

Effectiveness of planned health teaching programme on knowledge regarding oral hygiene among school children in the age group of 7-12 years

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Abstract- Children are a nation's most fragile resource. Oral health is the condition of the mouth, teeth, and orofacial structures that allow people to carry out basic tasks like eating, breathing, and speaking. The study was conducted by using pre-experimental research design (one group pretest and posttest design). The sample consists of 60 school children from Government primary school Kuanwala, Doiwala, Dehradun, Uttarakhand, India. The simple random sampling method was used to select the participants for this study. Moreover, the tool used for this study was structured knowledge questionnaire. Results of the study indicated that the level of knowledge regarding oral hygiene depicts that during pretest 31(51.7%) school children having moderately adequate knowledge followed by 29(48.3%) having inadequate knowledge. After intervention (planned health teaching programme) there was an improvement in the level of knowledge regarding oral hygiene that is on 3rd day, most of the school children 55(91.7%) having adequate knowledge and five (8.3%) having moderately adequate knowledge. The study concluded that the mean and standard deviation of level of knowledge regarding oral hygiene where the pretest score is 11.05 ± 2.867 followed by post test score of day 3rd is 25.63 ± 2.963 . The t value is 27.568 (59) at 0.05 significant level which proves that the level of knowledge regarding oral hygiene of school children was effective.

Keywords: Planned health teaching programme, knowledge, oral hygiene, school children.

INTRODUCTION

Considered to be the most prevalent subject throughout civilizations is health. Regardless of caste, creed, religion, political beliefs, or economic or social circumstances, it is a fundamental human right. Children who are in good health learn well. In addition to being at the center of various government efforts and regulations, school-age children's health and wellbeing have gained significant public attention. Oral health is a component of the WHO's "Health for all by the year 2025" aim. There are many issues that affect children of school age, but one of the most prevalent ones is oral health. Education is built on a foundation of good health and nutrition. (1)

Everyone needs to practice good oral hygiene, but kids especially need to. The whole health of the body is impacted by oral health. It supports keeping the mouth, teeth, gums, tongue, and lips in good health. Cleanliness, comfort, and hydrating mouth structures are all components of good dental hygiene. These factors promote wellbeing and can increase hunger. The child's general health is first impacted by oral health. A child's

growth and development may be negatively impacted by poor dental health in a number of ways. When it comes to physical health, oral health has an impact on food, correct breathing, speaking, smiling, and social scenario adaptation. Poor oral health can make it painful and uncomfortable, embarrassing, impair self-esteem, and make it difficult to carry out daily tasks. Children with poor dental health may not develop normally, be underweight, become irritable, be more prone to disease, experience more hospital admissions, and have trouble sleeping. (2)

Children are a nation's most fragile resource. Caries, which affects 50–75% of children of school age in India, is the most prevalent disease. Due to a lack of proper care and inadequate oral hygiene education, children are more likely to develop dental disease, which is growing at an alarming rate. One of the most important needs for children is dental health, it is acknowledged. Therefore, it is crucial to avoid oral disorders at the school level.

Poor dental health has an adverse effect on a person's ability to grow, develop, learn, eat well, communicate, and feel confident in themselves. Oral health, which includes dental caries, gum disease, tooth loss, and oral cancer, is a crucial predictor of a person's general health, wellbeing, and even quality of life. According to the 2017 Global Burden of Disease survey, 3.5 billion people worldwide were affected by oral disorders.² Lip and oral cavity cancers are among the top 15 most prevalent malignancies worldwide, with approximately 180000 fatalities annually, according to the International Agency for Research on Cancer. (3)

Dental hygiene often refers to the habit of maintaining a clean, healthy mouth, teeth, and gums to fend off infections. Oral hygiene and oral health are often taken for granted, despite the fact that they are vital aspects of daily living.³ Oral infection has the potential to lead to serious health consequences, and oral health has a substantial impact on overall health. Oral hygiene refers to routine oral care for children, such as brushing their teeth or cleaning their dentures. To preserve the health of children's teeth, gums, mucous membranes, and lips, oral hygiene is offered. (4)

Planned health teaching program is any collection of educational opportunities intended to encourage voluntarily taking care of one's health. People, families, institutions, or communities may engage in these actions or behaviors. Therefore, educational initiatives for kids, parents, policymakers, or healthcare professionals may fall under the purview of health education.

