

# A Descriptive Study to Assess the Awareness on First Aid of Fracture Among Selected Rural Public of Mysuru

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## Abstract

*First aid refers to the prompt care given to a person who has been suddenly ill or injured until expert help is available or until the individual has recovered. Providing initial care to an individual with a minor injury is classified as first aid, wherein the application of first aid techniques suffices for treating minor burns, wounds, and insect stings. One ailment that requires emergency care is fracture, which will help to prevent subsequent difficulties. If patients who need emergency care are given first aid right away, the outcome can be greatly improved.*

**Keywords:** First aid, public awareness, fracture, ill or injured, emergency care

## INTRODUCTION

First aid refers to the prompt care given to a person who has been suddenly ill or injured until expert help is available or until the individual has recovered. In either the home or on the street, accidents can occur [1]. First aid may be needed in a wide variety of scenarios, and many nations have laws, regulations, or other policies that specify the minimum degree of care that must be provided in specific instances [2]. For instance, treating minor burns, wounds, and insect stings often only requires first aid [3, 4].

Fracture is another ailment that requires immediate attention to prevent future consequences. A shattered bone has a fracture. It is a force-related breach of the bones' structural integrity that also results in soft tissue damage. It necessitates medical intervention.

Several research studies performed in various regions of India demonstrate widespread misunderstandings and ignorance regarding the rift amongst the people. Given that this condition is

generally preventable, delivering the appropriate information at the appropriate time is crucial to enacting behavioral change when the general public is most receptive [5]. When given to individuals in need of emergency treatment, immediate first aid has a significant impact on the result [6].

The World Health Organization (WHO) advises establishing first responder treatment through community participation in areas without a prehospital trauma care system [7]. As injuries and accidents have grown to be the main epidemic of noncommunicable diseases in India, first aid training is an essential community survival skill that is required of all people [8].

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It is estimated that 12,75,000 youngsters suffer severe injuries in India. There were 22,000 drowning-related deaths documented in total. In Maharashtra, accidental injuries account for at least 98 out of every 100,000 child deaths each year. Even a basic knowledge of first aid, according to many experts, would be of great value to people who find themselves in emergency situations [6].

The fear of making mistakes when providing first aid to severely ill or injured people is a significant obstacle and the main worry of laypeople. There is a chance for everyone to save lives. First aid training and practice are crucial for preserving life in severe medical situations [9].

The purpose of this study is to increase public knowledge of fracture first aid and to educate the public on how to treat fractured patients.

## OBJECTIVES

1. To determine the public's level of knowledge on fracture first aid.
2. To determine the relationship between the public's chosen personal factors and their level of awareness about fracture first aid.

## MATERIALS AND METHODS

- *Research approach and research design:* A cross-sectional descriptive survey design
- *Setting:* Rural community
- *Population:* Public attending an health exhibition
- *Sample and sampling technique:* 300 individuals were selected by non-probability convenience sampling.
- *Inclusion criteria:*
  - People in the age group of 18 to 40 years

### Description of the Tool

1. The sociodemographic data collection tool included questions about age, education, occupation, prior knowledge, and information source.
2. A structured questionnaire with 18 questions about first aid of fracture.

There were 14 items in it. The total score ranged from 0 to 18, and each item had 4 possible answers. Also, the tool was arbitrarily divided into three knowledge levels: poor knowledge (0–7) (less than 50%), average knowledge (51–75%), and good knowledge (12–14) (more than 75%).

After obtaining participants' informed agreement and confirming their anonymity and the study's goal, data collecting began. Between January 18 and January 23, 2023, participants were interviewed for the data [10, 11].

### Data Analysis

The subjects' data were entered into a Microsoft Excel master sheet and then evaluated with a social sciences statistical software (SPSS). The study employed descriptive (frequency and percentage) and inferential (chi-square test) statistics. A 5% level of significance was used for all statistical analysis.

