS).the injury /physiologic focus of PS acute mortality was largely associated with hemorrhage (90.9%). The site of lethal hemorrhage was truncal (67.3%), followed by junctional (19.2%) and peripheral-extremity (13.5%) hemorrhage. Most battlefield causalities died of their injuries before ever reaching a surgeon. To significantly impact the outcome of combat casualties with potentially survivable (PS) injury, strategies must be developed to mitigate hemorrhage and optimize airway management or reduce the time interval between the battlefield point of injury and surgical intervention (8).

Military wounds are by their very nature devastating and complex. With improvements in body arm our, pre-hospital emergency care and timely evacuation to consultant-led field hospital management, soldiers are surviving injuries that previously they would have succumbed to before reaching definitive care. These soldiers are often physiologically compromised, will have received massive blood transfusions and, therefore, are immune compromised and have large surface area wounds involving multiple limbs as well as body cavity trauma. This demands

extensive and continuous wound management from the time of injury through to definitive healing that is only achieved by managing the whole patient and addressing issues such as pain, nutrition, infection, physiological function and wound care before thoughts about reconstruction (9).

In Ethiopia traumatic injuries are one cause of morbidity and mortality. The largest proportion of serious injuries in Ethiopia comes from road traffic accidents; they have become one of the major national health burdens. The health sector recognizes that injuries have multiple causes that necessitate a multi-sectoral approach towards effective prevention and rapid responses when they occur, including efforts to strengthen the quality and availability of emergency medical services. The target under HSDP III was to improve the proportion of people seeking formal health care in the case of serious illness or injury from 41% to 55% (10).

In 2007, researchers looking at the pattern of injuries in Addis Ababa found that injuries accounted for 27% of all emergency visits, 5% of all hospitalizations, and 3% of deaths. The findings from a community based survey in Jimma Zone in 2007 showed that prevalence rate of injury (serious enough to stop daily living or to need care or that was taken for care) was 8.9% per year; out of the 304 individuals studied (who had injuries Who came to a health unit with injuries), 83.5% had received health care at different levels of health facilities and 5.2% were admitted for inpatient care (10).

Ethiopian National Defence Forces have contributed greatly in realizing peace, development, good governance and democracy through protection of the country from anti-peace forces and external forces acts to destabilize the nation. To accomplish their mission, military personnel may fight with enemy. This could result mass causality which would be difficult to manage only by health personnel; besides since military personnel should need combat readiness, accidents might happen during mobilization and trainings. Hence every military personnel should have basic first aid knowledge and skills to minimize risk of life threatening injuries during war and accident. Therefore, this study will focus on assessment of Knowledge, Attitude and Skill regarding first aid measures.

Literature review

Many ancient armies tried to reduce morbidity and mortality on the battlefield through provision of early first aid. The most successful were the Romans under Emperor Augustus] (63 BC–14AD, who developed advanced military medical services to support their legions. Their military medical services included physicians, surgeons, hygiene officers and bandagers called *capsarii*.3 the *capsarii* were essentially combat medics. They wore the same combat gear as other soldiers and received their medical training within the legion. Because they were placed in forward positions they were effective in providing prompt first aid (11).

It was not until the turn of the 19th century that battlefield care was to re-emerge Perhaps the Prussian surgeon Friedrich Von Esmarch made the greatest contribution to battlefield first aid. He was appointed Surgeon General at the outbreak of the Franco- Prussian War (1870) and introduced battlefield bandaging and splinting techniques. These skills were later adopted by the British military stretcher bearers. Von Esmarch produced two manuals entitled First aid on the battlefield and First aid to the injured. Von Esmarch adopted the triangular bandage (diagonally cut from a 40 cm square of calico) for use on the battlefield. This bandage was invented by Dr Mayor of Lausanne and is still in use today (11).

Soldiers may have to depend upon their first aid knowledge and skills to save themselves or other soldiers. They may be able to save a life, prevent permanent disability, and reduce long periods of hospitalization by knowing what to do, what not to do, and when to seek medical assistance. Anything soldiers can do to keep others in good fighting condition is part of the primary mission to fight or to support the weapons system. Most injured or ill soldiers are able to return to their units to fight and/or support primarily because they are given appropriate and timely first aid followed by the best medical care possible (12).

A cross sectional study was conducted to assess knowledge, attitude, and practice of first aid measures in under graduate students of Karachi. Study was carried out at six colleges, knowledge was assessed regarding various emergency situation with the help of a questionnaires. The target population size was 460, based on 50% prevalence and 95% confidence interval. The eventual sample size achieved was 446 a total students were interviewed. Seventy eight students (17.5%)

had formal First Aid (FA) training. The mean number of correct answers of students with FA training was 10.3 (+/- 3.5) as opposed to 8.58 (+/- 4.0) in those without FA training ($p < 0.001$, 95% CI) with a mean difference of 7.84%. The mean number of correct answers by medical students with FA training was 11.2 (+/- 2.9) as opposed to 7.2 (+/- 3.43) by non-medical students ($p < 0.001$, 95% CI) with a mean difference of 18.14%. Students having received formal first aid training scored better than those who had not ($p < 0.001$). First aid training programmes should be introduced at school and college level in developing countries to decrease the early mortality and morbidity of accidents and emergencies (13).

A survey was conducted among Mosul University students. The majority of the students in the study (91.9 %) have not participated in the first aid courses, also (96%) found the necessity for lean to the first aid activity. The result indicated to (46%) the knowledge level of the first aid, (45%) the knowledge level of the first aid cases, and the percentage of the first aid cases as a following: the respiratory systems (25 %), the circulatory system (24%), the bleeding (58%), the trauma (38%), the burns (51 %), the fractures (66%), and the bites and stings cases (53%) (14).

Majority of the students have not participated in the first aid course, and observe it is necessary to learn the first aid activity. While a high percentage of the false answers about meaning of the first aid. In addition, the result reveals a high percentage of the participated students had false answers or they do not know the first aid about the respiratory systems, the circulatory system, the trauma, the burns, and bites and stings. But the results reveal there is a high percentage of the students had true answers about the first aid of the bleeding and the fractures (14).

Cross sectional descriptive study was conducted in the southern district of Tumkur in India Nearly 60% of the responders had witnessed more than two emergencies in the previous six months and 55% had actively participated in helping the injured person. The nature of the help was mainly by calling for an ambulance (41.5%), transporting the injured (19.7%) and consoling the victim (14.9%). Majority (78.1%) of the responders informed that they had run to the victim (42.4%) or had called for an ambulance. The predominant reason for not providing help was often the „fear of legal complications" (30%) that would follow later. Significant number (81.4%)

of respondents reported that they did not have adequate skills to manage an emergency and were willing to acquire knowledge and skills in first aid to help victims (15).

A descriptive quantitative approach was used in this study, using a closed-ended multiple-choice questionnaire to collect the statistical data from the participants. The questionnaire was projected to gain specific knowledge on the most common injuries occurring in youth football. Results indicated that the youth team had the basic knowledge on the treatment of the most common injuries football, but clearly lacked knowledge on the various initial steps needed to care for an injured teammate. Twenty-seven participants took part in the study, out of which more than half had prior first aid knowledge or qualification. An average of 62% of the participants answered correctly. This can be attributed to the fact that, half of the participants had prior first aid knowledge. Using the results from this study, it is recommended that further first aid education is needed for the team in order to boost their skills and confidence in handling injury situations. However, the responsibility of providing first aid should not be left to the players and coaches to handle. In addition, a larger nationwide sample-size would produce far more results, which could provide a bigger picture of the current situation in Finland (16).

Road accidents have become a serious social problem. The scale and complexity of this problem shows clearly that there is a necessity to improve citizens' ability to give first aid which is especially essential in the case of drivers. The questionnaire was given to 560 employees of local government institutions in the city of Lublin either professional or non-professional drivers. The direct method and anonymous questionnaire were used. The results of the questionnaire revealed clearly that very few drivers are well-prepared to give proper first aid at the accident site. No matter what sex, education or driving experience, the drivers have not got enough skills to give first aid and the effect is enhanced by various psychological barriers. The questioned drivers shared the opinion that first aid training is badly run. The drivers stressed bad quality of the training and the fact that it is impossible to acquire practical skills that may be required in the case of emergency. Drivers' views on possibilities of decreasing the number of fatal casualties of the road accidents included, among others, the following propositions: in addition to the driving license exam first aid exam should be compulsory severe enforcement and execution of the law which regulates the mandatory first aid giving (17).

A questionnaire survey was conducted among the 501 taxi drivers enrolled in south Korea , 82.5% of whom have encountered emergency situations at least once a year but only 48.2% of whom have extended assistance to the emergency victims they have encountered. The most important reason cited by 71.4% of the respondents for not extending assistance to the victims in such situations was lack of knowledge regarding how to extend emergency assistance and the avoidance of getting entangled in legal matters. The related education contents that the respondents indicated they want to learn to be able to extend assistance in emergency situations were cardiopulmonary resuscitation and how to manage unconscious people, people experiencing seizure and the victims of traffic accidents (18).

