

Knowledge, Attitudes, and Practices towards First Aid for Common Injuries in the University Setting among Non-Academic Staff Members of a Selected State University in Sri Lanka

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Abstract

First aid is important in preventing fatalities and disabilities when given with correct techniques promptly. Knowledge on first aid, positive attitudes and correct practices of first aid among staff members is vital in environments with a dense population, such as universities. This study aimed to describe the knowledge, attitudes and practices on first aid for common injuries among non-academic staff members of the University of Sri Jayewardenepura (USJ), Sri Lanka. A descriptive cross-sectional study was conducted with conveniently selected (N=170) non-academic staff of USJ. A self-developed and pre-tested self-administered questionnaire was used. Depending on the mean, overall knowledge, and practices, they were divided as "Good" and "Poor"; attitudes were divided as "Positive" and "Negative". Data were analyzed using descriptive statistics and inferential statistics with SPSS version 26. The response rate was 56.7%. The mean age of the participants was 35.58 (SD $\pm$ 9.27), and the majority were females (55.3%). Of all the participants, 42.4% completed a diploma/degree, and 43.5% were management assistants. Only 12.4% had taken first-aid training. Among all participants, 51.8% had good first-aid knowledge; 50.6% had positive attitudes, and 50.6% had good practices. Higher levels of education and training among the staff were found to be significantly associated with knowledge, attitudes, and practices. In contrast, the higher level of the job category was significantly associated with knowledge (p -value $\leq$ 0.05). Overall knowledge of first aid was "good", attitudes were "positive", and practices were "good" only in about half of the participants. It is vital to emphasize the relevant institutions that conduct awareness and education programmes with adequate training sessions on first aid.

Keywords: *attitude, first aid, injury, knowledge, non-academic staff, practice*

Introduction

Injuries are the number one cause of morbidity and mortality among the economically productive age group of 15-44 years and the leading cause of hospital admissions in Sri Lanka, contributing to most

disabilities (Directorate of Non-Communicable Diseases, Ministry of Health, 2022).

First aid is the assistance given to the person suffering a sudden injury or illness, with care provided to preserve life, prevent the condition from worsening and reduce the severity of injuries (Teshale & Alemu, 2017). It can be initiated by anyone in any situation and includes self-care. General characteristics of the provision of first aid, at any level of training, include recognizing, assessing, and prioritizing the need for first aid; providing care using appropriate competencies; and recognizing limitations and seeking additional treatment when needed, such as activating emergency medical services or seeking other medical assistance (Pellegrino et al., 2020).

Previous studies have shown that 10-35% of post-accident deaths occur in the first 5 minutes, and more than 50% occur in the first 30 minutes. However, it has been observed that with the proper and knowledgeable application of first aid, 38% of deaths could be prevented at the site of the accident. Furthermore, first aid treatment applied in the first five minutes is most effective. These data show how vital the matter of time is in saving lives. Therefore, to get the most effective results from first aid, trained people need to perform the necessary initiatives before the professional health team arrives (Mert-Boga et al., 2018).

The most basic level of prehospital trauma care is provided by laypeople known as “first responders” in many communities (Bhattarai et al., 2023; Eisner et al., 2020). They comprise the first level of the prehospital system. They may be motivated lay people from the community or people from specific occupational groups, such as taxi drivers, truck drivers, soldiers, students, or workers, who are trained through voluntary or mandatory programmes to recognize an emergency, call for help and act as the basic first aid providers until more formally trained rescuers arrive (Teshale & Alemu, 2017).

However, studies have found that the willingness of individuals to apply first aid at the scene of an emergency and the quality of first aid treatment are low worldwide (Huy et al., 2022). Nevertheless, with first aid training, the willingness can be increased, and the quality can be

improved (Kendall et al., 2025). Therefore, increasing the number of people who have been trained and know how to correctly apply first aid can decrease the number of deaths and serious injuries in cases around the world where first aid is needed. Moreover, it has been emphasized that the health benefits derived from first aid will serve to improve the sense of social responsibility within society and strengthen societal values (Mert-Boga et al., 2018). Knowledge and skills in performing first aid are especially important for personnel working in universities, where there are a dense population of young people and accidents and emergencies necessitating first aid can occur more frequently (Mert-Boga et al., 2018). Some studies regarding this issue have recommended that studies assessing first aid knowledge in universities should not only include students, but also academic personnel, to fully identify any deficiencies in first aid capabilities (Wafik & Tork, 2014).