MATERIAL AND METHODS

Research Approach

A quantitative research approach was adopted for this study.

Research Design

Pre-Experimental Design (one group pre-test post-test design)

Setting

The current research was done in Government primary school Kuanwala, Dehradun, Uttarakhand.

Population

In the present study, the population consists of school children in the age group of 7-12 years.

Samples

The sample of present study consist of school children in the age group of 7-12 years who comply with the requirements.

Sampling Technique

In the present study, all the samples who fulfill the inclusion criteria are recruited using the simple random sampling technique.

The calculated sample size was 60 school children in the age group of 7-12 years.

Development and description of Tool

Section A: demographic data

It contains 7 items for obtaining information which includes age, gender, standard/class, father’s education, mother’s education, father’s occupation, mother’s occupation, type of family, residential area, and source of information.

Section B: Structured questionnaire to assess the knowledge regarding oral hygiene

Structured interview schedule was used to assess the level of knowledge regarding oral hygiene among school children. It consists of 30 multiple choice questions with four options for each question and patients are expected to choose one correct option. Correct answer is given a score as one. Total score is 30.

Score Interpretation

Level of Knowledge	Score	Percentage
Adequate knowledge	21-30	70-100%
Moderately Adequate knowledge	11-20	37-69%
Inadequate knowledge	0-10	0-36%

RESULT

SECTION A: DESCRIPTION OF THE BASELINE CHARACTERISTICS OF THE STUDY PARTICIPANTS

Table No. 1 Frequency and percentage distribution of school children based on baseline characteristics (n=60)

S.No.	Socio-Demographic Data	Frequency	Percentage (%)
	Age in years		
	7-9years	32	53.3%
	10-12years	28	46.7%
	Gender		
	Male	28	46.7%
	Female	32	53.3%
	Standard/Class		
	3 rd standard	21	35%
	4 th standard	22	36.7%

	5 th standard	17	28.3%
	Father's Education		
	No formal education	16	26.7%
	12 th pass	17	28.3%
	10 th pass	08	13.3%
	8 th pass	19	31.7%
	Mother's Education		
	No formal education	18	30%
	12 th pass	05	8.3%
	10 th pass	35	58.3%
	8 th pass	02	3.3%
	Father's Occupation		
	Government job	6	10%
	Private job	28	46.7%
	Laborers	26	43.3%
	Mother's Occupation		
	Government job	9	15%
	Private job	33	55%
	Laborers	18	30%
	Type of family		
	Joint family	32	53.3%
	Nuclear family	28	46.7%
	Residential area		
	Urban area	28	46.7%
	Rural area	32	53.3%
	Source of information		
	Television	16	26.7%
	Radio	14	23.3%
	Newspaper	06	10%
	Other/ No information	24	40%

The above table no. 1, shows that most of the school children 32(53.3%) were lie between the age group of 7-9 years, more than half of the school children 32(53.3%) were female, most of the school children 22(36.7%) were in 4th standard, most of the father's education of school children 19(31.7%) were 8th pass, most of the mother's education of school children 35(58.3%) were 10th pass, most of the father's occupation of school children 28(46.7%) had private job, most of the mother's occupation of school children 33(55%) had private job, majority of school children 32(53.3%) were belongs to joint family, more than half of the school children 32(53.3%) were from rural area, most of the school children 24(40%) had no source of information.

