

Effect Of Self-Instructional Module on Knowledge Regarding First-Aid Management Among Teenagers in Selected Rural Area, Durgapur, West Bengal

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ABSTRACT

First aid is the immediate care given to a person who has been injured or suddenly fallen ill. First aid education is important to aware teenagers and young people as they are most likely to push boundaries and take risks when things go wrong, hence it is vital that they are equipped with the knowledge and confidence to help others and themselves. The present study aimed to evaluate the effectiveness of self-instructional module on knowledge regarding first-aid management among teenagers in selected rural area, Durgapur". The study aimed to find out the effect of self-instructional module among teenagers regarding first aid. 100 samples were taken by random sampling techniques. Teenagers (14-19 years) who were available during data collection period and who were willing to participate in the study were included in the study. Data were collected by interview techniques from teenagers by using demographic questionnaires and structured questionnaires. 3 point rating scale was used to observe the knowledge score of teenagers. In the conclusion of the normality test, data were examined. The study's goals led to the adoption of a parametric list. For descriptive statics, frequency and percentage distribution are used, whereas the t-test (-28.57) and Chi square are used for inferential statics. The results revealed that there is significant increase in knowledge regarding first aid management among teenagers (p=0.000). Significant association was found between pre-test score of teenagers regarding first aid management with their selected demographic variables.

Keywords: *Self-instructional module, Effectiveness, First aid management, Teenagers.*

1. INTRODUCTION

Accident can happen anywhere at any time. The consequence of unintentional accident can be life threatening. Unintentional accident needs immediate and appropriate lifesaving care before the affected person get major treatment. Accident is the leading cause of death and disability for children over the age of one in many industrialized countries. A child's environment plays a critical rate, both in accordance and the severity of an injury. Most injuries take place in on near child's home where unsafe play areas and play thing's may often be found as well as access to chemicals, medicines, persons and other dangers. Age, sex, and economic factors are important determinants of accident incidence and severity, not only are children particularly prone to accidents but also the types of accident depend on age. Fewer than five children tend to be none at risk for poisoning, drowning, burns, snake bite, fractures. First aid is given to preserve and protect life, prevent further injury or deterioration of the victim and help to promote recovery. First aid is the immediate care given to a person who has been injured or suddenly fallen ill. First aid education is important to aware teenagers and young people as they are most likely to push boundaries and take risks when things go wrong, hence it is vital that they are equipped with the knowledge and confidence to help others and themselves. In India there were more boys than girls. Most (1354 [46.9%]) of the accidents had occurred at home and schools. Fall and sports-related accidents were the leading causes of injury (in 1088 [37.7%]) and 560 [19.4%]) of the cases respectively). Most of the visits were for minor injuries (bumps, swellings, cuts, bruises and scrapes), and snake bite.

OBJECTIVES OF THE STUDY

1. To determine the effectiveness the self-instructional module on knowledge regarding first-aid Management.
2. To find out the association between pre-test knowledge scores of teenagers regarding first-aid Management with selected demographic variables.

2. METHODS & MATERIAL

In the above study Quantitative research approach was used to evaluate the effectiveness of self- instructional module on knowledge regarding first aid management in burn, fracture, drowning, snake bite, poisoning among teenagers in Bhadubala Vidyapith, Jemua, Durgapur. A Pre - experimental one group pre-test post- test design was selected. The pilot study was conducted at Lobnapara High school, Dhabani, Durgapur. Main study was conducted at Bhadhubala Bidyapith; Jemua. Target population includes school children among teenagers. Accessible population includes school children among teenagers studying at Bhadubala Bidyapith, Jemua, Durgapur. The sample of the study is the school children among teenagers between age group 14-19 years and those who fulfilled the inclusive criteria. Sample size for the study comprises of 100 participants who met the Inclusion criteria .sample size was calculated by SLOVIN'S FORMULA. Simple random sampling technique is used to select the samples by lottery method. After extensive review of literature and discussion with the experts a structured questionnaire was developed. The reliability of the tool was established by pre-test post-test method. Pre- test score was 0.78 and post-test score was 1.032 and the tool was considered reliable.

3. RESULT**TABLE 1: Frequency and percentage distribution of demographic variables among teenagers**

n=100

SL. no.	Demographic variables	Frequency (n)	Percentage (%)
1.	Age 1) 8-13 years 2)13-19 years 3)20-24years	100	100
2.	Sex 1)Male 2)Female	37 63	37 63
3.	Education 1) education up to primary 2)no formal education 3)secondary to higher secondary 4)higher secondary to graduate	100	100
4.	Father's education 1) secondary 2)higher secondary 3)graduate	74 15 11	74 15 11
5.	Mother's education 1) secondary 2)higher secondary 3) graduate	81 11 6	81 11 6
6.	Father's occupation 1)farmer 2)businessman 3) government employee 4) private employee	35 22 11	35 22 11

