Original Article

"A STUDY TO ASSESS THE EFFECTIVENESS OF VIDEO-ASSISTED TEACHING PROGRAMME REGARDING ORAL HYGIENE AMONG 1ST TO 3RD CLASS SCHOOL CHILDREN AT SELECTED GOVERNMENT SCHOOL AT MEDCHAL DISTRICT, TELANGANA."

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Abstract

The study aimed to assess the effectiveness of video-assisted teaching program on Knowledge regarding oral hygiene among 1st to 3rd class school children at Medchal district Telangana, pre-experimental one group pre-test and post-test Research Design was used. the sample was 30 school children studying in govt school Medchal district selected by non-probability convenient sampling technique. The data collected by the administrator structure knowledge questionnaire was analysed by Using SPSS: v-20, all the inferences were checked at 0.05 level of significance. the mean pre-test knowledge score was 13.03 which improved to 24.33, the standard deviation was 2.39 and the calculated value of paired t-test was 3.446. Table value at 0.05 level of significance at def.=29 was 2.045. As the calculated value is greater than the table value it is evident that there was a significant difference between pre-test and post-test knowledge scores. Hence hypothesis was accepted, video-assisted teaching program was effective.

INTRODUCTION

“A child is precious and beautiful A source of joy and happiness A focus of love and care A subject of dreams for the future” ---- Pandit Jawaharlal Nehru

Every child has a fundamental right to his total health and we have an obligation to fulfill this faith. To bring children happily from childhood through adolescence is a difficult task and requires an approach that is carefully planned, coordinated, and implemented by knowledgeable people

The goal of WHO, “Health for all by the year 2025”, includes oral health as one of the healthy lives. WHO selected the theme “Oral health for a healthy life” in 1994” Thepurpose behind this was to make people aware ofdiseases of the oral cavity and to educatethem in relation to the prevention of these diseases School age is a period of overall development. During this period the childlearns to becomea productive member of the peer group. If proper oral hygienehabits are cultivated during this period, it will go a long way in maintaining the oralhealth of a child throughout his/her life. Healthy habits are inculcated early. The seeds of prevention of

dental caries ifsworn early in infancy, childhood or adolescence will bear fruits in the form of good health not only in dental but in general throughout life.

Where children are, there is the golden age". Children are the world's most valuable resource. They are very vital for deciding how the world is going to be after some years.So, if you could perform a little properly within the lifestyles of a toddler then there can be change, at the least a slightest change, within the global to return. Children are absolutely the muse of the country. Hence, the focus of every citizen needs to be to sell their fitness and protect their hobby. Children are truly the foundation of the nation. Hence, the focus of every citizen should be to promote their health and safeguard their interest. They are the foundation that shapes children's future health, happiness, growth, development and learning achievement at school, in the family and community, and in life in general. Children need a lot of help and guidance in growing up. Good personal hygiene keeps the child healthy. In order to become healthy, Proper oral hygiene is important to even very young children, and child needs to learn this early in life. A healthy, correctly fed child more expected to have healthy teeth.

The nature of the school environment plays an important role in all-round development of a child. Psychological, emotional and general well-being exists within the schools. The children between the age group of 6-10 years will more attract to colorful foods during their school going period. During the school age 6-10 years the children are totally dependent on the family for health care. School age years are more susceptible to infections than younger children because of their growing curiosity and increased independence from close adult supervision during school times there is increased contact with other children who may be harboring the acute infections.

NEED FOR STUDY

"Every enamel in a man's head is more precious than a diamond"

Good oral health helps us in experiencing the life. It lets you communicategenuinely; taste, chunk, and swallow delicious and nutritious ingredients, and show your emotions through facial expressions including smiling.

