

A STUDY ON FIRST AID KNOWLEDGE AND AWARENESS AMONG THE GENERAL POPULATION IN BANGLADESH

Omer Fayshal Pavel*¹, S. M. Shahnawaz Rashid³, Nipa Rani Devi¹, Nandeeta Samad Sarah² and Abuzar Ibn Faruk¹

¹East West University, Department of Pharmacy.

²University of Dhaka, Institute of Nutrition and Food Science.

³University of Asia Pacific, Pharmacy Department.

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*Corresponding Author

Omer Fayshal Pavel

East West University,
Department of Pharmacy.

ABSTRACT

The study was to find the knowledge pattern and assessing the immediate response capacity regarding first aid. In this cross-sectional study during 4 months with total 397 of samples has the main objective to assess the updated knowledge and awareness of importance of first aid. The participants were targeted from College students graduate and post graduate students and PhD candidates. The ratio of the male female was almost equal in the study. This study addressed some issues those are very regular but identical and important as well. Like people are not so familiar with the process of chest compression and are not sure what should be done with the patient of car accident. At the end of the study, when asked, majority responded they don't have the essential knowledge on first aid and 77 percent of the respondent agreed that everyone should have minimum essential first aid knowledge. In this study it was found that the major problems in enriching the first aid are lack of awareness of general people, lack of source of information and the wrong concept of those only doctors should be the first aid responder.

KEYWORDS: First aid, Car accident, immediate response, 3Ps, Bangladesh.

INTRODUCTION

First aid refers to medical support usually provided immediately after the injury occurs and at the specific location where the injury occurred until professional help arrives. First aid often consists of a short-term treatment or protection from further deterioration of the situation. It is predicted that majority of the general people are not very well known about the technology.

First aid ranges from the cleaning minor cuts, scrapes, or scratches to bandages and dressings in the sudden devastating accidents. It doesn't mean only to make situation improved by giving immediate support rather a first aid respondent can use of non-prescription medicine to make a immediate support to the patient.^[9,4] It is believed that first aid responders mainly focus on 3 Ps, those mean preserve the life, prevent the deterioration and promoting the recovery.^[1,8] These three steps are must to make a proper supporting response to the injured people.

Though first aid is highly required where Floods, storms, earthquakes, heat waves, industrial accidents or other natural disaster visits often, but it is not less in our regular life, it is highly required as fainting, burns, intoxication, drowning, road crashes, etc can reach us so often. And the place can be home, school or in the workplaces, where we pass our time most.^[6]

In the report of 'First aid for a safer future: updated global edition on September 2010', it was reported that globally 1.3 million people were killed in road accidents each year and as many as 50 million are injured.^[3,11] The situation could be improved if there were an immediate response to save the dying victims. To reach a ambulance or support team obviously take time but in this situation only a general person with sound or quite knowledge of First aid only can ameliorate the situation.

According to some studies, Bangladesh has the access of health care providers is very difficult, and in this situation immediate response by the official first aid or hospitals can take time, and the time can be enough to make a count of death.^[5] According to Bangladesh Road Transport Authority, from 2010 to 2016 in Bangladesh more than 19,000 accident recorded among those more than 14,000 were killed only in road accident.^[2]

In high-income countries' regular emergency services have response times ranging from six to eight minutes.^[7] Like in France, 90 per cent of cases of first aid responders reach in the spot in less than 13 minutes but the response time is longer in rural areas.^[5]

It is quite true that first aid can't replace the original and demanding medical response but the likelihood of an injured victim living or dying depends on the timeliness of these lifesaving steps that we call first aid.^[7]

Thus the objective of the study was to find the knowledge pattern among the general population of Bangladesh regarding the First aid and assessing the opinion whether first aid

should be emphasised highly or it should be the responsibility only for the medical team like doctors, nurses or other medical help providers.

METHOD AND MATERIALS

Study design

This cross-sectional study was designed as questionnaire-based study. There were 20 questions in the study where 14 were close end question and remaining were open end or opinion based.

Study setting: This cross-sectional descriptive study was carried in online survey method by taking the help of Google form. In different social media and mail were used to reach the population of desired criteria.

Study time and Population

Questionnaires were developed and completed in February to March 2017. 4 month was the duration of the data collection and analysis. In total 397 people responded whereas the questions were sent to 500 people. Among the 397, 355 responses selected for the study remaining were ignored for the aberrant response. The main desired population of the study were students. Only 1.2% of the population was from the college students where as 34.65% and 64.25% population were from post graduate or PhD candidates and under grad students respectively. In the study 51% of the population was male and 49% was female.

Ethical issues

Prior permission was taken from the respondents and provided the very basic information regarding the first aid. The purpose of the study was explained clearly to the participating population and confidentiality was ensured. Informed consent was obtained from population before filling the questionnaire.

