Assessment of Knowledge, Awareness, and Practices of First Aid Skills among the Society

Keywords: first aid skills, knowledge, participants, training, emergency

ABSTRACT

Background: First aid (FA) is the immediate treatment given to the victim (patient) of an accident or sudden illness, promptly and correctly before medical help is available.1 Objective: This study aims to assess the level of knowledge of the general public regarding FA. Methodology: A cross-sectional study was performed on 20 randomly selected individuals. A questionnaire was used to assess their knowledge and attitude about first aid. Knowledge, attitude, and practice of first aid for general medical emergencies are assessed. The data are presented as frequencies and percentages. Results: Out of the 20 questionnaires distributed, the sample consisted of male (9) and female (11) respondents. Most participants (10) were between the ages of 20-30 and other participants were between 15-20 years (4) and 30-45 years (6). Overall it was observed that only 40% had complete knowledge regarding first aid measures in an emergency like burns, 20% of participants had complete knowledge regarding first aid measures in an emergency like a heart attack, 25% of participants had complete knowledge regarding first aid measures in case of animal bite, 35% of participants had complete knowledge regarding first aid measures in case of shock and 60% of participants do not know about the Cardio-Pulmonary Resuscitation. Conclusion: The level of knowledge about first aid among the participants was not good. The study also identified key areas that lack first aid knowledge. Therefore there is a need to introduce formal first aid training at various levels like school, colleges, offices, etc.
INTRODUCTION

Our modern society is increasingly prone to many factors that can bring people into dangerous situations. Accidents can happen equally at home or on the street. The first example that people think of when highlighting the benefits of first aid (FA) is road traffic accidents (RTA). FA emergency assistance to a person who is suddenly injured or ill until professional help arrives or until the person recovers. The sole purpose of the FA is to save lives, reduce the impact of injury, and prevent further injury.²

Every year more than 80,000 persons die in the traffic crashes annually in India; more than 1.2 million are seriously injured and about 300,000 get disabled permanently.³ In addition to the loss of life, the RTA incurs huge financial losses in the form of ongoing treatment and years of productive life. In some cases, if the patient does not receive immediate first aid, their condition can worsen, affecting their future health, quality of life, or even death.⁴

Significant time elapses before the ambulance arrives, but professional help can still be provided. The FA has shown a significant reduction in deaths when applied under different conditions. Properly managed FA is important to save the lives of accident victims; it is crucial to increase knowledge about the FA.

First aid knowledge is invaluable to the individual and society. This allows the person to assist injured people in an accident or emergency until help arrives. First aid skills can be applied at home, in the office or public places so that more first aid certified people in the community than the community can become safer.

IMPORTANCE OF FIRST AID TRAINING ⁶

**Increases safety:** The basis of first aid training is "prevention". It is always better to be safe than sorry. Knowledge of first aid promotes safety and well-being in people, motivating them to be more vigilant and safe in the environments in which they live. Awareness and desire to be risk-free will keep you safer and more secure; reduce the number of causes and accidents.

**Save Lives:** A person trained to give first aid can take immediate action to save lives in the event of any casualties in their vicinity. While it is natural for many of us to rush to support an injured person, a trained person is more trustworthy, confident, and self-controlled.
Relieve pain: Some wounds require a very simple solution, such as an ice pack or a quick massage no need to travel to the emergency room, at least not for a while. In such cases, it is more reliable to call a person trained in first aid courses. These can help reduce pain by doing simple procedures and at least temporarily reduce pain.

Sense of Security: Knowing that you can save your own life when needed or helping people you know or those injured in certain emergencies get more rest and more safety. A sense of security promotes a healthier and more reliable environment around you where you and the people around you feel more secure. The existence of such individuals assures others in the situation.

Prevents the situation from becoming worse: A trained person knows how to keep the situation from getting worse. They provide temporary treatment that will keep the victim's condition from deteriorating until professional help arrives.