If you protect your oral health with good oral hygiene practices (brushing and flossing), the odds are in your favor you can keep your teeth for a lifetime. To keep your enamel healthy, it's far critical to take away dental plaque, a sticky, colorless movie of bacteria. it may cause tooth decay and gum sickness. Promotion of health as a level of prevention is most apt for Formative years of life; Preschool and school-going children. Value-based learning is in the life cycle inthe early year's life and, thereafter continues throughout the life cycle with varyingdegrees of acquisition. Health is not valued unless it is lost. Organized value-based learning can be achieved much more effectively schools, homes and families. It might be a actual investment in fitness and development of future citizens. Parents and instructors are nice appropriate to put foundations and nurture the values of staying healthful. A new push and enthusiasm are called for in the present system directing efforts at community levels. Increased acquisition with the aid of individuals and families of the know-how talents and values required for higher living made to be had via all instructional channels inclusive of the mass media other sorts of modern-day and traditional communications and social action can be powerful in behavioral change. Oral hygiene is the practice of keeping one's mouth clean and free of disease and other problems (e.g. breath) by regular brushing of the teeth (dental hygiene) and cleaning between the teeth. It is important that oral hygiene be carried out on a regular basis to enable the prevention of dental disease and bad breath.
The majority of oral fitness situations are dental caries (teeth decay), periodontal sicknesses, oral cancers, oral manifestations of HIV, Oro-dental trauma, cleft lip and palate, and Noma (severe gangrenous disease starting in the mouth mostly affecting children). Most oral health situations are in large part preventable and can be treated of their early stages.

The Key facts related to oral health Worldwide include that 60–90% of school children are affected with oral cavity problems. Oral disease in children is high among poor and disadvantaged population groups. Risk factors for oral diseases include an unhealthy diet, poor oral hygiene, and social determinants, low socioeconomic status, lack of access to dental care, lack of awareness of the importance of dental care, low parental education

level, familial history of dental caries, sugar-rich diet, improper oral hygiene practices, lack of fluoride exposure to the teeth, untreated decay.

OBJECTIVES OF THE STUDY

- Toassessthepre-test knowledgeamong1st-3rd classchildrenregardingoral hygiene.
- Toassessthepost-knowledgeamong1st-3rd classchildren regardingoralhygiene.

Conceptual Framework –

Imogen Kings Goal Attainment

Hypothesis:

The post-test knowledge scores of 1st -3rd class school children will be significantly higher than the pre-test knowledge scores after administration of video-assisted teaching program on oral hygiene as measured by structured questionnaire at P>0.05 level of significance

Assumptions

- 1-3rd class children have some knowledge regarding oral hygiene.
- Knowledge helpsprotect the children from the adverse effects of oral hygiene
- The video-assisted teaching program on oral hygiene may enhance the knowledge of 1st-3rd class children.

Limitations

The study limited to

- Children in Government High School, Medchal,Hyderabad.
- Children who are in1st to 3rd class.
- Children who can speak and understand Telugu and English.
- Children who are willing to participate in the study.
- Children who are present at the time of Data Collection.

RESEARCH METHODOLOGY

Research Approach

An evaluative approach was adapted for the present study.

Sample

A sample consists of 30schoolchildren who are studying at government school Medchal,Telangana at the time of data collection.

Sample Size: 30 school children between the 1st -3rdclasses.

Sampling Technique: Nonprobability convenient sampling technique

CRITERIA FOR SELECTION OF THE SAMPLE

The sample should be

- ❖ The children who are studying at government school Medchal, Telangana.
- ❖ The children who are available at the time of data collection.
- ❖ The children who can understand, read and write Telugu and English

CONTENT VALIDITY OF THE TOOL:

The content validity and appropriateness of the tool. The investigator submitted the prepared tool to experts in the field of pediatrics and nursing education. Their valuable suggestion was incorporated in the tool.

Reliability: In order to establish reliability, Karl Pearson correlation coefficient (test-re-test) was computed from the scores and the obtained "r" value was 0.91. This was indicated that the tool was reliable for conducting study.

ORGANIZATION AND PRESENTATION OF THE DATA:

PART A: demographic variables consistof such age, sex, type of family, area of residency, food habits, family history of oral hygiene, educational qualification of the child, educational status of father &mother, occupation of the father, siblings' status, family income per month.

