A Descriptive Study to Assess the Knowledge Regarding First-Aid Management and Develop Information Booklet among Adolescents at Selected Higher Secondary School of Ahmedabad City

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ABSTRACT

A descriptive study to assess the knowledge regarding first-aid management and develop information booklet among adolescents at selected higher secondary school of Ahmedabad city. 100 Adolescent students were selected by using non probability convenient sampling techniques. The test was conducted using a semi-structured knowledge questionnaire. Study shows that 68% of students have good knowledge about first aid management while 32% of students have average knowledge regarding first aid management. Knowledge level of Adolescent on first aid management was decided statistically at 5% significant level. There were no any significant association between knowledge and demographic variables such as age, gender, education, stream, monthly family income, number of siblings, residential area (habitat), knowledge regarding first aid management which was statistically confirmed with chi-square test. This study provided booklet regarding selected first aid management topics in improving the knowledge of adolescents.

KEYWORDS

Knowledge, First Aid Management, Adolescents

INTRODUCTION

"Right person being in the right place at the right time."

First aid to sick and wounded has been practiced since ancient times. In fact, the famous German Surgeon General ES MARCH (1823-1903) is considered to have conceived the idea of "First-Aid". According to, ST JOHN'S AMBULANCE first-aid and emergency care is a vital and growing speciality.

According to National First-aid Science Advisory Board, First-aid should be learned by every person for this. Adolescents as a group is the most adventurous group, characterised by increase proximity to various types of accidents and emergencies as they try to explore the environment. All primary school children should receive first aid training starting in first grade.

They are more prone to variety of injuries like motor vehicles accidents are the leading cause of death in the adolescent's years. Pubescents are especially susceptible to injury when riding snow mobiles, or motor cycles, a sport, that is increasing in popularity

Estimating the burden of injuries is crucial for understanding the magnitude of the problem, developing mechanism for intervention, allocating physical, human, financial resources for control of the problem throws light to the need of first-aid. A review of Indian studies and observations by other agencies indicate the ratio of death to serious injuries needing hospitalization to minor injuries as 1:20:50.

First aid is the provision of initial care for an illness or injury. It is usually performed by non-expert, but trained personnel to a sick injured person until definite medical treatment can be assessed. Certain self-limiting illness or minor injuries may not require further medical care past the first aid intervention. First aid makes the difference between life and death, sometimes, more recently, with a child, it is clear that a little knowledge for first aid will go a long way in saving lives.

STATEMENT OF THE PROBLEM

"A descriptive study to assess the knowledge regarding first-aid management and develop information booklet among adolescents at selected higher secondary school of Ahmedabad city."

OBJECTIVES

To assess the knowledge regarding first aid management among adolescents at higher secondary school of Ahmedabad city.

To find out the association between knowledge score of adolescents on first aid management with socio demographic variable.

To develop information booklet on first aid management for adolescent group at selected higher secondary school of Ahmedabad city.

ASSUMPTIONS:

Adolescents may have some knowledge regarding first aid management selected higher secondary schools.

The information booklet may be a useful source to improve the knowledge regarding first aid management.

RESEARCH APPROACH: The research study approach is Quantitative non-experimental research approach

RESEARCH DESIGN: The research design selected for the study is Non–experimental descriptive research design

RESEARCH SETTING: This study was conducted in the selected higher secondary schools of Ahmadabad city. The investigator had selected non-probability convenient sampling technique. The pilot study conducted in selected higher secondary schools of Ahmedabad.

TARGET POPULATION: Adolescents of higher secondary school of Ahmedabad city, Gujarat state.

SAMPLE SIZE AND SAMPLING TECHNIQUE

Total 100 adolescent (16-18 years) students studying in selected higher secondary schools of Ahmadabad city were selected by non-probability convenient sampling technique. The steps of the sampling technique that the investigator adopted were as follow:
 the investigator Selected 100 samples and taken samples from 3 schools in disproportionate way.

SELECTION OF TOOLS FOR DATA COLLECTION

Semi structured knowledge questionnaires

The investigator reviewing the literature pertaining to assess knowledge of adolescents. Investigator has prepared knowledge questions by selecting multiple choice question method for collection of data regarding first aid management

DEVELOPMENT OF THE TOOLS:

Development of semi structured knowledge questionnaire

A semi structured knowledge questionnaire focuses on main 11 areas such as introduction of first aid management, first aid kit, road traffic accident, heart attack, foreign bodies, burns, bites, bleeding, poisoning, allergic reaction, and disaster. According to main areas investigators developed 30 questions.

