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PERCEPTION AND PRACTICES REGARDING FIRST-AID AMONG SCHOOL TEACHERS IN MYSORE

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ABSTRACT

Background: Children are vulnerable to injuries, but at times they may face severe accidents, first aid becomes as important as taking a child to a medical facility. As children spend most of their time in schools, school teachers need to be equipped with knowledge on first aid.

Objectives: To assess the sociodemographic characteristics of school teachers, to assess the perception and practices regarding first aid and to assess the factors influencing perception and practices among school teachers.

Methodology: This cross sectional study was conducted for 9 months in 40 randomly selected schools of Mysore. Teachers working in these schools, who had minimum 1 year experience, were included. The details regarding perception and practices, events requiring first aid were obtained by using self administered, pre-tested questionnaire.

Results: 150 (57.3%) were from urban and 112 (42.7%) were from rural areas. Majority 130 (49.6%) were more than 40 years old. Out of 262 school teachers, 255 (97.3%) had ever heard of a terminology first aid. Among those who had heard of first aid 201 (78.8%) had replied that first aid has to be given in case of wounds whereas only 77 (30.2%) were aware that even fainting needs first aid care. Overall perception and practice regarding first aid among school teachers was found to be poor. Wound was found to be the commonest event requiring the first aid care in the school.

Conclusion: The perception and practices of school teachers on first aid was found to be poor. Wound was found to be the commonest event requiring first aid followed by fainting attack.

Key words: School teachers, first aid, wound, perception, practices, fainting attack

INTRODUCTION

Children are vulnerable to injuries and accidents. Usually, one comes across minor bruises but at times, children may face severe accidents resulting in fractures, bleeding, fainting or even drowning, and thus, first aid becomes as important as taking a child to a medical facility.

First aid is defined as the assessments and interventions that can be performed by a bystander (or by the victim) immediately with minimal or no medical equipments. The primary objective of

first aid is to alleviate suffering, facilitate healing process and minimize damage. Often the first action taken for management of injuries and common illness decides the future course of disease and complication rates.^{1,2,3} Various incorrect practices and myths associated with illnesses, injuries and first aid practices have also been reported among teachers.^{2,3}

Schools in India lack adequate medical infrastructure/facilities, which can lead to loss of life.³ The increasing competition in class has led to

high stress levels, and consequently students are falling prey to physical ailments such as vertigo, accidents, epilepsy and asthma. The concern is whether schools are prepared to handle such cases and provide first aid till the time the child is taken to a hospital.³

The common consensus was that a child is solely the responsibility of the school till the time he/she is in the school, and thus, ensuring their safety, not only in the school premises but also in the school buses lies with the schools. Teachers, on the other hand, feel that it's not feasible to remember each and every student's medical history, though they are aware of a few special cases. Every teacher should be equipped with first aid techniques so that he/she can handle basic emergencies in the classroom. Every school should have standard operating procedures based on the school's requirements and teachers should be trained well in First Aid Response. In this background the present study was undertaken with the objectives to assess the sociodemographic characteristics of school teachers, to assess the perception and practices regarding first aid and to assess the factors influencing perception and practices among school teachers.

MATERIALS AND METHODS

This cross sectional study was conducted for the period of 09 months (June 2012 to February 2013) among 40 randomly selected private and government aided primary and secondary schools of Mysore district in which Department of Community Medicine is regularly conducting school health appraisals. All the teachers working in these schools, having a minimum of 1 year experience and consenting to participate in the study were included. After obtaining permission from head of the institution, data was collected by using self administered, pre-tested structured questionnaire. The items in the questionnaire were socio-demographic details, perceptions and practices regarding first aid and frequency of events requiring first aid care in their school campus in last one month. After briefing about the study objectives, teachers were asked to tick the most appropriate answer in the given list of answers. Questionnaire was collected back on the same day. The data was entered into the computer using Microsoft Excel 07 version and analyzed using SPSS - 16. All the correct responses were given one point and wrong responses were given zero point.

