

## Original Research Article

# First aid knowledge among health assigned teachers of primary schools

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### ABSTRACT

**Background:** Every parents of a child knows that it is hard enough to keep their child safe at home but when child goes off to school there is a whole new set up of challenges. Parents totally entrust their children to the schools. They rely on the teachers as their second parents in the institute for learning. They know for a fact that their educators will want no harm to come their way. While they are busy working, they fully believe that their children are well cared for. On the other hand, the teachers have the responsibility to keep an eye on their students. They should make sure that they are comfortable and secured within the four walls of their school. This then calls for their ability to handle even the most stressful situations. So much more, the school staff, especially the health teacher has to be equipped with the knowledge of first aid.

**Methods:** Non-experimental survey study was conducted to assess the knowledge of first-aid among Health assigned teacher working in selected schools of Dehradun city. Using purposive sampling technique 40 samples of different schools of Dehradun city was adopted to select the area.

**Results:** Result shows that the majority of health assign teachers were having average knowledge about first aid i.e. 29 (72.5%) and 10 (25%) were having good knowledge and 1 (2.5%) was having poor knowledge regarding first aid. Majority of participant were female 21 (52.5%). The educational status of most participants was post graduate (67.5%). Majority of the schools were private 25 (62.5%). There is no significant association between socio-demographic variables i.e. Gender, level of schools, year of experience as a health assigned teacher and education provided by teacher, but qualifications of teachers and type of schools was found to have a significant association.( $p > 0.05$ ).

**Conclusions:** First aid is the assistance given to any person suffering a sudden illness or injury, with care it is provided to preserve life and to prevent the condition from worsening, and for promoting recovery. It is important that health assigned teachers are equipped with strong, professional competencies. In order for health promotion actions to be sustainable in schools, teachers must be capable, competent and skilled health educators. As they are at prime position to contribute to a nations health gain through the provision of health education for future adults. Based on findings we can say that the health assigned teachers are having average knowledge regarding first aid. Therefore, the health assigned teachers must be equipped with appropriate and upgraded knowledge.

**Keywords:** First knowledge, Health assigned teachers, Primary schools

## INTRODUCTION

According to national first aid science advisory board, first aid should be learned by every person, for this it is necessary, that first aid training and education should be provided to everyone or universal.<sup>1,2</sup> In childhood, school life plays an important role for everyone. It has a great or direct impact on children's physical and mental development.<sup>3</sup> As the children comes under the vulnerable group; they are more prone to get injuries and accidents especially when they are in school going age because at that time they are still maturing physically and mentally. In school, teachers are the first caregiver who protects the children from trauma and accidents. Every teacher should have the ability to deal with any health emergency condition, when a children need health care. The victim should get immediate management of any accidents or trauma for good and early prognosis.

Every time, health worker would not be available in the school or place; where accidents had taken place consequently. It is needed or desired that there should be Health Assign Teacher in every schools who will be responsible to look after the minor ailments or accidents in the school.<sup>4</sup> Students' safety is a major concern for teacher, parents and school staff. In some countries health education is a subject in its own right under the responsibility of health education teachers (e.g. Finland, Ireland), while in others, it is cross curricular in implementation, covered across a broad spectrum of subjects.<sup>5</sup> Ideally, health education would occur within a broader framework of a Health Promoting School (HPS). The HPS framework is a specific approach that is used across countries for promoting health in the school setting. It is a whole school approach aimed at enhancing the health and educational outcomes of students. There are typically six components of the HPS approach; 1. Healthy school policies 2. The school's physical environment 3. The school's social environment 4. Individual health skills and action competencies 5. Community links 6. Health services.<sup>6</sup>

### *Need of the study*

Every parents of a child knows that it is hard enough to keep their child safe at home but when child goes off to school there is a whole new set up of challenges. Parents totally entrust their children to the schools. They rely on the teachers as their second parents in the institute for learning. They know for a fact that their educators will want no harm to come their way. While they are busy working, they fully believe that their children are well cared for.

The current study aims to identify knowledge of Health assigned teacher on first aid and its correlation with demographic variables. For that, researcher surveyed for presence of health teacher availability in schools, and reported that 40 of the 45 schools had a health assigned

teacher. Researcher also assumes that the teachers were having adequate knowledge and to confirm it researcher has decided to conduct a research project to assess the knowledge on first aid among Health assigned teacher working in selected schools.

### *Problem statement*

A study to assess the knowledge of first-aid among Health assigned teacher working in selected schools of Dehradun city.

### *Objectives*

- To assess the knowledge of first- aid Health assigned teacher in selected schools of Dehradun city.
- To find association between selected socio-demographic variables with knowledge of Health assigned teacher in selected schools of Dehradun city.

