KNOWLEDGE OF FIRST AID IN ACCIDENTS MEMBERS OF THE INDONESIAN RED CROSS VOLUNTARY BLITAR CITY

Ari Wibowo¹, Mujito², Sri Mugianti³

¹,²,³ Department of nursing, Malang Health Polytechnic, Blitar Nursing Study Program, Indonesia, arie.borinks@gmail.com

ABSTRACT

Proper first aid from the Indonesian Red Cross Voluntery Corps through the 112 call center can help reduce the risk of death from traffic accidents. This study aims to determine the knowledge of members of Indonesian Red Cross Voluntery Blitar City about first aid in accidents. The method used is descriptive quantitative with a sample of 33 respondents from Members of Indonesian Red Cross Voluntery Blitar City selected by purposive sampling. This research used a questionnaire as a research instrument and was conducted in March 2023 at the Indonesian Red Cross Voluntery Blitar City headquarters. The results showed that 42% of respondents had good knowledge. Based on the analysis of the answers on the definition indicator, the figure is 64% less, while the indicators for stages show the figure is 66% lacking, which is below the average of all indicators. Based on the results of the analysis, members of Indonesian Red Cross Voluntery Blitar City can conduct programmed training at first aid stages to increase knowledge about accident trauma cases.

Keywords: accident, knowledge, first aid

Background

First aid is the provision of immediate assistance to sick or injured sufferers who require basic medical assistance. Basic medical care referred to here is treatment based on medical science that ordinary people can have. This basic medical provision is carried out by the first responders who arrive at the scene who have the skills and are trained in medical treatment (1).

First aid is the initial treatment of an illness or accident. This can be done by people who are not experts in dealing with illnesses or injuries, until they wait for treatment at the hospital. Accidents can happen anywhere and at any time. This event can be a small incident or a disaster involving a large number of sufferers. The first people to provide help are those at the scene. Those who attempt to provide this assistance have various levels of knowledge ranging from those who have no knowledge of first aid and are untrained to those who are experienced and trained. There is time between assistance at the accident site until the victim can receive help from medical personnel at a health facility, so this grace period must be carried out by the first person closest to the victim who has first aid skills. The assistance provided must be an integral part of helping victims from the field to further treatment at the hospital (2).

The principles of First Aid are actions that are taken immediately, maintain the victim's life, reduce suffering, prevent wound contamination and further suffering and refer the victim to the nearest health service. The principles of First Aid are considered necessary for all levels of society, because with first aid we can help people or victims until professional medical care (2).

Traffic accidents are one of the biggest causes of death in the world. Globally, according
According to WHO (2010), around 1.3 million people die every year due to traffic accidents and this number is likely to continue to increase to 1.9 million in 2020. WHO data on these accidents, 90% occur in developing countries, including Indonesia (3). In Indonesia, the proportion of disabilities and death rates due to accidents is still quite high, most (70%) of traffic accident victims are motorbike riders who are late in getting help and head injuries are the first of all types of injuries experienced by accident victims. Meanwhile, accident data in Blitar City in the last six months, there were 22 cases of traffic accidents (4).

Members of Indonesian Red Cross Blitar City who are active and are members of call center 112 handling emergency cases in Blitar City, are expected to be ready and responsive in handling accident victims. Therefore, Members of Indonesian Red Cross skills require knowledge in providing first aid to road accident victims. Based on the data obtained, only 50% members of Indonesian Red Cross in Blitar City have ever provided first aid to accident victims. All members of Indonesian Red Cross Blitar City have taken part in the Indonesian Red Cross Blitar City Basic Education and Training which is organized by Indonesian Red Cross Blitar City every year. Based on a preliminary study of 20 members of Indonesian Red Cross Blitar City, it was found that 8 members were able to provide appropriate first aid. 2 of the members have a background in first aid training experience at Indonesian Red Cross East Java Province and 6 more members are taking health-based education. Meanwhile, 12 members still do not know first aid for accidents and are new members to Indonesian Red Cross. The role of Indonesian Red Cross volunteers is important in helping accident victims.