PART B: It is divided into three sections,

Section 1: Knowledge of the children regarding oral hygiene.

Section 2: Knowledge of the children regarding effects, causes, signs and symptoms of oral problems

Section 3: Knowledge of the children regarding diagnostic evaluation, management, prevention & home remedies of oral hygiene.

The level of knowledge was classified as below:

- Below average knowledge - <50%
- Average knowledge - 51-75%
- Above average knowledge ->75%

Organization and presentation of data:

SECTION-I: Distribution of samples based on demographic variables.

SECTION II: Level of knowledge of people on oral hygiene.

SECTION-III: Association between the levels of knowledge on oral hygiene among children with their selected demographic variables.

Table: 1 Frequency and percentage distribution of demographic data, related to Oral Hygiene Among 1st To 3rd Class School Children at Selected Government School N=30

s.no	Demographic variables	Frequency	Percentage
1	**Age**		
	5-6 years	9	30
	6-7 years	16	53.3
	7-8years	05	16.7
2	**Sex Of the Child**		
	Male	14	47%
	Female	16	53%
3	**Religion**		
	Hindu	18	60
	Christian	05	16.6
	Muslim	07	23.4
	Others	0	0
4	**Educational Status of Child**		
	1st	12	40
	2nd	13	43
	3rd	5	16.7

Table 4.1: Shows that 53.3% of school children were between the age group of 6-7 years, 30% of school children were between 5-6 years, 16.7% were of 7-8 years. With regard to sex of the child 53 %of the schoolchildren were females and 47% were males,with regard to religion 60% of the mothers were Hindus and 23.4% were Muslims, and 16.6% of mothers were Christians. Distribution according to the education showed that 43% of school children studied up to 2nd class, 40% studied up to 1st class, 16.7% has 3rd class education.

Table-2: Frequency and percentage Distribution of mothers based on occupation, type of family and parity and monthly income of the family. N=30

5	**The Educational Status of parents**		
	Illiterates	02	6.6%

	Primary	0	0%
	Secondary	05	16.8%
	Intermediate	14	46.6%
	Degree &above	09	30%
6	**Family**		
	Nuclear family	23	76.6%
	Joint family	07	23.4%
7	**Sibling Status**		
	1st child	13	43 %
	2nd child	10	33.3 %
	3rd child	4	1.3 %
	Only child	3	10 %
8	**Monthly Income of Family**		
	<10,000/-	9	30%
	11,001-20,000/-	13	43%
	21,001-30,000/-	5	16%
	>30,000/-	3	10%
9	**Area Of Residence.**		
	Urban area	14	47%

	Rural area	16	53%
10	**Food habits**		
	Like outside foods	17	57%
	Like homemade foods	13	43%
11	**Family history of brushing**		
	Brushing only in the morning	18	60%
	Brushing twice daily	12	40%
12	**Source of information.**		
	a) Mass Media	25	83.3%
	b) Health Camps	11	36.6%
	c)Relatives and Friends	19	63.3%
	d)Health personnel	3	10%

Table 4.2: Shows that Distribution according to education showed that 46.6% of parents studied up to intermediate, 30% studied up to degree and above, 16.8% had secondary education and 6.6%of mothers were illiterates. type of family, 76.6% were from nuclear family and 23.4% were from the joint family. Withregard to sibling status showed that 43% of 1st child,33.3% had 2nd childand only child is having 10%. Regarding monthly family income, 53.3% of people had Rs.10001 -Rs.15, 000, 33.3% had Rs.5, 000-Rs.10, 000 and 13.4% had Rs.15, 001-Rs.20, 000.with regard to area of residence 53% of children are staying at urban area,47% of children are residing at urban area. With regard to food habits 57% of children likes outside foods and 13% of children likes homemadefoods. With regard to Family history of brushing 60% ofchildren Brushing only in the morning and 40% of the children Brushing twice daily. Among which 83.3% of the mother had information through mass media, 63.3% had information from relatives and friends, 36.6% learned from health camps and remaining 10% of got had information through health personnel.