Study was conducted in Afyonkarahisar providence on preschool teachers working in school district in May 2005. All 118 participants answered the questionnaire. The mean age of the sample population was 27.7•}/ 9.1 years and 111 (94.1%) participants was female. 61.9% of participants stated that they have previously taken the first aid education with 54.2% of mentioning that it was theoretical one. Besides, 84.7% of participants felt being inadequate in first aid and 85.6% of them made inquiry to have the first aid education. The mean score of achievement for the participants in first aid and basic life support is found to be 48.9. 61.9% of participants stated that they have previously taken the FA education with 54.2 % of mentioning that it was theoretical one. Besides, 84.7% of participants felt being inadequate in FA and 85.6% of them made inquiry to have the FA education. 25.4% they have knowledge on Heimlich maneuver and 11.9 Initial treatment of burn (19).

Study on assessment of knowledge on practice regarding first aid measures among the self-help groups in selected areas of Mangalore. 39 % received information from the teaching programs, 20% from mass media 13% from friends and 17% of them do not have exposure to any source of information about the first aid practices. The results showed that majority of the samples 62% had good knowledge, and 38% had average knowledge about the first aid practice. Among the seven areas of the knowledge assessment on first aid measures the mean percentage score of the samples were highest (70%) in the area of poisoning , 55.25 Burns 49.2 Wound 39.5 Choking and lowest score (28.8%) in the area of bleeding (20).

A cross sectional study was conducted for 9 months in 40 randomly selected schools of Mysore Perception regarding first aid Out of 262 school teachers 255 (97.3%) had ever heard of a terminology first aid. Among those who had heard of first aid 201 (78.8%) had replied that first aid has to be given in case of wounds whereas only 77 (30.2%) were aware that even fainting needs first aid care. 204 (80.0%) perceived that in case of wound the area should be washed with water. In case of fracture, only 77 (30.2%) perceived that the fractured part should be supported/splinted. In case of epilepsy/ fits 109 (42.7%) mentioned that a metal rod/key should be given to child. During burns, 141 (55.3%) mentioned that the burnt area should be placed in the cold water but 49 (19.2%) mentioned that turmeric powder should be applied (21).

Practice of first aid among 255 teachers who had heard of first aid, 206 (80.8%) had practiced it for wound, 83(32.5%) for bleeding from nose and 27 (10.6%) for fainting attacks. In case of wound 173 (67.8%) of the subjects had washed the wound area but 12 (4.7%) had applied herbs to the wound area. Most common practice following fracture was found to be avoiding the movement of fracture part 142 (55.7%) and only 50 (19.6%) had given support to the fracture area. At the time of epilepsy fits the most common first aid practice followed was giving metal rod/key to the child 86 (33.7%). In case of burns placing the burnt area in cold water was the commonest practice 94 (36.8%), application of turmeric powder and cow dung was followed by 12 (4.7%) and 03 (1.2%) respectively. Keeping the child in forward bending position was the commonest practice 149 (58.4) followed by most of the teachers in case of bleeding from nose. When a child encountered fainting attacks most of the teachers use to elevate their legs 67 (26.3%) but 35 (13.7%) and 23 (9.0%) use to slap the child and give water even when the child is unconscious respectively (21).

A cross-sectional Study was done over 5 months (from 01/Dec/2010 to 01/May/ 2011) in five randomly chosen primary schools in different regions in Baghdad/ Al-Rusafa, carried out on 100 primary school teachers. 65% of the participants answered question wrongly, not knowing that applying pressure with clean cloth or a dressing is the first step when facing a severe bleeding. 59% of the participants answered question concerning raising a limb that is bleeding correctly, 54% of the participants answered question concerned with major blood vessels bleeding-

correctly the mean of the 100 teachers' score was 38 (the maximum score is 100), of the 100 participants, 4% had good knowledge, 19% had fair knowledge and 77% had poor knowledge (22).

Cross-sectional study in Qalubeya governorate, Egypt was to measure the incidence and types of home injuries affecting rural children aged up to 12 years and to assess their mothers" knowledge, attitudes and practices (KAP) about first aid and its associated factors This study revealed that 26.6% of the studied mothers had not heard of the term of “first aid” . Of those who had a previous knowledge about first aid, 56.1% reported that television (TV) and/or radio were the source of their knowledge, 13.8% of them gained their knowledge from attending training courses, 12.0% from doctors or nurses, 12.0% from reading textbooks, 4.1% from the educational curriculum and 2% from friends and relatives. All studied mothers agreed that mothers of school-age children should know about first aid and that they were all willing to undergo such training. The mean number of KAP questions answered correctly by the studied mothers was 11.0 (SD 5.3) out of 29, range 4–24 (23).

A cross--sectional study was carried out in four medical schools (universities and Colleges) of Tanzania,, from three different regions three of which were private colleges and one government University .A total of 464 students were interviewed, 459 (98.9%) had heard about first aid before and only (46.1%) had formal First Aid (FA) training. The overall mean knowledge level was found to be 43% which is low. The mean number off correct answers of students within the clinical phase of training was 6.76 (± 2.096) as opposed to 5.86(± 2.061) in those within Basic Science phase off training ($p<0.001$, 95% CI). Of these, only 57 (12.3%) had adequate knowledge off more that 60%, and the rest having knowledge level off 50% and bellow. The mean number off correct answers by medical students with FA training was 6.09 (± 1.99) as opposed to 6.2 ((± 2.22) by medical students who never received FA training ($p<0.001$, 95% CI). 439 (94.6%) of respondents supports the inclusion of first aid training in the school curriculum,, whereas up to 64% off students in some off the universities think that their school and colleges do not do enough in spreading awareness on FA (24).

A cross-sectional cohort study was carried out among commercial inter-city drivers in Nigeria. Participants were asked an open-ended question regarding the definition of first aid. Of the participants, seventy-nine (34.5%) defined first aid as what is done for the patient at the accident site. Others defined it as getting the patient to the nearest hospital or care site (22; 9.6%), controlling bleeding (7; 3.1%). The remaining participants were uncertain. When asked about who should give first aid, a majority (172; 75.1%) believed that scene bystanders should do so. A minority (57; 24.9%) believed that only policemen, the federal road safety officers or healthcare workers should initiate care. A simple majority (142; 63.8%) believed first aid should be initiated as soon as possible, while 33 (14.4%) believed it should not be started until after arriving at the hospital (25).

Participants were asked to prioritize the basic first aid concepts of breathing maintenance, haemostasis and fracture splinting. A majority (128; 59.9%) correctly prioritized airway management first, while only 37.6% identified the correct order for all the three care areas. In relation to safe patient positioning after a traumatic event, 42 (18.3%) believed placing the victim sideways, 172 (75.1%) face-up position and 15 (16.9%) believed face down positioning was best. Related to wound management and haemostasis, 90 (44.5%) believed a tourniquet should be used for on-going severe bleeding, 104 (51.5%) believed a dressing and pressure should be applied and 8 (4.0%) responded that the wound should be left alone. Considerations for fracture management were that 184 (88.5%) believed splints could be used for obvious fractures while 16 (7.0%) believed splints should not be used; 29 (12.7%) were undecided (25).

One hundred and seventy-one (80.7%) participants have attended to RTA victims before while 58 (19.3%) had not, although most (49) knew other drivers that had. For those previously attending to RTA victims, 83 (36.2%) said they took the patient to the nearest hospital, 37 (16.2%) said they gave onsite first aid before taking the patient to the nearest hospital, 22 (9.6%) helped extricate trapped crash victims, 9 (3.9%) attended to bleeding wounds, one „surrendered‟‟ his vehicle to be used for patient transportation to a hospital and one gave mouth to mouth resuscitation. The cited first aid provided by the participants included pouring water on the victims (18; 10.5%), stopping bleeding with compression or tourniquets (13; 7.6%), applying wooden splints (6; 3.5%) and calling the police (5; 2.9%) (25).

Attitude regarding first aid When asked for the necessity to provide first aid for RTA patients, 184 (80.3%) felt it was necessary. Of those who felt it was necessary, the majority felt it would help prevent unnecessary deaths and improve patient outcomes. Reasons given by those who felt giving first aid was not necessary were that only experts are qualified to treat accident victims or that lay people might not know what to do. Three believed that untrained people could apply wrong treatment and cause harm. Of the 226 that responded to whether lay people, should be trained to give first aid, 206 (90%) agreed, 8 (3.4%) disagreed and 12 (5.2%) were doubtful. Within this cohort, 183 (79.9%) were willing to participate in training and 152 (66.4%) were willing to pay for such training and begin using this skill set (25).

A model of prehospital trauma training for lay persons devised in Africa Tiska was done. Over 300 commercial drivers attended a first aid and rescue course designed specifically for roadway trauma and geared to a low education level. The training programme has been evaluated twice at one and two year intervals by interviewing both trained and untrained drivers with regard to their experiences with injured persons Results: Control of external haemorrhage was quickly learnt and used appropriately by the drivers. Areas identified needing emphasis in future trainings included consistent use of universal precautions and protection of airways in unconscious persons using the recovery position (26).

In Ghana, the recognition that pre-hospital trauma mortality, especially due to road traffic injuries, was increasing in the absence of a formal emergency medical system led to the development of a low-cost solution for providing pre-hospital trauma care. As the majority of victims of trauma in Ghana were already being transported to hospitals by taxi and bus drivers, commercial drivers were the target groups for this intervention given their proximity to many of the events requiring emergency care. Given the large burden of emergent conditions in Africa and other low-resource settings, transportation of patients often falls to taxi, bus, or truck drivers. For this reason, Geduld and Wallis chose taxi drivers as the focus of their first-responder training program in Madagascar. The program consisted of four workshops that incorporated hands-on training in pre-hospital scene management, bleeding and broken bones, immobilization and patient movement (including patient transfer and cervical spine immobilization), and labor and delivery (27).

