A Study to Assess the Level of Knowledge Regarding First Aid Management of Selected Emergencies Among School Teachers in Royal Global School Guwahati, Assam

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ABSTRACT

First aid is a crucial life skill that reduces fatalities and enables faster treatment for injuries. It also gives staff and the public a sense of purpose and the potential to save lives. School is a significant part of children's lives, impacting their physical and mental health. This study aims to assess the level of knowledge regarding first aid management of selected emergencies among school teachers at Royal Global School in Guwahati, Assam, and to find the association between knowledge scores and selected demographic data. A descriptive study was conducted with 100 samples drawn using a convenient sampling technique. Teachers' knowledge was assessed using a self-administered structured questionnaire. Results showed that the majority of teachers (34%) were over 35 years old, 53% were female, 60% were Hindu, 40% had a postgraduate degree, and 32% had 6-10 years of teaching experience. Findings revealed that 81% of teachers had moderately adequate knowledge, 15% had adequate knowledge, and 4% had inadequate knowledge of first aid management. A significant association was found between teachers' knowledge and educational status ($x2=18.7$, $p<0.00$). The moderately adequate knowledge among teachers regarding first aid highlights the need for improvement. Deliberate efforts should be made to enhance school teachers' first aid knowledge through training and awareness programs.

Keywords: Knowledge, First aid, School Teachers.

INTRODUCTION

Life's unpredictability makes safe travel and returns uncertain. Accidents arise from haste, ignorance, carelessness, childhood and old age, forgetfulness, and unusual courage.[1] Preparedness is crucial for safety, highlighting the importance of first aid in reducing fatalities and enabling quick treatment. First aid provides individuals with lifesaving skills and a sense of purpose.[2]

Accidents frequently occur in schools, during travel, and daily activities. Many people lack first aid knowledge and fail to act during emergencies. Teachers, in particular, should be equipped with first aid skills as health workers aren't always present, and children are prone to minor accidents. Preparedness in first aid is essential, as quick action can save lives.[3]

Teachers should also understand childhood issues, recognize abnormal behaviour and provide mental health support with guidance from psychologists. Studies show school teachers often lack adequate first aid knowledge. Therefore, assessing their knowledge in Royal Global School, Guwahati, Assam, is necessary.

More studies and programs on first aid knowledge are essential to improve emergency preparedness among school teachers.

OBJECTIVES

- To assess the level of knowledge regarding first aid management of selected emergencies among school teachers in Royal Global School, Guwahati Assam.
- To find out the association between level of knowledge regarding first aid management among school teachers in Royal Global school Guwahati, Assam with some selected demographic variables such as age, gender, religion, educational status, and teaching experience.

HYPOTHESIS

H1: There is a significant relationship between knowledge of teachers regarding first aid management with some selected demographic variables such as age, gender, religion, educational status, and Teaching experience, at $p < 0.05$ level of significance

RESEARCH METHODOLOGY

Research approach: A quantitative research approach is used for the present study.

Research design: A descriptive research design was adopted for the present study.

Setting: The present study was conducted at Royal Global School, Guwahati Assam. The setting was selected because of the availability of the sample, and the feasibility of conducting the study.

Population: In this study target population consists of school teachers of Royal Global School, Guwahati, Assam.

Samples: School teachers of Royal Global School who fulfilled the inclusion criteria

Sample size: In the present study sample size consisted of 90% of the total accessible population which was found to be 100 teachers who met the inclusion criteria and who are working in Royal Global School, Guwahati.

Sampling technique: Non-probability convenience sampling technique is used for the present study.

Sampling criteria

Inclusion criteria

Teachers who are working in Royal Global School

Teacher who will give consent in the study

Exclusion criteria

Teacher who had undergone training program in first aid

Teacher who will be not available during the period of data collection.

Variables In the present study, two types of variables are used. They are:

- **Research variables:** Knowledge teachers regarding first aid management of selected secondary schools.
- **Demographic variables**: Demographic variables include age, Gender, religion, educational status, and teaching experience.

Tools for data collection

These tools consist of:

- **Part 1: Demographic variable** -
  This section consists of 5 items on demographic data like Age, Gender, Religion, Educational status, and teaching experience.

- **Part 2: Knowledge questionnaire -**
  Structured Self-Administered Questionnaire

Reliability of the tool

The reliability of the tool was determined by Karl's split half method, showing knowledge questionnaire reliability with 0.101. So, the reliability of the tool was satisfactory.