SECTION –II

level of knowledge of school children regarding oral hygiene among 1st to 3rd class

table-3: overall knowledge scores of school children regarding oral hygiene among 1st to 3rd class

N = 30

Knowledge levels	Pre-test		Post test	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Below average (50%)	25	83.4%	0	0%
Average (50-75%)	5	16.6%	6	20%
Above average (>75%)	0	0%	24	80%

Fig.3: Knowledge levels of school, children inpre-test and post-test on oral hygiene

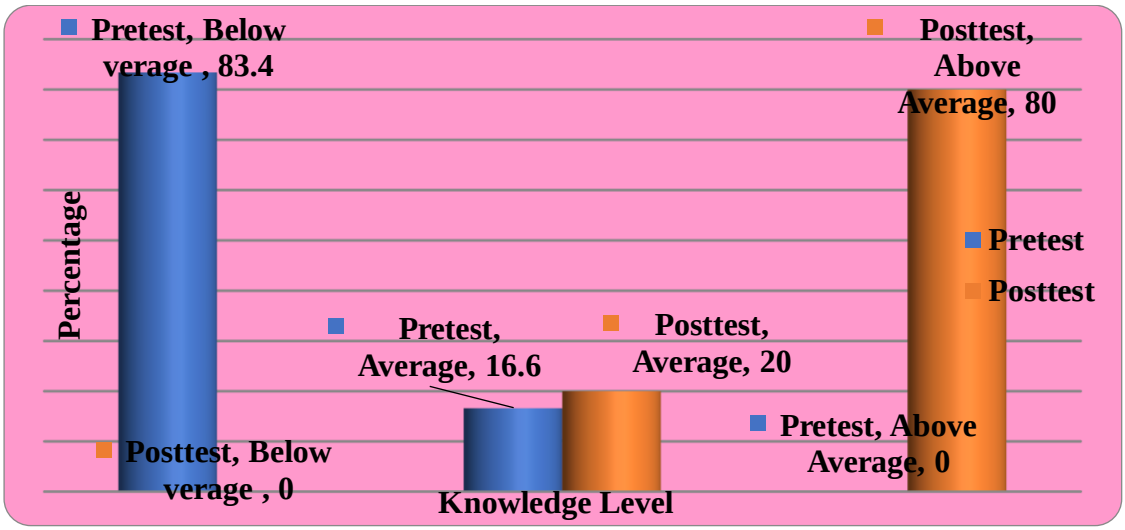

Table 4 & Fig 1 show the level of school children's knowledge regarding oral hygiene among 1st to 3rd class.In the pre-test 83.4% had below-average knowledge, 16.6% had average knowledge and none had above-average knowledge. The level of knowledge in post test showed that 80% had above average knowledge, 20% had average knowledge and none had below average knowledge.

SECTION- III

Comparison Of Pretest and PostTest Knowledge ofSchool Children Regarding Oral Hygiene Among 1st to 3rd class

Table 4: Comparison of pre-test and post-test knowledge scores of school children. N = 30

Criteria	Pre test		Post test		Paired t-test
	Mean	SD	Mean	SD	

Overall knowledge	**13.03**	**2.079**	**24.33**	**2.397**	**t_{cal} 3.446 *** **t_{tab} =2.045** **df=29**

Note: * Significant at 0.05 level of significance, df (degree of freedom), t_{cal} = calculated value, t_{tab} = table value

Fig 2: Overall knowledge scores of mothers in pre-test and post-test.

