

A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING DENTAL CARIES AMONG SCHOOL GOING CHILDREN, BENGALURU

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ABSTRACT

“A Study to Assess the Effectiveness of Structured Teaching Programme On Knowledge Regarding Dental Caries Among School Going Children, Bengaluru.”

Dental caries, which affects 60–90% of schoolchildren and the great majority of adults, is the primary health issue in the majority of developed nations. Dental caries is a multi-factor illness and preventive health issue that affects daily activities including eating, speaking, and feeling good about oneself.

Objectives

1. To evaluate the respondents' oral hygiene knowledge.
2. To assess the effectiveness of STP among school going children by conducting, pretest, STP, post-test.
3. To assess the effectiveness of role playing, health education video playing in improving dental hygiene practice skill among primary school children.

Method

Purposive sampling technique.

The impact of the STP on primary school students' knowledge and behaviour about dental caries was evaluated in this study using an evaluative technique.

A highly visible, organised atmosphere that fosters an awareness of timetables, activities, and expectations is created by the STP (Structured Teaching Program).

RESULT

In assessing 40% of the children had inadequate knowledge (0-50%) regarding dental caries. 60% of the children had moderate knowledge (51-75%). None of the participants had adequate knowledge about the dental caries.

The mean pretest level of knowledge was 11.23 and the standard deviation of the pretest was 2.14 and the mean percentage is 56.15%. Thus, the investigator assumes that there is need to improve the knowledge level of children.

After administration of structured teaching program, the level of knowledge was calculated. 76.7% of the children had

moderate knowledge and 23.3% of children has adequate level of knowledge on dental caries. The knowledge level of the children in the post-test had shown major difference. The mean of the post-test was greater than the pretest's mean, which was 11.23, at 14.033. The difference in standard deviation between the pretest and posttest was 0.4, demonstrating the effectiveness of a structured training programme in raising the knowledge level of the students. When the findings were evaluated, it was found that there was no correlation between the post-test knowledge and the demographic characteristics at the 0.05 level. Two demographic variables, gender and history of toothache were taken for finding out the association. Their respective X² value is 1.11 and 0.6627 which is non-significant.

INTREPRETATION AND CONCLUSION

The goal of the study was to assess the effectiveness of a structured teaching programme on primary school students' understanding of dental caries at a particular government school. Using a systematic knowledge questionnaire, the data was gathered. The relevant statistical techniques were used to evaluate and interpret the data that was gathered.

The study's findings led to the following interpretation:

The subjects did not have enough information on dental caries.

A structured education programme proved successful in raising respondents' levels of knowledge. It was discovered that several pupils had insufficient knowledge during the pretest.

The pretest's standard deviation was 2.14, its mean percentage was 56.15, and its mean level of knowledge was 11.23.

When an organized education programme was administered, the degree of knowledge was determined.

23.3% of the youngsters and 76.7% of the children had appropriate knowledge about dental caries, respectively. The overall improvement in mean percentage of knowledge score was 14.0155 with "t" calculated value 11.03, which is found to be statistically significant at P<0.05 level of confidence. The association between demographic variables and post-test knowledge score on dental caries shows that socio demographic variables like gender, religion and history of toothache was not significant at 0.05 level.

HYPOTHESES

- H1- There will be improved knowledge on dental hygiene importance among school going children.
- H2- There will be significant improvement in dental hygiene routine and its follow ups after STP among school going children.

INTRODUCTION

Oral health reflects overall health

Cleaning the patient's teeth and oral cavity is not the only aspect of oral hygiene. It also involves steps to improve patient comfort and stop illness from spreading via the mouth.

In most developed nations, dental caries, which affects 60–90% of schoolchildren and the great majority of adults, is a serious health issue.

Dental caries is a multi-functional illness and avoidable public health issue that affects daily activities including eating, speaking, and feeling good about oneself.

In India, dental caries affects 60% of adults and 80% of children, and both prevalence and severity have steadily increased over the past 20 years. Dental caries is one of the most common and ancient diseases that affects humans, according to research. The prevalent chronic infectious disease known as dental caries is brought on by cariogenic bacteria that exist on teeth. These microorganisms produce acid by consuming carbohydrates, which over time demineralizes tooth structure.

