

EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON THE LEVEL OF KNOWLEDGE REGARDING FIRST AID MANAGEMENT FOR SELECTED MINOR AILMENTS AMONG HIGH SCHOOL STUDENTS OF DATIA.

Medical Surgical Nursing

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ABSTRACT

Background: First aid is the first and immediate assistance given to any person with either a minor or serious illness or injury with care provided to preserve life, prevent the condition from worsening or to promote recovery until medical services arrive. **Aim:** The aim of the study was to evaluate the effectiveness of structured teaching programme on the level of knowledge regarding first aid management for selected minor ailments (epistaxis and heat stroke) among high school students. **Materials And Methods:** Quasi-experimental research was adopted and self-structured questionnaire used to explore the knowledge regarding first aid management for selected minor ailments (epistaxis and heat stroke) among high school students. **Results:** The finding of the study revealed that mean pre-test knowledge score was 8.16 ± 5.31 and mean post-test knowledge score was 19.06 ± 23.20 . The mean difference was 10.9. The calculated t value was 20.72 at the degree of freedom 29 while the tabulated t value was 2.045. **Conclusion:** It was revealed that the knowledge level significantly increased after the administration of structured teaching programme.

KEYWORDS

Knowledge score, high school students, epistaxis, heat stroke

INTRODUCTION

First aid is applied to injured or in persons in any health threatening settings in order to save life, prevent degradation of the situation or contribute to a treatment process before professional medical care is available. This refers to assessment and intervention that can be performed by the victim with minimal or no medical equipment. Sudden illness or injury or animal's bite can often be serious unless proper care is administered promptly.

According to **WHO** in current environment, population exposure to heat is increasing regularly due to climate change. Globally, extreme temperature events are observed to be increasing in their frequency, duration and magnitude. Between 2000 and 2016 the number of people exposed to the heat waves increased by around 125 million.

Epistaxis commonly referred to as "nosebleed" remains to be one of the most common ENT emergencies presenting to the accident and emergency departments (AED) worldwide. In the **United States**, around 1.7% of all AED visits are due to epistaxis, and about 1 in 200 ED visits in the US is due to epistaxis. The incidence usually is bimodal affecting mostly those younger and the older population (<10 years old and >70 years old).

The specific ratio of epistaxis among school students in India is not readily available as it can vary base on factors such as geographical location, climate, and individual health conditions. Schools often encounter nose bleeds among students due to various reasons such as dry air, allergies, nasal trauma or underlying medical conditions. The heat stroke cause about 374 deaths across in India in 2021. In athletes of high school students are 1.6 cases per 100000 athletic exposure and 9000 cases annually. As shown by various reports, minor ailments are not a major problem and we can treat them with first aid management.

Objectives:

The objectives of the study were as follows:

- To assess the knowledge of high school students towards selected minor ailments (heat stroke and epistaxis).
- To evaluate the effectiveness of structured teaching program on the level of knowledge.
- To find out the association between knowledge level and the selected demographic variables of high school students

With this aim in mind, to impart knowledge in first aid among students to build a safe and healthier community. Basic first aid knowledge helps students to deal with emergencies.

MATERIALS AND METHODS:

A quantitative research approach was adopted in the present research study. A quasi-experimental research design (One-group pretest-post-test design) has been used to attain the objectives of the present study. The sample of the study were the high school students selected using the non-probability convenient sampling technique. A total of 30 samples who fulfilled the inclusion criteria were selected and

randomly allocated into experimental and control group

Instruments:

The research tool for the data collection comprised of 2 sections.

- Section A of the tool consisted of the socio-demographic variable comprising of a total of 8 items like age, gender, religion, type of family, educational status, place of living and previous knowledge regarding epistaxis & heat stroke, information regarding heat stroke.
- Section B comprised of the 25 self-structured questionnaire to assess the knowledge regarding first aid management of selected minor ailments among sample.

Data Collection:

Before the collection of data, permissions were taken from the concerned authorities of the school. Samples were selected as per the inclusion criteria of the study. Prior to the data collection, nature and purpose of the study was explained to the samples. Consent was taken and confidentiality was maintained. It started with pre-test data collection there after implementation of structured teaching program and followed by post test data collection.

RESULTS

Data was presented mainly as frequency and percentage distribution of knowledge score.

Paired t test was used to compare means of the groups. Descriptive and inferential statistics was applied to draw final inference of the study.

Description Of Demographic Characteristics:

Total 8 items were assessed to collect the baseline data about the samples. It included age, gender, religion, educational qualification, family income, type of family, area of residence, previous knowledge and the source of knowledge.

Knowledge Level Regarding First Aid Management Of Selected Minor Ailments

Knowledge level regarding first aid management of minor ailments was assessed and it was distributed into 3 different categories depending on the knowledge score.

Table 1 depicts the distribution of the samples according to their pre-test and post-test knowledge level regarding first aid management of minor ailments. In pre-test, 70% of the samples had inadequate knowledge while in the post-test 66 % of the samples had adequate knowledge an 33 % had good knowledge.