In Ethiopia, like other developing countries, injuries are common but little attention is being given to this problem. one-year (July 2005-June 2006) retrospective descriptive study in Addis Ababa conducted were 40,752 out-patient department visits, of which 956 were hospitalizations with 35 deaths occurring as a results of injury which accounted for 27% of all emergency and 3% of all regular visits, 5% of all hospitalizations and 3% of deaths. The patients were predominantly young males. Even though falls were the commonest causes of unintentional injury, road traffic injuries were the main burden of the health facility being the commonest cause among young male and also accounted for 61% of injury related admission, 52% of injury related death, and leading cause of repeated visits. A total of 44% of unintentional injuries were categorized under „other accidental causes", only 6 deaths were reported in the outpatient department, and the conditions of one third of the patients at discharge were not recorded (28).

According to Ethiopian police reported 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. The 12,140 fatal crashes involved 1,070 drivers, 5,702 passengers, and 7,770 pedestrians, totaling 14,542 fatalities, an average of 1.2 road user fatalities per crash (29).

A retrospective study was carried out among soldiers of the 25th division to identify the pattern of war injury and compare the severity based on different anatomical sites and set the priority for those life threatening problems from their medical record. A total of 1932 records 77(3.99%) presented with head injury, penetrating chest injury16 (0.83%), penetrating abdominal injury 32(1.66%).Injury of the upper extremity 151(7.66%) and lower extremity was 165(8.07%) respectively. multiple soft tissue injury were account 1376(71.22%). Most of the war wound mild which can be treated easily by front level hospital. Extremity and head were the most common organs remarked during offensive operation (30).

Relevance of the study

Medical personnel will not always be readily available; the military personnel should have their own skills and knowledge of life-sustaining methods to survive on the integrated battlefield. Thus, this study will help Defense Health Main Directorate to fill the gaps identified on knowledge, attitude and skill of military personnel regarding first aid measures.

Objectives

General objectives

To assess knowledge, attitude and practices of military personnel regarding first aid measures

Specific objectives

1. To determine the level of awareness of first aid measures in military personnel
2. To describe the skill of military personnel toward first aid measures
3. To determine the attitude of military personnel toward first aid measures

Methodology

Study design and period

A Quantitative descriptive cross-sectional study was conducted among military personnel in Northern Command 21st division from February 20 - February30, 2014 G.C

Study area

The study was carried out in 21st division, regiment 1, regiment 3, regiment 5, regiment 6 and regiment 9 in Northern Command Tigray Region. Northern command consist different infantry and mechanized divisions. From those divisions, 21st division has been selected using lottery method; and from the 21st division regiments, 75 military personnel were selected using systematic sampling technique.

Source and study population

In this study the source of population were military personnel of 21st division members

Target population (study unit)

The study population consists of military personnel of infantry regiments

Sampling technique

Selection of study subjects was carried out through the stratified random sampling technique and sampling size was calculated. The total military personnel were stratified in to 5 strata based on their unit"s location. Finally proportional numbers of military personnel from each site of unit location was selected using simple random sampling. From those selected each regiment, 75 military personnel were selected using systematic sampling technique.

Study variables

Independent variable

Demographic variables: age, sex, rank, marital status, education, service year, war exposure, accident exposure, previous injury, injury care taker, military training center, religion and ethnicity. Source of information: about first aid measures

Dependent variable

KAP on first aid measures

Inclusive criteria: all military personnel who are members of the regiments

Exclusive criteria: military personnel who are members of medical staff.

Sample size determination

Sample size was calculated using sample size determination for single population proportion. The following formula was used to estimate the minimum number of military personnel"s required for the study.

$$n = \frac{(z\alpha/2)^2 x p(1-p)}{D^2}$$

where N=maximum sample size to represent large population

Z=with 95%confidence level (Z=1.96)

D= margin of sample error

Where zα/2 (critical value) =1.96 for 95% CI,

p=50% since it was unknown; d= 0.05

$$n = \frac{(1.96)^2 * 0.5(1-0.5)}{(0.05)^2}$$

$$n = \frac{(3.8416)*(0.25)}{0.0025}$$

n = 384

So if 5% of non- response rate was assumed = 384*5% = 19 then 384+19 =403

Sample size was calculated by using finite population correction formula

$$nf = \frac{n}{1 + \frac{n}{N}}$$ where n = 403 and N = 5000

$$\frac{403}{1 + \frac{(403)}{5000}} = 373$$

After the sample size was calculated a proportionate sample size was allocated using the following formula

Sample size determination

Strata"s	Sample size determination of each strata
Strata 1 regiment one	$\frac{1000x373}{5000}$ =75
Strata 1 regiment three	$\frac{1000x373}{5000}$ =75
Strata 1 regiment five	$\frac{1000x373}{5000}$ =75
Strata 1 regiment six	$\frac{1000x373}{5000}$ =75
Strata 1 regiment nine	$\frac{1000x373}{5000}$ =75
Total	375

Data collection technique

Structured questionnaire were prepared based on literature review and professionals consultation. The questionnaires were pre-tested before data collection. The questionnaire were first prepared in English and translated to Amharic. Finally, five data collectors were recruited for each regiment.

Data quality assurance

Pre testing the questionnaire was done on 30 military personnel‟s a brief explanation on how to fill the data, close supervision during data collection was maintained and the principal investigator was checking each completed questionnaire and then was grouped and stored properly.

Operational definition

Knowledge: understanding of the study subject to ward first aid measures

Attitude: way of feeling of the study subject to ward first aid measures

Skill: way of perform the study subject to ward first aid measures

First Aid: The immediate care given to an injured or ill person for the purpose of saving life before reaching a health care facility for definitive care

Data analysis

Data was entered and analyzed in computer program SPSS version 20. The results of the study was organized and presented using tables, graphs and; the following statistical analysis was considered. Such as Frequency, percentage, standard deviation and mean were employed.

Ethical consideration

Ethical clearance was obtained from department of emergency medicine, AAU institutional review board (IRB). The purpose and data collection procedure of the study were clearly communicated with the concerned body of the institution. Finally, permission was obtained from the relevant personnel in charge of the health main directorate of ministry of defense and the northern command health directorate. Formal permission was secured from the Division and each regiment before distribution of the questionnaires respondents were asked their willingness to respond to the questionnaires and finally verbal consent was obtained

Dissemination and communication of the results

Findings of the study will be disseminated through submission of the report to AAU, Department of Emergency Medicine and Defense Health Main Directorate. Besides, presentation of the results of the study will be carried out on research workshops.

Results

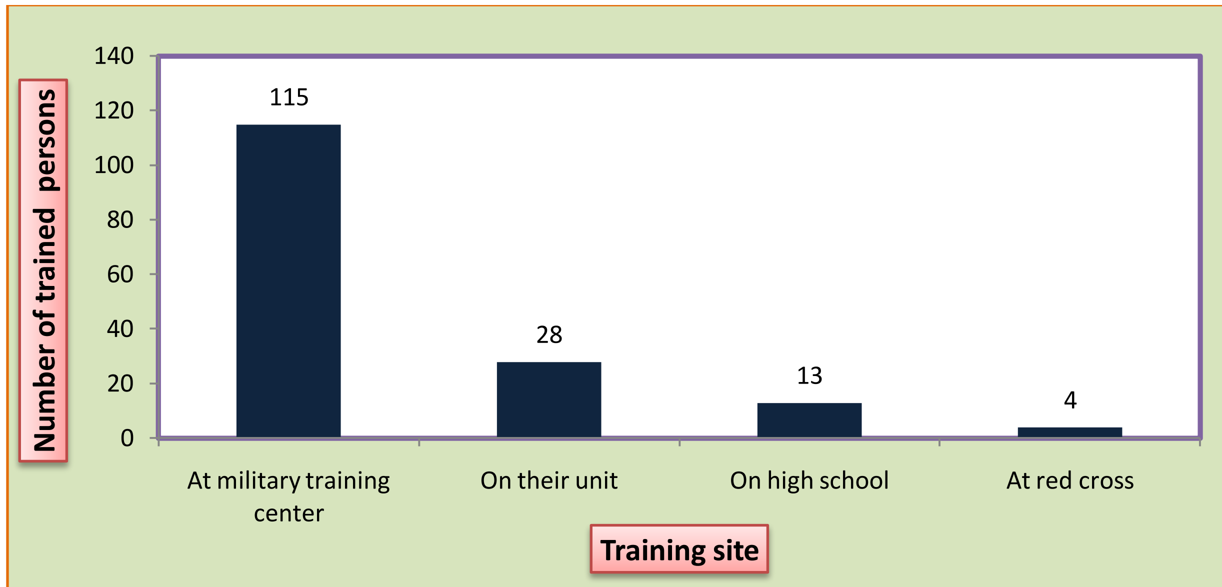
Socio-demographic characteristics

- Of the 375 military personnel‟s, all were male and the response rate was 100% (375). The mean age ± SD of the study participants was (26.7 ± 7.14). Most of the respondents, 280(74.7%) were between 18-30 ages group, 31-43 age group contributed to 92 (24. 5%) of the respondents and while those above 44 age group were 3(8%).
- Regarding educational level high school were 268(63.5%) ,while those who had 5-8 grade were 122 (32.5%) and 15 (4.0%) of the respondents were diploma and above . Regarding to religious aspect 280(74.7%) were orthodox, 47(12.5%) were Muslim, 48(12.8%) were protestant .Regarding to military rank, 162 (43.2%) were PVT, followed by corporal 75(20%) and SGT 73 (19.5%).
- The 2nd corporal accounted for 33 (8.8%) of the respondents. 25 (6.7%) of the respondents were Lieutenant, 3 (0.8%) of the respondents were Captain, 2 (0.5%) of the respondents were 2nd Lieutenant, while two (0.5%) were Major in rank.
- One hundred eighty six (49.6%) served in the military for one to five years while 101 (26.9%) of the respondents served in their military for six to ten years and 88(23.5%) of the respondents served for above 10 years in the military. Out of the total 375 military personnel‟s, 160 (42.7%) were trained first aid on different areas 115(71.8%) on military training center, 28 (17.5%)) on their units, 13(8.1%)) on high school and 4(2.6%) by Red Cross