The majority of people experience it gradually, and it is brought on by an ecological imbalance in the balance between the minerals in teeth and the microbial activity of oral biofilms. This activity causes a change in the plaque's pH because of the production of bacteria as well as the buffering effects of saliva and the surrounding environment. As a result, dental illness requires treatment, which is generally expensive and out of the reach of the general public owing to a lack of time, people, and money. Prevention is therefore more inexpensive. Dietary changes and attention to personal cleanliness should be advised. By maintaining a healthy oral hygiene practise, dental cavities can be avoided.

limiting your intake of sugary beverages and sweets and mints. Sealants are thin plastic-like coatings that are placed on the molars' surfaces. The coating stops plaque from building up in the deep grooves. This technique will assist in keeping the mouth clean and improving oral hygiene on these delicate areas. People are becoming more conscious of the need of maintaining good oral hygiene as the prevalence of dental caries declines, the number of individuals keeping their teeth increases, and more emphasis is placed on having visually appealing dentitions. Also, the market for oral hygiene products has grown, particularly those with therapeutic or aesthetic benefits. Personal oral hygiene, which involves removing bacterial plaque from teeth and gums and preventing its re-accumulation, is the maintenance of oral cleanliness for the preservation of oral health. As plaque is the main cause of gingivitis and periodontal disease, these conditions may be largely avoided by controlling plaque levels. Although removing plaque helps prevent dental cavities, the main therapy is fluoride, which is provided via a fluoride toothpaste. Chemotherapeutic drugs and mechanical aids like chewing gum and floss are being used in oral hygiene regimens (in mouth rinses, dentifrices, chewing gums).

The advantage of maintaining good dental hygiene relies on the person's hand dexterity, lifestyle, motivation, and oral health. Children should be encouraged to practise good dental hygiene, especially throughout their preschool years. Early oral hygiene instruction and maintenance can help children develop habits that are less likely to alter as they grow older. For instance, establishing good dental hygiene practises early on in infancy and adolescence can be achieved by educating pregnant or nursing mothers the value of oral hygiene through prenatal courses, home health visitors, nurses, midwives, and auxiliaries at child health centres and hospitals. Parents must be aware of dental issues since mothers are crucial in helping their children establish good oral hygiene practises.

Teachers may help with programmes for oral health education since youngsters spend a lot of time in school. Dental hygiene practises have been effectively improved and promoted beginning at a young age by activities including group participation, coloring/activity books, movies, interactive computer programmes, parent-child teaching sessions, contracting and rewarding of behavioural gains. As far as behaviour is concerned, a child's teacher, dentist, assistant, or sibling can all be excellent role models. improving oral hygiene practises for children and teens. For entertainment and education, interactive aspects can be coupled with costumed characters, oral health exhibitions, and show bags filled with literature, toothbrushes, toothpaste, floss, and stickers. Children's dental health shows may be created for educational institutions and community gatherings using cutting-edge oral health promotion techniques, and regular oral hygiene components may be included to children's TV entertainment. Hence, general health and wellbeing are inextricably linked

to dental health. Global economics and public health are severely impacted by oral disorders, which also dramatically lower the quality of life for individuals who are affected. According to the World Burden of Disease survey, oral diseases impacted 3.9 billion people. The most common oral disorders worldwide are periodontal disease and dental caries (tooth decay). More over half of the world's population had periodontal disorders, with severe periodontitis affecting 11.2% of the population.

Similar to how dental caries, which affects over 2.4 billion people, is most common in permanent teeth, early childhood caries, which affects 621 million children, is a hidden worldwide epidemic that has a detrimental impact on children's quality of life and well-being. The cumulative burden of oral illness and diseases has greatly grown as a result of changes in demographic profiles, especially the ageing population. Untreated oral disorders affected 3.5 billion persons worldwide in 2015, up from 2.5 billion in 1990, with a 64% rise in Disability Adjusted Life Years (DALYs).

Objectives of the Study

1. To gauge the individuals' level of knowledge regarding oral hygiene
2. To evaluate the efficacy of STP among students by administering a pretest, STP, and post-test.
3. To evaluate how role playing and health education video playing affect children in elementary schools' ability to practise oral hygiene.