## METHODS

In present study non experimental descriptive survey design was used. The population under study were Health assigned teachers working in selected schools of Bhaniyawala, Doiwala and Ranipokhri of Dehradun city within 10-15 km of distance from Jollygrant. Non probability Purposive sampling technique was used. 40 samples were selected for the study who were health assigned teachers both male and female in the selected schools of Dehradun city.

## RESULTS

### *Related to sociodemographic variables*

The above Table 1 show that the maximum age of study subjects was 31-40 years i.e.16 (40%). Out of 40 study subjects 19 (52.5%) were female, 21 (47.5%) were males. 35 (87.5%) were married and 5 (12.5%) were unmarried. The standard majority of the qualification of sample was post-graduation I.e. 27 (67.5%) followed by graduate i.e. 12 (30%). Majority of school were private 25 (62.5%), whereas 15 (37.5%) were government. 20 (50%) schools were senior secondary followed by 13 (32.5%) primary and 7 (17.5%) high school. Majority of the study subjects are having experience of more than 10 years i.e. 50%. Out of total study subjects 17 (42.5%) were physical education teacher and 23 (57.5%) were teachers providing academic education. Out of total, 13 (32.5%) study subjects were having family member as a health care provider, were as 27 (67.5%) were not having medical background. 25 (63%) of the samples were not having any special education to support the responsibility, whereas 15 (37%) samples were having special education.

**Table 1: Frequency and percentage distribution of base line data of the participants.**

Name of items	Frequency	Percentage
<b>Age of study subjects</b>		
21- 30years	10	25%
31-40years	16	40%
41-50years	8	20%
51-60years	6	15%
<b>Gender of the study subjects</b>		
Male	19	47.5%
Female	21	52.5%
<b>Marital status of the study subjects</b>		
Married	35	87.5%
Unmarried	5	12.5%
<b>Qualification of the study subjects</b>		
Diploma	0	0%
Graduate	12	30%
Post graduate	27	67.5%
Any other	1	2.5%
<b>School type of study subjects</b>		
Private	25	62.5%
Government	15	37.5%
<b>School level of the study subjects</b>		
Primary school	13	32.5%
High school	7	17.5%
Senior secondary school	20	50%
<b>Teaching experience of the study subjects</b>		
<5 year	11	27.5%
5-10	9	22.5%
>10 years	20	50%
<b>Experience of study subjects as a health assign teacher</b>		
<10 years	22	55%
≥10 years	18	45%
<b>Type of education provided by the study subjects</b>		
Physical education	17	42.5%
Academic education	23	57.5%
<b>Other responsibility of the study subjects</b>		
Class teacher	22	55%
Subject teacher	4	10%
Health assigned teacher	1	2.5%
Sports teacher	13	32.5%
<b>Study subjects having family member as a health care professional</b>		
Yes	13	32.5%
No	27	67.5%

**Success rate of first aid events managed in percentage**

The bar diagram shows, the maximum success rate were reported by majority of health assigned teacher i.e. 22 between (91-100%) and the minimum success rate were (60-70%) by 2 health assign teachers (Figure 1).

The above table shows that there are significant association between qualification of teacher and type of school. In qualification, the majority of study subject were Post Graduate, so they scored good in questionnaire and in type of schools majority of them were from private

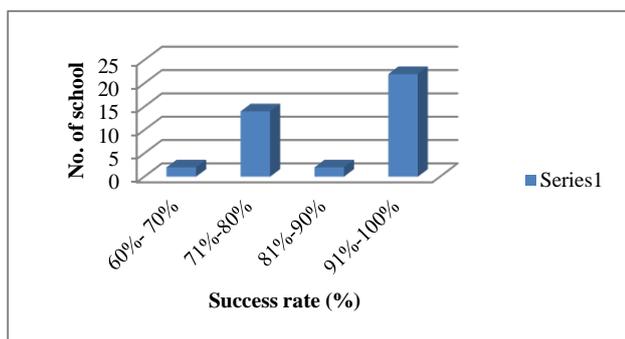
schools. Whereas rest of the socio-demographical variables were not having any significant association with knowledge score (Table 2 and 3).

