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"A CO-RELATIVE STUDY TO EVALUATE THE EFFECTIVENESS OF VIDEO ASSISTED DEMONSTRATION ON KNOWLEDGE AND PRACTICE REGARDING VARIOUS BRUSHING TECHNIQUES TO PREVENT DENTAL CARIES AMONG SCHOOL GOING CHILDREN AT SELECTED PRIMARY SCHOOLS, KANPUR, (UP)."

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ABSTRACT
One of the most significant oral health issues worldwide is dental carries, which result from the interaction between bacteria and fermentable carbohydrates and can lead to the destruction of the hard parts of teeth. Despite being preventable, dental caries remain prevalent, affecting approximately half of the world's population, or 3.5 billion people, with 40% of cases going,untreated. Unfortunately, dental caries has become a serious global public health concern, with a high incidence of cavities among children (60-90%) and adults (100%), frequently causing discomfort and pain. The present study was conducted to assess the effectiveness of video assisted demonstration and find out co-relation between knowledge and practice regarding various brushing techniques to prevent dental carries among Primary Schools children.60 sample were collected by using non-probability convenience techniques through structured knowledge questionnaire the data collected and analysed based on descriptive and inferential statistics. The result showed that the study was statistically not significant at 0.05 level none of the student have adequate knowledge and practice at the time of pre - test but after providing demonstration the knowledge and practice level was increased. The pre-test adequate knowledge is (0%), moderate is 24 (40%), inadequate is 36 (60%) in post-test adequate knowledge is 26 (43%) moderate 34 (57%) inadequate is (0%), in pre-test practice score adequate score is 1(1.67%) moderate, 56(93.3%) inadequate 3(5%) in post- test adequate practice score is 47 (78%), moderate 13(22%), inadequate (0%). The knowledge score for pre-test means and standard deviation values (10.6), (3.3) whereas in post-test (20.0) and (2.37) respectively the calculated "t" value 60.27 was greater than value & df 59 which was p>0.05 level of significant differences between pre-test and post- test level knowledge. The test revealed that there was no significant association of knowledge with selected demographic variables such as Age, Gender, Religion, Previous knowledge, Class, so there were significant with association with association with Age, Gender, Religion, Previous knowledge. Class but there was no significant with other selected demographic variables, were found non-significant at <0.05 level of significance.
 The practice score for pre-test mean value is (7.55) and standard deviation is (1.18), in post-test mean value (11.37) standard deviation is (1.09) and the calculated t value (25.60) was greater than value & df59 which was p>0.05 level of significant differences between pre-test and post- test level knowledgehence The test revealed that there was no significant association of knowledge with selected demographic variables such as Age, Gender, Religion, Previous knowledge, Class, so there were significant with association with association with Age, Gender, Religion, Previous knowledge. The practice score for pre-test mean value is (7.55) and standard deviation is (1.18), in post-test mean value (11.37) standard deviation is (1.09) and the calculated t value (24.60) was greater than value & df 59 which was p>0.05 level of significant differences between pre-test and post- test level knowledge. The test revealed that there was no significant association of knowledge with selected demographic variables such as Age, Gender, Religion, Previous knowledge, Class, so there were significant with association with association with Age, Gender, Religion, Previous knowledge. Class but there was no significant with other selected demographic variables, were found non-significant at <0.05 level of significance.
 The study concluded that the demonstration method on various brushing techniques to prevent dental caries among Primary Schools children.

INTRODUCTION

Dental cavities, which arise from the combination of bacteria and fermentable carbohydrates and can cause the hard portions of teeth to be destroyed, are among the most serious oral health problems in the world.

Dental caries affects about half of the world's population, or 3.5 billion people, and 40% of cases go untreated despite being avoidable. Regretfully, dental caries has emerged as a significant worldwide public health issue, with a high prevalence of cavities in adults (100%) and children (60-90%) that commonly result in pain and discomfort.

Overall health and dental health are interdependent and have an impact on one another. The main risk factors for a number of oral diseases are poor oral hygiene habits, smoking, alcohol consumption, and improper food. tooth caries, tooth erosion, periodontitis, oral cancer, and numerous other disorders of the soft tissues of the mouth are all influenced by diet.