Table 1: Frequency distribution of selected socio-demographic characteristics among military personnel of 21st division, February 2014. (n=375)

Characteristic		Frequency	%
Age	18-30	280	74.7
	31-43	92	24.5
	Above 44	3	0.8
Sex	Male	375	100.0
	Female		
Educational status	1-8	122	32.5
	High school	268	63.5
	Diploma and above	15	4.0

Service year	1-5 years	186	49.6
	6-10 years	101	26.9
	Above 10 years	88	23.5
Marital status	Married	77	20.5
	Single	293	78.1
	Divorced	4	1.1
	Widowed	1	0.3
Military training center	Hurso	193	51.5
	Birsheleko	147	39.2
	Edagahamus	21	5.6
	Blate	7	1.9
	Dedasa	4	1.1
	Other	3	0.8
War exposure	No	268	71.5
	Yes	107	28.5
Previous combat injury	No	327	87.2
	Yes	48	12.8
type of injury	extremities injury	34	70.8
	chest injury	7	14.5
	abdominal injury	4	8.3
	head injury	3	6.25
Accident exposure out of war injury	Yes	92	24.5
	no	283	75.5
what was the cause of accident	car accident	26	6.9
	falling from high or steep place	58	15.5
	Other	8	2.1
	Total	92	24.5



Graph 1: Shows distribution FA attained areas among military personals of 21st division February 2014

Result Knowledge

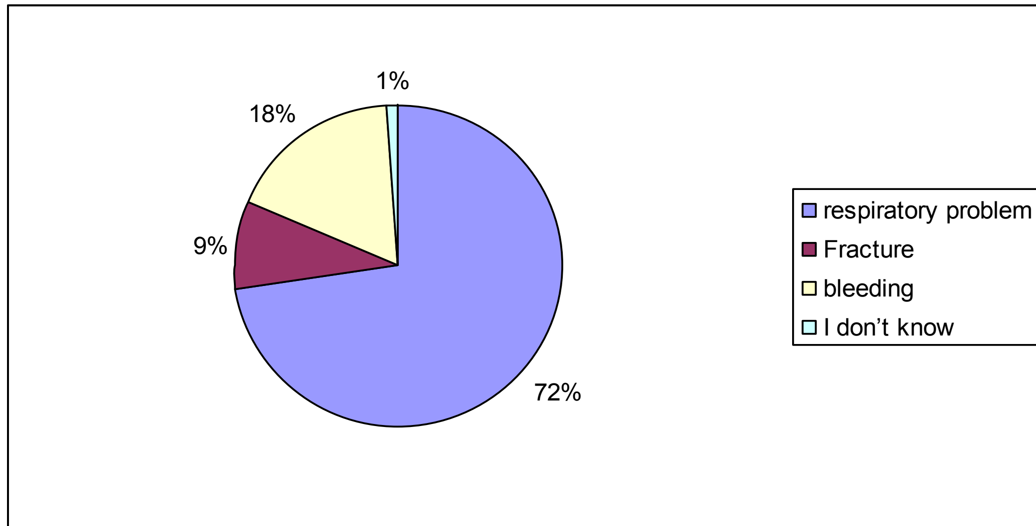
- From the participant 160 (42.7%) attended FA training .Concerning first aid of penetrating object on abdominal injury causality 118(31.5%) said remove it immediately and sent patient to hospital, 214(57.1%) didn‟t remove it and immediately send to hospital, 43(11.5%) answered didn‟t know .Regarding awareness of dressing the wound after injury 193(51.5%) responded to control the bleeding, 16(4.3%) used only to protect the wound from further contamination of germs, 156(41.6%) responded to control the bleeding and protect from germ and10 (2.7%) didn‟t know the use of dressing wound.
- FA of victim on fire 93(24.8%) said that they told him to fall to the ground and roll, 121(32.3%) said pour water directly on the burned area, 11(2.9%) wrapped with a blanket or other large covering, 134(35.7%) they knew all FA measures of burns and 16(4.3%) didn‟t know.
- Regarding FA of snake bite 109(21.9%) responded all methods of FA, 43(11.5%) said Lower affected part below the level of the heart, 26(6.9%) said cleanse the bitten area with soap and water, 115(30.7%) said keep bitten extremity immobilized and the rest 82(21.9%) they didn‟t know the answer.

- FA concerning chemical burn 34(9.1%) dried or powdered form chemical carefully brush it off the skin before flushing with water, 76(20.3%), said remove outer clothing while burn was being flushed, 178(47.5%) said both methods and 87(23.2%) they didn't know.
- FA of penetrating eye injury 166(44.3%) responded that did not attempt to remove object or wash eye and cover both eyes, 114(30.4%) said attempt to remove object and don't cover the eye and 95(25.3%) said I didn't know.
- Regarding Preferable position for unconscious patient 283 (75.5%) said on his back, 17 (4.5%) said on his stomach, 34 (9.1%) said on lateral side or recovery position and 41 (10.9%) they didn't know
- The awareness regarding sign of air way obstruction 221(58.9%) they knew all signs of air way obstruction, 128(34.1%) they knew only one sign, 26(6.9) they didn't know.
- Regarding to causality giving FA priority 272, (72.5%) said respiratory problem manage first, 66(17.6%) say bleeding problem manage first, 33(8.8%) say fracture problem manage first, 4(1.1%) they didn't know the priority.

Table 2: Frequency distribution showing the knowledge of first aid measures among military personals of 21st division February 2014 (n=375)

Variable		Frequency	%
have you attend FA training	Yes	160	42.7
	No	215	57.3
FA measures of penetrating object on abdomen	remove it immediately and send to hospital	118	31.5
	should not remove it and immediately send to hospital	214	57.1
	I don't know	43	11.5
Reason of dress the wound	to control the bleeding	193	51.5
	to protect the wound from further contamination of germs	16	4.3
	All	156	41.6
	I don't know	10	2.7
victim on fire FA measures	Tell him to fall to the ground and roll	93	24.8
	If you have water pour it directly on the burned area	121	32.3
	wrap the person in a blanket or other large covering	11	2.9
	All	134	35.7
	I don't know	16	4.3

snake bite FA measure	Lower affected part below the level of the heart	43	11.5
	Cleanse area with soap and water	26	6.9
	Keep bitten extremity immobilized	115	30.7
	All	109	29.1
	I don't know	82	21.9
chemical burn FA measures	Wear gloves then if the chemical is in a dry or powde form,brush it off the skin before flushing with water	34	9.1
	If possible, remove outer clothing while burn is being flushed	76	20.3
	All	178	47.5
	I don't know	87	23.2
penetrating eye injury FA measures	Do not attempt to remove object or wash eye and cover both eyes	166	44.3
	attempt to remove object and don't cover the eye	114	30.4
	I don't know	95	25.3
preferable position of unconscious patient	on his back	283	75.5
	on his stomach	17	4.5
	on lateral side	34	9.1
	I don't know	41	10.9
Sign of complete airway obstruction,	Speak	60	16.0
	Breath	56	14.9
	Cough	12	3.2
	All the above	221	58.9
	I don't know	26	6.9
goals of basic life support	Correct	79	21.1
	Incorrect	296	78.9



Graph 2: Shows distribution regarding respiratory, bleeding and fracture FA priority among military personals of 21st division, February 2014

Result toward Attitude of first aid

- One hundred eighty two (48.5%) said first aid activity was performed by any person that present at the accident, 173(46.1%) only by health professionals and 20(5.3%) they didn"t know.
- Among 375 participants, 300(80.0%) thought individual bandage was necessary any time when accident happens, 34(9.1%) thought during war only, 33(8.8%) they didn"t know when time was necessary and 8(2.1%) thought did not use it without medical personnel.
- Three hundred twenty eight or 87.5% of the participants put their individual bandage with the gun, 32 (8.5%) they put on their cloth bag, 11(2.9%) they didn"t know where to put the individual bandage and the rest 4(1.1%) they thought to it anywhere.
- Of 375 participants 365(97.3%) thought FA was important to military personnel"s and 10(2.7%) thought not important because it was the work of health workers. Three hundred fifty four (94.4%) of the participants were thought first aid training was important to all military personel.

- Regarding interest to give FA to others 312(83.2%) were interested and 63(16.8%) not interested the reason was 32(53.3%) lack of training, 22(34.9%) said FA was the job of professional, 7(11.1%) fear of wound and 2(3.1%) lack of interest.