REVIEW OF LITERATURE

In order to evaluate the dentistry students' oral hygiene practises, oral health status, and the impact of information learned in preventative elements on their personal health attitudes, an inquiry was carried out at the University of Sharjah in the United Arab Emirates. (Yildiz and Dogan 259). A sample of ninety-three students was taken, after their voluntary response for study under the approval of the University's Research Ethics Board.

The students were provided with questionnaires consisting of twenty polar responses (agree/disagree) and additional two questions on brushing and flossing the frequency (Cortes et al. 1208). The result of the study indicated that twenty-nine percent of the participants had bleeding gums.

About eighty-three percent confirmed that they were worried about their gums color while sixty- three percent of them reported that it was difficult to prevent gum illness with just brushing alone. Ten percent of the participants showed that they had discovered some deposits of sticky white substances on their teeth (Ainamo and Bay 233). About ninety-two percent of the participants did not agree that they would develop false teeth in their old age. Concerning dental health conduct, approximately sixty-nine percent of the participants confirmed that they usually check their teeth in the mirror after brushing.

Eighty-six percent said they brushed at least twice a day, while 56 percent said they regularly used dental floss (El-Mostehy and Zaki 105). As a result, it is crucial for those who want to become dentists to acquire the fundamental knowledge and attitudes related to dental hygiene and the prevention of oral diseases. Dentists play a significant role in the creation of improved civic oral health training (Cavaillon et al. 137).

In Hong Kong, a 24-month intervention trial involving parents of preschoolers from a neighbourhood with fluoridated water was carried out (Jiang. Lo, Chu, & Wong, 2014). The following information was given to the participants in one of

three groups. Education on dental health is the first step, followed by instruction in how to brush properly and the application of a fluoride varnish every six months.

The findings revealed that there was no difference between the groups in terms of the frequency of teeth brushing, DMFT scores, or the experience of children with caries. Because there was no control group in this study, the results could not be utilised to assess how successful the oral health education was.

Nevertheless, the absence of variations in the results between the interventions they received suggests that the fluoride varnish application and teeth brushing instruction, which were only given to groups two and three, did not have any extra discernible benefits.

African immigrants to Canada who were parents of preschoolers underwent an educational intervention (Amin, Nyachhyon, Elyasi, & Al-Nuaimi, 2014). The four-hour oral health education session was conducted and featured movies and "hands-on" activities.

The pre- and post-education programme knowledge of parents regarding dental health was compared. According to the findings, the intervention was successful in increasing parental awareness, attitudes, and intentions to have their kids get more dental exams (Amin et al., 2014); however, the programme did not track long-term behavioural changes or outcomes related to oral health.

In Brazil, mothers of toddlers up to eight months old participated in an intervention research to improve their knowledge of and behaviours related to oral health (de Silva, Noia, Gonçalves, Pinho, & da Cruz, 2013). At baseline and again at follow-up, the mothers' knowledge was evaluated, and a preschooler's dental health was examined. Throughout a six-month period, mothers attended three instructional presentations on preventative dental health care. The mothers received toothbrushes for preschool as well.

Individual monthly follow-ups was place for a year after the three educational lectures to provide parents with particular advice on how to care for their child's teeth and to reaffirm the prior educational messaging. Positive findings from the study included an increase in mother understanding of oral health issues as well as notable advancements in the dental health of the preschoolers. Also, there were decreases in the kids' plaque, cavities, and gingival bleeding.

Subramaniam P and Prashanth P did a study on the prevalence of early childhood caries in preschool children aged 8.48 months in Bangalore, South India. 1500 kids between the ages of 8 and 48 months were randomly chosen from play houses and nursing homes located around the city. The average number of decaying, removed, and filled teeth was 0.854, and the frequency of ECC was 27.5%. ECC has a significant correlation with the investigated risk variables.

As part of study on risk factors for dental caries in small rural and regional Australian communities, a cross-sectional survey measuring oral health of 434 children (32% Aboriginal) aged 3 to 12 years old in three small rural or regional regions was conducted.

