



AN EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF DEMONSTRATION ON KNOWLEDGE AND PRACTICE REGARDING SELECTED TOOTH BRUSHING TECHNIQUE AMONG SCHOOLERS IN SELECTED SCHOOLS.

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ABSTRACT

Aims: The aim of present study were to assess the pre-test knowledge and practice regarding demonstration of selected tooth brushing technique among schoolers, to assess the post-test knowledge and practice regarding demonstration of selected tooth brushing technique among schoolers, to evaluate the effectiveness of demonstration on knowledge and practice regarding selected tooth brushing technique among schoolers. **Material and Methods:** Non probability convenient sampling technique was used to select the sample. Quantitative research approach with pre-experimental one group pre-test post-test design. The data collected during the month of November among schoolers in selected school of the city using socio demographic data sheet, structured knowledge questionnaire and practice checklist. **Results:** A total of 60 schoolers participated in the study, 8 years of age group n=23, 9 years of age group n=16, 10 years of age group n=21, in which schoolers male n=29 and female n=31. On final scoring of test in pre-test score 36 were average, 12 were good, 12 were poor level of knowledge score. Practice score 35 were average, 17 were good, 8 were poor. Post-test score 33 were good, 25 were very good, 2 were excellent level of knowledge score. Post practice score 31 were very good, 27 were good, 2 were excellent. **Conclusions:** The study finds that the knowledge of age, religion and standards was significantly improved after receiving information in the form of demonstration of selected tooth brushing technique. The practice of religion, type of family was significantly improved after receiving demonstration.

KEYWORDS : effectiveness, demonstration, tooth brushing technique, schoolers, school.

INTRODUCTION:

'Dental problems are never any fun, but the good news is that most of them can be easily prevented'.

Oral health is important for general health and wellbeing. We know that poor oral health can affect someone's ability to eat, speak, smile and socialize normally. From early in life, as part of the overall health and wellbeing of a child, good oral health contributes to their 'Getting the Best Start in Life and school readiness'.¹

BACKGROUND OF THE STUDY:

India, a developing country faces many challenges in rendering oral health needs. The majority of Indian population resides in rural areas, of which more than forty percent constitute children. These children cannot avail dental facilities due to inaccessibility, financial constraints and stagnation of public dental healthcare services. This entails the health professionals to adopt a more practical approach to achieve primary prevention of oral diseases. The most viable solution seems to be dental health education.

NEED FOR THE STUDY:

According to the National Oral Health Survey of India the prevalence of periodontal diseases was 57.0%, 67.7%, 89.6% and 79.9% in the age groups 12, 15, 35-44 and 65-74 years, respectively. The age standardized incidence of oral cancer in India is 12.6 per 100,000 population. Mar 20, 2017.

OBJECTIVE OF THE STUDY

1. To assess the pre-test knowledge and practice regarding demonstration of selected tooth brushing technique among schoolers.
2. To assess the post-test knowledge and practice regarding demonstration of selected tooth brushing technique among schoolers.
3. To evaluate the effectiveness of demonstration on knowledge and practice regarding selected tooth brushing technique among schoolers.
4. To association of knowledge and practice score with selected demographic variables

Will be tested at 0.05 level of significance

H₀: There will be no significant difference in the pre-test and post -test knowledge and practice score regarding demonstration of selected tooth brushing technique among schoolers.

H₁ : There will be significant difference in the pre- test and post- test knowledge and practice score regarding demonstration of selected tooth brushing technique among schoolers.

ETHICAL ASPECTS

- Permission was taken from the ethical committee.
- Proper explanation regarding the purpose of the study and nature of questionnaire involved in the study was given to the samples.
- Information about the sample was handled properly so that confidentiality and anonymity are maintained.

CONCEPTUAL FRAMEWORK

The conceptual framework selected for the study was based on Ernestine Wiedenbach's "Prescriptive Theory" (Helping art of clinical nursing).

SAMPLING CRITERIA:

INCLUSIVE CRITERIA

The criteria that specify characteristics that a population does have In this study, inclusive criteria was,

School children are

- 1) Age group of 8 – 10 year.
- 2) Who are willing to participate.
- 3) Who know the English, Marathi and Hindi language.

EXCLUSIVE CRITERIA

It is the criteria that involves people who does not possess the population characteristics

In this study the exclusive criteria was,

School children are

- 1) Those who are not present at the time of data collection.
- 2) With physical disabilities.
- 3) With oral diseases

HYPOTHESIS

METHODOLOGY :

Non probability convenient sampling technique was used to select the sample. Quantitative research approach with pre-experimental one group pre-test post-test research design. The data collected during the month of November 2019 among schoolers students . Total 60 samples were selected. After obtaining consent from the subjects, socio demographic and structured knowledge questionnaire were administered and data were collected.

TOOLS:**PREPARATION OF TOOL**

Tool or research instrument is a device to measure a concept of interest in a research project that a research use to collect data.

In this study tool consists of semi structure questionnaire for assessing knowledge and checklist to evaluate practice which includes:

Section I: The investigator constructed this tool to collect the background data of the study and to identify the influence of sample characteristics with the association in them. It included variables like Age of child (in years), Religion, Gender, Standard, Types of family, source of information.

Section II: The investigator constructed this tool to identify the influence of participants by questionnaire on knowledge regarding tooth brushing technique.