SECTION B: ASSESS THE LEVEL OF KNOWLEDGE REGARDING ORAL HYGIENE OF SCHOOL CHILDREN IN THE AGE GROUP OF 7-12 YEARS

Table No. 2 Assess the level of knowledge regarding oral hygiene of school children (n=60)

Score	Pretest		Posttest	
	f	%	F	%
0-10 (Inadequate Knowledge)	29	48.3%	00	00%
11-20 (Moderately adequate Knowledge)	31	51.7%	05	8.3%
21-30 (Adequate Knowledge)	00	00%	55	91.7%

*f= Frequency & %= Percentage

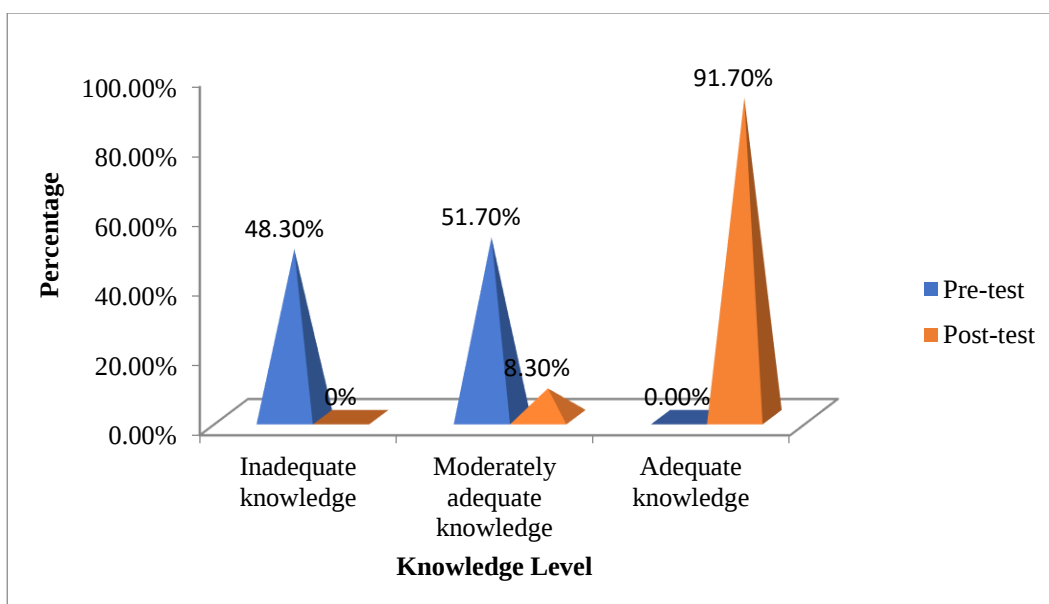


Figure 2.1 Bar representation of level of knowledge regarding oral hygiene of school children

The above figure 2.1 shows that, the assessment of level of knowledge regarding oral hygiene depicts that during pretest 31(51.7%) school children having moderately adequate knowledge followed by 29(48.3%) having inadequate knowledge.

After intervention (planned health teaching programme) there was an improvement in the level of knowledge regarding oral hygiene that is on 3rd day, most of the school children 55(91.7%) having adequate knowledge and five (8.3%) having moderately adequate knowledge.

SECTION C: EFFECTIVENESS OF PLANNED HEALTH TEACHING PROGRAMME ON KNOWLEDGE REGARDING ORAL HYGIENE OF SCHOOL CHILDREN IN THE AGE GROUP OF 7-12 YEARS

Table No. 3 Effectiveness of planned health teaching programme on knowledge regarding oral hygiene (n=60)

Variables	Pre-test	Posttest	t value (df)	p value
	Mean $\pm$ SD	Mean $\pm$ SD		
Level of knowledge	11.05 $\pm$ 2.867	25.63 $\pm$ 2.963	27.568 (59)	0.000