Study procedure

The questionnaire was online for four month and the accessible web link was provided to the population through the social media or email address. There was no distributed paper to reduce the ignorance of population response.

Statistical analysis

The data were collected and analyzed using the Microsoft Excel 2010. Descriptive results were expressed as percentage and plotted with table, bar diagram and pie chart.

RESULT

In the response of the selected 355 respondents are shown as table, bar diagram and pie chart. Table 1 shows the very basic knowledge on first aid, asked to the population, which were asked as close end questions.

Table. 1: General Knowledge on First Aid. (All are in percent).

Asked on	Yes	No
The familiarity with First Aid	07	93
Ever been a first aid respondent	58	44
Can recognize the symbol of first aid	72	28
Know about the AED Training	18	82
Know about the basic 3 Ps of first aid	31	69
Agree with, First make yourself secure then help victim	57	43
Have the Ambulance or hospital contact	30	70

Table 2 is to represent the basic knowledge on some physiological and most used chemicals in first aid or emergency situations. Here all the questions are in close end form.

Table. 2: General Knowledge on Physiology and Chemical. (All are in percent).

Have the general knowledge on/ Accurate answer given by*	Yes	No
Normal Pulse rate*	10	90
Alcohol is a good sterilizer	78	22
How to use Inhaler in asthma	70	30
Normal range of blood pressure*	96	04
How to do chest compression	11	89
Immediate response in seizure	35	65
Use of glucose in hypoglycaemia	40	60

When the population were asked, whether they know what should be done when a respondent got a car accident victim. The response is shown by the pie chart 1.

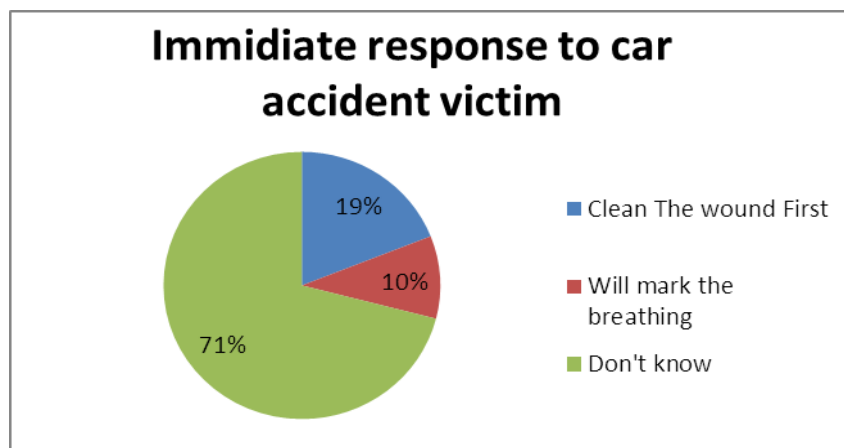


Figure. 1: Response to car accident victims.

Figure 2 shows the response of the respondent when they got a victim with accidental bleeding.

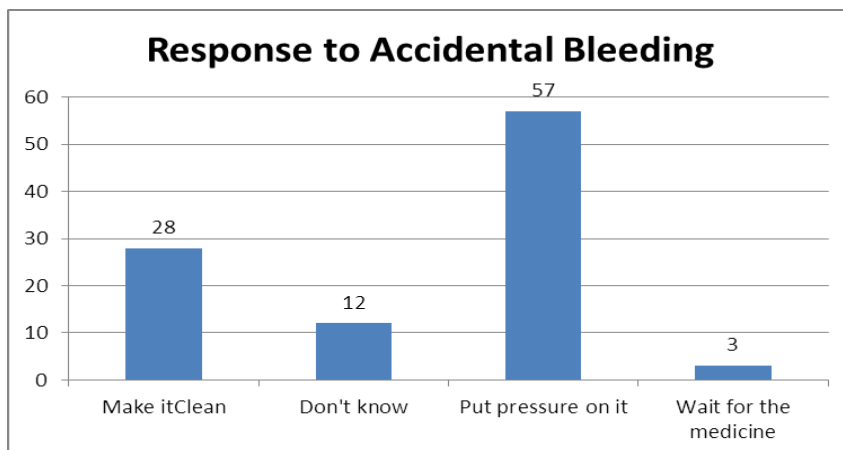


Figure. 2: Response to Accidental Bleeding.

Figure 3 shows the response against the question of fast response of nose bleeding.

