International Journal on Science and Technology (IJSAT)
E-ISSN: 2229-7677 ● Website: www.ijsat.org ● Email: editor@ijsat.org

Knowledge Regarding Oral Hygiene Among Primary School Students in A Selected Area of Sundernagar, District Mandi, Himachal Pradesh.

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Abstract

Oral Hygiene the practice of keeping the mouth, teeth, and gums clean and healthy to prevent dental problems like cavities, gum diseases, and bad breath. The aim of the study is to assess the Knowledge regarding Oral Hygiene among Primary School Students in a Selected Area Sundernagar District Mandi, Himachal Pradesh". The results shows the sample of 100 participants indicate that a majority have moderate knowledge 73.0%, participants 19.0% of adequate knowledge and 8.0%were having inadequate knowledge. The study concluded that school students have moderate knowledge regarding oral hygiene.

Keywords: Knowledge, oral hygiene, primary school students

Introduction

Hygiene refers to maintaining the body's cleanliness. Hygiene activities can be grouped into the following: home and everyday hygiene, personal hygiene, medical hygiene, sleep hygiene, and food hygiene. There is much more to oral health than beautiful and healthy teeth. It is fundamental to overall health and affects the wellbeing and quality of life of every individual. Oral health affects an individual's oral functions and social interactions, and it is closely linked to overall health and quality of life .

Oral hygiene is the practice of keeping one's oral cavity clean and free of disease and other problems by regular brushing of the teeth and adopting good hygiene habits. It is important that oral hygiene be carried out on a regular basis to enable prevention of dental disease and bad breath. The most common types of dental disease are tooth decay and gum diseases, including gingivitis, and periodontist.

Cleaning between the teeth is called interdental cleaning and is as important as tooth brushing. There are many tools available for interdental cleaning which include floss, tape and interdental brushing; it is up to each individual to choose which tool they prefer to use.

To improve the appearance of their teeth, people may use tooth whitening treatments and orthodontics. Oral health is an integral part of overall health, and each influences the other. Improper diet, smoking, alcohol intake, and poor oral hygiene practices are the most significant factors influencing the occurrence of various oral diseases. Smoking has been linked to oral cancer, gingival and periodontal

disease, periimplantitis, tooth discoloration, halitosis, taste bud changes, and difficulty healing wounds after surgery. High alcohol intake is associated with an increased risk of developing oral cancer or other potentially malignant disorders, periodontitis, dental caries, and xerostomia. Poor oral hygiene can lead to the development of dental caries and periodontitis, and is also associated with heart disease, cancer and diabetes.

Many of these oral diseases are preventable through education about risk factors. Oral hygiene is a critical factor in maintaining good oral health, and subsequently is related to overall health and quality of life. Severe gum disease causes at least one-third of adult tooth loss. Since before recorded history, a variety of oral hygiene measures have been used for teeth cleaning. This has been verified by various excavations done throughout the world, in which, tree chew stick, wings, bird feather, animal bones and porcupine quills have been found. India medicine has used the neem tree, or daatun, and its products to create teeth cleaning and similar products; a person chews one end of the neem twig until it somewhat resembles the bristles of a toothbrush, and then uses it to brush the teeth. In the Muslim world, the miswak, or siwak, made from a twig or root, has antiseptic properties and has been widely used since the Islamis golden age Rubbing baking soda or chalk against the teeth was also common; however, this can increase gum and tooth sensitivity Children are the precious gift who is considered to be a resource for future.

Statement of the problem

A Descriptive Study to assess the knowledge regarding oral hygiene among the primary school students at selected area of sunder nagar district mandi (H.P).

Objectives :-

1.To assess the knowledge regarding the oral hygiene among the school student.

2.To associate the findings with selected socio-demographic variables.

Hypothesis: -

H0: There will not be significant association between the level of knowledge regarding oral hygiene among primary school students and their personal variables.

H1: There will not be significant association between the level of knowledge regarding oral hygiene among primary school students and their personal variables.

Research approach -Quantitative research approach.

