e - ISSN - 2349-0691



AMERICAN JOURNAL OF ADVANCES IN NURSING RESEARCH



Journal homepage: www.mcmed.us/journal/ajanr

EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING ORAL HYGIENE AMONG PRIMARY SCHOOL CHILDREN IN SELECTED SCHOOLS, BANGALORE

Dr. Tejeshwari B.V

Guide, HOD & Professor, Department of Community Health Nursing, RajaRajeswari College of Nursing, Bangalore, Karnataka, India.

Article Info

Received 25/08/2023 Revised 15/09/2023 Accepted 19/10/2023

Key word:

Effectiveness, Knowledge, STP and oral hygiene.

ABSTRACT

Introduction: - Oral hygiene is a crucial aspect of maintaining good overall health and wellbeing. It refers to the practice of taking care of your mouth, teeth, and gums to prevent various oral health issues such as cavities, gum disease, bad breath, and more serious conditions like oral cancer. Good oral hygiene not only contributes to a healthy mouth but can also impact your overall quality of life. Objectives: - 1. To assess the level of pre-test knowledge regarding oral hygiene among primary school children in selected schools, Bangalore, Karnataka. 2. To assess the level of post-test knowledge regarding oral hygiene among primary school children in selected schools, Bangalore, Karnataka. 3. To evaluate the effectiveness of structured teaching programme on oral hygiene among primary school children in selected schools, Bangalore, Karnataka. 4. To find out association between posttest knowledge score regarding oral hygiene with selected demographic variables. Design: -Evaluative research approach was used for the study. Forty, 1st standard to 4th standard primary school children were recruited by non-probability purposive sampling method. Necessary administrative permission was obtained from concerned authority. Written informed consent was obtained from all subjects. Then the investigator collected the data pertaining to the demographic variables by using structured interview schedule. Ethical clearance was obtained from Institutional ethical committee. Content validity of the tool was established by split of method. The obtained score was 0.94 & it was found to reliable. Pre-testing of the tools was done. Setting: - The study was conducted in selected primary schools, Bangalore, Karnataka. Result: - The findings of the study was revealed that the mean score of knowledge regarding oral hygiene was 12.4 in pre-test and 17.5 in post-test out of maximum score of 20, which proved that structured teaching programme was effective in increasing the knowledge level of primary school children regarding oral hygiene. The paired't' test found be statistically significance at 0.05 levels. Conclusion: -The present study attempted to assess the effectiveness of structured teaching programme on knowledge of primary school children regarding oral hygiene and it was found that the structured teaching programme was effective in improving the knowledge of primary school children

INTRODUCTION

Oral hygiene is the practice of keeping the mouth

and teeth clean to prevent dental problems, especially the



common dental cavities and gingivitis, and bad breath. There are oral pathologic conditions in which a good oral hygiene is required for healing and regeneration of the oral tissues. These conditions included gingivitis, periodontitis, dental traumas such as subluxation, oral cysts, and after wisdom tooth extraction. [1]

Health and disease are no longer related to where you are born, but rather to the socioeconomic setting in which you live. Oral disease demonstrates a strong relationship to socioeconomic status. Oral diseases such as dental caries, periodontal disease, tooth loss, oral mucosal lesions and Oro dental trauma, oropharyngeal cancer, HIV-related oral disease are major health problem word wide. Oral disease results mainly because of unhealthy lifestyles such as poor nutrition, diet and oral hygiene. [2]

Oral health is a vital component of overall health, which contributes to each individual's wellbeing and quality of life by positively affecting physical and mental wellbeing appearance and interpersonal relations. Oral health is an important aspect of health for all children. Oral health is essential to general health and wellbeing throughout the life span and is a marker for overall health status Research and other advances in oral health have led to safe and effective means of maintaining oral health and preventing dental caries, periodontal disease, gingivitis. The beginning of school health service in India dates backs to 1909 when for the first-time medical examination of school children was carried out in Baroda city. In 1953 the secondary education committee emphasized for the need medical examination of peoples and school feeding programmes. In 1960 the government of India constituted a school health committee to assess the standard of health and nutrition of school children and suggests ways to improve them. Children with disabilities and special needs are at a higher risk of health problems. Special needs children need extra help to achieve and preserve physical health, including dental health. A clean mouth is the most essential requirement for good health. Children with special needs have enough problems without having poor health due to poor oral health adding to their other life problems. Special needs children are those who have special requirements due to developmental, physical, emotional or behavioural conditions who need help from caregivers and associated services. Common oral problems such as tooth decay or gum diseases put all children and adults at risk for other health problems. However, special needs children often have more oral health problems than the general population. For instance, children with disabilities may have problems with mobility, behavioural problems, neuromuscular problems, cognitive problems, gastroesophageal reflux problems, or seizures.