First aid technology promotes a healthy, safe, and secure environment and instills confidence in people, their families, their peers, and colleagues. Basic first aid knowledge can help a lot in dealing with injury conditions. Not only is the medical help they provide, but the confidence they display also helps a lot in times of danger. Training to provide first aid is beneficial to oneself and the community.

Injuries are very common because of common catastrophes or other man-made circumstances. It is in this manner of most extreme significance to outfit the individuals with the abilities of First Aid directly from their school level, so they can deal with any circumstance requiring emergency treatment before the qualified medical assistance arrives at the point. Keeping these realities in view, this study has been planned to assess the awareness, knowledge and practices of first aid skills among the society with respect to emergency treatment and later impart them training. The objectives of this study are to assess the awareness, knowledge and practices of first aid skills for some general emergencies among the society, to find out their attitude about first aid and to provide appropriate education regarding first aid. This will be beneficial for prevention of many mortalities & morbidities in future.

METHODOLOGY

A study was carried out in a residential society in 2019 to assess the awareness, knowledge, and practices of the first aid. This study was a questionnaire-based survey. A self-developed
questionnaire consisting of closed-ended items were used. All participants who were willing to participate in the study were enrolled. A briefing was given about the nature of the study, and the procedure of completing the questionnaire was explained. The 20 participants were selected randomly.

The questionnaires consisted of four parts: (1) demographics, including age, gender, education level (2) knowledge of basic first aid information, including first aid kit, contents of first aid kit; (3) management of common first aid emergencies such as Heart attack, Burns, etc. (4) regarding previously attended the training. The results are based upon the data obtained from 20 participants. Data were analyzed using MS Excel 2007.

RESULTS

Out of the 20 distributed questionnaires, the sample consisted of male (9) and female (11) respondents. Most participants (10) were aged between 20 and 30 years, and other participants were between 15-20 years (4), and 30-45 years (6). [Table No.1] Only 20% participants had previously exposure to first aid training. [Table No. 2] [Figure No.1]

Table No. 1: Demographic Data of the respondents to their educational level

<table>
<thead>
<tr>
<th>Variables</th>
<th>Did not complete high school</th>
<th>High School</th>
<th>Bachelor’s degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male (9)</td>
<td>02</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td>Female(11)</td>
<td>01</td>
<td>03</td>
</tr>
<tr>
<td>Age Group</td>
<td>15-20</td>
<td>01</td>
<td>02</td>
</tr>
<tr>
<td></td>
<td>20-30</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>30-45</td>
<td>02</td>
<td>01</td>
</tr>
</tbody>
</table>

Table No. 2: Distribution of respondents to the training attended

<table>
<thead>
<tr>
<th>Particular</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Aid Training Attended</td>
<td>20%</td>
<td>80%</td>
</tr>
</tbody>
</table>
Knowledge about basic First Aid

The knowledge in the participants indicated that more than 3/4th of the participant (95%) had good knowledge of basic FA. [Table No. 3] [Figure No.2]

Table No. 3: Knowledge about basic First Aid

<table>
<thead>
<tr>
<th>Sr.No</th>
<th>Questions</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Knowledge regarding First aid and objectives of First aid, first aid kit.</td>
<td>95%</td>
</tr>
</tbody>
</table>
Knowledge about first aid measures in some emergency

It was observed that 40% of participants had complete knowledge regarding first aid measures in an emergency like burns and 55% had partial knowledge. 20% of participants had complete knowledge regarding first aid measures in an emergency like a heart attack and 25% had partial knowledge. For animal bite, 25% of participants had complete knowledge and 55% had partial knowledge. For shock, 35% of participants had complete knowledge and 60% of participants do not know Cardio-Pulmonary Resuscitation. [Table No. 4] [Figure No. 3]