DESCRIPTION OF THE TOOLS:

The investigator prepare tool in two sections as follows:

Section I: Demographic data: age of adolescents, gender, education, stream, family income per month (in rupees), No. of siblings, residential area, knowledge on first aid management.

Section II: 30 questions related to introduction and importance of first aid management as well as subtopics such as road traffic accident, heart attack, foreign bodies, burns, bites, bleeding, poisoning, allergic reaction, and disaster.

RELIABILITY

The reliability of semi structured knowledge questionnaire was determined by the using the split half method- Karl Pearson's rank co- relation formula.

For pilot study, the reliability of semi structured knowledge questionnaire was 0.980715 which is more than 0.7

For main study, the reliability of semi structured knowledge questionnaire was 0.98762 which is more than 0.7

PROCEDURE FOR DATA COLLECTION:

The Investigator taken Permission from Principal of Each Selected Schools of Ahmedabad city & collected data. The data collection procedure was started from 13th April 2019.An informed written consent from all the participants were taken before starting the study. The investigator approached the sample individually, discussed the objectives of the study and obtained consent for participation in the study. All samples gave good co-operation during data collection procedure and no problem was faced during data collection.

PLAN FOR DATA ANALYSIS:

The investigator planned to analyse the data in following manner:

Demographic Data to be analysed using frequency and percentage will present in the form of table. The data from the semi structured knowledge questionnaires administered of non-experimental descriptive study will be analysed using mean, df, p-value and type of test will be present in the form of tables.

Chi-square will be used to find the association with demographic data and the findings will documented in tables and graphs.

ANALYSIS AND INTERPRETATION OF DEMOGRAPHIC DATA OF THE SAMPLES

Table 1 Frequency and Percentage Distribution of Samples by their demographic variable:

[N=100]

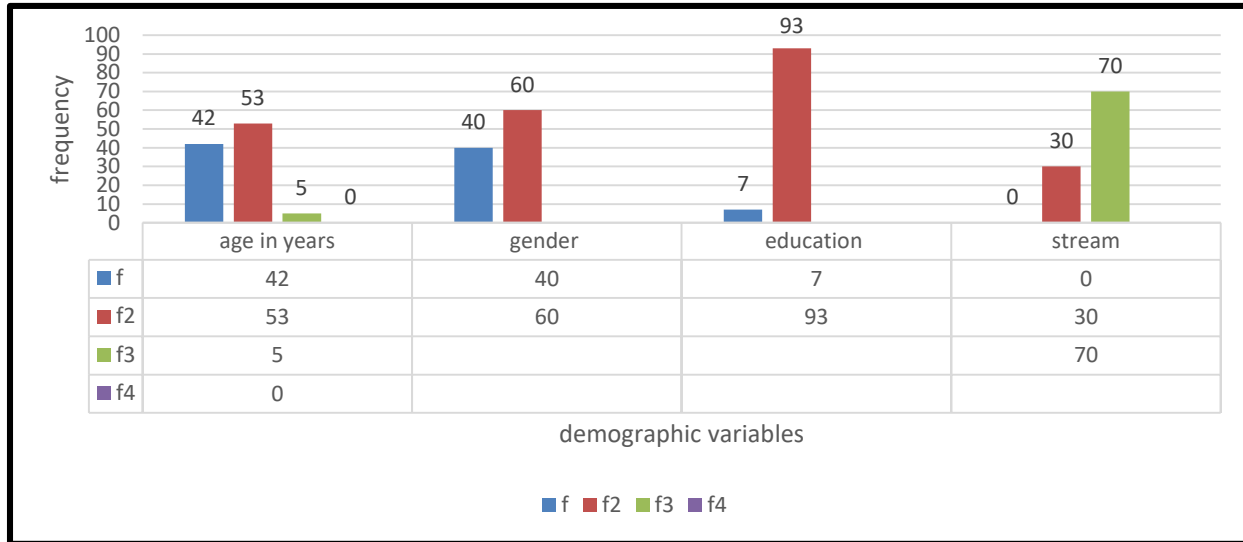| Demographic variables	Frequency(f)	Percentage (%)
1. **Age (in year)**		
a. 16	42	42%
b. 17	53	53%
c. 18	05	05%
d. Above 18	00	00%
2. **Gender**		
a. Male	40	40%
b. Female	60	60%
3. **Education**		
a. 11th	07	07%
b. 12th	93	93%
4. **Stream**		
a. Arts	00	00%
b. Commerce	30	30%
c. Science	70	70%
5. **Monthly Income**		
a. 5,000/-	01	01%
b. 5,001-10,000/-	17	17%
c. 10,001-15,000/-	39	39%
d. 15,001 above	43	43%
6. **Number of Siblings**		
a. 0	08	08%
b. 1	64	64%
c. 2	23	23%
d. Above 2	05	05%
7. **Residential area**		
a. City	100	100%
b. Village	00	00%
8. **Knowledge regarding first aid management**		
a. Yes		
b. No	92	92%
	08	08%