Table 3: Frequency distribution showing the attitude of first aid measures among military personals of 21st division February 2014 (n=375)

Variable		**Frequency**	**%**
Who perform first aid activity	only by health professionals	173	46.1
	by any person	182	48.5
	I don"t know	20	5.3
	Other		
when time is necessary individual bandage	during war only	34	9.1
	at any time accident happen	300	80.0
	not used it without medical personal	8	2.1
	I don"t know	33	8.8
where you put your individual bandage	on his cloth bag	32	8.5
	with the gun	328	87.5
	at any were	4	1.1
	I don"t know	11	2.9
is first aid important to military personnel"s	Yes	365	97.3
	No	10	2.7
do you think first aid training is important to all military personnel"s	Yes	354	94.4
	No	21	5.6
interest to give FA to others	Yes	312	83.2
	No	63	16.8
The reason not given FA for the others	lack of training	32	53.3
	fear of wounds	7	11.11
	it is the job of professional	22	34.9
	lack of interest	2	3.1

Result toward Practice of first aid.

- Among 375 subjects included the study 138 (32.9%) had experienced injury either combat or out of combat injury preceding the study from those 61(44.2%) first aided by health workers, 57(41.3%) first aided by their comrades and 20 (14.49%) were first aided for themselves.
- Most of the participants of the study 350 (93.3%) they have individual bandage and 129(34.4%) used individual bandage preceding the study from those 69(53.5%) for themselves, 44(34.1%) for their comrades, 4(3.1%) for their families and 12(9.3%) for the other persons who were FA need.
- Regarding bleeding control 201(53.6%) they answered all FA of controlling bleeding, 132(35.2%) said only by put clean cloth immediately, 21(5.6%) said only by elevate the injured extremities, 9(2.4%) said only by digital pressure and the rest 12(3.2%) they didn‟t know.
- Regarding first aid of protruded intestine 242 (64.5%) said didn‟t turn the intestine but cover with clean cloth, 106(28.3%) false answer those said return the intestine to the place immediately and the rest 27(7.2%) they didn‟t know.
- Regarding fractured FA out of 375 study subjects, 317(84.5%) responded correct answer of fractured FA and 58(15.5%) they didn‟t know.
- Majority 277(73.9%) of the respondents correct answer FA of seizure and 98(26.1%) were given false answer.
- Majority of participants included on the study 355(94.7%) gave correct answer FA of Drowning and the rest 20(5.3%) they didn‟t know.
- Regarding FA choking due to foreign body 175(46.7%) said tab on cervical area, 92(24.5%) Heimlich manure, 52(13.9%) gave water to drink, 24(6.4%) sent immediately to doctor and 32(8.5%) they didn‟t know.
- Regarding FA of Cardiac arrest 240(64%) gave incorrect answer and only 135(36%) gave correct answers.

Table 4: Frequency distribution showing the practice of first aid measures among military personals of 21st division February 2014 (n=375)

Variable		Frequency	%
who gave FA first during combat and out of combat injury	your self	20	14.49
	your comrade	57	41.3
	health worker	61	44.2
	Total	138	100
do you have individual bandage	Yes	350	93.3
	No	25	6.7
have you ever used individual bandage	Yes	129	34.4
	No	246	65.6
for whom used the bandage	for your self	69	53.5
	for your comrade	44	34.1
	for your family	4	3.1
	for other people who were on need	12	9.3
How do you stop bleeding?	Put clean cloth immediately	132	35.2
	elevate the injured extremities	21	5.6
	using arterial digital pressure above the bleeding site	9	2.4
	All	201	53.6
	I don't know	12	3.2
FA measures abdominal intestine is found out of the abdomen and visible	return to the place immediately	106	28.3
	cover with clean cloth and call for help	242	64.5
	I don't know	27	7.2
FA measures of leg fractured	Immobilize or support with pillows	89	23.7
	Immobilize or support with blankets	16	4.3
	Immobilize or support with uninjured limb	45	12.0
	support by all of the above you get at the accident area	167	44.5
	I don't know	58	15.5
FA measures of seizure	Do not place anything in individual's mouth	30	8.0
	Loosen restrictive clothing	53	14.1
	If possible, place a cushion or blanket under individual's head	73	19.5
	Hold or restrain	48	12.8
	clear area around the individual to prevent injury from sharp objects	65	17.3
	give food, drink or medications during a seizure	50	13.3
	more than three correct	56	15

FA measures of drowning	Quick remove any obstruction such as weeds from the casualty mouth	58	15.5
	Place him on firm surface check ABC	133	35.5
	Keep him/her warm	17	4.5
	All	147	39.2
	I don't know	20	5.3
FA measures of choking	Give water to drink	52	13.9
	Send immediately to a doctor	24	6.4
	tab on cervical area	175	46.7
	Heimlich manure	92	24.5
	I don't know	32	8.5
FA measures of cardiac arrest	Correct	135	36.0
	Incorrect	240	64.0

Discussion

No similar studies evaluating the level of FA knowledge among military personnel or others in Ethiopia exist so far.

This study had focused on military personnel"s. Out of 375 military personnel"s participate in the study 57.3% were untrained rest 42.7%were trained first aid. Similarly in a Study conducted on assessment of knowledge on practice regarding first aid measures among the self-help groups in selected areas of Mangalore 39 % received information from the teaching programs (20).

This study revealed that 95.7% of the respondents had knowledge of providing FA to a burn victim, but the findings from the study conducted to determined knowledge on practice regarding FA measures among the self-help groups in selected areas of Mangalore witnessed that only 55.25% of the respondents are knowledgeable how to manage a burn victims (20). The reason for this side is because the settings of the study participants vary greatly. i.e., unlike the self-help groups the military population gets trainings on first aid measures.

Majority of study participants (75.5%) said the convenient position for unconscious patient is placing him or her in face up position, followed by 10.9% of the respondents had no idea, 9.1% said placing the patient on his or her side which is scientifically acceptable and 4.5 % said placing the patient in face down position .But Nigeria study conducted to analyze safe patient positioning after a traumatic event among commercial inter-city drivers in showed 18.3 % of the participants know the scientifically accepted position of the unconscious patient (25). This difference would be due to drivers are prone for road traffic accidents which require a knowledge of extricating a victim from a vehicle and transport injured people from the scene.

Seventy-two percent of the study participants said respiratory problems are the first priority to provide FA, 17.6% said bleeding, 8.8% said fracture and the rest did not know the priority problem to provide FA which is different from the findings of the above study i.e., only 59.9% of the participants are knowledgeable how to prioritize patients seeking FA. This might be due to health education regarding FA measures are provided to the military society as compared to the drivers.

Of 375 soldiers 48.5% of them thought that FA could be performed by any person, 80% of them thought individual bandage is necessary at any time. The majority of participants (83.2) are willing to provide FA to those who are injured and the rest are not willing. Among those respondents who are not willing to provide FA, the reason was lack of training in 53.5% of subjects, 34.9% thought that FA is the job of health professionals , 11% because they fear wounds and the rest is due to lack of interest. 94.4% of the respondents agreed that FA training is necessary. Similarly the findings from the study done to assess attitude of commercial city drivers in Nigeria towards FA, 80% of them were agreed to provide FA (25). Of those who disagreed to provide FA, the reason not to give FA was that they thought only qualified experts should treat accident victims or that lay people may not know what to do.

A study conducted to assess the KAP of drivers towards FA in south Korea witnessed that, the most important reason cited by 71.4% of the respondents for not extending assistance to the victims in traumatic situations was lack of knowledge and avoidance of getting entangled in legal matters which significantly different from the findings of this study because the reason provided by those study subjects who were not willing to provide FA was lack of training and because they thought that provision of FA was the job of health workers rather than avoidance of getting entangled in legal matters (18) .

In this study 94.4% agreed that lay people should be trained to provide FA. This result is in line with the findings of the above Nigerian study which revealed that 90% agreed, 3.4% disagreed and 5.25% of the respondents were doubtful regarding the necessity of FA training to lay people to provide FA.

Regarding bleeding control 201(53.6%) of them answered all the appropriate ways of controlling bleeding, 132(35.2%) said by putting clean cloth immediately, 21(5.6%) said by elevating the injured extremities, 9(2.4%) said by digital pressure and the rest did not know. This result was not comparable to other study which was done in 5 randomly selected schools in Baghdad/ Al-Rusafa, carried out on 100 primary school teachers that showed that 65%of the participants wrongly answered how to control bleeding (22). This indicates almost 96.8% of these study participants know one or more bleeding control ways. The possible reason for the difference might be due to training experience and the health workers give health education on their units.

Regarding fracture FA, majority of the respondents (84.5%) responded correct method of fracture FA and 15.5% didn‟t know. This percentage is comparable with the results of the study done in Nigeria that 88.5% of the study subjects believed splints could be used for obvious fracture management. But in other cross sectional study which was conducted in randomly selected schools of Mysore, only 30.2% perceived that the fractured part should be supported (21). The reason for this significant difference regarding practice of fracture first aid might be due to the difference of settings of the study subject‟s i.e., school versus military setting.

Concerning Choking FA due to foreign body only 92(24.5%) of the participant correctly responded the recommended FA measure which is the Heimlich maneuver. Similarly in a Study conducted in Afyonkarahisar providence on preschool teachers working in school district revealed that only 25.4% of the respondents replied the right FA measure provided for chocking victim (19).