Table 2 depicts the comparative data showing the effectiveness of structured teaching programme on the knowledge level. The mean pre-test score was 8.16 ± 5.31 while that of post-test was 19.06 ± 23.20 . The t-value calculated was 20.72 at df 29 while tabulated was 2.045 at the p level < 0.05.

Table 3 Depicts the association of selected demographic variable with the knowledge level.

Figure 1 depicts that knowledge level of pre-test and the post test of the samples.

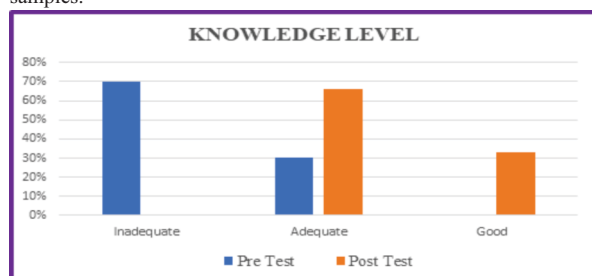


Figure 1: Graph Depicting The Pre-test & Post-test Knowledge Level Of The Samples (N=30)

Table 3: Association Of Demographic Variable With The Knowledge Level Regarding First Aid Management Of Selected Minor Ailments.

S. N	Demographic Variable	Category	Inadequate	Adequate	Good	Chi Square (χ^2)	S/NS
1	Age	13-15	0	8	0	$\chi^2 = 3.14$ Df= 6	NS
		16-18	0	15	7		
		19-21	0	1	0		
		21-23	0	0	0		
2	Gender	Female	0	19	2	$\chi^2 = 4.78$ Df = 2	NS
		Male	0	5	4		
3	Religion	Hindu	0	23	6	$\chi^2 = 0.257$ Df=6	NS
		Muslim	0	1	0		
		Christian	0	0	0		
		Other	0	0	0		
4	Type of Family	Nuclear	0	20	2	$\chi^2 = 13.97$ Df=2	S
		Joint	0	4	4		
5	Education	Non formal	0	9	1	$\chi^2 = 3.159$ Df=6	NS
		Primary	0	11	2		
		Secondary	0	3	2		
		Graduate	0	1	1		
6	Place of Living	Urban	0	24	6	$\chi^2 = 0$ Df=2	NS
		Rural	0	0	0		
7	Previous knowledge on epistaxis	Yes	0	16	2	$\chi^2 = 3.14$ Df=6	NS
		No	0	8	4		
8.	Previous knowledge on Heat stroke	Yes	0	14	2	$\chi^2 = 2.2$ Df=2	NS
		No	0	11	3		
9.	Have you ever had epistaxis	Yes	0	8	0	$\chi^2 = 1.126$ Df=2	NS
		No	0	16	6		
10	Have you ever had heat stroke	Yes	0	6	2	$\chi^2 = 0.17$ Df=2	NS
		No	0	18	4		

DISCUSSION

Muniraju M (2023) conducted a prospective descriptive study aimed to determine common etiologies and management of epistaxis in a tertiary care center. Total 60 of sample of patients selected by consecutive sampling presented in the DR B.R Ambedkar Medical College and Hospital, Bangalore, Karnataka, India with epistaxis between the years 2021-2022. Incidence of epistaxis was more in males (58.33%) with male to female ratio of 1:4:1 most common age group was between 10-49 year (68.33%), the commonest etiology was idiopathic (30%), when the cause was present trauma was the most common reason mainly in young adults (13.33%) followed by hypertension (11.67%). The most common site of epistaxis was noted in the anterior nasal cavity (45%) where little area (20%) was the most common location. most cases were managed by consecration non-surgical treatments alone (55%) like anterior and or posterior nasal packing chemical/ electro and blood components. Almost an equal number of patients underwent surgical managements in our hospital (45%) as it is a tertiary care centre.

CONCLUSION

Most of the time primary school children experience minor injuries such as heat stroke and epistaxis, etc., and they always need first aid care to prevent condition become worse and school teachers are the nearest one's to manage their minor injuries. If school teacher have enough knowledge about first aid management, they may not only help in reducing the complications and absenteeism rate in children, but also save the life of children when needed.

Financial Support And Sponsorship

No

Table 1: Frequency And Percentage Distribution Of The Post-test Knowledge Level Of The Samples [N=30]

S. N	Level of Knowledge	Pre-Test		Post- Test	
		Frequency	Percentage	Frequency	Percentage
1	Inadequate	21	70%	0	0
2.	Adequate	9	30	20	66%
3.	Good	0	0	10	33%

Table 2: Comparative Data Showing The Effectiveness Of Structured Teaching Programme On The Knowledge Level (N=30)

Group	Mean	Mean Difference	SD	df	Calculated t-value	Tabulated t-value
Pre-test	8.16	10.9	5.31	29	20.72 *S	2.045
Post-Test	19.06		23.20			

* $p < 0.05$ S- Significant NS- non significant

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