Therefore, it is necessary to know the extent knowledge members of Indonesian Red Cross in providing first aid for accidents, so that appropriate intervention can be taken if there is a need for first aid training in accidents for members of Indonesian Red Cross. Based on the background above, the researcher is interested in conducting research with the title "Knowledge of First Aid in Accidents for Indonesian Red Cross Members in Blitar City".

Methods

The design used in this research is exploratory descriptive with a quantitative approach. This research sample was taken from the entire population, namely members of KSR PMI Blitar City, totaling 33 people.

This research instrument is in the form of a questionnaire containing 25 questions. The scoring system for questions where answering "correct" is given a score of 1, if answering "wrong" is given a score of 0. Analyze the data with the percentage of each correct answer using the formula P= f/n x 100%.

Results

Distribution of respondent characteristics

Table 1. Distribution of respondent characteristics.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Total</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-20 years old</td>
<td>16</td>
<td>49%</td>
</tr>
<tr>
<td>21-25 years old</td>
<td>15</td>
<td>45%</td>
</tr>
<tr>
<td>26-30 years old</td>
<td>2</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>16</td>
<td>49%</td>
</tr>
<tr>
<td>Female</td>
<td>17</td>
<td>51%</td>
</tr>
</tbody>
</table>
Based on Table 1, it is almost half of the respondents were aged 16 – 20 years (16 people), most of the respondents were female (17 people), most of the respondents had a high school education (27 people) and 88% were students. The 33 respondents, 23 (70%) of them had performed first aid in case of illness or accident, while 31 (94%) had never taken first aid training.

Knowledge data about first aid members of the Indonesian Red Cross in the city of Blitar

Level of knowledge of first aid in accidents for members of the Indonesian Red Cross in Blitar city

Table 2 Level of knowledge of first aid in accidents

<table>
<thead>
<tr>
<th>Level of Knowledge</th>
<th>Total</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Good</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Good</td>
<td>14</td>
<td>42%</td>
</tr>
<tr>
<td>Enough</td>
<td>7</td>
<td>21%</td>
</tr>
<tr>
<td>Not Enough</td>
<td>8</td>
<td>24%</td>
</tr>
<tr>
<td>Very Little</td>
<td>3</td>
<td>9%</td>
</tr>
</tbody>
</table>

Based on table 2, it is known that the knowledge of 33 respondents is divided into five categories, namely very good (1 person or 3%), good (14 people or 42%), sufficient (7 people or 21%), poor (8 people or 24%), and very less (3 people or 9%).

Respondents' knowledge based on question items about first aid

Table 3 Respondents' knowledge based on question items about first aid

<table>
<thead>
<tr>
<th>Question Items about First Aid</th>
<th>Total</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>21</td>
<td>64%</td>
</tr>
<tr>
<td>Objective of first aid</td>
<td>30</td>
<td>92%</td>
</tr>
<tr>
<td>Principles of first aid</td>
<td>25</td>
<td>77%</td>
</tr>
<tr>
<td>First aid stages</td>
<td>21</td>
<td>66%</td>
</tr>
</tbody>
</table>
Discussion

Based on the research results, knowledge was obtained from 33 members of Indonesian Red Cross Blitar City who answered the questionnaire and received predicate results according to the level of mastery, namely 3% very good, 42% good, 21% sufficient, 24% poor, and 9% very poor in knowledge about first aid. For accident cases, first aid is action or treatment given directly to people injured due to an accident or other emergency condition with the aim of saving or maintaining life until medical assistance from professional personnel arrives.

According to research by (5), knowledge arises after someone observes certain objects, and has an important role in forming open behavior. Knowledge is needed as a psychological boost in growing self-confidence as well as encouraging attitudes and behavior every day so that it can be seen that knowledge is a stimulation of a person's actions. Knowledge is not the only factor that influences a person's behavior, but knowledge is also influenced by supporting factors or external factors that can directly influence behavior change such as the facilities they have, other facilities they have or the tools they need as well as positive support from people, others to change behavior (6). To be able to provide appropriate first aid to people who have accidents, Members of Indonesian Red Cross must understand and understand the condition of illness/injury and must have knowledge in carrying out appropriate first aid, so that knowledge becomes a factor that can influence first aid actions in dealing with injuries (7).