Table No. 4: Knowledge about first aid measures in some emergency

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Emergency Situation</th>
<th>Complete knowledge</th>
<th>Partial knowledge</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Burns</td>
<td>40%</td>
<td>55%</td>
<td>05%</td>
</tr>
<tr>
<td>2</td>
<td>Heart Attack</td>
<td>20%</td>
<td>25%</td>
<td>55%</td>
</tr>
<tr>
<td>3</td>
<td>Animal Bite</td>
<td>25%</td>
<td>55%</td>
<td>20%</td>
</tr>
<tr>
<td>4</td>
<td>CPR</td>
<td>25%</td>
<td>15%</td>
<td>60%</td>
</tr>
<tr>
<td>5</td>
<td>Shock</td>
<td>35%</td>
<td>40%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Figure No. 3: Knowledge about first aid measures in some emergency
Knowledge of the participants to their medical background

Participants having medical background significantly change the level of knowledge about first aid information in our sample. [Table No. 5]

Table No. 5: Knowledge about basic first aid to their medical background

<table>
<thead>
<tr>
<th>Background</th>
<th>Complete Knowledge</th>
<th>Partial Knowledge</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Persons</td>
<td>Percentage</td>
<td>No. of Persons</td>
</tr>
<tr>
<td>Medical (05)</td>
<td>03</td>
<td>60%</td>
<td>02</td>
</tr>
<tr>
<td>Non-Medical (15)</td>
<td>02</td>
<td>13%</td>
<td>10</td>
</tr>
</tbody>
</table>

DISCUSSION

FIRST AID AND EMERGENCIES

Most of the participants in our sample were adequately aware of FA actions in the event of burns and shock emergencies. However, knowledge about FA measurements such as CPR and FA measurements in heart attack cases is very limited.

Interestingly, our participants said that they were not ready to help when faced with a fatal situation. They stated that such a response was due to a lack of confidence and skill. Also, participants said that they have fear about the legal consequence if anything goes wrong when dealing with such situations.

METHODS OF ENHANCING THE KNOWLEDGE OF THE FA

People need to be made more aware of how to handle FA and emergencies. FA trained participants received a course in college or school. This highlights the importance of incorporating FA training into the education system. Moreover, it is clear that taking the course alone is not enough to apply the knowledge in real-life situations. Participants are encouraged to give the knowledge tests before and after the course to assess the benefit of the FA course. Follow-up courses are encouraged every 6-12 months to ensure that the population is well-informed and up-to-date with the latest FA activity.²

Having a valid Basic Life Support Certificate should be there for all health care providers in India. However, this course must also be given to non-medical individuals. Making the course
mandatory for high-risk populations is encouraged as the first step in establishing a community program that targets the entire population. The mandatory course significantly improves participants' knowledge and self-assessment skills.²

Also, television advertising can have an impact on FA viewers' perceptions and can be used as a tool to raise awareness and disseminate knowledge. Raising knowledge of FA in the population leads to knowledgeable individuals. This proves to be very important for the country to face any natural disasters.²

**IMPORTANT OF FA COURSES**

Only 20% of our samples received FA training in their lifetime. However, the staggering availability of these courses along with the expensive registration fees is some of the obstacles that people face when choosing FA training. Therefore, it is the role of the government to encourage public participation in such courses by providing affordable and widely available courses across the country.²

In our study, we found statistical significance between FA training intake and improved response to life-threatening emergencies. This exploration highlights the importance of taking FA training and making it mandatory for supervisors in high-risk environments such as schools, sports and industrial factories.²

**CONCLUSION**

The population does not have enough knowledge about FA in detail. A small percentage of people take FA courses, and those courses are taken by individuals voluntarily. A large gap of knowledge has been observed in individuals who are not trained in how to deal with emergencies, which proves the importance of making FA training mandatory. While knowledge of the FA’s training is important, it should not be overstated at the expense of the FA’s basics.

The level of knowledge about first aid among the participants was not good. The study also identified key areas that lack first aid knowledge. Therefore there is a need to introduce formal first aid training at various levels like school, colleges, offices, etc.

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REFERENCES

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