Corresponding Author **Dr.Tejeshwari.B.V**

Email:- tejeshwinirajesh@gmail.com

them at risk for tooth decay, gum disease, and other health These problems may make it impossible for disabled children to tend to their own oral care, which puts problems. [3]

It is possible to spread germs to your children's mouth, so remember never place anything from your mouth into your child's mouth. As a parent of a special needs child, you will be responsible for helping the child brush his teeth. Your special needs child may not be able to assist at all in oral care, so it would be your responsibility to provide him with the care he needs. Never leave your special needs child (or any child) lying down with a bottle, or propped with a bottle. Milk, formula or any other liquid, other than water, can collect in the mouth of a resting child and cause bacteria to form in the mouth. Aside from that, there is a risk of aspiration when the child is lying down with a bottle. Another thing to remember is that good nutrition is good for the mouth and the body, and poor nutrition can be detrimental to them. Soda, candy, sweet drinks and other concentrated sweet foods may cause cavities.

However, millions of individuals suffer from dental caries and periodontal disease, resulting in unnecessary pain, difficulty in chewing, swallowing, speaking and increased medical costs. Untreated oral diseases in children frequently lead to serious general health problems, significant pain, interference with eating and lost school time. Tooth decay is the most common chronic disease of childhood, affecting 50 percent of childhood, affecting 50 percent of childhood and 70 percent by late adolescence. Chronic gingivitis is also common among children. Gingivitis is often caused by inadequate oral hygiene which leads to plaque buildup. Most oral diseases can be prevented. [4]

OBJECTIVES

- To assess the level of pre-test knowledge regarding oral hygiene among primary school children in selected schools, Bangalore, Karnataka.
- To assess the level of post-test knowledge regarding oral hygiene among primary school children in selected schools, Bangalore, Karnataka.
- To evaluate the effectiveness of structured teaching programme on oral hygiene among primary school children in selected schools, Bangalore, Karnataka.
- To find out association between post-test knowledge score regarding oral hygiene with selected demographic variables. [5]

HYPOTHESES

 $\mathbf{H_1}$ – There's a significant difference in a pre-test and posttest level of knowledge regarding oral hygiene among primary school children in selected schools, Bangalore.

 \mathbf{H}_{2} – There's a significant association of post-test level of knowledge regarding oral hygiene among primary school



children with their selected demographic variables.

MATERIAL AND METHODS

Evaluative research approach was used for the study. Forty children were recruited by non- probability purposive sampling method. Necessary administrative permission was obtained from concerned authority. Written informed consent was obtained from all subjects. Later the investigator collected the data pertaining to the demographic variables by using structured interview schedule in the following three phases. [6]

Phase I: Assess the pre-test knowledge of primary school children regarding oral hygiene by using structured questionnaire.

Phase II: A STP was administered on knowledge regarding oral hygiene.

Phase II: Assess the post-test knowledge after a period of week within the group followed by same procedure.

Ethical clearance was obtained from Institutional ethical committee. Content validity of the tool was established by split of method. The obtained score was 0.94 & it was found to reliable. Pre-testing of the tools was done. A pilot study was conducted to see the feasibility. The obtained data were analyzed based on the objectives and hypothesis by using descriptive and inferential statistics. [7]

The above table 2 shows the distribution of primary school children according to the level of knowledge regarding oral hygiene before and after structured teaching programme. It revealed that in pre-test, majority of the respondents 30 (75%) had inadequate knowledge, 10 (25%) had moderate knowledge and none of them had adequate knowledge regarding oral hygiene. And in post-test most of the respondents 25 (62.5%) had adequate knowledge and 15 (37.5%) had moderate knowledge regarding oral hygiene.

Table1: Frequency and percentage distribution of demographic variables of primary school children n=40

Sl.N	Demographic Variables	Frequency (F) N=40	Percentage (%)
1	Age		
	8-9years	28	70
	10-11years	12	30
	Gender		
2	Male	28	70
	Female	12	30
3	Class		
	Class 1	8	20
	Class 2	11	28
	Class 3	9	22
	Class 4	30	30
4	Religion		
	Hindu	27	68
	Muslim	7	17
	Christian	6	15
5	Mother Tongue		
	Kannada	40	100
6	Father's Education		
	Primary	14	35
	Secondary	6	15
	Higher secondary	3	8
	Graduate or Postgraduate	2	5
		15	37
7	Mothers' education		
	Primary	12	30
	Secondary	4	10
	Higher secondary	24	60



8	Occupation status of		
	father		
	Farmer	17	43
	Business	8	20
	Profession	3	7
	worker	12	30
9	Occupation status of		
	mother	5	13
	Business	28	70
	Unemployed	7	17
	Others		
10	Type of family		
	Single	17	43
	Joint	12	27
	Extended	11	30
11	Income of family		
	Below5000	6	15
	5000-10000	16	40
	11000-15000	7	18
	>15000	11	27

Table 2: Frequency and percentage distribution of primary school children according to the level of knowledge regarding oral hygiene before and after structured teaching programme. n=40.