Limitation

- Shortage of time
- There were no similar studies conducted in our country, especially related to first aid measures

Conclusion

In conclusion the study participant‟s military personnel are expected to know first aid measures more because of their mission. But the result showed that there is gab on preferable position of unconscious patients, FA of penetrating objects on the abdomen, FA of chemical burn, FA of penetrating eye injury, FA of priority, FA of protruded intestine, seizure, choking, cardiac arrest, fractured. Also half of the participants believed FA activity is performed only by health workers. So it is important to evaluate the First aid training programs of military training center to improve knowledge practice and attitude of the military personnel‟s.

Recommendations

1. Military training centers FA measures training curriculum should be evaluated in case of FA education competency
2. FA training should be supported by practice in particular
3. The attitude of military personnel regarding FA ought to be given by health staff should be changed by training to optimize lifesaving at front line.

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Annex 1:

English Version Questionnaire

AAU School of Graduate Studies Faculty of Medicine Department of Emergency Medicine master student research project questionnaire

Research topic: KAP of Military Personnel Regarding First Aid Measures in Northern Command 21 Division

1. Town
2. Site
3. Date

Introduction: I am 2nd year emergency medicine and critical care post graduate student in Addis Ababa University School of Graduate Studies Faculty of Medicine Department of Emergency Medicine**.** I am interviewing people here in northern command 21st division in order to investigate about military personnel first aid measures knowledge, attitude and practice. Your name will not be written on this form, and will never be used in connection with any of the information you tell us. You do not have to answer any questions that you do not want to answer, and you may end this interview at any time you want to. However, your honest answer to these questions will help us better understand about military personnel first aid measures knowledge, attitude and practice and to give different training regarding the gaps. I would greatly appreciate your help in responding to this study.

Are you voluntary to participate on the study? Yes-_______No-___ if no what is your reason -__

____

The research will be done in collaboration with faculty of medicine AAU.

Principal investigator

Name 1 Dr.*Assefu W/Tsadi k (M.D, Anesthesiologist, Asst. professor ER fellow)*
Cell phone 0911405796
2. Ato Haimanot Geremew (BSc.N, MSc on Adult Nursing, Lecturer, AAU Emergency Medicine)Cell phone 0911481146

We would greatly appreciated and thank your response to us and for taking your time

Supervisor name ______________________________

Cell phone 0913110376

Signature ______________________________

Section I : General information (make circle to the option you chose)

1. Age________________________________
2. Sex A. Male B. Female
3. Rank ______________________________
4. Service year in military______________________
5. What is highest level of school you completed-______________________
6. Religion
   A. Orthodox
   B. Muslim
   C. Protestant
   D. Other specify____________________________
7. Marital status
   A. Single
   B. Married
   C. Divorced
   D. Widowed
   E. Other specify____________________________
8. Trained military training center
   A. Hurso military training center
   B. Birsheleko military training center
   C. Other specify____________________________

Section II: KAP towards first aid measures

9. Have you attended first aid training?
   A. Yes
   B. No

10. If your answers yes where did you get the training

    A. On high school
    B. On military training center
    C. On his unit (division)
    D. Other specify_______________________

11. Do you war exposure

    A. Yes
    B. No

12. If your answers for question number 11 yes did you sustained injury during combat
    A. Yes
    B. No

13. If your answers for question number 12 yes what was the type of injury
    A. Extremities injury
    B. Chest injury
    C. Abdominal injury
    D. Head injury
    E. Other specify______________________

14. If you sustained injury during combat who gave you care first
    A. Yourself
    B. your comrade
    C. health worker
    D. Other specify________________

15. Have you ever had accident occur in the past year out of war injury
    A. Yes
    B. No

16. If the answer to Q15 is "yes what was the cause of the accident?

    A. Car accident
    B. Falling from high or steep place
    C. Other specify ______________________

17. During the accident who gave you care first

A. Yourself
B. your comrade
C. health worker
D. Other specify_________________

18. do you have individual bandage

A. Yes B. No

19. Have you ever used individual bandage

A. Yes B. No

20. If the answers to question 19 yes, for whom use the bandage

A. For yourself
B. for your comrade
C. For your family
D. For other people who were on need

21. When time is necessary individual bandage

A. During war only
B. At any time accident happen
C. Not used it without medical personnel permission
D. I don"t know
E. Other specify_________________

22. Were you put your individual bandage

A. On his cloth bag
B. With the gun
C. At any where
D. I don"t know
E. Other specify________________

23. First aid activity is performed by
    A. Only by Health professionals
    B. by any person
    C. I don‟t know
    D. Other specify_________________
24. Is first aid important to military personnel‟s
    A. Yes
    B. No
25. If your answer no what is your reason ____
    ____
26. Do you think first aid training is important to all military personals
    A. Yes
    B. No
27. If your answer question number 26 no what is your reason _________________________
    ____
28. Do you have interest to give first aid to your comrade or others
    A. Yes
    B. No
29. If your answer question number 28 no What are the barriers or factors that may prevent to give first Aid to self and others
    A. Lack of training
    B. Fear of wounds
    C. It is the job of professional
    D. Other specify_________________

30. If Penetrating object seen in your comrade abdomen or back during war or accident what do you do?

A. removes it immediately and sends to hospital

B. should not remove it and immediately send to hospital

C. I don‟t know

D. Other specify______________

31. Why you dress and bandage the wound as soon as possible?
    A. to control the bleeding
    B. To protect the wound from further contamination of germs
    C. All
    D. I don‟t know
32. How do you stop bleeding?
    A. Put clean cloth immediately
    B. Elevate the injured extremities
    C. Using arterial digital pressure above the bleeding site
    D. all
    E. I don‟t know
33. If the victim is on fire what do you do
    A. Tell him to fall to the ground and roll
    B. If you have water pour it directly on the burned area
    C. wrap the person in a blanket or other large covering
    D. all
    E. I don‟t know
34. What is your action if abdominal intestine is found out of the abdomen and visible
    A. return to the place immediately
    B. cover with clean cloth and call for help
    C. I don‟t know

35. If you have got snake bite person what you do
    A. Lower affected part below the level of the heart.
    B. Cleanse area with soap and water.
    C. Keep bitten extremity immobilized.
    D. All
    E. I donֺt know
36. If you get a one leg fractured what do you do
    A. Immobilize or Support with pillows,
    B. Immobilize or Support with blankets,
    C. Immobilize or Support with uninjured limb
    D. You can support by all of the above you get at the accident area
    E. I donֺt know

37. If you get chemical burn what is your action
    A. Wear gloves then if the chemical is in a dry or powder form, carefully brush it off the skin before flushing with water.
    B. If possible, remove outer clothing while burn is being flushed.
    C. All
    D. I donֺt know

38. If you get penetrating eye injury what is your immediate first aid care
    A. Do not attempt to remove object or wash eye and cover both eyes
    B. attempt to remove object and donֺt cover the eye
    C. I donֺt know
39. If you get a an injured comatose person what you do first
    A. Open the mouth and remove any secretion or foreign body that obstructs the airway first
    B. Stop bleeding first
    C. Immobilized the fractured bone first
    D. I donֺt know

40. If you get seizure what you do? circle the correct answers

   A. Do notplace anything in individual's mouth.
   B. Loosen restrictive clothing.
   C. If possible, place a cushion or blanket under individual's head.
   D. Hold or restrain
   E. Clear area around the individual to prevent injury from sharp objects.
   F. Give food, drink, or medications during a seizure.

41. What position is preferable if you get unconscious patient during accidental injury

   A. On his back
   B. On his stomach
   C. On lateral side
   D. I donʽt know

42. A patient has a complete airway obstruction, they cannot:

   A. Speak
   B. Breath
   C. Cough
   D. All the above
   E. I donʽt know

43. What will you do when you see someone drowning

   A. Quick remove any obstruction such as weeds from the casualty mouth
   B. Place him on firm surface check ABC
   C. Keep him/her warm
   D. All
   E. I donʽt know

44. A person first aid with choking due to foreign body

   A. Give water to drink
   B. Send immediately to a doctor
   C. tab on cervical area
   D. Heimlich manure
   E. I donʽt know

45. You get three causality during car accident

1. Respiratory injury and breathing problem
2. Fracture
3. Upper arm bleeding

Question from those causality for whom you give first aid first .write on ordered

____

____

____

46. write the goals of basic life support

A. ______________________________
B. ______________________________
C. ______________________________

47. If you get cardiac arrest what is your management? Write on priority ordered

A. ______________________________
B. ______________________________
C. ______________________________
D. ______________________________

Thank you

Annex 2 Amharic version of the survey tool

የመጠይቁ ኮድ_________

<u>በአዲስ አበባ ዩኒቨርስቲ ጤና ሳይንስ ኮሌጅ የድንገተኛ ህክምና ትምህርት ክፍል የድህረ ምረቃ ተማሪ የመመረቅያ የዳሰሳ ጥናት ጥያቄዎች</u>

የጥናቱ ርእስ በሰሜን ዕዝ የ 21 ኛ ክፍለ ጦር የሰራዊት አባላት በመጀመርያ ህክምና እርዳታ አሰጣጥ ያላቸው እውቀት ዝንባሌ እና ተግባር የዳሰሳ ጥናት

