

CORRELATIONAL ANALYSIS: KNOWLEDGE, TRAINING, AND ATTITUDE TOWARDS FIRST AID INJURIES AMONG STUDENTS OF ASTATE SENIOR HIGH SCHOOL IN BANJARMASIN

Mira^{1*}, Izma Daud², Rinda Asmarani Nur Asih³

¹⁻³FKIK, Muhammadiyah University of Banjarmasin

Email Correspondence: mira28@umbjm.ac.id

Disubmit: 18 Januari 2024

Diterima: 01 Februari 2024

Diterbitkan: 13 Februari 2024

Doi: <https://do.org/10.33024/mahesa.v4i3.13925>

ABSTRACT

Childhood injury is a growing public health concern that requires special attention. Students frequently participate in activities without considering the influence on their own body, resulting in injuries that can have a negative impact on their health and daily activities. The goal of this study was to assess the association between students' knowledge, training, and attitude toward first aid for injuries in a state senior high school in Banjarmasin. A correlational study design and a cross-sectional approach were utilized in this investigation. Data was obtained from a total of 1280 respondents, and a sample of 114 respondents was analyzed using a basic random sampling technique with probability sampling, with Spearman's rho as the statistical test utilized. With a p value of 0.05, the results suggest that there is a relationship between the level of knowledge, training, and attitude and the level of accuracy in first aid. It can be concluded that understudies' knowledge, training, and state of mind influence the precision of giving first aid for injuries, so it is critical for understudies to have positive knowledge, preparation, and demeanor in giving first aid to avoid mistakes that can lead to crises.

Keywords: Attitude, First Aid for Injuries, Level of Knowledge, Training

BACKGROUND

Injuries among high school students are common as a result of a lack of awareness and prudence when participating in physical activities. Their propensity for taking part in a variety of physical activities makes them more prone to injury.. Injuries are frequently the root cause of health problems among adolescents, particularly in countries with low or middle incomes. (Jacob Sarfo, Paul Obeng, 2022). An injury is defined as damage to the body produced by impact or excessive movement, such

as bruising, cuts, muscle, joint, or bone dislocations, so that the muscles, bones, and joints cannot carry the load or function properly. Injuries can happen inadvertently; thus the injured person must be handled properly. Adolescents who participate in physical education activities at school, as well as those who frequently skip school, become victims of bullying, or engage in physical conflicts, have a higher risk of catastrophic injury. (Tang et al., 2019).

Children's injuries are a

prevalent health issue that requires specific attention because they might result in lasting impairments. Injuries considerably contribute to the worldwide burden of death and morbidity in children and adolescents. Adolescent injury has received attention since it is seen as a major cause of disability and death in teenagers in low- and middle-income nations. According to the Global Burden of Diseases and Injuries, three types of injuries are among the top ten causes of disability-adjusted life years (DALYs) for people aged 10 to 24 years (Aboagye et al., 2022). Injury prevention in school children can be accomplished by expanding their knowledge, creating a safe learning environment, predicting injury risk factors, and being aware of the appropriate resources and treatment for injuries.

Children's injuries are becoming more common, necessitating immediate action. According to WHO data (WHO, 2022), the Sub-Saharan African area (SSA) has a greater proportion of mortality among teenagers aged 10 to 19 years. According to the same research, the death rate for ages 10-14 ranges from 0.2 to 14.8 deaths per 1,000 10-year-old adolescents, and for ages 15-19, the death rate ranges from 0.8 to 24.9 deaths per 1,000 15-year-old adolescents, with injuries accounting for the vast majority of these deaths. Every year, injuries cause around 950,000 deaths in children under the age of 18, with nearly 90% of these deaths being unintentional. With 230,000 deaths per year, children aged 5-14 years are the age group with the highest number of deaths. Tens of millions of youngsters require care each year owing to non-fatal accidents, and many of them have lifelong disabilities (Deisy Sri Hardini, 2022.) In Indonesia, the prevalence of

injuries interfering with everyday activities is 9.2%, with abrasions, bruises, and contusions being the most common types of injuries (Sari Armenia Diah and Purnamasari, 2021). Injuries in children can have a negative impact on their physical and emotional health, but they can be avoided by improving students' knowledge and attitudes about first aid for injuries. A preliminary study at a state senior high school in Banjarmasin discovered that students had very little knowledge of first aid for accidents. According to the findings of the interviews, more than 12 pupils were injured each week. However, just three out of ten pupils had ever received first aid instruction, and only four out of ten students had ever received first aid items. Based on the problem description above, the researcher is interested in investigating the relationship between high school students' knowledge, attitudes, and training in first aid for injuries, with the goal of improving students' understanding of how to provide effective first aid for injuries and promoting a proactive and caring attitude toward students who experience injuries at school. This is critical since injuries in school pupils might result in temporary or permanent disability and reduce the likelihood of emergencies occurring.