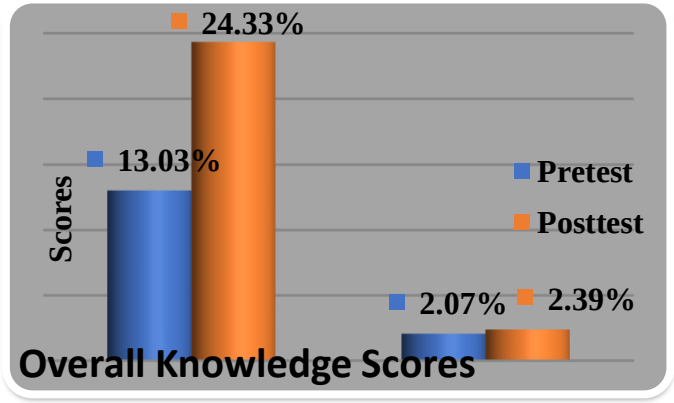

Table 4 and figure 4:show that the pre-test mean knowledge score was 13.03 and the standard deviation was 2. 079.Inpost-test mean knowledge,the score was 24.33, the standard deviation was 2.39 and the calculated value of paired t-test was 3.446. Table value at 0.05 level of significance at df=29 was 2.045. As the calculated value is greater than the table value it is evident that there was a significant difference between pre-test and post-test knowledge scores. Hence hypothesis was accepted, video-assisted teaching program was effective

SECTION-IV

Association between the knowledge levels and the selected demographic variables of oral hygiene.

Table 5: Association between the pretest knowledge levels and the selected demographic variable N=30

S.No	**Demographic variables**	**Frequency (N)**	**Below average**	**average**	**Chi-square values**
1	Age				
	5-6 years	9	9	0	t_{tab}= 5.991 t_{cal}= 4.506 df= 2, NS
	6-7 years	16	14	2	
	7-8years	5	3	2	
02	**Education**				

	Illiterates	2	2	0	t_{tab}= 7.815
	Secondary	5	5	0	t_{cal}= 1.461
	Intermediate	14	12	2	df= 3
	Degree &above	9	7	2	NS
03	**Food habits**				
	Like outside foods	23	21	2	t_{tab}= 3.841
	Like homemade foods	7	5	2	t_{cal}= 1.81 df= 1, NS

Note: NS: Nonsignificant at P<0.05, t_{cal}: calculated value, t_{tab}: table value, df: degrees of freedom.

Table 5: Shows that the chi-square calculated value for age was 4.506 and the table value was 5.991 at 2 df. The Chi-square value calculated value for education was 1.461 and the table value was 7.815 at 3 df. Chi-square calculated for parity was 1.81 and the table value was 3.841 at 1 df. As Chi-square calculated value is less than the table value among all variables, there was no significant association between pre-test knowledge score with demographic variables of school children.

Table 6: Association between posttest knowledge levels and selected demographic variables of school children. N=30

S.no	Demographic variables	N	average	Above average	Chi-square values
1	**Age**				
	5-6 years	9	1	8	t_{tab}= 5.991
	6-7 years	16	4	12	t_{cal}= 0.68 df= 2 NS
	7-8years	5	1	4	
02	**Education**				
	Illiterates	2	0	2	t_{tab}= 7.815
	Secondary	5	1	4	t_{cal}= 1.77
	Intermediate	14	2	12	df= 3
	Degree &above	9	3	6	NS
03	**Food habits**				
	Like outside foods	23	5	18	t_{tab}= 3.841

	Like homemade foods	7	1	6	t_{cal}= 0.168 df= 1 NS

Note: P<0.05 NS: Nonsignificant, t_{cal}: calculated value, t_{tab}: table value, df: degree of freedom.

Table 6shows that in post-testchi-square table values are greater than chi-square calculated values, hence no significant association was found between the post-test knowledge levels with demographic variables ofschool children.

Recommendations

On the basis of the findings of the present study the following recommendations can be made.

- A similar study can be conducted by adopting a different research design.
- A comparative study can be conducted among rural and urban children regarding knowledge of oral hygiene.
- A similar study can be conducted to assess the nursing personnel regarding knowledge of oral hygiene.
- An observational study can be conducted on children on maintenance of oral hygiene.
- A comparative study can be conducted related to eating habits and maintenance of oral hygiene.
- A development study can be conducted regarding maintenance of oral hygiene and poor oral hygiene in the future.

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