Note: * significant at $p < 0.05$

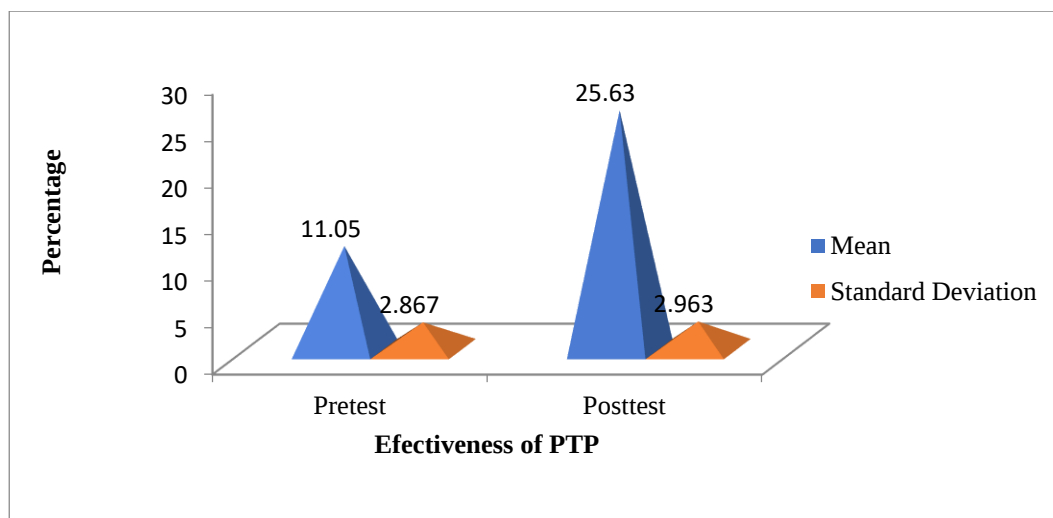


Figure 3.1 Bar representation of mean and standard deviation of level of knowledge regarding oral hygiene of school children

Figure 3.1 depicts that the mean and standard deviation of level of knowledge regarding oral hygiene where the pretest score is 11.05 $\pm$ 2.867 followed by post test score of day 3rd is 25.63 $\pm$ 2.963.

The above table no. 3 shows that the t value is 27.568 (59) at 0.05 significant level which proves that the level of knowledge regarding oral hygiene of school children was effective. Hence, H_1 was accepted and null hypothesis was rejected.

DISCUSSION

Objective 1: to assess the knowledge regarding oral hygiene of school children in the age group of 7-12 years.

According to the findings of this survey, the assessment of level of knowledge regarding oral hygiene depicts that during pretest 31(51.7%) school children having moderately adequate knowledge followed by 29(48.3%) having inadequate knowledge.

After intervention (planned health teaching programme) there was an improvement in the level of knowledge regarding oral hygiene that is on 3rd day, most of the school children 55(91.7%) having adequate knowledge and five (8.3%) having moderately adequate knowledge.

Bala Renu, Bhatnour Divya, Kajal, Pritika, Ravita, Vimla, (2020) to evaluate students' understanding of oral hygiene in the chosen school in Ambala, Haryana's Naraingarh district. A sample size of 50 children between the ages of 9 and 12 were chosen for the quantitative study using a simple random sampling technique, and a semi-structured questionnaire was used to gauge the level of oral hygiene knowledge among the chosen students in the Naraingarh district of Ambala (Haryana). According to the survey, out of 50 children, 18 (45.84%) had a good level of knowledge about oral hygiene, followed by 14 (34.17%) who had a medium level, 11 (0.83%) who had an exceptional level of knowledge, and 7 (1.66%) who had a poor level of knowledge.

Objective 2: to evaluate the effectiveness of planned health teaching programme on knowledge regarding oral hygiene of school children in the age group of 7-12 years.

According to the findings of this survey, the mean and standard deviation of level of knowledge regarding oral hygiene where the pretest score is 11.05 ± 2.867 followed by post test score of day 3rd is 25.63 ± 2.963 . The t value is 27.568 (59) at 0.05 significant level which proves that the level of knowledge regarding oral hygiene of school children was effective.

Subramaniam Devi Narmada, (2020) Children between the ages of five and seventeen are affected by dental caries, which is the most prevalent chronic disease in children. In order to improve oral health awareness, a study was conducted to evaluate school-age children's understanding of oral hygiene in a few Jalgaon schools. The study was conducted using a pre-experimental evaluation research approach. The study was carried out in a few Jalgaon city schools. There were 60 kids in the sample that were of school age. Purposive sampling was used to choose the sample. The findings demonstrated that the organized training program was very successful in raising school-age children's awareness of oral hygiene.

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