Both the 5–6 year old and the 11–12 year age groups in this study's rural/remote youngsters had lower oral health than either the state or the national average. In these societies, dental caries was highly correlated with socioeconomic position, cleaning one's teeth, and Aboriginal status.

A research on dental caries and oral health practises among 12-year-old school pupils from low socioeconomic

backgrounds in Zimbabwe was undertaken by Brighton Tasarsa et al. Twelve-year-old children were the subjects of a descriptive cross-sectional research that was carried out at elementary schools in the Harare and Bikita districts. Both urban (59.5%) and rural (40.8%) youngsters exhibited a significant frequency of dental caries, according to the findings. Both urban and rural areas of Zimbabwe have a significant frequency of dental caries among 12-year-old school students.

Priya Mathad conducted a descriptive study on "the dental attitudes, knowledge and practice in school children in 2012 with the aim to investigate the dental Ades, knowledge and practice of school children in Chennai using a questionnaire. Descriptive research design was used with the sample of 592 subjects (219 males and 323 females). The sampling technique used was simple random method. Data analysis was done in SPSS veer 17/01 test was med to the mean values Chi-square test was used to compare the mean values. Result shows that level of knowledge wine was statistically significant with P -0.004. There was statistically significant difference with P - 0008 when comparing the frequency of brushing the teeth Twice per day among the two different age groups Comparing the various other factors such as gender, type of school and age groups to the visit to dentist, it was observed that statically significant difference with P<0.0001 was Sd when comparing the female children (25 and male children (63%) and P 0.002 observed when comparing the younger and older age group who voted the dentate. Therefore, the conclusion of the study reveals that overall health knowledge among the surveyed children was low.

Dileep C, et al," had conducted arch survey on the knowledge, attitude and practice about oral gene among teachers with an aim to assess the knowledge attitude and practice about oral hygiene gnashers in Kanpur A pilot research study was conducted with the sample of 300 subjects and the sampling technique und was questionnaire method. Dets analyses were done by collecting and analyzing the data as percentage, which were based on the number of responses for each variable.

The result shows that 84% had believed that toothbrush was better than finger to clean the teeth while 52.6% teachers had a tendency to change the brush within 2-3 month. Therefore, they concluded that teachers need to improve their awareness on oral hygiene knowledge and practice which will facilitate the improvement of seal hygiene awareness among the future citizens.

In order to examine oral health-related knowledge and behaviours among 12-year-old students studying in Panchkula, India, Mela A. Kat G undertook a research on oral health associated to knowledge, attitude, and practises among kids in the rest parts of Panchala. This research involved a total of 440 kids (216 boys and 224 girls) from 12 schools. A 13-um dosed-ended questionnaire was given to each participant to complete. Version 11 of SPSS was used to examine the data that was gathered. The Chi square test was used to evaluate whether differences between the two genders were statistically significant. Just 25% of the individuals reported brushing their teeth more than once a day, according to the results. Just 35.9% of the children attended the dentist, and of those who did, 8.2% were utilised, despite 32 percent of the children not brushing their teeth every day during the previous year and 45.5% of the children having some issue with their teeth and gums.

To determine the incidence of dental problems and the need for treatment among Delhi's school-age children in different educational zones, a cross-sectional study was carried out. 520 schoolchildren between the ages of 9 and 12 were assessed following the WHO (1997) standards. Dental carries were reported to be prevalent in 52.3% of cases, with mean deft and DMFT readings of 0.5038 1.0859 and 0.8250 1.3437, respectively. In addition to different treatment requirements, 49.7% needed restorative care. This study demonstrates the lack of knowledge and accessibility to dental facilities. To

tackle this infectious condition, it is thus necessary to establish preventative and promotional oral health initiatives.

In Irbid, Jordan, a study was carried out to determine the association between socioeconomic class and dental health, gingival health, and oral hygiene in 12- to 15-year-old children from each of the five geographical districts. Students from 10 public schools (n = 674) with low to intermediate socioeconomic level were chosen at random. Further more included were high socioeconomic class kids (n=347) attending 10 private schools. School pupils had their dental health, gingival health, and oral hygiene checked. The mean plaque and gingival scores were greater in public school students than in private school students. The public-school students also had higher overall scores for decaying teeth, missing, or filled teeth and surfaces as well as higher scores for decayed teeth and surfaces.