Fluoride-free toothpastes without or with established anti-caries compounds are also commercially available in addition to fluoridated toothpaste. For protection against carries, fluoride-free toothpaste may incorporate ingredients like xylitol or calcium phosphates.

Brushing should not be done for less than 120 to 180 seconds (2-3 minutes), since each quadrant should have an efficient 30-45 second brushing session. It is advised to wash your teeth twice a day, just after breakfast and right before bed, in order to completely eliminate food particles and bacterial plaque.

NEED FOR STUDY

Maintaining general health and quality of life requires routine preventative care for the teeth and gums, which also helps to control conditions like diabetes and heart disease.

Access to dental care – Due to employment disparity and geographic isolation, many rural communities lack access to oral health providers

Oral health literacy –Rural communities had lower health literacy, according to a 2009 study. In terms of dental health, low health literacy can lead to bad dental hygiene and trouble utilizing the dental care system. Furthermore, a 2016 study found that rural populations with low health literacy are more likely to drink beverages with added sugar and are more susceptible to dental caries.

Oral Hygiene The practice of maintaining good oral hygiene, along with dental hygiene and the adoption of healthy hygiene habits, involves regularly cleaning one's teeth to keep the oral cavity free of diseases and other issues (such as bad breath). In order to prevent dental disease and foul breath, it is crucial to practice good oral hygiene on a regular basis.

PROBLEM STATEMENT:

"A Co-relative study to evaluate the effectiveness of video assisted demonstration on knowledge and practice regarding various Brushing Techniques to prevent dental caries among School going children at selected Primary Schools, Kanpur, (UP)."

OBJECTIVES OF THE STUDY:

1. To assess the knowledge regarding various Brushing Techniques among School going children at selected Primary Schools Kanpur, (UP).
2. To evaluate the practice regarding Brushing Technique among School going children at selected Primary Schools Kanpur, (UP).
3. To assess the effectiveness of video assisted demonstration on knowledge regarding various Brushing Techniques among School going children at selected Primary Schools with their selected socio demographic variables.
4. To find out correlation between knowledge and practice regarding Brushing Techniques among School going children at selected Primary Schools Kanpur, (UP).

HYPOTHESES:

Hypotheses were tested at 0.05 level of significance.

- H_{01} – There is no significant association between the knowledge and practice regarding Brushing Techniques among School going children at selected Primary Schools with their selected socio demographic variables.
- H_{02} – There is no correlation between knowledge and practices regarding Brushing Techniques among School going children at selected Primary Schools Kanpur, UP.
- H_1- There is a significant association between the knowledge and practice regarding Brushing Technique among Schools Children with their selected demographic variables.
- H_2- There is a positive correlation between knowledge and practice regarding Brushing Techniques among Schools Children.
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METHOD AND MATERIALS:

RESEARCH APPROACH-
The Research approach used for present study was **Quantitative evaluative research approach.**

RESEARCH DESIGN-
The Research design used in this study was **Quasi-experimental, One group pre-test post-test Research design.**

VARIABLES-
Independent variable-In the present study, the independent variables were video assisted demonstration on brushing techniques.
Dependent variables- In the present study, the dependent variables were level of knowledge and practice among Primary Schools children regarding dental caries.
Socio-demographic variables- In this present study demographic variables were Gender, Age, Religion, class of study, previous knowledge, Source of information, regarding Brushing Techniques.

POPULATION-
Population for the present study consisted of Primary Schools children of selected Schools Kanpur (UP).

TARGET POPULATION-
The target population of present study consisted of Primary Schools Children of selected Schools Kanpur, (UP).

ACCESSIBLE POPULATION-
Accessible population of present study consisted of Primary Schools children, Garhwa, Bagdaudhi bangar, Kanpur, UP and who are available at the time of data collection.

SAMPLE-
In this study, the samples were school children of selected Primary schools Kanpur, UP.

SAMPLE SIZE-
The sample size in the present study were 60 Primary Schools Children.

SAMPLING TECHNIQUE-
In this study, **Non- probability Convenience Sampling Technique** was used to select the sample.

INCLUSION CRITERIA-
1. Primary Schools Children from selected Schools, Kanpur, (UP).
2. Primary Schools Children available at the time of the study.
3. Primary Schools Children both male and female.