Ethical consideration

Ethical permission to proceed with the study was taken from the "Ethical Committee, the Assam Royal Global University, Guwahati, Assam. The investigator obtained permission from the principal of Royal Global School, Guwahati, Assam. written consent was obtained from the sample before the data collection and Confidentiality was ensured.
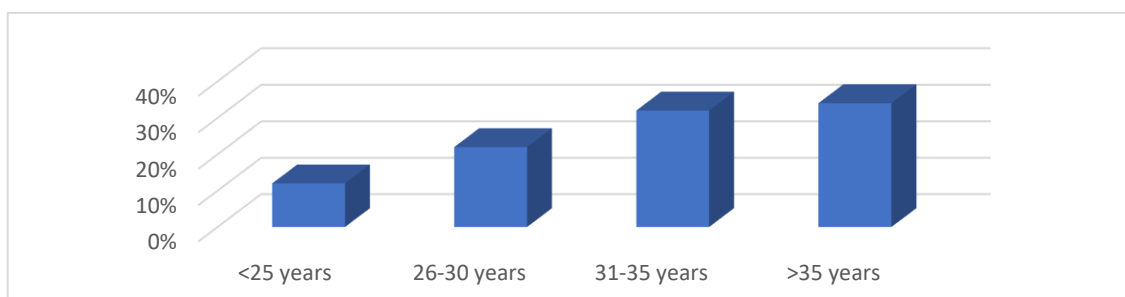
DATA COLLECTION PROCEDURE

The main study was conducted at Royal Global School on date 17/08/23. Prior permission was obtained from the principal of Royal Global School, Guwahati, Assam. The researcher explained the purpose of the study compassionately and informed consent was taken from the teachers. 100 samples were selected from the school by using a convenient sampling technique. The knowledge was assessed by a structured self - Administered Questionnaire to assess the level of knowledge regarding first aid management among school teachers. The socio-demographic and knowledge questionnaire sheets were administered, and the total time allowed for each teacher was 45 minutes. All teachers cooperated with the investigator during the data calculation process, which was terminated after thanking the teachers for their cooperation and patience.
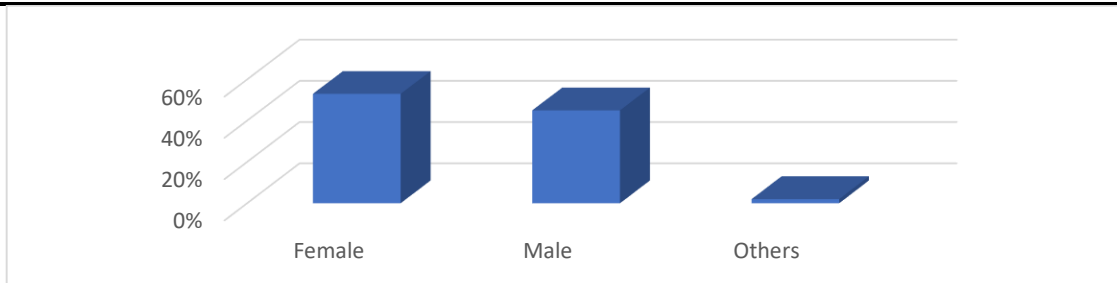
RESULT
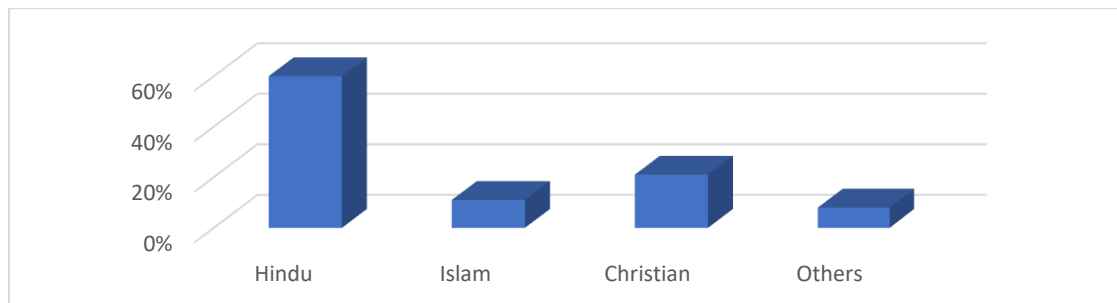**Section I: Description of subject characteristics.**