It consists of questions on –

- Knowledge regarding introduction
- Knowledge regarding definition
- Knowledge regarding anatomy
- Knowledge regarding start and fall out
- Knowledge regarding types
- Knowledge regarding technique
- Knowledge regarding steps of brushing

Section III: The investigator constructed checklist to identify the influence of participants practice regarding tooth brushing technique

DESCRIPTION OF TOOLS**Section I – demographic variables**

The investigator constructed this tool to collect the background data of the study subjects and to identify the influence of the sample characteristics with their level of knowledge.

It includes total 6 demographic variables such as Age of child (in years), Religion, Gender, Standard, Types of family, source of information.

Section II – Semi structured knowledge questionnaire

A semi structured knowledge questionnaire was conducted by reviewing the related literature and consultation with experts. The questionnaire consists of 20 multiple choice question on knowledge regarding Tooth Brushing Technique

Total score is 20. Each question carries 1 mark and zero for the wrong answer.

Knowledge score

Excellent	17-20
Very Good	13-16
Good	9-12
Average	5-8
Poor	0-4

Section III: - The investigator constructed checklist to identify the influence of participants practice regarding Tooth Brushing Technique.

Practice Score

Excellent	13-15
Very Good	10-12
Good	7-9
Average	4-6
Poor	0-3

RESULT:

In this chapter, different aspects of the study in terms of analysis and interpretation are discussed. The study reveals mean pre test knowledge score 6.73 and the mean post test knowledge score was 12.53. The calculated value 27.74 is greater than tabulated value 2.00 at 0.05 level of significance.

Hence it is statistically interpreted that the demonstration on knowledge regarding selected tooth brushing practice among schoolers was effective. Thus the H_1 is accepted and H_0 is rejected. And pre test practice score 5.46 and the mean post test practice score was 9.80. the calculated value 21.68 is greater than tabulated value 2.00 at 0.05 level of significance. Hence it is statistically interpreted that the Planned Teaching Programme on practice regarding selected tooth brushing practice among schoolers was effective. Thus the H_1 is accepted.

Analysis also reveals that there is association of knowledge score with age (in years), religion and standard while none of the other demographic variable were associated with knowledge score.

There is association of practice score with religion , type of family While none of the other demographic variable were associated with practice score.

REFERENCES

1. <http://www.connecttosupporthillington.org/s4s/wherelive/council?pagelid=1354> cited on 17/03/2019 at 11.20 am
2. <http://www.rogershealth.org/content/introduction-proper-oral-health> cited on 17/03/2019 at 11.24am
3. <http://www.slideshare.net/lakshmi01071994/brushing-techniques-70870057> on 17/03/2019 at 11.33 am
4. http://en.wikipedia.org/wiki/Charles_C_Bass, cited on 21/03/2019 at 8.04 pm
5. Kerala Nursing Forum Journal, Vol 2, No-1, Jan-March, (2007), P-32. cited on 6/12/2019 at 3.15 pm
6. https://en.wikipedia.org/wiki/Oral_hygiene cited on 6/12/2019 at 3.45 pm
7. Dr Girish P Management of dental caries in selected rural areas of Gujarat through atraumatic restoration technique (ART).Gol. WHO. Collaboration Programme, 2006-07.p.9-10. Cited on 7/12/2019 at 5 pm .
8. Thomas S, Tandon S, Nair S, Effect of dental health education on the oral health status of a rural child population by involving target groups. Journal of Indian society of Pedodontics Preventive development. September 2000.p.115 cited on 4/12/2019 at 1pm
9. <https://www.who.int/news-room/fact-sheets/detail/oral-health> cited on 17/03/2019 at 11.57 am
10. <http://www.ncbi.nlm.nih.gov/pubmed/27223127> cited on 17/03/2019 at 12.0 7 pm
11. www.oraljournal.com/archives/2018/4/1/d/4-1-25 cited on 17/03/2019 at 12.0 9 pm
12. [https://www.jcdr.net/articles/PDF/12204/32186%CE\[Ra1\]F\(SL\)PF1\(AB_SHU\)PFA\(SHU\)PB\(AB_SL\)PN\(SHU\).pdf](https://www.jcdr.net/articles/PDF/12204/32186%CE[Ra1]F(SL)PF1(AB_SHU)PFA(SHU)PB(AB_SL)PN(SHU).pdf) cited on 17/03/2019 at 12.30 pm
13. https://www.who.int/oral_health/media/en/orh_report03_en.pdf cited on 17/03/2019 at 1pm
14. Available at Wikipedia.org/wiki/Dental_caries. cited on 3/9/2020 at 4pm .
15. Thomas S, Tandon S, Nair S, Effect of dental health education on the oral health status of a rural child population by involving target groups. Journal of Indian society of Pedodontics Preventive development. September 2000.p.115 cited on 5/11/2019 at 1 pm
16. Naseem shah. Oral and dental disease: causes, prevention and treatment strategies. All India institute of medical sciences, New Delhi 110029. cited on 5/11/2019 at 1.30 pm
17. <https://www.natureasia.com/en/nindia/article/10.1038/nindia.2017.29> cited on 17/03/2019 at 1.20pm
18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4573062/> cited on 17/03/2019 at 1.40pm
19. National oral health care programme .available on <https://www.aiims.edu/aiims/events/dentalworkshop/nohc-prog.htm> cited on 17/03/2019 at 1.50pm
20. Journal of Indian Society of Pedodontics and Preventive Dentistry Available from https://www.researchgate.net/publication/7732811_Prevalence_of_dental_caries_among_5-13-year-old_children_of_Mangalore_city cited on 17/03/2019 at 1.50pm