According to researchers, members of Indonesian Red Cross knowledge of first aid in accidents is still below 50% in the good category. Factors that influence the lack of knowledge of members of Indonesian Red Cross include that the majority of members are students who have academic duties other than members of Indonesian Red Cross activities. Many accident victims who experienced broken bones, fainted, sprained etc. were given the same treatment and even made mistakes in providing help. This condition is of course very dangerous if it results in worsening the sufferer's condition, for this reason the public should have knowledge about first aid in accidents, and the importance of first aid in accidents is not accompanied by sufficient knowledge in its application (8).

Based on the results of research on knowledge of first aid in accidents in mastery of each knowledge indicator, it was found that the category was 92% very good for assessing first aid objectives, 77% sufficient for first aid principles, 64% insufficient for the definition of first aid knowledge, 66% insufficient for first aid stages, and 70% less for indicators of accident trauma cases. There are three indicators for assessing knowledge in the poor category which influence knowledge.

The definition of first aid has an effect on someone remembering knowledge, assessment indicators at the stages of first aid can have an effect on remembering knowledge, and assessment indicators for accident trauma cases have an effect on someone applying first aid knowledge. Knowledge about first aid in accidents has an important role in the implementation of behavior, where first aid is a basic medical care action that can be carried out by lay people. Emphasized that in providing first aid, a person must understand the definition, objectives, principles and stages of first aid (1). States that internal factors such as education,
employment, and age, as well as external factors such as the environment and sources of information influence a person's knowledge (9). Life experience also plays a role in influencing a person's abilities (10).

According to the researchers, judging from the parameter results, the category obtained was lacking in indicators of knowledge of first aid, stages of first aid and accident trauma cases, knowledge can be influenced by internal and external factors. Judging from internal factors, the last education of 27 people (82%) was high school or equivalent. The results of research show that the level of knowledge is influenced by education, for a higher level of education the level of knowledge is also better (11). External factors based on training: 94% (31 people), the majority of whom have never attended first aid training, the training and experience they have attended are also important factors in influencing knowledge. Previous research has proven the relationship between training and the quality of documentation and patient safety programs (12). Research result shows that training has an influence on knowledge. Researchers also found that there are main factors that have a positive impact on increasing knowledge, such as age, education, employment, experience, and valid sources of information (13). Researchers believe that members of Indonesian Red Cross Blitar City can carry out programmed training on first aid to increase knowledge of first aid in accidents.

**Conclusion and Recommendations**

Based on research conducted, the knowledge Indonesian Red Cross Blitar City members shows that their knowledge of first aid for accidents is in the sufficient category. Identification of a description of the knowledge Indonesian Red Cross Blitar City members regarding first aid in accidents obtained a sufficient predicate, with the criteria that 33 KSR Indonesian Red Cross Blitar City members received predicate results according to the level of mastery of first aid knowledge, namely 3% very good, 42% good, 21% sufficient, 24 % less, and 9% very less. Therefore, it is necessary to improve the implementation of first aid training, especially for members.

**Acknowledgment**

We would like to thank the director of, Indonesian Red Cross Blitar City who has provided the opportunity to carry out research.

**References**

1. PMI DKI Jakarta. Humanity. PMI DKI Jakarta [Internet]. 2018; Available from: https://pmidkijakarta.or.id/page/majalah-digital
4. Diskominfotik Kota Blitar. BPS korban Lakalantas. Pemerintah Kota Blitar [Internet]. 2022; Available from: https://diskominfotik.blitarkota.go.id/tag/statistik
5. Romayanti T. Pengaruh Pemberian Pendidikan Kesehatan Pertolongan Pertama Pada

1. PMI DKI Jakarta. Humanity. PMI DKI Jakarta [Internet]. 2018; Available from: https://pmidkijakarta.or.id/page/majalah-digital
4. Diskominfotik Kota Blitar. BPS korban Lakalantas. Pemerintah Kota Blitar [Internet]. 2022; Available from: https://diskominfotik.blitarkota.go.id/tag/statistik
9. Hendrawan A. Gambaran Tingkat Pengetahuan Tenaga Kerja PT ’X’ Tentang Undang-Undang dan Peraturan Kesehatan dan Keselamatan Kerja. J Delima Harapan [Internet].