This section deals with the description of characteristics of the school teachers in terms of frequency and percentage and presented in table 1 to 5
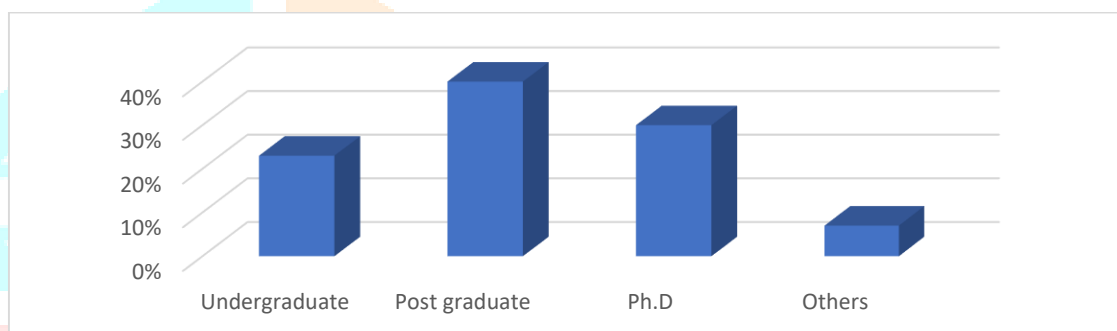

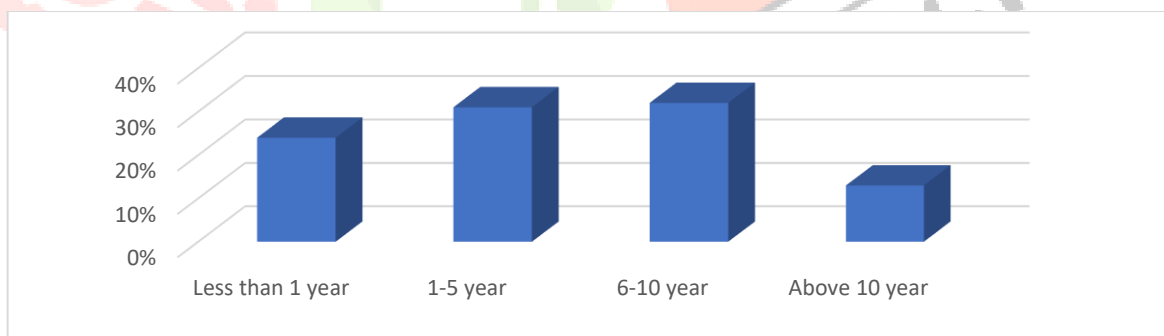**Fig1: Distribution of teachers according to their Age group**

Fig 2: Distribution of teachers according to their Gender

Fig **3: Distribution of teachers according to their Religion**

Figure 4: Distribution of teachers according to their educational status

Figure 5: Distribution of Teachers according to their year of experience

Section II: Knowledge of the school teachers regarding first aid management

Knowledge level of 100 school teachers were assessed by using structured self-administered questionnaire and was analysed by using descriptive statistics. The mean, standard deviation and range have been calculated. These values are represented in the table 1

Table 1: Frequency and percentage distribution according to grading of knowledge score

Knowledge score	Frequency (f)	Percentage (%)	Mean	SD
Adequate knowledge (>17)	15	15%	9.76	2.8
Moderately adequate knowledge (13-17)	81	81%		
Inadequate knowledge (<13)	4	4%		

Table 1 shows that the majority of the teachers 81 i.e. (81 %) teachers had moderately adequate knowledge, 15(15%) had Adequate knowledge, and 4(4%) teachers had inadequate knowledge on first aid management. **NS: Not significant**

Section III: Association between Knowledge of the teachers regarding first aid management and selected variables

Table 2 : Association between level of Knowledge and age

Age	Knowledge			Chi-square(calculated)	df	P value
	Adequate	Moderately Adequate	Inadequate			
<25years	2	9	1	0.41007	6	0.1963 NS
26-30years	5	16	1			
31-35 years	4	26	2			
>35 year	13	3	1			

Table 2 shows that the obtained chi-square value for the knowledge of teachers with age was 0.410 (tabulated value 12.59) at df =6, and p-value =0.1963. Hence no significant association between the level of knowledge and age of the school teachers was found. **NS: Not significant**