The non-academic staff perform administrative and technical duties (Bradley, 2009). They consisted of several job categories, such as technical officers, computer application assistants, lab attendants, security guards, labourers, and others (Dompelage et al., 2019). There have been domestic-based and international-based studies assessing the efficacy of training on first aid, but there have been no studies examining the efficacy of first aid training on the knowledge level and skills that specifically involve university workers (Mert-Boga et al., 2018). Yet this group has a strong possibility of experiencing cases that require first aid. There were no previous studies conducted in Sri Lanka to assess the knowledge and describe the attitudes and practices of university non-academic staff on first aid. Thus, this study aimed to describe the knowledge, attitudes and practices on first aid for common injuries among non-academic staff members in a university setting.

Methodology

Study Design and Setting

A descriptive cross-sectional study was conducted among non-academic staff members at the USJ, Sri Lanka. USJ is one of Sri Lanka's premier institutions of higher learning. It has 16,145 internal

undergraduates, 745 permanent academic staff, and 935 permanent non-academic staff members (University of Sri Jayewardenepura, 2023).

Study Population

The study population was the non-academic staff members attached to the USJ. The sample size ($n=422$) was calculated using the equation of Lachenbruch et al. (1991) with a 10% non-response rate. Non-academic staff members who have more than 6 months of experience were included using the convenience sampling method. The non-academic staff members who were on medical leave, maternity leave, those with physical disabilities, on quarantine, and who were on work from home (due to issues with COVID-19 and fuel crisis), during the study period were excluded from this study.

The questionnaires with information sheets and voluntary consent forms were distributed among 300 non-academic staff members, and only 170 returned the filled questionnaires as they were not reachable due to quarantine, and work from home (due to issues with COVID-19 and fuel crisis/unstable political conditions).

Study Instrument and Data Collection

A self-administered questionnaire was developed based on questionnaires used in previous studies and the internationally accredited first aid manual for Sri Lanka by St John Sri Lanka (Austin & Thilakasiri, 2018). The opinion of the experts in the field was also taken. Checking of face and content validity was done with the expertise in the field of trauma (one consultant surgeon and two trauma-specialised nurses). The questionnaire was developed in the English language, and it was translated into two languages (Sinhala and Tamil) with the help of two independent bilingual experts (a professional translator and registered nurse). All the items in both questionnaires translated by the two independent bilingual experts were consolidated by the investigators into a common version. Only the English and Sinhalese language questionnaires were used in data collection according to the participants' preference.

Each questionnaire consisted of four parts: Part 1 - Socio-Demographic Data (Age, Gender, Marital status, and Educational level), Part 2 - Knowledge regarding first-aid, which consisted of 75 items under 14 questions relevant to the definition of first aid and its components, first-aid for airway problems, spinal cord and head injury, fallen from a height, bleeding, burn injury, transportation of a victim, and emergency contact number. Part 3 - Attitudes regarding first-aid, which consisted of 14 responses and Part 4 - Practices regarding first-aid, which consisted of 9 items/actions to check the practices of the participants who attended to an injured person and 7 responses to check the reasons for not attending to an injured person.

The questionnaire was pre-tested using 20 non-academic staff members of USJ. They were not included in the main study. The participants were asked to comment on whether the wording used made any of the items difficult to understand, confusing, or difficult to answer. Based on the answers, the participants reported that the allocated time was enough to complete the questionnaire, the wording was clear enough to understand, and the questions were asked appropriately to imply the meaning. Based on their feedback, a few adjustments were made in the wording of questions to improve the clarity, readability, and understandability of the questionnaire.

The list of non-academic staff members under each category was obtained from the registrar of the university and accessed through the departments and different sections. After briefing the Registrar and the Heads of the Faculties/Sections regarding the nature of the study, the questionnaires with information sheets and voluntary consent forms were handed over to non-academic staff members by an investigator. Then, one of the investigators approached the participants with permission from the relevant authority to collect their informed consent and completed questionnaires. Confidentiality and anonymity were maintained throughout the study by coding the questionnaire using serial numbers. Data was only used for research purposes, and the data was password-secured, which could be accessed only by the investigators.