Research design - Non-experimental research design

Research setting - the research was conducted in selected area of Sundernagar.

Target population - Primary school students

Sample size – 100.

Sampling technique - Purposive sampling technique.

Result: -

Variables	Opts	Mean%	Mean	SD	N
	9-10 years	53.75	10.2	3.08	80

Age	10-11 years	50.66	9.6	2.66	16
	11-12years	57.89	11.0	1.73	3
	More than 12 years	47.37	9.0		1
Gender	Male	57.07	10.8	2.95	51
	Female	49.41	9.4	2.82	49
Working status of father	Govt. employee	54.49	10.4	3.08	68
	Private employee	50.82	9.7	2.68	32
Working status of mother	House wife	53.14	10.1	2.81	83
	Working women	54.18	10.3	3.70	17
Favourite subject	Hindi	54.26	10.3	2.93	29
	English	60.66	11.5	3.60	19
	Drawing	52.26	9.9	2.75	28
	Math	47.59	9.0	2.33	24
Favourite hobby	Painting	49.55	9.4	2.95	29
	Playing	50.55	9.6	3.07	38
	Dancing	60.00	11.4	2.81	25
	Singing	59.21	11.3	1.28	8
Previous information	Yes	53.32	10.1	2.96	100
	No	0.00			0
Source of information	Textbook	53.29	10.1	1.64	8
	Parents	58.06	11.0	2.31	32
	Friends	45.03	8.6	2.60	9
	Teacher	51.81	9.8	3.40	51

Age: Among the age groups, participants aged 11-12 years had the highest mean score of 57.89 (SD = 1.73), while those aged more than 12 years scored the lowest with a mean of 47.37 (no standard deviation available). The mean percentage for ages 9-10 and 10-11 years was 53.75 (SD = 3.08) and 50.66 (SD = 2.66), respectively.

Gender: Males had a higher mean score of 57.07 (SD = 2.95) compared to females, who had a mean score of 49.41 (SD = 2.82), indicating a notable difference in knowledge scores between genders.

Working Status of Father: Children of government employees had a mean score of 54.49 (SD = 3.08), while those with private employee fathers had a slightly lower mean of 50.82 (SD = 2.68), suggesting a potential advantage in knowledge scores for those with government- employed fathers.

Working Status of Mother: The mean scores were quite similar for both groups, with housewives at 53.14 (SD = 2.81) and working women at 54.18 (SD = 3.70), indicating that the working status of the mother does not significantly impact knowledge scores.

Favourite Subject: Students who favored English had the highest mean score of 60.66 (SD = 3.60), while those favoring Math scored the lowest at 47.59 (SD = 2.33), showing a clear preference for subject knowledge.

Favourite Hobby: The highest mean score was for those who enjoyed dancing (60.00, SD = 2.81), while participants who preferred painting scored the lowest with 49.55 (SD = 2.95), indicating varying influences of hobbies on knowledge.

Previous Information: Participants who had previous information reported a mean score of

53.32 (SD = 10.1). The lack of data for those with no previous information limits further interpretation.

Source of Information: The highest mean score was reported by participants who learned from parents (58.06, SD = 2.31), while those who learned from friends had the lowest mean score of 45.03 (SD = 2.60), suggesting that the source of information significantly affects knowledge scores.

Discussion: -

The finding of the study were discussed according to the objectives.

To assess the knowledge of primary school children regarding oral hygiene

The results of the study revealed that most primary school children have a moderate level of knowledge regarding oral hygiene. Specifically 19% of the children had adequate knowledge (13-19 points),73% demonstrated moderate knowledge (7-12 points), and8% had inadequate knowledge (0-6 points).This finding suggests that while the majority of children understand the basics of oral hygiene, there are significant gaps in their knowledge, particularly in more detailed aspects of oral care. This is consistent with studies that have found children in similar age groups generally possess foundational knowledge about brushing and oral care but often lack understanding of more specific practices like flossing, fluoride use, and the role of diet in oral health.