Table 3: Association between Level of Knowledge and Gender

Gender	Knowledge			Chi-square (Calculated)	df	P value
	Adequate	Moderately Adequate	Inadequate			
Female	9	40	2	1.66976	4	0.1963 NS
Male	5	39	1			
Others	1	2	1			

Table 3 shows that the obtained chi-square value for the knowledge of teachers with Gender was 1.66976 (tabulated value 9.49) at df=4 and p-value = 0.1963. Hence there is no significant association between the level of knowledge and gender of the school teachers was found. **NS: Not significant**

Table 4: Association between level of knowledge and religion

Religion	Knowledge			Chi-square (calculated)	df	P value
	Adequate	Moderately Adequate	Inadequate			
Hindu	4	52	2	1.95661	6	0.1619NS
Muslim	2	8	1			
Christian	1	7	0			
others	1	1	1			

Table 4 shows that the obtained chi-square value for the knowledge of teachers with religion was 1.95 (tabulated value 12.59) at df =6 and p-value =0.1619. Hence there is no significant association between the level of knowledge and religion of the school teachers was found. **NS = non-significant**

Table 5: Association between level of knowledge and educational status

Educational status	Knowledge			Chi-square (calculated)	df	P value
	Adequate	Moderately Adequate	Inadequate			
UG	4	18	1	18.76	4	0.001**
PG	7	31	2			
PhD	4	25	1			

Table 5 shows that the obtained chi-square value for the knowledge of teachers with educational status was 18.76 (Tabulated value 9.49) at df =4. Hence is significant association between the level of knowledge and educational status of the school teachers was found

Table 6: Association between level of knowledge and teaching experience

Year of teaching experience	Knowledge			Chi-square (calculated)	df	P value
	Adequate	Moderately Adequate	Inadequate			
<1year	3	20	1	6.81	6	0.338 NS
1-5 year	6	24	1			
6-10 year	2	29	1			
>10 years	4	8	1			

Table 6 shows that the obtained chi-square value for the knowledge of teachers with teaching experience was 6.81 (tabulated value 12.59) at df =6 Hence there is no significant association between the level of knowledge and teaching experience of the school teachers was found.

DISCUSSION

The first objective of the study was to assess the level of knowledge regarding first aid management of selected emergencies among school teachers

The findings of the present study result show that the majority, i,e 7(46%) teachers had moderately adequate knowledge, 6(40%) teachers had inadequate knowledge, and only 2(14%) teachers had adequate knowledge of first aid management. Similar trends were observed in a study conducted by Somner et al. in the study, a total number of 100 teachers' knowledge was assessed using a questionnaire and a 20-point scale. The results showed a mean score 11.9 standard deviation 2.9.88% teachers had average knowledge, 5% of teachers had excellent knowledge and 7% teachers had poor knowledge about first aid management.

Contrary to these findings, the study conducted by Rakhi et al (2020)[4] "A study to assess the level of knowledge of secondary school teachers regarding first aid management of selected emergencies among school teachers at selected secondary school at Ghataprabha". Results of this study showed that the majority of school teachers i.e. 62(62%) were had adequate knowledge and 38(38%) were having moderately adequate knowledge regarding first aid management. None of the teachers had inadequate knowledge regarding first aid management.

The second objective of the study was to find out the association between the level of knowledge regarding first aid management among school teachers with some selected demographic variables such as Age, Gender, Religion, Educational status, and teaching experience The findings of the present study reveals that there is no significant association between the knowledge of the school teachers and selected demographic variables such as age, gender, religion, educational qualification, types of family, teaching experience and marital status. The findings of this study is similar to the study conducted by Navjot Kaur et al (2018)[1] conducted a descriptive cross-sectional study to assess the level of knowledge regarding first aid management among school teachers in the selected school of the district Mohali, Punjab. The study found that there was no significant association between knowledge regarding first aid management among school teachers with the selected demographic variables

CONCLUSION:

While there is a varying level of knowledge regarding first aid management among school teachers, with many having only moderate or inadequate understanding, targeted educational interventions are necessary to enhance their first aid competencies. Furthermore, future research should explore other potential factors influencing teachers' knowledge and consider broader and more diverse demographic variables to gain a comprehensive understanding of the determinants of first aid knowledge among educators.

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