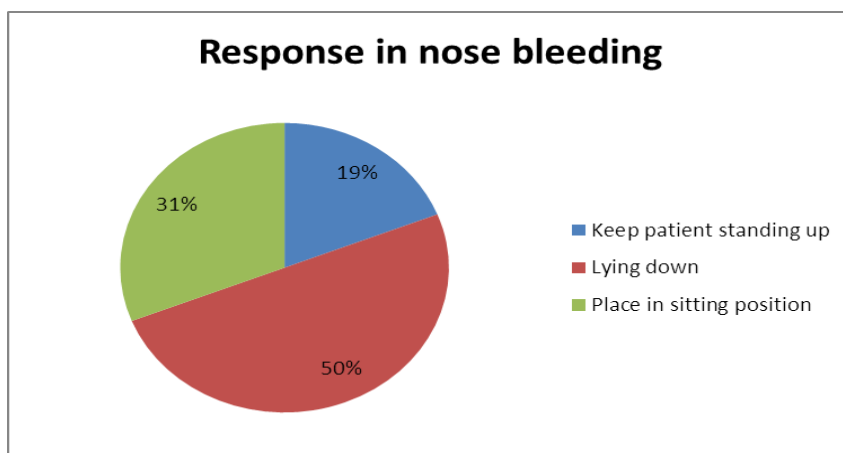


Figure. 3: Response in nose bleeding.

The major two questions were asked to the respondents and their responses are represented by the table below in percentage.

Table. 3. Response against the crucial statement of the study.

Statement	Yes	No	Can be/ No Idea
You have significant essential knowledge on First aid	22	70	8
Basic First aid technique should be known to all	77	13	10

Finally the respondents were asked about the main barrier of the knowing the first aid knowledge. And the response is like this.

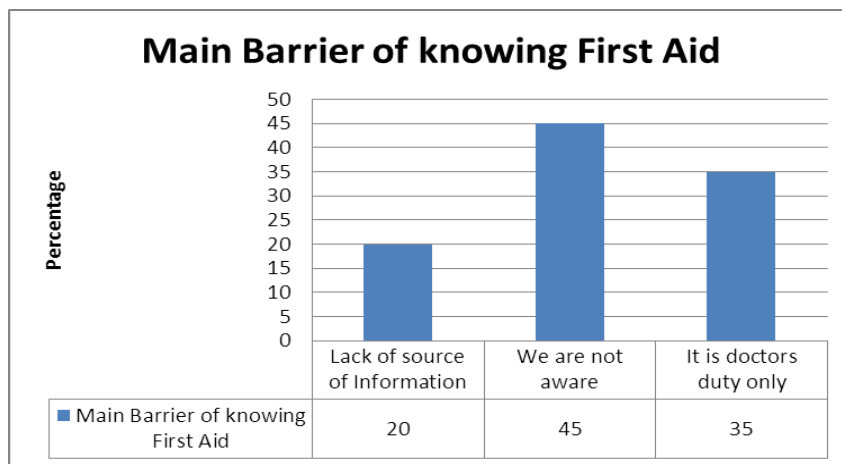


Figure. 4: Main barrier of knowing the first aid.

DISCUSSION

Throughout the study there are some issues those are highlighted in the discussion part of the paper. Although majority of the samples are well familiar with the term of first aid but the importance and updated knowledge is significantly poor among the respondents. This is very clear by the response of the emergency number and hospital contact question that most of the people don't have the contact of the nearer or closest hospital or emergency caregiver organization. To collect the phone number or contact of emergency support can take time in a very crucial period of accident. All the results of the table 1 highlight that knowledge which is not up to the mark. In the table 2, it was demonstrated the basic knowledge on very important health issues that should known to general people. Here it is seen that respondents have the knowledge in good percentage but in some crucial points like pulse rate, immediate response in hypoglycaemic condition and seizure the knowledge is not up to the mark. People are not familiar with the process of chest compression and the wrong compression can produce other severe complications as well. In the figure 1, people are not sure what should be done in with the patient of car accident. Then in figure 3, majority gave the perfect answer but in the case of nose bleeding which is most often incidence about 79 percent of the people know the wrong thing like lying down or standing up position. But in figure 2, people are well known what should be done in the case of immediate accidental bleeding. Now, come the major part of the study that is the table 3, where the respondents were asked what they think about their update on first aid knowledge. When it was asked whether they are well known about first aid, majority responded they don't have the essential knowledge on first aid and 77 percent of the respondent agreed that everyone should have essential first aid knowledge. In this study it was found that the major problems in enriching the first aid are

lack of awareness of general people, lack of source of information and the wrong concept of those only doctors should be the first aid responder.

LIMITATION

1. The study was online survey based in short time duration.
2. Though the respondents were requested to complete the survey independently but influence could not be entirely ruled out.
3. The different statistical values are not included here.

CONCLUSION

The study titled 'A Study on First Aid knowledge and responsibility awareness among the general population in Bangladesh' shows that although the samples have the minimum knowledge on first aid but they are not well aware regarding the first aid technique. In the discussions part of the paper it was highlighted the main barriers and problems in improving the first aid knowledge. But the positive side is this people are getting aware and willing to have the appropriate first aid knowledge as a result different first aid training programs and organizations are developing in Bangladesh.

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