Statistical analysis: Descriptive statistical measures like mean, standard deviations, percentages were applied. Other inferential statistical tests like Mann-Whitney's test was applied to know the difference between mean scores between the groups. Data was presented in the form of tables wherever necessary.

RESULTS

Socio-demographic characteristics of subjects

Among 262 school teachers enrolled in the study, 150 (57.3%) were from urban and 112 (42.7%) were from rural areas. Majority 130 (49.6%) were in the age group of more than 40 years, 156 (59.5%) were males, 129 (49.2%) had studied upto post graduation, 64 (24.4%) had teaching experience for 16-20 years and 252 (96.2%) were Hindus by religion. Only 43 (16.4%) teachers had received training in first aid. Only 10 (25%) of the schools had first aid kit in their premises.

Perception regarding first aid

Out of 262 school teachers 255 (97.3%) had ever heard of a terminology first aid. Among those who had heard of first aid 201 (78.8%) had replied that first aid has to be given in case of wounds whereas only 77 (30.2%) were aware that even fainting needs first aid care. 204 (80.0%) perceived that in case of wound the area should be washed with water. In case of fracture, only 77 (30.2%) perceived that the fractured part should be supported/splinted. In case of epilepsy/fits 109 (42.7%) mentioned that a metal rod/key should be given to child. During burns, 141 (55.3%) mentioned that the burnt area should be placed in the cold water but 49 (19.2%) mentioned that turmeric powder should be applied. In case of bleeding from nose only 13 (5.1%) mentioned that pressure should be applied over nose. In case of fainting attacks, 72 (28.2%) perceived that the legs should be elevated and 46 (18.0%) mentioned that water should be given to drink even when the child is unconscious.

Practice of first aid

Among 255 teachers who had heard of first aid, 206 (80.8%) had practiced it for wound, 83(32.5%) for bleeding from nose and 27 (10.6%) for fainting attacks. In case of wound 173 (67.8%) of the subjects had washed the wound area but 12 (4.7%) had applied herbs to the wound area. Most common practice following fracture was found to be avoiding the movement of fracture part 142 (55.7%) and only 50 (19.6%) had given

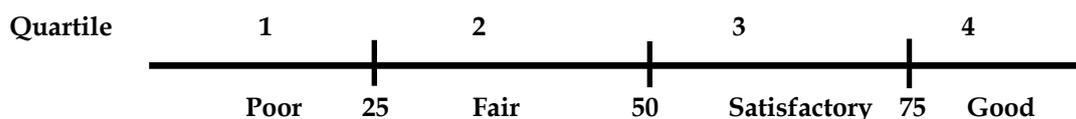
support to the fracture area. At the time of epilepsy/fits the most common first aid practice followed was giving metal rod/key to the child 86 (33.7%). In case of burns placing the burnt area in cold water was the commonest practice 94 (36.8%), application of turmeric powder and cow dung was followed by 12 (4.7%) and 03 (1.2%) respectively. Keeping the child in forward bending position was the commonest practice 149 (58.4) followed by most of the teachers in case of bleeding from nose. When a child encountered fainting attacks most of the teachers use to elevate their legs 67 (26.3%) but 35 (13.7%) and 23 (9.0%) use to slap the child and give water even when the child is unconscious respectively.

Table 1: Distribution of study subjects based on their overall perception and practices regarding first aid

Category	Frequency (%)
Poor	119 (45.4)
Fair	97 (37.0)
Satisfactory	44 (16.8)
Good	2 (0.8)
Total	262 (100)

Overall perception and practice of first aid

Correct response to the question asked was given score '1' and wrong answers were given score '0'. Total scores per respondent for all the questions were calculated. The scores were further divided into four quartiles. Perception and practice



Factors influencing perception and practice of first aid

There was a statistically significant difference in mean ranks of first aid perception and practices among school teachers with qualification of degree or less, experience of more than 10 years, residing in urban areas and who had received training in first aid, whereas there was no significant difference with respect to their sex.