Figure 1 A bar graph showing demographic variables (Age in the years, gender, education, stream) regarding first aid management
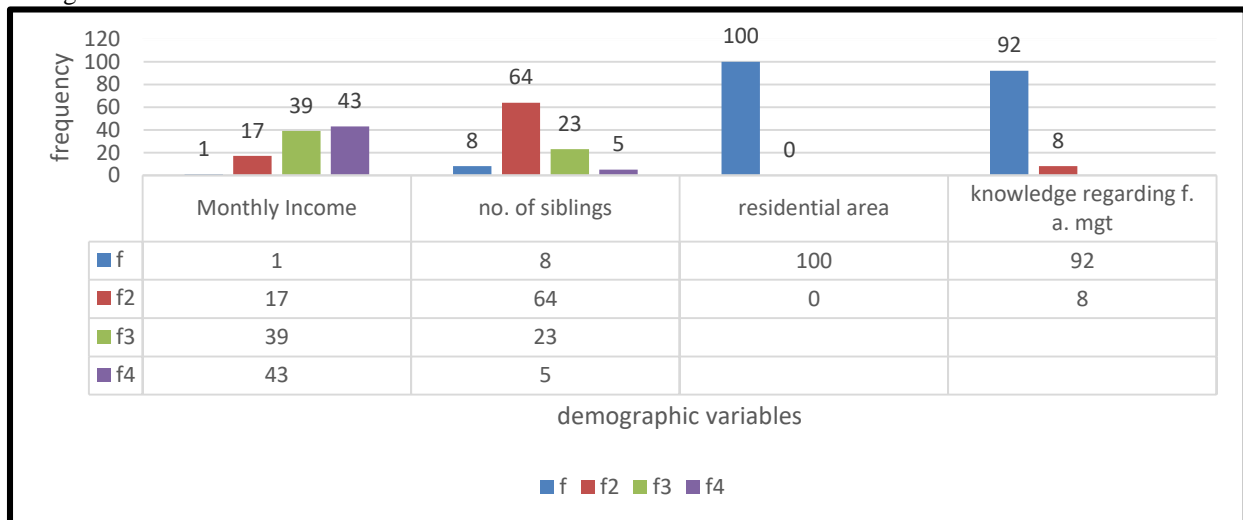

Figure 2 A bar graph showing demographic variables (family monthly income (in rupees), number of siblings, residential area, knowledge regarding first aid management) regarding first aid management

Table 2 Area – Wise Maximum score, Mean score, Mean Percentage of knowledge of Samples on First aid management (N=100)

AREA	MAX. SCORE	MEAN SCORE	PERCENTAGE
Introduction	2	1.34	67%
First aid kit	1	0.78	78%
RTA	3	2.68	89.33%
Heart attack	3	2.39	79.66%
Foreign bodies	2	1.18	59%
Burns	3	1.95	65%
Bites	2	1.23	61.5%
Bleeding	5	3.13	62.6%
Poisoning	3	2.49	83%

Allergic reaction	3	1.71	57%
Disaster	3	2.76	92%
Total	30	21.64	72.13%

ANALYSIS AND INTERPRETATION OF DATA RELATED TO THE ASSOCIATION OF KNOWLEDGE SCORE WITH SELECTED DEMOGRAPHIC VARIABLES

Table 3 Association between knowledge score and demographic variables [N=100]

Demographic variables	Frequency (f)	Types of Test	Calculate P Value	df	Association
1. Age in years					
a) 16	42	Yates χ²	0.6828		Not significant
b) 17	53	value		2	
c) 18	05	(0.763)			
d) 18 and above	00				
2. Gender		χ² value			
a) Male	40	(3.378)	0.066	1	Not significant
b) Female	60				
3. Education		Yates χ²			
a) 11th	07	value	0.3979	2	Not significant
b) 12th	93	(1.843)			
4. Stream					
a) Arts	00	χ² value		1	Not significant
b) Commerce	30	(0.079)	0.7786		
c) Science	70				
5. Monthly Income					
a) 5,000/-	**01**	**Yates χ²**			**Not significant**
b) 5,001-10,000/-	**17**	**value**	**0.09**		
c) 10,001-15,000/-	**39**	**(6.479)**		**3**	
d) 15,001 above	**43**				
6. Number of Siblings					Not significant
a) 0	08	Yates χ²	0.31599	3	
b) 1	64	value			
c) 2	23	(3.537)			
d) Above 2	05				
7. Residential area					
a) City	100				
b) Village	00				
8. Knowledge regarding F.A. Mgt		Yates χ²		1	Not significant
a) Yes	92	value	0.964		
b) No	08	(0.002)			