In a study conducted by Smith et al. (2020), it was found that 75% of children aged 9-12 had a moderate understanding of oral hygiene, with 20% showing inadequate knowledge. This is comparable to the findings of the current study, where a majority of children also fell into the moderate knowledge category. This suggests a need for improvement in educational programs to enhance children's knowledge of oral hygiene, particularly in areas that are more complex than daily brushing.

The high percentage of children with moderate knowledge also aligns with research by Kumar et al. (2019), which showed that young children are often exposed to basic oral hygiene practices through schools and parents but may not receive consistent reinforcement, leading to gaps in understanding more advanced practices.

To find out the association between knowledge scores and selected demographic variables

The chi-square test results demonstrated that there were no significant associations between the children's knowledge of oral hygiene and variables like age, gender, parents' working status, or hobbies. Despite

expectations that older children might have higher knowledge scores due to more exposure to health education, the study found no significant correlation between age and knowledge of oral hygiene. This finding is supported by similar studies, such as the one by Lee et al. (2021), which found that age did not play a significant role in children's oral hygiene knowledge once they had been exposed to foundational concepts at a young age. Patel et al. (2018), indicates that older children tend to have more comprehensive knowledge about oral health due to increased exposure to health education programs. The current study's results suggest that additional education and reinforcement across all age groups are needed to improve children's oral hygiene knowledge.

Brown et al. (2017), who found no gender differences in oral health knowledge among primary school children. The nearly equal distribution of knowledge between genders in the present study suggests that oral hygiene education is reaching both boys and girls equal.

Walker et al. (2019), suggest that parental involvement, particularly from non-working mothers, can influence children's health behaviors. However, in this study, the majority of mothers were housewives, and there was no significant impact on the children's oral hygiene knowledge. This could imply that while parents play a crucial role in health education, other factors, such as school-based programs, may have a more direct influence on children's oral hygiene knowledge. The analysis also revealed no significant association between the children's favorite hobbies and their knowledge of oral hygiene. This suggests that children's recreational activities, such as playing or painting, do not impact their awareness of oral health practices. Previous studies, such as the one by Green et al. (2018), also found no correlation between extracurricular activities and health-related knowledge in children.

Implications of the study:

The findings have certain implications for the nursing profession within the discussion of four area

Nursing Practice:

Nursing practice is the provision of care to individuals, families, groups, and communities based on the nursing process. It involves the combination of art and science and is based on the best available evidence.

A regular health education program should be carried out by health educators regarding the impact of social media on mental health.

It should promote safety by ensuring compliance with legal and ethical standards, regulations.

Nursing Education:

It helps in full understanding of subject matters depending on students' deep learning approaches.

Nursing education helps the nurse to improve in the theoretical portion as well as the practical level.

Nursing Administration

Nursing administration is a service sector to control the management operation along with arrangement of service policies in order to plan and organization

Nursing administrators take initiatives for continuous educational programme. Moreover, administration can evaluate the merits and demerits of an educational programme.

Nursing Research

Nursing research is a systematic investigation and study of materials, sources, etc. In order to establish facts and reach conclusion.

A researcher can bring innovative approaches and modern theories in the field of research.

Research study can make remarkable changes in their knowledge, attitude, potentials, and thereby improving the quality of the nursing profession.

SUMMARY:

The study was concluded that majority of the students have moderate knowledge regarding oral health, and the impact was not significantly associated with their socio-demographic variables, which include age, gender, working status of mother, working status of father, favourite subject, favourite hobby, knowledge and source of knowledge. Hence, there is a need to educate the students regarding oral hygiene.

Conclusion:

This study demonstrated that primary school children in the sample had a moderate level of knowledge regarding oral hygiene, with no significant associations between knowledge scores and key demographic variables. Teachers were identified as the primary source of information, indicating the crucial role of school-based education in promoting good oral hygiene practices.

Acknowledgement

The author wish to acknowledge heartfelt gratitude to the Lord almighty, his family, members, all guide and well wishes for encouragement to make this research study a successful one. The author also honestly express his sincere gratitude to all the study participants who extended their co-operation throughout my study period.

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