



EFFECT OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE AND KNOWLEDGE ON PRACTICE OF DENTAL CARIES AMONG 6-10 YEARS CHILDREN

Nursing

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ABSTRACT

A pre-experimental one group pre test posttest study was conducted to evaluate the effectiveness of structured teaching programme on knowledge and knowledge on practice of dental caries among 6-10 years children. 50 samples were selected by simple random sampling technique lottery method. The researcher explained the purpose of the study and reassured the data collected would be kept confidential. The researcher has developed an interview schedule after reviewing the literature and considering the opinion of pediatric nursing experts. The description of demographic variables includes age, gender, educational status of the parents, occupation of parents, type of family, residence, parental income, source of water supply and number of siblings. The questionnaire was distributed to assess the knowledge and knowledge on practice of children on prevention of dental caries. After the pretest, education was given through video assisted teaching and booklets. Posttest was conducted on the 15th day to assess the effectiveness of teaching in improving the knowledge on prevention of dental caries by using the same questionnaire. On knowledge, the mean pretest score is 7.46 and the mean posttest score is 11. The calculated 't' value is 10.47 and df (49) is significant at 0.05 level. Hence it has been found that structured teaching programme was effective on knowledge of dental caries among 6-10 years children.

KEYWORDS

Dental caries; Knowledge, Practice, 6-10 Year old children.

INTRODUCTION

Dental caries is the most common chronic disease of childhood, globally. Although dental caries' levels have been declining the world over, the problem of early childhood caries has remained unchanged in many areas of the world, especially the socially deprived. Dental caries affecting the primary dentition of preschool children is referred to as ECCs. ECC is defined as "the presence of one or more decayed (noncavitated or cavitated lesions), missing, or filled tooth surfaces in any primary tooth in a child under the age of six." ECCs is a multifactorial disease with an etiology that involves a complex interaction between biological and socioeconomic factors. It is classified as mild, moderate, and severe. In children younger than 3 years of age, any sign of smooth-surface caries is indicative of severe ECCs (S-ECCs). From ages 3 through 5, 1 or more cavitated, missing (due to caries), or filled smooth surfaces in primary maxillary anterior teeth or a decayed, missing, or filled score of ≥ 4 (age 3), ≥ 5 (age 4), or ≥ 6 (age 5) surfaces constitutes S-ECC.

Lack of awareness of the importance of primary teeth was a common finding in a focus group study with parents and caregivers in a multiethnic community in the US. Qualitative studies of low-income families in Head Start programs in the US report that parents often saw the primary dentition as temporary teeth whose condition had little bearing on the future dentition and though aware of some of the problems that could arise felt that general life demands made oral care a low priority. Daly et al. found that parents in their study, viewed the primary dentition as important and were keen to establish good oral health habits. These reports suggest that social and cultural factors play a part in parental attitudes, as dental attendance for preventive dental care was not seen as necessary, rather only if problems arose. Parents should be informed to brush their children's teeth at least once by parents themselves at night before going to bed. This shows that parents need to be trained and motivated to carry out oral hygiene practices in a proper way and efficiently.

In India, the trend indicates an increase in oral health problems especially dental caries, which has been consistently increasing both in prevalence and in severity over last five decades. Children of all age groups are affected by dental caries and its treatment is restorative care, which may even include pulp therapy. As these treatment options are not only expensive, but also demanding for the child. The best option, which is more acceptable and economical for the children is – Prevention. Thus, it becomes imperative to collect the data on knowledge and practice of dental caries needs to determine the course of action for preventive care.

MATERIALS AND METHODS

A pre-experimental one group pre test posttest study was conducted to evaluate the effectiveness of structured teaching programme on knowledge and knowledge on practice of dental caries among 6-10 years children. 50 samples were selected by simple random sampling

technique lottery method. After obtaining permission from the District Elementary Officer (DEO), Assistant Elementary Officer (AEO) and authorities of Government Primary School, Keerthanam, Coimbatore, the researcher introduced herself and established a rapport with the children. The researcher explained the purpose of the study and reassured the data collected would be kept confidential. The researcher has developed an interview schedule after reviewing the literature and considering the opinion of pediatric nursing experts. The description of demographic variables includes age, gender, educational status of the parents, occupation of parents, type of family, residence, parental income, source of water supply and number of siblings. The questionnaire was distributed to assess the knowledge and knowledge on practice of children on prevention of dental caries. It consists of 15 questions related to assessment of knowledge among children about the prevention of dental caries and 20 questions related to assessment of practice of school children regarding prevention of dental caries. After the pretest, education was given through video assisted teaching and booklets. Posttest was conducted on the 15th day to assess the effectiveness of teaching in improving the knowledge on prevention of dental caries by using the same questionnaire. Data collected from 3-4 children in a day, it looks 20-30 minutes to gain information from each sample.