MAJOR FINDINGS OF THE STUDY:

The majority of samples 53(53%) were from age group of 17 years, samples 42(42%) were from age group of 16 years and 05(05%) samples were in age group 18 years. Majority of samples 60(60%) were in category of gender was female and 40(40%) samples were in gender was male. In the education, 07(07%) samples were in 11th standard and 93(93%) samples were in 12th

standard. In the category of stream majority of samples 70(70%) were in science stream as well as samples 30(30%) were in commerce stream. In category of family income per month, 01(01%) samples had 5000Rs. as well as 17(17%) samples had 5001 to 10,000Rs, 39(39%) samples had 10,001 to 15,000Rs. As well as 43 (43%) samples had above 15,001Rs. As regard to number of siblings, majority of samples 64(64%) have 1 sibling, 23(23%) samples have 2 siblings, 05(05%) samples have above 02 siblings and 08(08%) samples have 0 sibling. In category of residential area, all samples 100(100%) were lived in city area. As regard to knowledge score of first aid management, majority of samples 92(92%) answer was yes as well as 08(08%) samples answer was no.
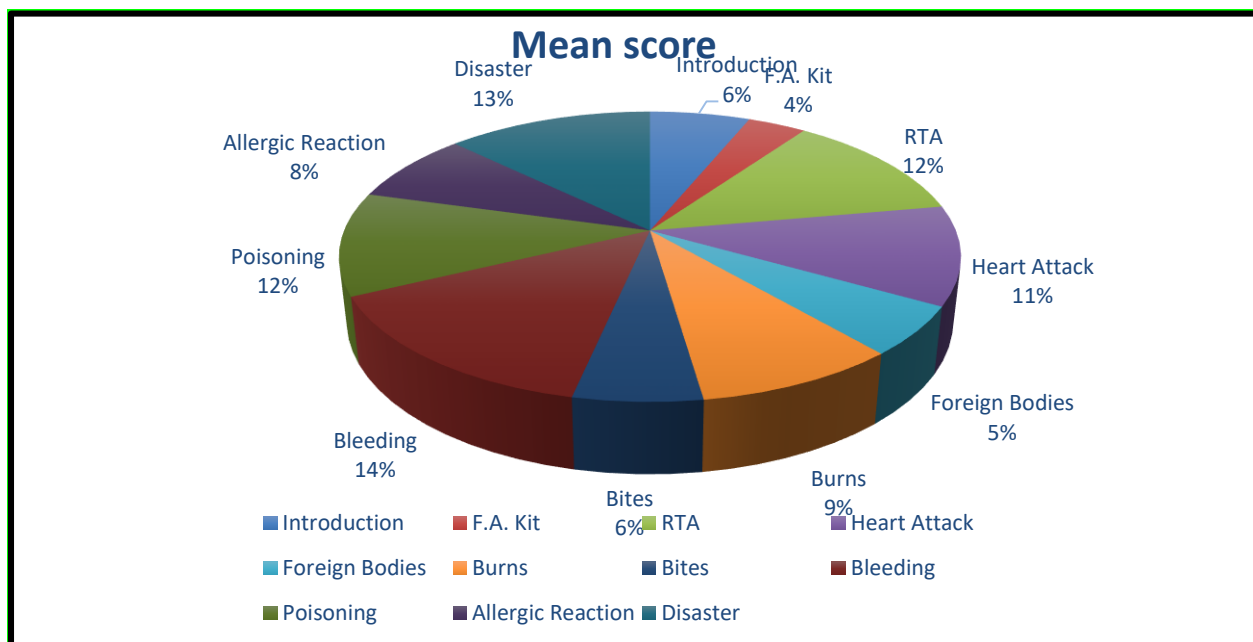

Figure 3 A pie chart showing that area- wise mean score of first aid management

CONCLUSION

At the end of the study, the investigator comes to know about the following highlights:

1. This survey was conducted only for 100 adolescents students. So, it is only validated to 100 samples.

2. Majority of students have good knowledge about first aid management

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