Conversely, there were much more missing and filled surfaces and teeth among private school students. The outcomes for oral hygiene, gingival health, and dental caries were poorer among poor children than they were among affluent children, although not noticeably worse. As a result, the study advises both socioeconomic groups to get oral health education.

A research on oral health awareness, practise, oral hygiene status, and dental caries prevalence among visually impaired children in Bangalore was carried out by Prashanth st. et. al. It used the Kruskal-Wallis Chi-Square test. 85 kids in total were used as the sample size. The current study indicates that the study population's oral health status has not significantly deteriorated. A little extra attention to oral hygiene by the parent or carer can have a significant impact on the decrease of dental caries.

A research was carried out in Northern Ireland to evaluate the success of a child-to-child strategy for encouraging healthy snacking among primary school students. 10 schools were divided into an intervention and control group at random. The sample size was 482. delivered to the experimental group as an intervention. Both the experimental and control groups received post-tests for oral health. Comparing intervention children to control children, the mean knowledge score of the intervention group increased more. The study found that the child-to-child method enhanced the oral health of the kids.

A study was carried out to ascertain the oral hygiene habits of Pokhara Municipality's schoolchildren. 200 school-aged children, ranging in age from 3.5 to 16, were questioned at random. The survey reveals that a significant portion of kids (45%) brush haphazardly, 15% brush vertically, and 40% brush horizontally. All of these brushing methods are ineffective. They lack a thorough understanding of correct brushing technique. They require good education. The essential stages for enhancing oral hygiene practises among schoolchildren are, in our opinion, oral hygiene awareness education and motivation.

A research on the effects of the child-to-child programme in six rural schools that was done in Jamaica. Students in grades 4 and 5 were introduced to the concepts of nutrition, personal hygiene, and child development. 199 children and 47 moms from the control group were compared to 423 children and 90 mothers in the experimental group. Children in the experimental group performed better on a knowledge exam at the conclusion of the school year.

RESEARCH METHODOLOGY

Research methods can be used to carefully tackle the research challenge. It may be thought of as a science that investigates how scientific research is carried out. In this article, we look at the many methods commonly employed by researchers to analyse their study subject and the justifications for each. The approach and the research techniques/methods must both be

recognisable to the researcher. Researchers need to know which of these methods or techniques are relevant and which are not, as well as what they would mean, indicate, and justify. This is in addition to knowing how to create specific tests or indices, compute mean, mode, median, standard deviation, or chi-square, and apply specific research techniques. Also, researchers need to be aware of the assumptions underpinning various techniques as well as the criteria by which they may choose the approaches and procedures that are most suitable for a certain problem. All of this suggests that a problem-specific methodology must be developed by the researcher because it may differ from issue to problem.

RESEARCH APPROACH

The impact of the STP on primary school students' knowledge and behaviour about dental caries was evaluated in this study using an evaluative technique.

A highly visible, organised atmosphere that fosters an awareness of timetables, activities, and expectations is created by the STP (Structured Teaching Program).

RESEARCH DESIGN

PRE-EXPERIMENTAL, one group pretest and post-test research design.

Factors Being Studied Include

Often, ideas are referred to as variables in quantitative investigations.

The independent variable is assumed to be the cause, while the dependent variable is assumed to be the result.

An attributed variable is one that remains unchanged during the course of the investigation. Structure teaching programme (STP) on dental caries is an independent variable.

Knowledge and behaviour of elementary school students about dental caries and dental hygiene are a dependent variable.

Gender, religion, and kind of family are attributes.

Tool Description

A structured knowledge questionnaire was created to assess knowledge of dental care and dental hygiene after a thorough examination of the literature and consultation with specialists.

PREPERATION OF CLOSED ENDED QUESTIONNAIRE

Closed ended questionnaire were prepared to assess the effectiveness of structure teaching program on knowledge, regarding dental crisis on 5th standard primary school children.

Section 1: The Socio Demographic Variables

The socio demographic contained of 6 items. Pertaining to age, gender, religion, previous knowledge related to dental care.