LITERATURE REVIEW

Knowledge is the result of "knowing" and occurs after someone senses a particular object. Sensing of objects occurs through the five human senses, namely: the senses of sight, hearing, smell, taste and touch. Most human knowledge is obtained through the eyes and ears (Supriyatno, 2022); (Rahmalia, 2023).

Knowledge level

The knowledge covered in the cognitive domain has six levels (Notoadmojo, 2012).

1. Know

It is defined as remembering material that has been studied previously. Included in this level of knowledge is remembering something specific and all the material that has been studied or the stimulation that has been received. Verbs to measure that people know about what has been studied include being able to mention, explain, define, state. (Retnaningsih, 2016); (Suandewi, 2021).

2. Understand

Understanding is defined as the ability to explain correctly about known objects and be able to interpret the material correctly. People who understand certain objects must be able to explain, mention, conclude, predict, and so on regarding the object being studied (Chariswan, 2020).

3. Application

Application is defined as the ability to use material that has been studied in real situations or conditions. Application here can be interpreted as the application or use of laws, method formulas, principles in other contexts or situations (Widianingsih, 2021).

4. Analysis

Analysis is the ability to describe certain material or objects into components but still within one organizational structure and still related to each other. Analysis is the ability to describe certain materials or objects into components but still within one organizational structure and still related to each other. Analysis is the ability to describe certain material or objects into components but still

within one organizational structure and still related to each other. This ability can be seen from the use of verbs such as being able to describe (make a chart), differentiate, separate, group, and so on (Pasaribu, 2019).

5. Synthesis

Synthesis refers to the ability to place or connect parts in a new overall form. In other words, synthesis is the ability to compose new formulations from existing formulations. For example, you can organize, you can plan, you can summarize and so on (Salombre, 2020).

6. Evaluation

This evaluation is related to the ability to justify or assess a material or object. These assessments are based on specified criteria or use existing criteria. For example, you can compare, interpret and so on (Mulat, 2016).

First aid

Accidents are an immediate first aid effort for accidents (P3K). First aid in an accident cannot replace medical personnel, it only provides initial aid to sick or injured victims. First aid is a temporary aid and treatment effort for accident victims before receiving more perfect help from a doctor or paramedic. This means that the help is not perfect treatment or treatment, but is only temporary help provided by first aid officers (medical officers or lay people) who saw it for the first time (Anggraini, 2018).

Principles of First Aid in Accidents According to Mursid (2017) The principles of First Aid in carrying out tasks are as follows: The helper protects himself first before helping. Be calm and never panic. Be thorough, responsive and make agile and precise movements without

causing additional damage. Keep the victim safe so that he is free from danger. Mark the scene so others know there was an accident. Try to contact an ambulance, a medical officer or doctor, hospital or local authorities or police/security. Actions to help victims in the most appropriate order. Pay attention to the condition of the victim, whether they are fainting, there is bleeding, wounds or even broken bones, they are in a lot of pain, etc. (Jamil. 2021).

RESEARCH METHODOLOGY

A quantitative research strategy was used in the study, namely a correlation technique with a cross-sectional design. The purpose of this study was to collect information on the correlation between variables such as students' knowledge, attitudes, and training in first aid for injuries at a state senior high school in Banjarmasin. This study's target group included all students at State Senior High School Banjarmasin, totaling 1280 respondents. A total of 114 people were chosen using probability sampling techniques, specifically simple random sampling. A questionnaire with 15 questions and Yes or No answer options was used as the measuring tool to assess the level of understanding of first aid. Another 15-question questionnaire was used to assess students' attitudes about first aid. This questionnaire used the Likert scale, with four response options: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). The measuring tool for training evaluation was a questionnaire with a single question. The instruments' validity and reliability were tested

on 112 students at a state senior high school in Banjarmasin.

The results of the researcher's validity test for the 15-question knowledge questionnaire, with the greatest r-value being 0.547 and the lowest being 0.404. The greatest r-value for the 15-question attitude assessment was 0.891, and the lowest was 0.428. The greatest r-value for the 15-question first aid accuracy questionnaire was 0.653, and the lowest was 0.462.