ከተማ ______________________ ቦታ______________________ ቀን ______________________

<u>ጤና ይስጥልኝ ፡-</u>እኔ በአዲስ አበባ ዩኒቨርስቲ ጤና ሳይንስ ኮሌጅ የድንገተኛ እና ጽኑ ህሙማን ህክምና ክፍል የሁለተኛ አመት የማስተርስ ተማሪ ነኝ ፡፡የመመረቅያ ጥናቴን በሰሜን ዕዝ የ21ኛ ክፍለጦር የሰራዊት አባላት በመጀመሪያ ህክምና እርዳታ አሰጣጥ ያላቸው እውቀት ዝንባሌ እና ተግባር ለማጥናት ይህ መጠይቅ አዘጋጅቼ ለናንተን ለመጠየቅ አቅርቤዋለሁ፡፡ የሚሰጡኝ ምላሾች ሁሉ በጥብቅ በሚሥጥርነት የሚያዙ ናቸው ፡፡ ስም በዚህ ቅጽ ላይ አይጻፍም እናም ከማንኛውም መረጃ ጋር ተያይዞ ሊቀርብ አይችልም ፡፡ለመመለስ የማይፈልጓቸውን ጥያቄዎች ያለመመለስ መብትዎ ሙሉ በሙሉ የተጠበቀ ነው፡፡የመጠይቁን ሂደት በፊለጉ ጊዜ እንዲቋረጥ ማድረግ ይችላሉ፡፡ይሁንና እርስዎን የሚሰጡን እውነተኛ እና ሃቀኛ ምላሽ በአገር መከላከያ ሚኒስቴር የሚገኙ የሰራዊት አባላት በመጀመሪያ ህክምና እርዳታ አሰጣጥ ያላቸው እውቀት ዝንባሌ እና ተግባር በማወቅ የተለያዩ ስልጠና ለመስጠት ይጠቅማል፡፡ስለዚህ ለሚቀርብልዎ ጥያቄዎች ለሚሰጡኝ ልባዊ ምላሾች ሁሉ ከልብ አመሰግናለሁ፡፡

ጥያቄዎችን ለመመለስ ፍቃደኛ ነዎት

ለዎ ፍቃደኛ ነኝ-______________________ ፈቃደኛ አይደለሁም ______________________________

ፈቃደኛ ካልሆኑ ምክንያትዎ ይግለጹ____

ጥናቱን የሚካሔደው ከአዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ኮሌጅ የድንገተኛ እና ጽኑ ህሙማን ህክምና ክፍል በመተባበር ነው፡፡

<u>የጥናቱ ህጋዊ ተቆጣጣሪዎች/መሪዎች/</u>

1. **ዶክተር አሰፋ ወልደጻዲቅ** (M.D, Anesthesiologist, Asst. professor ER fellow*)*

ስልክ ቁጥር 0911405796

2. **ሲት ሃይማኖት ገረመው** (BSc.N,MSc on Adult Nursing, Lecturer, AAU EM)

ስልክ ቁጥር 0911481146

ግዜዎን ሰጥተው ለጥያቄዎቹ መልስ በመስጠትዎ ከልብ አመሰግናለሁ፡፡

ያረጋገጠው ተቆጣጣሪ

ሙሉ ስም____

ፊርማ____

ቀን____

<u>ክፍል አንድ አጠቃላይ መረጃ</u>

1. ዕድሜዎ ስንት ነው____

2. ጾታ

   ሀ. ወንድ

   ለ. ሴት

3. ወታደራዊ ማዕርግዎ ምንድ ነው______________________________________

4. የቅጥር ጊዜዎ መቼ ነው____

5. የትምህርት ደረጃዎ____

6. ሃይማኖትዎ ምንድ ነው

   ሀ. ኦርቶዶክስ

   ለ. ሙስሊም

   ሐ. ፕሮቴስታንት

   መ. ሌላ ከሆነ ይገለጽ____________

7. የጋብቻ ሁኔታ

   ሀ. ያላገባ

   ለ. ያገባ

   ሐ. የተፋታ

   መ. ባለቤቱ የሞተችበት

   ሠ. ሌላ ከሆነ ይገለጽ_________________

8. መሰረታዊ ወታደራዊ ስልጠና የትነው የወሰዱት?

ሀ. ሁርሶ ወታደራዊ ማሰልጠኛ

ለ. ብርሸለቆ ወታደራዊ ማሰልጠኛ

ሐ. ሌላ ከሆነ ይግለጹ_______________

<u>ክፍል ሁለት</u>

ስለ የመጀመርያ ህክምና እውቀት ክህሎትና ተግባር በተመለከተ የቀረቡ መጠይቆች

9. የመጀመሪያ ህክምና ስልጠና ሰልጥነዋል ?

   ሀ. አዎ

   ለ. አልሰለጠንኩም

10. መልስዎ አዎ ከሆነ ስልጠናው ያገኙት ከየት ነው ?

ሀ. በትምህርት ቤት

ለ. በወታደራዊ ማሰልጠኛ

ሐ. በክፍለ ጦር

መ. ሌሎች ካሉ ይገለጹ ____________________

11. ውጊያ ተሳተፈው ያውቃሉ ?

ሀ. አዎ

ለ. አልተሳተፍኩም

12. መልስዎ አዎ ከሆነ በውጊያ ቆስለው ነበር ?

ሀ. አዎ

ለ. አልቆሰልኩም

13. መልስዎ አዎ ከሆነ ምንዎ ነው የቆሰሉት ?

ሀ. እግር ወይ እጅ

ለ. ደረት ላይ

ሐ. ሆድ ላይ

መ. ጭንቅላት ላይ

ሠ.ሌሎች ካሉ ይገለጹ ____

14. በውጊያ ወቅት መቁሰል ገጥሞዎት በነበረ ጊዜ የመጀመሪያ ህክምና እርዳታ ያደረገልዎት ማን ነበር?

ሀ. በራሴ

ለ. ጓደኛዬ

ሐ. የጤና ባለሙያተኛ

መ. ሌሎች ካሉ ይገለጹ_______________________________________

15. ከውጊያ ውጭ ከዚህ በፊት ድንገተኛ አደጋ ገጥሞት ያውቃል ?

ሀ. አዎ

ለ. አያወቅም

16. ለጥያቄ ቁጥር 15 አዎ ከሆነ መልስዎ አደጋው በምን ምክንያት ነበር የገጠምዎት ?

ሀ. የመኪና አደጋ

ለ. ከከፍተኛ ቦታ መውደቅ

ሐ. ሌሎች ካሉ ይግለጹ_______________________________________

17. አደጋ ገጥሞዎት በነበረ ጊዜ የመጀመሪያ ህክምና እርዳታ ያደረገልዎት ማን ነበር?

ሀ. በራሴ

ለ. ጓደኛዬ

ሐ. የጤና ባለሙያተኛ

መ. ሌሎች ካሉ ይገለጹ__________________

18. የግል ባንዴጅ አለዎት ?

ሀ. አዎ

ለ. የለኝም

19. የግል ባንዴጅ ተጠቀመው ያውቃሉ ?

ሀ. አዎ

ለ. አላውቅም

20. መልስዎ አዎ ከሆነ ለማን ነው የተጠቀሙት ?

ሀ. ለራሴ

ለ. ለጓደኛዬ

ሐ. ለቤተሰቤ

መ. ለሌሎች ሰዎች አደጋ ገጥሟቸው ስነበረ

21. በምን ወቅት ነው የግል ባንዴጅ የሚያስፈልግ ?

ሀ. በውጊያ ወቅት ብቻ

ለ. በውጊያ ወቅት እና ከውጊያ ውጭ አደጋ ሲያጋጥም

ሐ. የጤና ሞያተኛ ሲኖር ብቻ

መ. አላውቅም

ሠ.ሌሎች ካሉ ይገለጹ _______________________________________

22. የግል ባንዴጅ የት ነው የሚያስቀምጡት ?

ሀ. በልብስ ኛንጣ

ለ. ከትጥቅ ጋር

ሐ. በተገኘ ቦታ

መ. አላውቅም

ሠ.ሌሎች ካሉ ይገለጹ ____

23. የመጀመሪያ ህክምና ዕርዳታ የሚሰጠው በማን ነው?

ሀ. በጤና ሞያተኞች ብቻ

ለ. በሁሉ ሰው

ሐ. አላውቅም

መ. ሌሎች ካሉ ይገለጹ____________________

24. የመጀመሪያ ህክምና ዕርዳታ ለወታደር አስፈላጊ ነው ይላሉ ?

ሀ. አዎ

ለ. አይደለም

25. መልስዎ አይደለም ከሆነ ለምን ይመስሉታል___________________________

26. በእርስዎ አመለካከት ሁሉ የሰራዊት አባል የመጀመሪያ ህክምና ዕርዳታ ስልጠና ያስፈልገዋል ይላሉ ?

ሀ. አዎ

ለ. አያስፈልገውም

27. የጥያቄ ቁጥር 26 መልስዎ አያስፈልግም ከሆነ ምክንያትዎ ያብራሩ______________________________

____

28. የመጀመሪያ ህክምና ዕርዳታ ለራስዎ ወይም ለሌላ ሰው መስጠት ይፈልጋሉ?

ሀ. አዎ

ለ. አልፈልግም

29. የጥያቄ ቁጥር 28 መልስዎ አልፈልግም ከሆነ ምክንያትዎ ምንድነው?

ሀ. ስልጠና ስላልወሰድኩ

ለ. ቁስል ስለምፈራ

ሐ. የጤና ሞያተኞች ስራ በመሆኑ

መ. አልወደውም

ሠ. ሌላ ካለ ያብራሩ,____

30. በውጊያ ወይም በሌላ አደጋ ወቅት በጓደኛዎ ሆድ ውስጥ ስለታም ነገር

ተሰክቶ ቢያገኙ ምንድነው የሚያደርጉት ?