		Respondents Knowledge				
Sl.No	Level of Knowledge	Pre-test		Post-test		
		Frequency	Percentage	Frequency	Percentage	
1.	Inadequate (< 50%)	30	75	-	-	
2.	Moderate (50-75%)	10	25	15	37.5	
3.	Adequate (> 75%)	-	-	25	62.5	
OVERALL		40	100	40	100	

Table 3: Mean, Standard Deviation and paired't' test to determine the effectiveness of structured teaching programme regarding knowledge on oral hygiene among primary school children . n=40

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Max score	Mean	SD	Mean difference	paired "t' test	Significance	
Pre-Test	15.41	5.17	1.0	12.50	0.05*	
Post-Test	20.21	6.78	4.8	12.30	0.05*	

The data presented in a table-3 shows that the obtained [t] value was 12.50, which was found statistically significant at 0.05 levels.

Table 4: Comparison of pre-test and post-test level of knowledge among primary school children regarding oral hygiene n=40

	Pre-test		Post-test		
Level of knowledge	No. of primary		No. of primary		Chi square test
	school children	%	school children	%	
Adequate knowledge	0	0	25	62.5	
Moderately adequate knowledge	10	25	15	37.5	$x^2 = 3.12$
Inadequate knowledge	30	75	0	0	Df=3
Total	40	100	40	100	P=0.05**

IMPLICATION OF THE STUDY:-

The result of the study proceed that students had

inadequate knowledge regarding oral hygiene. The findings of the study have scope in the following areas,



Nursing Practice

- 1. Nurses working in the community field should have enough knowledge about oral hygiene & able to find an opportunity to teach & improve knowledge regarding oral hygiene
- 2. Nursing professionals can play a key role in the enhancement of knowledge of primary school children regarding oral hygiene, which could improve the knowledge of primary school children. [8]

Nursing Education

1. Nursing curriculum can be modified with increased emphasis on oral hygiene.

Nursing Administration

- 1. Administrators can organize the educational programs in primary school children and community areas to provide knowledge regarding oral hygiene.
- 2. The nurse administrator in the higher-level authority must hold discussions and meetings on oral hygiene. Based on that, the knowledge of the primary school children can be assessed and the program can be planned and implemented in school & community at various levels. [9]

Nursing Research

Management & administration authorities give encouragement, motivation & also provide financial support to do research.

ASSUMPTIONS

- ✓ Students will have some knowledge regarding selected aspects oral hygiene.
- ✓ Structured teaching programme may enhance the knowledge of students regarding selected aspects of oral hygiene.

LIMITATIONS

- The study was conducted in selected primary school, Bangalore.
- Sample was selected only from one institution; hence generalization can only be made for the selected sample.
- The study did not use control group. The investigator had no control over the events that took place between pre-test and post-test.

RECOMMENDATIONS

Based on the study findings the following recommendations have been made for further study:

- Similar study can be carried out on larger samples for broader generalization.
- A comparative study could be conducted in different settings to find out the effectiveness of structured teaching programme.
- An experimental study could be replicated with a control group.
- A comparative study could be undertaken to evaluate different teaching strategies, self-instructional module (SIM), peer evaluation and education by students.

DISCUSSION

Structured teaching programme was found to be an effective educative method for improving the knowledge of primary school children in the selected schools regarding oral hygiene. The findings were similar to other studies, which shown that primary school children having good knowledge on oral hygiene. In the present study results revealed that obtained [t] value was 12.50, which were found with statistically significant at 0.05 levels. [10]

CONCLUSION

The study concluded that the structured teaching programme on knowledge regarding oral hygiene among students in selected schools carried out was effective in improving the knowledge of students as evidenced by the significant change between pre-test and post-test knowledge score.

ACKNOWLEDGEMENT

We want to express our sincere thanks to the committed B.Sc. Nursing students whose efforts and input were instrumental in the success of this study. A special shout-out to the participants whose involvement was crucial; without them, this project wouldn't have come to fruition. Our appreciation extends to the authors, editors, and publishers of the articles, journals, and books that were invaluable in shaping the literature discussed in this article. Gratitude also goes out to everyone who, in various ways, aided us in completing this study.

CONFLICT OF INTEREST: Nil

SOURCE OF SUPPORT: Self Funded

ETHICAL CLEARANCE:

Obtained from Institutional ethical committee

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