Because the r-value was greater than the r-table for df 112 (0.1548 obtained from $N-2=df$), all surveys were judged genuine. The researcher's reliability test findings for the knowledge questionnaire were 0.766 and 0.825 for the attitude and first aid accuracy questionnaires, suggesting that the research instruments were reliable because the r-value was more than 0.60. After completing direct study administration by giving questionnaires to respondents who had previously been given an explanation of the disseminated questionnaires, the respondents were requested to sign a permission form as evidence of their agreement to participate. The completed questionnaires were double-checked to confirm that all questions had been completely addressed by the respondents. After collecting all of the data, the researcher began data processing. The non-parametric Spearman Rank correlation test with a significance threshold of 0.05 was utilized in this study. A computer was used to do univariate and bivariate analysis. This research has obtained ethical approval from the research ethics commission of Muhammadiyah University of Banjarmasin with No. 131/UMB/KE/IV/2022.

RESEARCH RESULT

This survey included 114 eligible students, with the biggest number of respondents coming from the 11th grade, with 53 respondents and a percentage of 46.5%. In total, 46 (40.4%) of the respondents were male, while 68 (59.6%) were female. A total of 74 (64.9%) respondents had good knowledge, and 105 (92.1%) had a positive attitude. A total of 92 respondents (80%) had no training in first aid for injuries. Meanwhile, 88 respondents (77.2%) rated the accuracy of first aid for injuries as good.

The findings of an analysis of students' knowledge of the correctness of first aid for injuries a state senior high school revealed that 71 respondents, or 62.3%, were classified as having good knowledge and accuracy of first aid for injuries. There was a strong association between the level of knowledge and the precision of first aid for injuries in Banjarmasin State High School students, according to the Spearman Rank statistical test. The association between the two variables showed a strong positive correlation with a Spearman Rank value of 0.653, indicating that the more information someone has, the greater their accuracy of first aid for injuries.

Meanwhile, a review of students' opinions regarding the accuracy of first aid for injuries

revealed that 88 respondents (77.2%) had a positive attitude and good accuracy of first aid for injuries. According to the Spearman Rank statistical test, there was a significant association between attitudes and the accuracy of first aid for injuries among students of a state senior high school in Banjarmasin. The association between the two variables revealed a relatively strong positive correlation with a correlation coefficient value of 0.582, showing that the more positive someone's attitude, the greater their accuracy of first aid for injuries.

In terms of examining student training connected to the accuracy of first aid for injuries, the results revealed that 80 respondents, or 70.17%, had never received training and had a low accuracy of first aid for injuries. According to the Spearman Rank statistical test, there was a significant correlation between training and the accuracy of first aid for injuries among students of a state senior high school in Banjarmasin. The association between the two variables revealed a strong positive correlation with a Spearman Rank value of 0.574, showing that the less frequently someone received training, the worse their accuracy of first aid for injuries.

DISCUSSION

According to the findings of a questionnaire-based research of Banjarmasin State High School students, 74 respondents (64.9%) had an excellent level of knowledge. This is similar with the conclusions of the research (Hajbaghery M A, 2019), which said that a good level of knowledge comprises the ability to know, understand, apply, analyze, synthesize, and evaluate

information. (Farisi Al, et al., 2021) describes knowledge as information received via interaction with the environment, particularly in the educational setting.

In accordance with the same study, the majority of students have a good attitude toward first aid for accidents, with 105 respondents (92.1%) demonstrating such an attitude. Previously, (Hardyanto J,

2020) discovered that a person's attitude about an object might influence their actions and behavior toward that object. As a result, the more favorable students' attitudes about first aid for accidents in the school setting, the more effective the injury handling. A person's attitude can be deduced from their conduct and compliance, which are influenced by their knowledge, beliefs, and attitudes. Due to non-supportive and accommodating environmental factors, the majority of respondents have never received training. This makes it difficult for students to obtain training, and a lack of engagement in training is another reason that halts students from having appropriate abilities, preventing them from taking action on an object such as first aid for injuries. According to research (Nirmalasari N, et al., 2020),

successful training must be balanced with theory and practice learning to develop a person's knowledge and abilities. Good training must be based on good information or appropriate training, and skill growth begins with unmastered skills. Adequate facilities and infrastructure are also required for effective training in areas such as first aid for injuries that necessitate the use of first aid equipment such as gloves, wound medicine, wound care sets, and others. A supportive setting is also necessary for good training. Training with real things or simulations will develop skills in a specific action, such as first aid for injuries. As a result, it is critical to create a favorable environment and enough facilities for effective training and to develop students' first aid skills. According to the findings of the questionnaire-based study, the level of accuracy of first aid for injuries showed by the students was the highest, with 88 respondents, or

77.2%. This finding is consistent with previous research (Nastiti E M, et al., 2020), which found that the accuracy of first aid is critical in treating someone who has an injury or illness, particularly in the school setting. Students' understanding of first aid is critical for ensuring accuracy in the initial treatment of injuries.