Frequency of events requiring first aid services

When enquired about the frequency of events requiring first aid in the school campus in last one month, wound was found to be most common event (Median: 3, Min: 1 and Max: 11)

scores of Respondents falling under first quartile (<25% answers are correct) were labeled as poor. Those between first and second and quartile (25-55% answers are correct) were labeled as fair and those between second and third quartile (50-75% answers are correct) were labeled to have satisfactory and above third quartile (>75% answers are correct) were labeled to have good perception and practice. Overall perception and practice regarding first aid among school teachers was found to be poor in 119 (45.5%), fair in 97 (37.0%) satisfactory in 44 (16.8%) and good in only 02 (0.8%).

Table 2: Factors influencing perception and practices regarding first aid

Particular	N	Mean Rank	Z	P
Sex				
Male	156	135.95	1.155	0.248
Female	106	124.95		
Education				
Degree or less	123	141.77	2.067	0.039
More than degree	139	122.41		
Experience				
<10 years	91	101.91	4.618	0.001
> 10 years	171	147.25		
Place of residence				
Urban	150	141.30	2.425	0.015
Rural	112	118.38		
Training of first aid				
Yes	43	160.13	2.713	0.007
No	219	125.88		

Note: Mann Whitney test

followed by fainting attack (Median : 3, Min: 1 and Max: 10) and bleeding from nose (Median : 2, Min: 1 and Max: 6).

DISCUSSION

Children spend their major part of day in schools along with their peers and teachers. They are at larger risk of injuries and emergencies due to the higher level of involvement in sports and extra-curricular activities. School teachers acting as the guardians of these students as long as they are in the school need to be equipped with the adequate knowledge regarding first aid practices. In this study an attempt was made to explore the knowledge of school teachers in first aid and

what actually they practice at the incident requiring first aid.

In the present study it was observed that 97.3% of school teachers had ever heard of the terminology first aid. This is quite a satisfactory response but when an enquiry was made in depth regarding the actual knowledge and practices they were found to be largely inadequate. This implies that even though teachers are briefly introduced about first aid in their professional training period but they will not have a detailed knowledge about it.

Majority (45.4%) of school teachers were having poor perception and practices regarding first aid in the present study. This is in similar lines with the observations made by Salwa A. Ali et al. at Africa where the scores obtained by school teachers on knowledge of first aid was found to be poor.⁵ Feng Li et al in China also noted that only 3.7% of school teachers achieved passing scores for first aid knowledge.⁶ Wiśniewski J et al in Western Pomerania noted that only 50% of the school teachers were having knowledge of rules of first aid and only one third of them were able to put them into practice.⁷ The poor knowledge in the present study can attributed to the fact that very little importance given by school functionaries and administration towards training of school teachers on first aid.

In the present study wound was found to be the most common event in the school campus requiring first aid. This is similar to the observations made by Amar Jeet Singh et al in Chandigarh noted that 41-46% of injuries occur among school children during school hours.⁸

Another observation in the present study was significant difference of perception and practice scores between teachers with qualification of degree and less compared to teachers with post graduation and above the probable reason could be teachers with higher level of education had less teaching experience and less likeliness to face the situations requiring first aid services. This attribution is further strengthened by the observation that perception and practice scores being higher among teachers with experience more than ten years. Teachers in urban areas had higher level of knowledge compared to those among rural areas. This may be attributed to higher level of exposure of urban school teachers to health related knowledge and practices.

CONCLUSIONS

Overall perception and practices of school teachers on first aid was found to be poor. Wound was the most common event requiring first aid followed by fainting attack. There was a significant difference among the teachers with qualification of degree or less, working experience of more than ten years, residing in urban areas and trained in first aid compared to their counterparts. The study brings out important information about lack of awareness regarding first aid among school teachers even though there are more number of events requiring first aid occurred frequently in the school campus. This gives a way for designing future programmes to train the school teachers on first aid and incorporate the same in regular school health appraisal.

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