ሀ. የወጋውን ስለት ትሎ አውጥቶ ወደ ህክምና በትሎ መሳክ

ለ. የወጋውን ስለት ሳሳሰወጣ ወደ ህክምና በትሎ መሳክ

ሐ. አሳውቀውም

መ . ሌሳ ካለ ያብራሩ,____

31. ለምንድነው የሚደማ ቁስል ወዲያውን በሻሽ የምንሸፍነው ?

ሀ. ደም ለማቆም

ለ. በጀርም እንዳይበከል

ሐ. ሁሉም መልስ ናቸው

መ. አሳውቀውም

32. የሚፈስ ደም ቢያጋጥምዎት እንዴት ሊያቆሙት ይችሳሉ ?

ሀ. በንጹህ ጨርቅ በመሸፈን መጫን

ለ. የሚደማው እጅ ወይ እግር ወደ ሳይ ከፍ ማድረግ

ሐ. ደም ከሚፈስበት ከፍ ብሎ መጫን

መ. ሁሉም መልስ ናቸው

ሠ. አሳውቀውም

33. አንድ ሰው ልብሱ በእሳት እየተቃጠለ ቢያጋጥምዎት ምንድነው የሚያደርጉ?

ሀ. መሬት ሳይ እንዲከባለል መንገር

ለ. ውሃ ካለ ወደ የሚቃጠለው ክፍል መድፋት

ሐ. ብርድ ልብስ ወይም ትልቅ መሸፈኛ ካለ ወድያው መሸፈን

መ. ሁሉም መልስ ናቸው

ሠ.አሳውቀውም

34. በውጊያ ወይም በአደጋ ጊዜ የሆድ ዕቃው ወደ ውጭ የወጣ ቁስለኛ ቢያገኙ ምንድነው የሚያደርጉ ?

ሀ. የወጣው የሆድ ዕቃ ወደ ቦታው ትሎ በማስገባት ትሎ ወደ ህክምና መሳክ

ለ. የወጣው የሆድ ዕቃ ወደ ቦታው ሳታስገባ በንጹህ ጨርቅ በመሸፈን ትሎ ወደ ህክምና መሳክ

ሐ. አሳውቀውም

35. በእባብ የተነደፈ ሰው ቢያገኙ ምንድነው የሚያደርጉ ?

ሀ. የተጎዳው አካል ከልብ በታች ዝቅ ማድረግ

ለ. የተጎዳው አካል በሳሙናና ውሃ ማጠብ

ሐ. የተጎዳው አካል እንዳይንቀሳቀስ ማድረግ

መ. ሁሉም መልስ ናቸው

ሠ. አላውቀውም

36. የአንድ እግሬ አጥንት የተሰበረ ቢያገኙ የሚያደርጉለት የመጀመሪያ እርዳታ ምንድነው?

ሀ. በትራስ አርጎ የተሰበረው አጥንት ማሰር እና መደገፍ

ለ. በብርድ ልብስ አርጎ የተሰበረው አጥንት ማሰር እና መደገፍ

ሐ. የተሰበረው አጥንት ካልተሰበረው አጥንት ጋር ማሰር

መ. በሁሉም ከላይ በተገለጹት እና በአካባቢው በተገኙ ነገሮች መጠቀም

ሠ. አላውቀውም

37. በኬሚካል የተቃጠለ ሰው ቢያገኙ የሚያደርጉለት የመጀመርያ እርዳታ ምንድነው?

ሀ. ኬሚካሉ ፈሳሽ ካልሆነ በውሃ ከማጠብ በፊት በብሩሽ አድርጎ ማልቀቅ

ለ. ኬሚካሉ የነካው ልብስ ማውለቅ

ሐ. ሁሉም መልስ ናቸው

መ. አላውቀውም

38. አይኑን በስለት የተመታ ቢያገኙ የሚያደርጉለት የመጀመሪያ እርዳታ ምንድነው?

ሀ. የወጋውን ስለት ሳታወጣ እና ሳታጥብ ሁለት አይኑን በንጹህ ጨርቅ መሸፈን፣

ለ. የወጋውን ስለት በማውጣት በጨርቅ ሳትሸፍን መላክ

ሐ. አላውቀውም

39. ህሊናው የሳተ ሰው ቢያገኙ የሚያደርጉለት የመጀመርያ እርምጃዎ ምንድነው?

ሀ. ከሁሉ በፊት አፉን በመክፈት የአየር ቧንቧውን ክፍት መሆኑን ማየትና በአፉ ውስጥ የተለያዩ ፈሳሽና ባእድ ነገሮች ካሉ በማስወጣት የአየር ቧንቧውን ክፍት ማድረግ፣

ለ. ከሁሉ በፊት መጀመሪያ ደምን ማቆም

ሐ. ከሁሉ በፊት መጀመሪያ የተሰበረው አጥንት ማሰር

መ. ማን እንደሚቀድም አላውቅም

40. የሚጥል በሽታ ያለው ሰው ወድቆ ቢያገኙ የሚያደርጉለት የመጀመሪያ እርዳታ ምንድ ነው? ትክክለኛ መልስ የሚሉትን ያክብቡ

ሀ. በአፉ ውስጥ የሆነ ነገር አለማስገባት
ለ. የጠበቀ ልብሱን ማላላት
ሐ. ከተቻለ ከጭንቅላቱ ስር ብርድ ልብስ ወይም ሌላ ጨርቅ ትራስ ማስገባት
መ.እጁን እና እግሩን ማሰር
ሠ. የወደቀበትን አከባቢ የተለያዩ ስለታም ነገሮች እንዳይወጉት ማጽዳት
ረ. ፈሳሽ እና መድሃኒት ወዲያውኑ በአፉ መስጠት፣

41. አንድ የተጎዳ ሰው የአየር ቧንቧው ክፍት እንዲሆን እንዴት እናስቀምጠዋለን?

ሀ. በጀርባው ማስተኛት

ለ. በሆዱ ማስተኛት

ሐ. በጎኑ ማስተኛት

መ. አላውቀውም

42. ሙሉ በሙሉ የአየር ቧንቧው የተዘጋ ሰው የሚያሳየው ምልክት ምንድነው?

ሀ. አይናገርም

ለ. ትንፋሽ አይነሮውም

ሐ. አያስለውም

መ. ሁሉም መልስ ናቸው

ሠ. አላውቀውም

43. በውሃ ውስጥ ሰምጦ የነበረ ሰው ቢያገኙ የሚያደርጉለት የመጀመሪያ እርዳታ ምንድነው?

ሀ. በአፉ ውስጥ ባዕድ ነገሮች ካሉ በማስወጣት የአየር ቧንቧውን ክፍትማድረግ፣

ለ. በጀርባው በማስተኛት የአየር ቧንቧውን የአተነፋፈስ ስርዓቱን እና የደም ዝውውሩን መስራቱን ማረጋገጥ፣

ሐ. ብርድ ልብስ ወይም ሌሎች ሙቀት የሚሰጡ ልብሶች ማልበስ

መ. ሁሉም መልስ ናቸውሠ. አላውቀውም

44. ጓደኛዎ ጥሬ ስጋ እየበላ ቢታነቅ የሚያደርጉለት የመጀመሪያ እርዳታ ምንድነው?

ሀ. ውሃ እንዲጠጣ መስጠት

ለ. ቶሎ ወደ ህክምና መላክ

ሐ. ማጅራቱን መምታት

መ. ከጎኑ በመሆን በሁለት እጆችን ወገቡን በመያዝ በደረቱ ላይ በመጫን ወደ ላይ ከፍ ማድረግ፣

ሠ አላወቀውም

45. በአንድ መኪና አደጋ ሶስት ሰዎች ከባድ የመኪና አደጋ ጉዳት ደረሰባቸው፤

1.የመተንፈሻ አካል ጉዳት እና የመተንፈስ ችግር

2. የአጥንት ስብራት

3.የላኛው እጅ ላይ የደም ስር መቆረጥ

ጥያቄ፡- ከነዚህ ተጎጂዎች ውስጥ ቅድሚያ የመጀመሪያ ህክምና ድጋፍ ማግኘት ያለበት የትኛው ነው?

____

46. በመጀመሪያ ህክምና እርዳታ የህይወት ማዳን መርሆዎች በቅደም ተከተል ያስቀምጡ

ሀ.____

ለ.____

ሐ.____

47. ራሱን ስቶ የልብ ምቱን የቆመ ሰው ቢያገኙ የሚያደርጉለት የመጀመሪያ ህክምና እርዳታ ምንድ ነው? መልስዎን በቅደም ተከተል ይጻፉ

ሀ.____

ለ.____

ሐ.____

መ.____

ጊዜዎ ሰጥተው ስለተባበሩኝ አመሰግናለሁ፡፡

ANNEX III DECLARATION

I, the undersigned, declare that this is my original work and has not been presented in this or any other university and that all sources of materials used for this thesis have been duly acknowledged

Name ______________________________________

Signature ___________________________________

Place____

Date of submission ___________________________

This thesis has been submitted for examination with my approval as university advisor

1.Name _____________________________________

Signature ____________________________

Place________________________________

2.Name _____________________________________

Signature ____________________________

Place________________________________