Based on the researcher's assumptions, it is possible to conclude that knowledge is an action performed by an individual or group to acquire knowledge that can be developed, particularly in terms of first aid for accidents in the school setting. The results of a questionnaire-based study at a state senior high school in Banjarmasin revealed that students' understanding of first aid for injuries is enough. As a result, the higher the students' knowledge of first aid for injuries, the more effectively injuries are handled.

CONCLUSIONS

The level of knowledge of the students about the correct use of first aid for injuries is generally in the category of good knowledge with accurate first aid for injuries at 71 respondents (62.3%).² The attitude of students towards the correctness of first aid for injuries is largely positive, with 88 respondents (77.2%) reporting accurate first aid for injuries.³ The training provided to students for the accuracy of first aid for injuries largely falls into the category of not trained with low accuracy of first aid for injuries, with 80 respondents (70.17%) falling into this category.

1. The accuracy of first aid for injuries among the students is largely in the area of accurate first aid, with 88 responders and a proportion of 77.2%.

REFERENCES

- Aboagye, R.G. Et Al. (2022) 'Prevalence And Psychosocial Factors Associated With Serious Injuries Among In-School Adolescents In Eight Sub-Saharan African Countries', *Bmc Public Health*, 22(1), Pp. 1-8. Available At: <https://doi.org/10.1186/s12889-022-13198-6>.
- Anggraini, N. A., Mufidah, A., Putro, D. S., Permatasari, I. S., Putra, I. N. A., Hidayat, M. A., ... & Suryanto, A. (2018). Pendidikan Kesehatan Pertolongan Pertama Pada Kecelakaan Pada Masyarakat Di Kelurahan Dandangan. *Journal Of Community Engagement In Health*, 1(2), 21-24.
- Chariswan, A. (2020). *Gambaran Pengetahuan Tentang Jajanan Sehat Pada Anak Kelas 5 Di Sdn 01 Kemantren Kecamatan Jabung* (Doctoral Dissertation, Poltekkes Rs Dr. Soepraoen).
- Deisy Sri Hardini, S.R.B. (2022) 'Pengaruh Model Edukasi Berbasis Tik "Aplikasi Teradam" Terhadap Pengetahuan Orang Tua Dalam Penatalaksanaan Kegawatdaruratan Anak', 6(2), Pp. 1610-1617.
- Farisi Al, Et Al. (2021) 'Pelatihan Kepemimpinan Islami Bagi Organisasi Siswa Smk Bina Mandiri Multimedia Cileungsi', *Jurnal Pengabdian Masyarakat Madani*, E-Issn 2798-5687 [Preprint].
- Hajbaghery M A, Et Al (2019) 'Iranian Teachers' Knowledge About First Aid In The School Environment', *Chinese Journal Of Traumatology* 22 [Preprint].
- Hardyanto J, Et Al. (2020) 'Gambaran Tingkat Pengetahuan Tentang Penanganan Pertama Cedera Olahraga Pada Unit Kegiatan Mahasiswa (Ukm) Olahraga Di Universitas Jenderal Achmad Yani Yogyakarta', *Jurnal Kesehatan Mesencephalon*, Vol.6 No.1, April 2020, Hlm 48-54 [Preprint].
- Jacob Sarfo, Paul Obeng, M.A. Et Al. (2022) 'Prevalence And Risk Factors Associated With Serious Injuries Among In-School Adolescents In Samoa: A Population Based Cross-Sectional Study', *Research Square*, Pp. 1-16. Available At: <https://doi.org/10.21203/rs.3.rs-2167345/v1>.
- Jamil, M., Laksono, B. B., Anggraini, S. N., Bagus K, S., & Nurwinda, S. (2021). Program Pelatihan Pertolongan Pertama Pada Kejadian Cidera Bagi Mahasiswa Kesehatan.
- Mulat, T. M. (2016). Tingkat Pengetahuan Dan Sikap Masyarakat Terhadap Penyakit Gastritis Di Wilayah Kerja Puskesmas Barombong Kota Makassar. *Jurnal Ilmiah Kesehatan Sandi Husada*, 3(1), 30-37.
- Nastiti E M, Et Al. (2020) 'Hubungan Tingkat Pengetahuan Pertolongan Pertama Pada Layperson Usia Anak Sekolah Terhadap Efikasi Diri Dalam Penanganan Kasus Cedera :A Systematic Review', *Jurnal Kesehatan Dr. Soebandi* Vol. 8, No. 2 [Preprint].
- Nirmalasari N, Et Al. (2020) 'Study Demographic: The History Of Injury And Handling Sports Injury At Sport Centre', *Journal Of Health Studies* [Preprint].
- Pasaribu, S. E. (2019). Pengaruh Motivasi, Kompetensi, Dan Lingkungan Kerja Terhadap Kinerja. *Maneggio: Jurnal*