## RESULTS

Data in Table 1 show that 53% (158) of the population are between the ages of 31 and 40 years. The majority, 57%, had a degree and 55% were married. The majority of persons, 67%, lacked prior understanding of first aid.

Table 2 reveals that 79% of respondents had inadequate understanding, while 14% had average knowledge.

**Table 1.** Frequency and percentage distribution of public according to selected personal variables ( $n = 300$ ).

S.N.	Personal variables	Frequency ( $f$ )	Percentage (%)
1.	<i>Age in years</i>		
	20–30	142	47
	31–40	158	53
2.	<i>Educational qualification</i>		
	SSLC and PUC	133	44
	Graduate	167	57
3.	<i>Occupation</i>		
	Agriculture	154	51
	Education	123	41
	Business	23	08
4.	<i>Marital status</i>		
	Married	135	45
	Unmarried	165	55
5.	<i>Previous exposure to knowledge regarding first aid of fracture (if yes mention the source)</i>		
	Yes:	98	33
	Media (TV, newspaper, Radio etc.)	33	
	Family and friends	15	
	Health care team	50	
	No	202	67

PUC, pre-university certificate; SSLC, secondary school leaving certificate.

**Table 2.** Frequency and percentage distribution of knowledge scores of public regarding first aid of fracture ( $n = 300$ ).

Knowledge scores	Frequency ( $f$ )	Percentage (%)
Poor knowledge	238	79
Average knowledge	41	14
Good knowledge	21	07

**Table 3.** Mean, median, standard deviation and range of knowledge scores of public regarding first aid of fracture ( $n = 300$ ).

Variables	Mean	Median	Range	SD
Knowledge scores	7.13	8	5–12	$\pm 3.18$

Data from Table 3 reveals that the knowledge score ranged from 5 to 12, with a mean of 7.13 and an SDD  $\pm 3.18$ . Also, at a 0.05 level of significance, the amount of knowledge is significantly correlated with several personal variables and prior exposure to first aid.

## DISCUSSION

The study was carried out to evaluate public understanding about fracture first aid. The study's findings showed that most women—79% (238)—had poor knowledge, followed by 14% (41) average knowledge and 21% (21) good knowledge. Average knowledge was 7.13, or 65%.

The conclusions are reinforced by some additional research that was done to evaluate first aid knowledge and usage among self-help groups in particular districts of Mangalore [9]. The findings indicated that most samples (62%) had strong knowledge and 38% had average understanding regarding first aid procedures. The mean percentage score of the samples was highest in the area of poisoning (70%) and lowest in the area of bleeding (28.8%) among the seven categories of the knowledge evaluation on first aid methods.

A recent investigation revealed that the majority of patients, specifically 301 individuals (accounting for 75.25% of the total), recognized immobilization as the primary first aid measure for fractures. This was closely followed by applying pressure to the wound using a sterile bandage, clean cloth, or clothing, which was acknowledged by 289 patients (equivalent to 72.25%). Additionally, 205 patients (51.25%) acknowledged the importance of applying a splint both above and below the fracture sites, while 190 patients (47.5%) recognized the significance of stopping any bleeding. Furthermore, 104 patients (26%) were aware of the importance of keeping the injured area elevated above the heart to reduce swelling, while 81 patients (20.25%) understood the need to avoid attempting to realign fractures or force dislocations back into position. However, it is worth noting that 95 individuals (23.75%) reported being unaware of any specific first aid procedures for fractures [5].

Study also aimed to find the association between level of knowledge regarding first aid of fracture and their selected personal variables of public and there is significant association between level of knowledge regarding first aid of fracture and previous exposure to knowledge regarding first aid of fracture. Contrary to other study findings, the above results indicated a noteworthy correlation between the knowledge level of teachers regarding first aid and their age.

## CONCLUSION

Awareness programs need to be organized frequently to motivate the public to attend or get training on first aid in order provide the first aid measures in times of need. Hence as health care professionals, it is our responsibility to provide the education regarding first aid measures and conduct training programs.

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