		32	32
7.	Mother's occupation	81	81
	1) house wife	9	9
	2) business women	6	6
	3) government employee	4	4
	4) private employee		
8.	Type of family		
	1) joint family	32	32
	2) nuclear family	68	68
9.	Food habits	15	15
	1) vegetarians	85	85
	2) non vegetarians		
10.	Any previous knowledge of first aid	36	36
	1) no previous knowledge		
	If yes: -		
	2) TV	57	57
	Newspaper	6	6

The above table reveals the frequency and percentage distribution of demographic variables for first aid safety measures among teenagers. With respect to age, 100 teenagers (100%) were in the age group of 13 -19 years. With respect to sex, 37 (37%) of male teenagers and 63 (63%) of female teenagers. With respect to educational status, 100 (100%) students are studying in Secondary to higher secondary. With respect to father's educational status, 74(74%) fathers completed secondary school education, 15(15%) fathers completed higher secondary school education and 11(11%) fathers completed graduation. With respect to mother's educational status, 81(81%) mothers completed secondary school education, 11(11%) mothers completed higher secondary school education and 6(6%) mothers completed graduation. With respect to father's occupation, 35 (35%) fathers were farmer, 22 (22%) fathers were businessman, 11 (11%) fathers were government employee and 32 (32%) fathers were private employee. With respect to mother's occupation, 81 (81%) mothers were house wife, 9(9%) mothers were business women, 6 (6%) mothers were government employee and 4(4%) mothers were private employee. With respect to type of family, 32 teenagers (32%) were living in a joint family, 68 teenagers (68%) were living in a nuclear family. With respect to food habits, 15 teenagers (15%) have vegetarian, 85 teenagers (85%) have non- vegetarian. With respect to any previous knowledge of first aid, 36 teenagers (36%) have no previous knowledge, 57 teenagers (57%) gain knowledge from TV and 6 teenagers (6%) gain knowledge from newspaper.

TABLE 2: Frequency & percentage distribution of pretest knowledge level of first-aids management

n=100

Level of knowledge	Frequency	%
Poor	33	33
Moderate	67	67
Good	0	0

The above table 2 reveals that 33 teenagers (33%) have poor knowledge, 67 teenagers (67%) have moderate knowledge regarding first aid management in pretest.

TABLE 3: FREQUENCY & PERCENTAGE DISTRIBUTION OF POST TEST KNOWLEDGE LEVEL OF FIRST-AID MANAGEMENT

n=100

Level of knowledge	Frequency	%
Poor	0	0
Moderate	11	11
Good	89	89

The above table 3 reveals that 11 (11%) teenagers have moderate knowledge and 89 (89%) teenagers have good knowledge regarding first aid management in posttest.

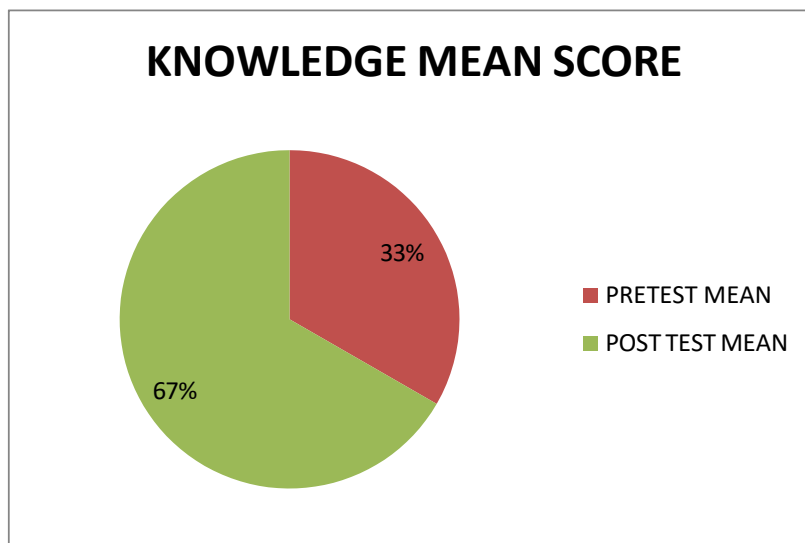


Fig 1: Mean, SD and mean% of pretest and posttest level of knowledge.

The above fig 1 reveals that the pretest mean score was 12.29, standard deviation was 3.59 and the mean% was 33. The posttests mean score was 24.08, standard deviation was 2.65 and the mean% was 67. The difference in mean% was 34.

TABLE- 4: Paired “t”-test to assess the effectiveness of self-instructional module on knowledge regarding first-aid management among teenagers (14-19 years)

n=100

	Pre test			Post test			Difference
	Mean	SD	Mean%	Mean	SD	Mean%	In mean%
Overall	12.29	3.59	33	24.08	2.65	67	34

	Post test		Pre test		‘t’-value	P-value
	Mean	SD	Mean	SD		
Overall	24.08	2.65	12.29	3.59	-28.57	0.000***

P<0.05, significant and **P<0.01 &*** and P<0.001, highly significant

The above table no 4 reveals the pretest mean was 12.29, standard deviation was 3.59, mean% was 33 and posttest mean was 24.08 , standard deviation was 2.65 , mean % was 67 with the calculated ‘t’ value of -28.57 which showed high statistical significance at p<0.001 level.