Section 2: This section deals with the structured knowledge questionnaire regarding dental carries. It consists of 30

questions related to general information regarding dental care, questionnaire related to dental hygiene and question related to prevention and complication of neglected oral hygiene.

It consists of check list on knowledge and practice regarding dental caries for 5th standard primary school children.

The questions should be answered based on tick mark, which mean the children have to tick either yes or no and choosing the correct option.

PREPARATION OF BLUEPRINT

A blueprint was prepared to aid in the construction of tool and questions were divided under these components: general instruction on dental hygiene, question related to dental carries, prevention and complication of neglected oral care. According to this checklist was prepared.

Scoring technique

Each accurate response received a score of 1, while each wrong one received a score of 0. The structured knowledge questionnaire allowed for a maximum score of 20. The various knowledge levels are divided into the following categories:

SI. No	Level of knowledge	Percentage of score	Actual score
1	Inadequate	< 50%	0-5
2	Moderate	50 – 75 %	6-10
3	Adequate	>75%	10-20

DATA ANALYSIS AND INTERPRETATION

Data from 72 respondents at a chosen elementary school in Bangalore were obtained using standardised questionnaires for the purposes of data analysis and interpretation. The collected data were organised and presented in the master sheet for tabulation and statistical processing. Descriptive and inferential statistics were used to compute the results.

HYPOTHESIS

- H1: There will be significant increase in the level of knowledge regarding dental caries among primary school children after role play.
- H2: There will be significant improvement in the practice skills regarding dental caries among primary school children after the role play.

ORGANIZATION OF ANALYZED DATA

The data was organized and presented in the form of tables and diagram represents under the following headings.

SECTION A

- Frequency and percentage distribution of socio demographic variables.

SECTION B

- Mean pre-test level of knowledge and practice.
- Mean post-test level of knowledge and practice.

SECTION C

- Comparison of mean pre-test and mean post-test level of knowledge.
- Comparison of mean pre-test and mean post-test and mean post-test level of practice.

Assessment of Knowledge of Respondents on Knowledge Regarding Dental Caries

Overall aspect wise pretest and post-test knowledge scores of respondents on knowledge regarding dental caries.

Table 5: Mean, Mean Percentage and Standard Deviation Regarding Dental Hygiene

Category	Mean	Mean Percentage	Standard deviation
General question	4.5	75%	0.719
Dental Hygiene	3.03	50.56%	1.016
Complication and Prevention	3.7	46.25	1.258
Total	11.23	56.15%	2.14

The tables above shows that the overall mean pretest knowledge of primary school children in selected RC International school are 11.23 with mean percentage of 56.15% and Standard deviation of 2.14.

Table 6: Mean, Mean Percentage and Standard Deviation for Post-Test Knowledge of Respondents On Knowledge Regarding Dental Caries.

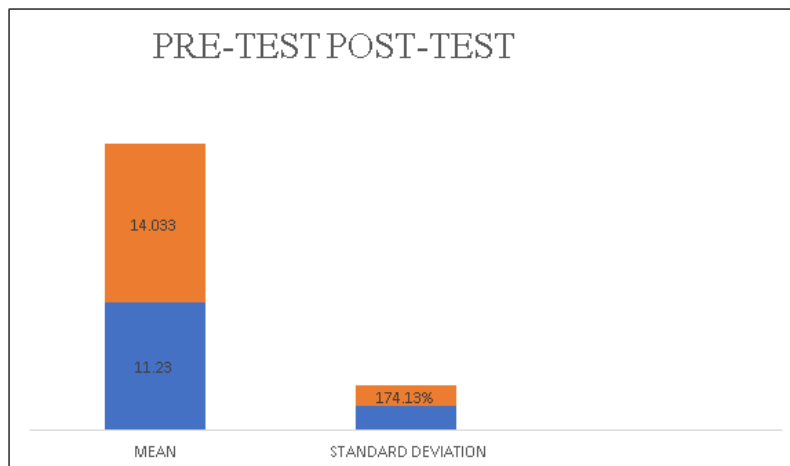
Category	Mean	Mean percentage	Standard deviation
General question	5.03	83.89%	0.547
Dental Hygiene	4	66.67%	0.894
Complication and prevention	5	83.3%	1.1255
Total	14.033	70.16%	1.7143

The table above shows that mean post-test knowledge of primary school in selected RC

International school are 14.033 with mean percentage of 70.16% and standard deviation of 1.7143.