Data Analysis

The knowledge was analyzed based on 14 main questions on knowledge, which include 75 sub-questions. For each correct answer, "1" mark was given, and a "0" mark for incorrect and 'don't know' responses, so that the maximum score that one can obtain is 75 and the minimum is zero. Data showed the normal distribution (symmetrical), and a mean split was used to categorize the level of knowledge into "Good" and "Poor" knowledge. Those who scored above the mean were categorized as having good knowledge, and those who scored below the mean were categorized as having poor knowledge.

The attitudes of the respondents towards first aid for common injuries were determined using 14 questions. A Likert scale (1 -5, 1- Strongly Disagree, 5- Strongly Agree) was used. The maximum score that one can obtain is 70 and the minimum is 14. The responses consistent with positive attitudes and reverse-coded negative attitudes were summed up. Data showed the normal distribution (symmetrical), and a mean split was used to categorize participants' attitudes towards first-aid into "Positive" and "Negative" attitudes. Those who scored above the mean were labelled as having positive attitudes, and those who scored below the mean were classified as having negative attitudes.

The practices regarding first-aid for common injuries were determined using 9 statements that state actions taken during an injury. The correct action taken was given a "1" mark and a "0" was given if the action was not taken. Those who scored above the mean were labelled as having good practice, and those who scored below were classified as having poor practice.

Descriptive statistics like frequencies and percentages were used for summarizing and presenting data. The chi-square test was used to determine the significance of categorical data. Significance was taken as $p < 0.05$. SPSS (Statistical Package for Social Sciences), version 26, was used to enter data and for analysis.

Ethical Consideration

Ethical approval was obtained from the Ethics Review Committee,

Faculty of Medical Sciences, USJ. Further, approvals were obtained from the relevant authorities. The information was gathered after obtaining informed consent from all the participants, and anonymity was maintained. Participants had the right to withdraw from the study at any time. Privacy and confidentiality of the participants and their information were ensured to the maximum at every stage of the research.

Results and Discussion

Results

Basic characteristics of the study population

The socio-demographic characteristics of the participants are presented in Table 1. The mean age of the participants was 35.58 (SD $\pm$ 9.27), and the majority were females (55.3%). Of all the participants, 98.8% were Sinhalese, 42.4% had completed a diploma/degree, 43.5% were management assistants, 45% had less than six years of experience, and only 12.5% had taken first-aid training.

Table 1. *Frequency Distribution of Socio-Demographic Characteristics (N=170)*

Characteristics	Number (%)	Characteristics	Number (%)
1. Age group		6. Marital status	
18 – 30	58 (34.1)	Married	118 (69.4)
31 – 44	82 (48.2)	Unmarried/Single	48 (28.2)
$\geq$ 45	30 (17.7)	Divorced	2 (1.2)
2. Gender		Widow/widower	2 (1.2)
Male	76 (44.7)	7. Job categories	
Female	94 (55.3)	Management Assistant	74 (43.5)
3. Ethnicity		Work aid	28 (16.5)
Sinhala	168 (98.8)	Technical officer	10 (5.9)
Tamil	1 (0.6)	Lab attendant	28 (16.5)

Muslim	1 (0.6)	Library worker	1 (0.6)
4. Religion		Security officer	13 (7.6)
Buddhism	163 (95.9)	Driver	12 (7.1)
Christianity	5 (2.9)	Work supervisor	2 (1.2)
Hindu	1 (0.6)	Health worker	1 (0.6)
		Programmer cum	
Islam	1 (0.6)	and system analyst	1 (0.6)
5. Education status		8. Working experience	
Primary	1 (0.6)	1 – 5 years	77 (45.3)
Grade 6 -10	6 (3.5)	6 – 10 years	49 (28.8)
Up to O/L	29 (17.1)	11 – 15 years	19 (11.2)
Up to A/L	62 (36.5)	16 – 20 years	7 (4.1)
Diploma/Degree	72 (42.4)	>20 years	18 (10.6)

First aid training

The participants were asked about their first aid training, and 21 (12.4%) had attended some form of first aid training at some stage in their lifetime. Of those who obtained the training, most reported (10, 47.6%) that they obtained the training 6 – 10 years back.