RESULTS

Sample characteristics

- Majority 34(68%) of the children belongs to the age group of 6-8 years and 16(32%) children belongs to the age group of 8-10 years.
- Majority 28(54%) of the children were females and 22(44%) were males.
- Regarding the number of siblings, majority 33 (66%) of the children were two children, 6(12%) were single children and 11(22%) were three and above.
- Majority 34(68%) of the children were from nuclear family and 16(32%) were from joint family.
- Regarding the father's education, majority 19(28%) belongs to primary education, 13(26%) belongs to illiterate, 12(24%) belongs to secondary education and 6(12%) belongs to higher education.
- Regarding mother's education, majority 23(46%) belongs to primary education, 16(32%) belongs to secondary education, 9(18%) belongs to illiterate and 6(12%) belongs to higher education.
- Regarding father's occupation, 50(100%) were coolie.
- Regarding mother's education, majority 28(56%) of the mothers were coolie and 22(44%) were house wives.
- Regarding residential area, 50(100%) were from rural areas.
- Regarding parental income, majority 49(98%) were below Rs.3000 and only one (2%) had Rs.3001-4500.
- Regarding source of water supply, majority 40(80%) were from public water supply, 8 (16%) from well and 2 (4%) from bore well.

Table 1: Knowledge regarding dental caries.

Sl No.	Score	Mean	SD	't' value	p value
1	Pretest	7.46	2.107	10.47	0.025
2	Posttest	11	1.93		

Table 1 reveals that the mean pretest score is 7.46 and the mean posttest score is 11. The mean posttest score was greater than the mean pretest score. The standard deviation pretest score is 2.107 and the standard deviation posttest score is 1.93. The calculated 't' value is 10.47 and df (49) is significant at 0.05 level.

Table 2: Knowledge on practice regarding dental caries.

Knowledge on Practice					
Sl no.	Score	Mean	SD	't' value	p value
1	Pretest	10	2.130	15.48	0.034
2	Posttest	16	2.25		

Table 2 reveals that the mean pretest score is 10 and the mean posttest score is 16. The mean posttest score was greater than the mean pretest score. The standard deviation pretest score is 2.13 and the standard deviation posttest score is 2.25. The calculated 't' value is 15.48 and df (49) is significant at 0.05 level.

DISCUSSION

Paired t test was done to evaluate the effectiveness of structured teaching programme on knowledge and knowledge on practice of dental caries among 6- 10 years children. On knowledge, the mean pretest score is 7.46 and the mean posttest score is 11. The mean posttest score was greater than the mean pretest score. The standard deviation pretest score is 2.107 and the standard deviation posttest score is 1.93. The calculated 't' value is 10.47 and df (49) is significant at 0.05 level. Hence it has been found that structured teaching programme was effective on knowledge of dental caries among 6-10 years children. While coming to the knowledge on practice the pretest mean score is 10 and posttest score was 16, it is higher than the pretest score. The standard deviation pretest score is 2.130 and the standard deviation posttest score is 2.25. The calculated 't' value is 15.46 at df (49) is significant at 0.05 level. The finding implies that the structured teaching programme has significant effect in the improvement of knowledge on practice regarding prevention of dental caries among 6-10 years children. The demographic characters namely age, number of siblings, type of family, mother's occupation and source of water supply were associated with knowledge and the demographic variables such as number of siblings, mother's education, type of family, source of water supply were not associated with knowledge on practice regarding prevention of dental caries. The results show that age has influenced on the posttest knowledge on practice regarding prevention of dental caries.

This was supported by a study conducted by Modena (2004) to find out the association between the demographic variables through the effective structured teaching programme. Education can successfully engage children in starting additional methods used to prevent dental caries based on their demographic variables especially age and socioeconomic status.

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