TABLE- 5: Association of pretest level knowledge on first aid management among teenagers in selected rural area Durgapur with selected demographic variables.

n=100

Demographic variables	Level of knowledge			χ^2	df	P value	Remark
	Poor	Moderate	Good				
Age							
1)8-13 years	40	60	Nil	-	-	-	Due to Constant age factor there is no significant difference
2)13-19 years							
3)20-24years							
Sex							
1)Male	9	20		47.426	30	0.023	Significant
2)Female	24	47	Nil				
Education							
1) Education up to primary							Due to constant education factor there is no significant difference
2)No formal education							
3)Secondary to higher secondary							
4)Higher secondary to graduate	45	55	Nil	-	-	-	
Father's education-							
1)Secondary	21	42					Non Significant
2)Higher secondary	10	12	Nil	42.675	30	0.060	
3)Graduate	2	13					
Mother's education-							
1)Secondary	26	46					Non significant
2)Higher secondary	5	14	Nil	26.747	30	0.637	
3)Graduate	2	7					
Father's occupation- 1)Farmer							Non-significant
2)Businessman	5	21					
3)Government employee	50	28	Nil	39.394	45	0.708	
4)Private employee	1	7					
	12	11					
Mother's occupation-							
1) House wife	29	46					Significant
2) Business women	4	16	Nil	54.488	30	0.004	
3)Government employee	0	5					
4)Private employee	0	0					

Type of family-							Non-significant
1) Joint family	16	28	Nil	33.725	30	0.292	
2) Nuclear family	17	39					
Food habits- 1)Vegetarians							
2)Non vegetarians	7	21	Nil	33.452	45	0.898	Non-significant
	21	46					
1) Any previous knowledge of first aid-							
2)No previous knowledge if yes-	19	36					
TV			Nil	21.439	30	0.874	Non-significant
Newspaper	10	26					
	4	5					

Note: df = degree of freedom, $P \leq .05$ * = Significant

The data presented in table 5 shows that, there was a statically significant association between level of knowledge and age in years due to constant age factor and education factor, sex ($\chi^2= 47.426$, $p=.023$), mother’s occupation ($\chi^2=54.488$, $p=0.004$), there was a statistically non-significant association between father’s education ($\chi^2=42.675$, $p=0.060$) mother’s education ($\chi^2=26.747$, $p=0.637$), father’s occupation ($\chi^2=39.394$, $p=0.708$), type of family ($\chi^2=33.725$, $p=0.292$), food habits ($\chi^2=33.452$, $p=0.898$), any previous knowledge of first aid ($\chi^2=21.439$, $p=.874$).

4. DISCUSSION

The findings are in consistent with the studies conducted by Shivani Saklani (2020), Assessment of the effectiveness of self-instructional module on knowledge regarding first aid management of selected minor injuries among students of Govt. senior secondary school: A pre- experimental study. A structured knowledge questionnaire was given to the school children where posttest knowledge was found to be higher than the pretest knowledge of school children about first aid management of selected minor injuries.

The study showed the pre-test mean score was 14.82. The posttest means score was 21.77. The difference in mean% was 6.95. The results of the posttest depicted that, (30%) students had moderate knowledge, and (70%) had adequate knowledge and none of the students had inadequate knowledge. The study shows that mean posttest knowledge scores (21.77) of the school students was higher than their mean pretest scores (14.82). The obtained mean difference (6.950) between the pre-test and posttest knowledge scores of experimental group was found to be statistically significant as evident from the "t"

value 22.598 "Sig at 0.05 level. The conclusion of the study revealed that there was significant improvement in the knowledge on first aid management of selected minor injuries among students after administration of SIM.

The findings are in consistent with the studies conducted by Navin Soni et al. (2021), A Study to assess the Effectiveness of Information Booklet on Knowledge regarding First aid and Safety Measure among Early Adolescent age (10-14 years) Children in selected schools at Udaipur. The study findings of the pretest mean score was 10.58, standard deviation was 1.71 and the mean % was 52.9. The posttest means score was 14.94, standard deviation was 1.39 and the mean % was 74.7. The difference in mean% was 21.8. The calculated' value of 22.31 which showed high statistical significance at $p<0.001$ level. There was no significant association of posttest level of knowledge with any of the demographic variables regarding First aid and safety measure.

5. CONCLUSION

The present study assessed the knowledge of teenagers regarding first aid and safety measures, the teenagers had inadequate knowledge regarding first aid management. After reading Self Instructional Module, there was a significant improvement in teenager’s knowledge regarding first aid managements. The study concluded that the Self-instructional module was effective in improving the knowledge regarding first aid management among teenagers.

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