Knowledge on first aid for common injuries

Knowledge was analysed based on 14 main knowledge questions, which include 75 sub-questions. The definition of first aid was known by most of the participants (89.4%), and 123 (72.4%) of them agreed to call for help. With regards to signs of airway problems, the majority of the participants (96, 56.5%) did not know that slow breathing is a sign of an airway problem. Of all the participants, 114 (64.7%) knew that cardiopulmonary resuscitation (CPR) should be given if the victim is not breathing, 110 (64.7%) and 93 (54.7%) knew that heart massage and artificial breathing are the components of CPR respectively and only 17 (10.0%) knew the heart massage to breathing ratio.

Of all the participants, 108 (63.5%) were aware of the changes in the normal shape of the vertebral column as a sign of a spinal cord injury while 90 (52.9%) of them did not know that change or loss of sensation as a sign of a spinal cord and 118 (69.4%) did not know to open the

airway by keeping the fingertips at the two ends of the jaw and by raising the jaw without tilting the head (jaw thrust). With regards to the signs of head injury, 109 (64.1%) did not know that uneven pupils as a sign and only 74 (43.5%) knew that breathing problems were also a sign.

The majority (90, 52.9%) did not know that any firm board with a rigid flat surface can be used as a stretcher which keeps the spine stable and allows resuscitation to be carried out during the transportation of a patient to the hospital, and 88 (51.8%) and 106 (62.4%) of participants did not know that weak and rapid pulse, and increased speed of breathing as the indication of external or internal bleeding respectively. The majority (164, 96.5%) knew the national emergency contact number to contact an ambulance.

The overall distribution of knowledge regarding first aid for common injuries is presented in Table 2. The mean knowledge score of participants was 48.71 (SD±12.70). When the scores were converted into percentages, the scores ranged from 14.67% to 97.33% with a mean score of 64.95 (SD±16.94). Of the participants, 51.8% had good knowledge and 48.2% had poor knowledge regarding first-aid for common injuries.

Table 2. Overall Distribution of Knowledge Regarding First Aid for Common Injuries (N=170)

Knowledge	Number (%)
Good knowledge	88 (51.8)
Poor knowledge	82(48.2)

Attitudes towards first aid for common injuries

Of all the participants, the majority, 120 (70.6%) were willing to stop and check the presence of injuries and provide first aid, and 139 (81.8%) were willing to shift the patient to a safer place to prevent further injuries. Furthermore, 157 (92.4%) were willing to call an ambulance, and if the ambulance was not available, 133 (78.2%) were willing to transport the patient to the nearest hospital. While transporting the victim, the majority, 128 (75.3%) do not mind their vehicle and clothes getting soiled with blood. The minority 10 (5.9%)

stated that they would stop only to watch the accident if they witnessed an injury. Only 8 (4.7%) stated they would pretend that they had not seen anything; 7 (4.1%) were not willing to provide first aid as they do not see it as important; 42 (24.7%) were not confident enough to provide first aid and they think that they could apply wrong treatment and cause harm than help; 5 (2.9%) and 17 (10.0%) were not willing to provide first aid due to fear that germs will enter their body and due to fear of blood respectively; and 22 (12.9%) were not willing to provide help due to legal complications that followed later. The majority 138 (81.2%) thought that university workers should be properly trained to deliver first aid and 136 (80.0%) were willing to get the training to deliver first aid.

The overall distribution of attitudes regarding first aid for common injuries is presented in Table 3. The mean score of study participants was 56.12 (SD±7.08). When the scores were converted into percentages, the scores ranged from 35.71% to 100% with a mean score of 80.17% (SD±10.12). Among all the participants, 86 (50.6%) had positive attitudes while 84(49.4%) had negative attitudes towards first towards first aid.

Table 3. *Overall Distribution of Attitudes Regarding First Aid for Common Injuries (N=170)*

Attitude	Number (%)
Positive attitude	86 (50.6)
Negative attitude	84 (49.4)

Practices towards first aid for common injuries

The majority of the participants (68.2%) had witnessed injuries in the past year, and out of that, most (66.4%) had attended to an injured victim.