EXCLUSION CRITERIA-
1. Primary Schools Children who were not willing to participate in the study.
2. Absentees were not be included.
3. Students of classes other than Primary.

METHOD OF DATA COLLECTION-
Self-structured knowledge questionnaire was used to assess the level of knowledge and practice regarding various brushing technique to prevent dental Caries among school going children at selected Primary Schools, Kanpur UP.

DEVELOPMENT AND DESCRIPTION OF TOOLS-
A tool was developed to selected Primary Schools in Kanpur, UP as well as to evaluate the effectiveness of video assisted demonstration on knowledge and practice regarding various Brushing Techniques to prevent dental caries among School going children at selected Primary Schools, Kanpur, (UP)."

The tool consists of 3 sections-
SECTION A-Socio- demographic variables.
SECTION B-Self -structured questionnaire related to various brushing technique to prevent dental caries.
SECTION C-Self- structured checklist questionnaire related to various brushing technique to prevent dental caries.

RESULT AND FINDINGS:
Section A:
Frequency and percentage wise distribution of demographic variables.
Major findings of the study were as follows:
1. Majority of the student 28(47%) were in their age of 10-11 years.
2. Majority of student 32(53%) belongs to gender female.
3. Majority of student was Hindu 55(92%).
4. Majority of the student studies in class 3rd25(42%).
5. Majority of student 49(81.67%) had no previous knowledge regarding various brushing techniques to prevent dental caries.
6. Majority of student 06(55%) had previous source of information by parents.

Section B:
Distribution of pretest and post-test level of knowledge regarding various brushing techniques to prevent dental caries.
Distribution of Primary School children according to the pre- test and post- test level of knowledge on various brushing technique to prevent dental caries.

S.No.	Level of knowledge	Pre-test		Post test	
		F	%	F	%
1.	Inadequate Knowledge	36	60%	0	0%
2.	Moderate knowledge	24	40%	34	57%
3.	Adequateknowledge	0	0%	26	43%
	Total	**60**	**100%**	**60**	**100%**

Distribution of Primary School children according to the pre- test and post- test level of practice on various brushing technique to prevent dental caries.

S.No.	Level of practice	Pre-test		Post test	
		F	%	F	%
1.	Inadequate practice	3	5%	0	0%
2.	Moderate practice	56	93.33%	13	22%
3.	Adequate practice	1	1.67%	47	78%
	Total	**60**	**100%**	**60**	**100%**

Section-C
Effectiveness of Video Assisted Demonstration Method On Knowledge Regarding Various Brushing Technique to Prevent Dental Caries Among Primary Schools Children.

n=60

S.No.	LEVEL OF KNOWLEDGE	MEAN	SD	P VALUE	T VALUE
1.	Pre-test	10.6	3.3	60.27	2.00
2.	Post-test	20.0	2.37		

Effectiveness of video assisted demonstration method on practice regarding various brushing technique to prevent dental caries among primary schools children.
n=60

S.No.	LEVEL OF PRACTICE	MEAN	SD	X^2	T VALUE
1.	Pre-test	7.55	1.18	25.60	2.00
2.	Post-test	11.37	1.09		

Section-D
Association of knowledge score and practice score with their selected socio demographic variables
The result shows that there is significant association between knowledge and their selected socio-demographic variables like age, gender and previous knowledge regarding various brushing techniques to prevent dental caries and there is no significant association between the religion, class of study, and source of information. The above table represents there is significant association between practice and their selected socio-demographic variables like religion and previous knowledge regarding various brushing techniques to prevent dental caries and there is no significant association with their socio demographic variables like age, gender, class of study and source of information. **Hence here H $_1$ was rejected and H$_{01}$ was accepted.**

Section- E
Coefficient of correlation analysis between level of pretest knowledge and pretest score practice

shows **No or negligible relation (-0.13)** between knowledge and practice score. So null hypothesis(H_{02}) was accepted and positive hypothesis (H_2) was rejected.

CONCLUSION:
On the basis of findings of the study, it was concluded that after VAD regarding various brushing techniques to prevent dental caries the concept regarding various brushing techniques was cleared to the Primary School children which was indicated by significant increase in post- test mean knowledge and practice scores.

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