**Table 2: Knowledge level score of participants: n=40.**

Knowledge level	Frequency	Percentage
Good (>10)	10	25%
Average (5-10)	29	72.5%
Poor (<5)	1	2.5%

**Table 3: Association between knowledge and demographic variable.**

Socio demographic variable		Below median	At an above the median	Chi square $\chi^2$	Significance
Gender	Male	6	13	1.32	Not significant
	Female	10	11		
Qualification	Graduate	2	10	4.223	Significant
	Post graduate	14	13		
Type of school	Private	12	13	4.96	Significant
	Government	4	11		
Level of school	Primary school	4	9	1.66	Not significant
	High school	2	5		
	Senior secondary school	10	10		
Year of experience	5 years	6	5	2.324	Not significant
	5-10 years	4	5		
	More than 10 years	6	14		
Year of experience as a health assign teacher	Less than 10 years	11	11	2.03	Not significant
	Of 10 and more than 10	5	13		
Education provided by teacher	Physical education	7	10	0.034	Not significant
	Academic education	9	14		



**Figure 1: Success rate of first aid in schools.**

**DISCUSSION**

Non-experimental descriptive survey i.e. research survey design was undertaken to assess the knowledge among health assigned teachers in selected schools of Dehradun city, Uttarakhand, from 16 May 2016 to 21 May 2016. The data was collected by using socio-demographic questionnaires and structured knowledge questionnaire from 40 study subject selected by purposive sampling technique to assess their knowledge on first aid. The data collected was analysed by using descriptive and inferential statistics.

**Association between demographic variables and knowledge based data**

The present study shows no significant association between socio-demographic variables i.e. Gender, level

of schools, year of experience as a health assigned teacher and education provided by teacher except qualifications of teachers and type of schools as a significant association was found between both of them. ( $p > 0.05$ ).

**Knowledge score of health assigned teachers regarding first aid**

Finding shows the majority of health assign teachers were having average knowledge about first aid i.e. 29 (72.5%) and 10 (25%) were having good knowledge and 1 (2.5%) was having poor knowledge regarding first aid. This study was supported by following literatures.

According to a cross sectional, analytical study conducted by Sonmer Y et al.<sup>7</sup> In the study, a total of 110 teacher’s knowledge was assessed using questionnaire and a 20 point scale. The results showed a mean score of  $11.9 \pm 2.9$ . The study also reported that there was no major difference in knowledge level of teachers who received first aid training previously to those who didn’t.

According to a study conducted by Masih S et al a training/practice program was highly effective in improving the significant knowledge regarding first aid management of minor injuries.<sup>8</sup> The study was conducted in Dehradun, Uttarakhand, India and the study samples were 50 teachers and 94% of them were females. The pre mean pre test scores were found to be  $(27.32 \pm 5.73)$  and mean post test scores were  $(34.76 \pm 4.35)$ . A significant positive correlation was found between knowledge and

practice scores of the study subjects. Thus, there is possibility of improvement in significant knowledge regarding first aid if training is provided.

Yet another study shows that teachers don't have enough knowledge on first aid. The study of Baser M et al (used 312 teacher samples and used questionnaire as a tool.<sup>9</sup> Upon data analysis, the results concluded were that 65.1% of teachers wrong about epistaxis, 63.5% were wrong for bee stings, and 88.5% for abrasions.

#### **Other findings of this study was**

- Researcher found that out of 40 schools only 12 schools only were having special room for first aid treatment.
- During data collection we also found that schools were providing over the counter drugs for minor ailments.
- Albendazole, folic acid, calcium and multivitamins are being provided by the schools under school health programmes.
- Researcher also found that at one school peon was also responsible for first aid treatment.
- We also found that 25 schools conducted health camps, some of them organize it monthly, yearly and some twice a year. In that they conduct Eye examination, physical examination and dental check-ups.

#### **Nursing implications**

The findings of the present study can be applicable in various area of nursing like nursing practice, nursing education, nursing research and nursing administration. Nurses can do extensive research in the area and research can be helpful in making awareness and education related to first aid and health assigned teachers. The health assigned teacher can be oriented to the common injuries/problems which needs first aid in the school area. They can be oriented about the first process (CPR) etc. The authorities should allow the nurse to conduct mock drill to improve knowledge and skills of nurses. Hospital should have EMRT (emergency team) ready with prime goal to provide first aid. Community health nurse should provide health education regarding first aid to the school health assigned teachers. Nurses can do extensive research in the area and the research can be helpful in generating the improvement and knowledge among the society about the importance of first aid and health assigned teacher in schools.

#### **CONCLUSION**

First aid is the assistance given to any person suffering a sudden illness or injury, with care it is provided to preserve life and to prevent the condition from worsening, and for promoting recovery. It is important that health assigned teachers are equipped with strong, professional competencies. In order for health promotion

actions to be sustainable in schools, teachers must be capable, competent and skilled health educators. As they are at prime position to contribute to a nations health gain through the provision of health education for future adults. Based on findings we can say that the health assigned teachers are having average knowledge regarding first aid. Therefore, the health assigned teachers must be equipped with appropriate and upgraded knowledge.

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