The frequency distribution regarding the actions taken during an injury is shown in Table 4. Of all the participants who have attended to an injured victim during the past year, 13 (16.9%) had taken actions to splint the fractures, and 18 (23.4%) had made sure that the patients' airway was clear. Only 49.4% have transported the patients

to the hospital, and 33.8% ensured safe positioning while transported to a hospital.

Table 4. *Frequency Distribution Regarding the Actions Taken During an Injury (N=77)*

Characteristics	Action taken (%)
Called for help	55 (71.4)
Called an ambulance	43 (55.8)
Moved patient from accident site to a safer place	46 (59.7)
Made sure that patients' airway was clear	18 (23.4)
Made sure that the patient is breathing properly	31 (40.3)
Stop bleeding	25 (32.5)
Splinted fractures	13 (16.9)
While shifting the patient to the hospital, safely position the patient	26 (33.8)
Transported patient to the hospital	38 (49.4)

The frequency distribution regarding the reasons for not attending to an injured victim is shown in Table 5. Among all the reasons, 45.2% of participants had not attended to an injury due to lack of confidence to provide first aid, and 89.3% and 88.2% stated that fear of germs and legal complications that follow later were not the reasons for not attending to an injured victim, respectively.

Table 5. *Frequency Distribution Regarding the Reasons for Not Attending to an Injured Victim (N=93)*

Characteristics	Reason for not attending to an injured victim (%)
Did not see giving first aid as important	15 (16.1)
Not confident enough to provide first aid	42 (45.2)
Due to the fear of germs will entering to the body	10 (10.8)
Due to fear of blood	14 (15.1)
Due to legal complications that follow later	11 (11.8)
No access to material to provide first aid	15 (16.1)
First aid was already given	33 (35.5)

The mean practice score of study participants was 3.83 (SD±2.37). When the scores were converted into percentages, the scores ranged from 11% to 100% with a mean score of 42.57 (SD±26.33). In this study, 116 (68.2%) have witnessed an injury within the past year, and out of that majority, (n=77, 66.4%) have attended to an injury. Among them, nearly half of the participants (n=39, 50.6%) had good practice, while 38 (49.4%) had poor practice towards first aid.

Association between socio-demographic factors and knowledge, attitudes & practices on first aid for common injuries

Significant associations were evident between education status ($p < 0.001$), job category ($p < 0.002$), and first-aid training ($p < 0.011$) with the knowledge of first aid for common injuries while education status ($p < 0.033$), job category ($p < 0.005$), working experience ($p < 0.017$) and first-aid training ($p < 0.026$) were significantly associated with the attitude towards first aid for common injuries.

Significant associations were evident between education status ($p < 0.034$) with the practices of first aid for common injuries.

Discussion

Only 12.4% of the participants had first aid training. The majority of the non-academic staff (51.8%) had good knowledge, 50.6% had positive attitudes, and 50.6% had good practice towards first aid for common injuries. Education status ($p < 0.001$), job category ($p < 0.002$), and first aid training ($p < 0.011$) were significantly associated with good knowledge. While education status ($p < 0.033$), job category ($p < 0.005$), working experience ($p < 0.017$) and first aid training ($p < 0.026$) were significantly associated with a positive attitude. Non-academic staff members' education status ($p < 0.034$) was significantly associated with better first aid practice. In the current study, less than one-fifth of the participants (21, 12.4%) had attended any form of first aid training at some stage in their lifetime. Similar findings were seen in studies conducted by Gunawardhana & Goonewardena (2016) and Ssewante et al. (2022), where 63 (15.7%) and 67 (19.4%) of the participants had first aid training, respectively. Both Sri Lanka and Uganda are lower-middle-income countries, and they have limited availability of first aid training opportunities. That could be the reason for the similarity in the results. In contrast, Asrat et al. (2025) stated that nearly three-quarters of their participants (313, 74.7%) had first aid training. In contrast, higher rates reported by Asrat et al. (2025) may reflect differences in institutional policies or the inclusion of participants from health-related backgrounds.