Table 7: Comparison Between Pretest and Post-Test Result.

Aspects Deviation	Mean	Mean percentage	Standard deviation
Pre test	11.23	56.15%	2.14
Post test	14.033	70.17%	1.7413



The above table shows a comparison of pretest and post-test mean, mean percentage and standard deviation.

Comparison of post-test and pre-test knowledge regarding Dental caries

N=72

Pre test			Post test			Enhancement
Mean	Mean %	SD	Mean	Mean%	SD	14.015%
11.25	56.15%	2.14	14.033	70.165%	1.7413	T=11.03
						df=29
						Table value=2.05significant

The aforementioned table contrasts respondents' pre-test and post-test knowledge ratings on dental caries. The outcome shows that the pre-tests' aggregate mean percentage of knowledge score was 56.15%. The mean post-test percentage was also shown to be 70.165%. The average improvement rate was 14.015%. At the 0.05 level, the computed t' value of 11.03 is deemed to be significant. Between the respondents' pre-test and post-test knowledge scores, there is a sizable variation.

DISCUSSION

The efficiency of a structured training programme about dental caries among primary school students was assessed using a pre-experimental design with one group of pretest/post-test. Data from the individuals were gathered using a standardised questionnaire that they self-administered.

After outlining the study's objectives, the fifth-grade student underwent a pretest. Play therapy was give on the same day after conducting the pretest examination, followed by post-test examination to evaluate the effectiveness of play therapy regarding dental caries.

Findings of The Study

In assessing 40% of the children had inadequate knowledge (0-50%) regarding dental caries. 60% of the children had moderate knowledge (51-75%). None of the participants have adequate knowledge about the dental caries.

The mean pretest level of knowledge was 11.23 and the standard deviation of the pretest was 2.14 and the mean percentage is 56.15%. Thus, the investigator assumes that there is need to improve the knowledge level of children.

After administration of structured teaching program, the level of knowledge was calculated. 76.7% of the children had moderate knowledge and 23.3% of children has adequate level of knowledge on dental caries. The knowledge level of the

children in the post-test had shown major difference. The mean of the post-test was greater than the pretest's mean, which was 11.23, at 14.033. The difference in standard deviation between the pretest and posttest was 0.4, demonstrating the effectiveness of a structured training programme in raising the knowledge level of the students.

When the findings were evaluated, it was found that there was no correlation between the post-test knowledge and the demographic characteristics at the 0.05 level. Two demographic variables, gender and history of toothache were taken for finding out the

association. Their respective χ^2 value is 1.11 and 0.6627 which is non-significant.

CONCLUSIONS

The goal of the study is to assess the effectiveness of a structured teaching programme on primary school students' understanding about dental caries at a particular government school. Using a systematic knowledge questionnaire, the data was gathered. The relevant statistical techniques were used to evaluate and interpret the data that was gathered.

The study's findings led to the following interpretation:

The subjects did not have enough information on dental caries.

A structured education programme proved successful in raising respondents' levels of knowledge. It was discovered that several pupils had insufficient knowledge during the pretest.

The pretest's standard deviation was 2.14, its mean percentage was 56.15, and its mean level of knowledge was 11.23.

When an organised education programme was administered, the degree of knowledge was determined.

23.3% of the youngsters and 76.7% of the children had appropriate knowledge about dental caries, respectively.

The mean percentage of knowledge that had improved overall was 14.0155, and the computed value of "t" was 11.03; this improvement is judged to be statistically significant at the P 0.05 level of confidence.

The relationship between sociodemographic factors including gender, religion, and past toothaches and the post-test knowledge score on dental caries demonstrates that these factors were not significant at the 0.05 level.

RECOMMENDATION

According on the findings of the study, the following suggestions may be made:

- A bigger sample size may be used for a study of a similar nature in order to reach more certain conclusions and generalise the results.
- It is possible to conduct a genuine experimental research to determine how schoolchildren care for their teeth.
- A research incorporating socio demographic factors can be done on the same subject.
- An article of dental caries can be published in mass media.

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