More than four-fifths of the participants (152, 89.9%) in this study knew the definition of first aid. A similar finding was observed in the studies of Asrat et al. (2025) (81.6%) and Awasthi et al. (2019) (94.6%), whereas lesser knowledge of the definition was seen (46.9%) in the study conducted in Ethiopia (Teshale & Alemu, 2017). The majority (154, 90.6%) were aware of the initiation of first aid in the immediate scene in this study, and it was supported by studies by Awasthi et al. (2019) and Ssewante et al. (2022) where 96% and 86.7% knew when to start the first aid, respectively. In contrast, a minority (10.0%) of the participants in the study by Asrat et al. (2025) conducted in Ethiopia were aware of the initiation of first aid.

With regards to components of first aid, more than four-fifths (144, 84.7%) of participants of this study knew stopping bleeding was a component whereas in a study by Olugbenga-Bello et al. (2012), it was even higher (89.5%), and it was seen much lesser (40%) in the study by Awasthi et al. (2019) conducted in India with drivers.

With regards to CPR, 112 (65.9%) and 17 (10%) knew that artificial breathing should be given mouth-to-mouth and mouth-to-nose, respectively; it was seen lesser (12.8%, 11.0%) in a study (Asrat et al., 2025). Only 17 (10.0%) participants in this study knew the heart massage to breathing ratio (compression-ventilation ratio). It was seen slightly higher (21%) before and much higher (97%) after a first aid course stated in a study by Adelborg et al. (2011) conducted in Denmark with 115 learner drivers. This difference in results was due to the effect of the course.

The present study showed that the majority (134, 78.8%) of the current study were aware of immobilizing the limb while shifting fracture fracture-suspected victim. This finding was supported by the studies by Awasthi et al. (2019) and Ssewante et al. (2022) where 73.4% and 65.2% knew that splints could be used to immobilize a fracture, respectively. In contrast, a minority (10.0%) of the participants in the study by Asrat et al. (2025) were aware of splinting.

In the current study, 164 (96.5%) knew the emergency contact number and it was supported by the studies by Pallavisarji et al. (2013) and Awasthi et al. (2019), where 90.0% and 98.4% were aware of the emergency contact number, respectively. In contrast, it was seen even fewer participants were aware of emergency contact numbers (49.7%, 48.7% and 21.5%) in the studies by Mohamadiyeh et al. (2023), Gunawardhana & Goonewardena (2016), and Ssewante et al. (2022), respectively.

The majority of the participants (120, 70.6%) in the present study were willing to provide first aid during an injury. This finding was supported by the studies by Olugbenga-Bello et al. (2012), Ssewante et al. (2022), and Awasthi et al. (2019) where 80.3%, 85.8%, and 92.5% of the participants were willing to provide first aid. In contrast, it was seen fewer participants (35.1% and 18.8%) were willing to

provide first aid in the studies by Mohamadiyeh et al. (2023) and Asrat et al. (2025), respectively.

In the present study, 157 (92.4%) were willing to call an ambulance during an injury, whereas in the study by Mohamadiyeh et al. (2023) conducted in the United Arab Emirates, it was even less (65.4%). Only 42 (24.7%) of the participants in this study were not confident enough to provide first aid without causing harm than help, whereas in the study of Teshale & Alemu (2017), it was slightly less (20.5%).

The least number of participants in this study (17, 10.0%) were not willing to provide help due to legal complications that followed later. This finding was supported by the studies by Teshale & Alemu (2017) and Mohamadiyeh et al. (2023), where 11.2% and 14.8% of their study participants worried about legal complications following involvement in the first-aid for injured persons.

Four-fifths of the participants (136, 80.0%) in this study were willing to get the training to deliver first aid. It was supported by the numerous studies by Olugbenga-Bello et al. (2012), Pallavisarji et al. (2013), Mohamadiyeh et al. (2023), Awasthi et al. (2019), Teshale & Alemu (2017), Mpombo & Mwanakasale (2017), and Ssewante et al. (2022) where 79.9%, 81.4%, 83.8%, 90.5%, 93.0%, 98.0%, and 98.6% of their participants were willing to have first aid training. In contrast, it was seen that less than one-fourth (22.7%) of the participants were willing to participate in the first aid training (Asrat et al., 2025).

The majority of the respondents (116, 68.2%) in the present study have witnessed an injury within the past year, and two-thirds of them (77, 45.3%) had given some sort of aid to injured persons. This finding was supported by the studies by Mpombo & Mwanakasale (2017), where 74.2% and 77.0% of their participants witnessed an injury, respectively. Regarding the type of first aid provided, in this study, only 16.9% took action to immobilize the fracture, which was much less than the studies by Awasthi et al. (2019) and Ssewante et al. (2022) conducted in Uganda, where 54.3% and 70.9% of their participants took action to immobilize the fracture.

Only 32.5% of the participants stopped bleeding during an injury, whereas higher practice was seen (55.0% and 66.5%) in the studies

conducted by Teshale & Alemu (2017), and Awasthi et al. (2019), respectively.

More than half (55.8%) of the participants called an ambulance during an injury. It was supported by the findings of a study conducted by Awasthi et al. (2019) that stated 51.1% of the participants called an ambulance, whereas lesser practice was seen (41.5%) in the study conducted by Pallavisarji et al. (2013) in India.

Nearly one-third (33.8%) of the participants in this study safely positioned the patient while shifting the victims to the hospital, whereas less practice (11.0%) was seen in a study (Teshale & Alemu, 2017). Nearly half of the participants (49.4%) in this study transported victims following an injury, whereas less practice was seen (19.7%, 33.3%, and 36.8%) in the studies conducted by Pallavisarji et al. (2013), Awasthi et al. (2019), and Olugbenga-Bello et al. (2012), respectively.

In the present study, only 11.8% of the participants did not attend to the injured victims due to legal complications. It was supported by the findings of a study conducted by Pallavisarji et al. (2013) where 29.8% of the participants did not attend to the injured victims due to legal complications. In contrast, much higher percentage (94.7%) of participants in a study worried about legal complications (Awasthi et al., 2019).

In the current study, 50.6% had good practice towards first aid for common injuries. So, it is observed that the practice of first-aid for common injuries was generally good in this study.

In the present study, the participants with higher education status ($p<0.001$), and previous first aid training ($p<0.011$) reported having higher knowledge and a significant positive association. It is supported by the findings of the studies of Mpombo & Mwanakasale (2017) ($p=0.013$), Ssewante et al. (2022) ($p=0.001$), and Yang et al. (2021) ($p=0.025$) that found that the knowledge was significantly associated with education status. The studies of Asrat et al. (2025) and Yang et al. (2021) found that knowledge of first aid was significantly associated with participants' previous first aid training,

with p-values of 0.027 and less than 0.001, respectively.

The participants with higher education status ($p < 0.033$), and previous first aid training ($p < 0.026$) reported having a positive attitude towards delivering first aid and a significant positive association. A similar finding was seen in the study of Yang et al. (2021), who found that education status ($p = 0.025$) and first aid training ($p < 0.001$) were significantly associated with the attitude towards first aid. Asrat et al. (2025) also supported this by showing their finding that first aid training ($p = 0.034$) was significantly associated with the attitude.

The participants with higher education status ($p < 0.034$) showed good practice towards delivering first aid, and a significant positive association. It was supported by a study by Yang et al. (2021), who found that education status ($p = 0.025$) was significantly associated with the practice towards delivering first aid. In contrast, the studies of (Teshale & Alemu, 2017) and Yang et al. (2021) found a significant association between first aid training and the practice towards delivering first aid, with a p-value less than 0.001.

Limitations

The limitations of this study include being conducted in a single university in Sri Lanka, which limits the generalizability. The convenience sampling technique and the sample size achieved were only 170 (less than the calculated sample size), and the unavoidable situations in the country during the data collection period were also limitations of this study.

Conclusions and Recommendations

The study showed that just over half of the participants demonstrated good first-aid knowledge, positive attitudes, and good practices towards first-aid. It means nearly half of the participants still lack adequate knowledge, have negative attitudes, and have poor practice related to first-aid for common injuries. It is vital to emphasize the relevant institutions to conduct awareness and education programmes by experts with adequate training sessions for this population to improve the knowledge and skills relevant to first aid for common injuries.

Conflict of interest

None declared

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