

Oral Hygiene Knowledge and Practices Among School-Aged Learners in the Northern Samar

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Abstract

This study aimed to assess the level of oral hygiene knowledge and practices among school-aged learners in the Division of Northern Samar to facilitate the development of an effective dental health education program. A descriptive research design was employed, incorporating both quantitative and qualitative methodologies to gain insights into the students' perspectives on oral health. Data were collected from 377 respondents in grades one through six across four districts, with Catarman being the primary representation. The study revealed that the students' diet predominantly consisted of expensive fish, expensive chicken, expensive rice, and expensive vegetables. Despite being from low-income, college-educated families, the majority of respondents' parents emphasized the importance of brushing teeth after every meal. Dental decay, multiple tooth decay, and tooth loss were prevalent among the respondents, who also lacked dental fillings and believed that regular teeth cleaning was the most effective way to remove plaque.

Keywords: Oral hygiene, Nutrition, Knowledge, Oral health, School-age learners

I. INTRODUCTION

Oral health has emerged as a growing concern among various stakeholders, including researchers, educators, and health authorities, due to its significant impact on overall well-being, particularly in school-age children and the elderly. Dental caries (tooth decay) and periodontal disease are the predominant issues affecting oral health, as highlighted in a joint report by the Departments of Health and Education, with alarming statistics showing that 48 percent of individuals suffer from gum disease and 87 percent have tooth decay, based on the 2011 NMEDS Survey.

Despite the widespread prevalence of oral health disorders in the country, specific data regarding the oral health status of the Northern

Samar region were notably lacking from official reports of the Departments of Education and Health. However, international comparisons, such as a news report from February 18, 2015, revealed that India ranked highest globally in terms of oral health diseases, surpassing even the Philippines. This information underscores the urgency of investigating the state of oral health in Northern Samar and understanding the perspectives of school-age students to develop effective dental health education programs.

The primary objective of this study was to gather the viewpoints of school-age learners regarding the state of oral health in the Division of Northern Samar. These insights were deemed essential for the development of targeted dental health education initiatives. The study aimed to document various aspects of school-age learners' profiles, including their nutrition habits and socio-psychological conditions, encompassing parents' income, occupation, educational attainment, and perspectives on oral health. Furthermore, the study sought to assess the level of knowledge among respondents concerning oral hygiene practices, encompassing brushing, rinsing, the use of dental floss, and toothpicks. By addressing these objectives, the research aimed to contribute valuable information to improve oral health awareness and care among school-age learners in the region.

II. METHODOLOGY

This research was conducted in the Division of Northern Samar, with a particular focus on the four districts of Catarman I, Catarman II, Catarman III, and Catarman IV. The target participants were students from R. Frigillana Memorial School, G. Cawayan Integrated School, Catarman I Central School, and Catarman II Central School. The primary objective of this study was to describe the level of oral health among school-age learners in the region. To achieve this goal, a descriptive research design was employed, incorporating both qualitative and quantitative methods. The research variables encompassed the profile of school-age learners, their oral hygiene status, knowledge of oral hygiene, and oral hygiene practices. Additionally, the study considered socioeconomic status and diet as potential influencing factors, focusing on parents' earnings, educational attainment, occupation, and the types of foods frequently consumed by the students.

To ensure the accuracy of the findings, a statistically viable sample was selected from the vast population of school-age children in the four Catarman districts, utilizing Sloven's method. This approach aimed to represent each population stratum adequately in the sample, enabling a more comprehensive analysis of the data.

For data collection, a web-based survey questionnaire was utilized. The researcher customized the survey to suit the study's specific objectives

since existing survey instruments did not fully align with the research goals. The questionnaire gathered information on the characteristics of school-age students, including their diet and socioeconomic status. Nutrition-related questions focused on foods consumed during various meals, while sociopsychological aspects explored parents' earnings, occupation, and educational attainment. The research instrument aimed to collect comprehensive data to assess the oral health knowledge and practices of the participants. By employing this methodology, the study sought to contribute valuable insights into the oral health status of school-age learners in the Division of Northern Samar, potentially informing the development of effective dental health education programs tailored to their needs.

III. RESULTS AND DISCUSSION

The study's participants reported that rice was a common dietary staple, often accompanied by vegetables, chicken, or fish. The majority of parents who took part in the study were engaged in occupations such as housekeeping or government work, earned moderate incomes, and held college degrees. Moreover, these parents emphasized the importance of regular tooth brushing for their children after every meal and were well aware of the significance of providing nutrient-rich milk to aid in proper meal chewing.

Regarding dental hygiene, a significant number of respondents acknowledged experiencing tooth decay among school-age students. The majority of pupils aged 6 to 7 who participated in the survey reported having experienced tooth decay. Interestingly, most students were aware that tooth decay was not solely caused by consuming sweets and inadequate tooth brushing. The prevalence of tooth loss among the respondents was generally low, which is noteworthy considering the overall population under investigation, where tooth loss was quite common, as indicated in the data presented in the table.

Further analysis of the data revealed a correlation between tooth loss and brushing habits, as well as the impact of common meals on dental decay. The majority of respondents who had experienced tooth loss had lost multiple teeth, indicating the significance of brushing habits and meal choices in dental health outcomes. Additionally, most participants reported having few or no dental fillings, suggesting that children with tooth decay were less likely to receive dental fillings. However, a considerable number of respondents had several dental fillings, indicating a higher incidence of dental issues among these students.

The presence of plaque on teeth was a concern for a significant majority of the survey participants. Many students admitted to not brushing their teeth regularly, leading to plaque buildup. However, the students generally recognized the importance of brushing and flossing as effective measures to prevent plaque formation.

This study shed light on the dietary habits, oral hygiene practices, and dental health status of school-age learners in the Division of Northern Samar. The findings highlighted the prevalence of tooth decay and tooth loss among the respondents and emphasized the need for improved oral health education and preventive measures, such as regular tooth brushing and a balanced diet, to promote better dental health among school-age children.

VI. CONCLUSION

Based on the findings of the study, it can be concluded that parents play a significant role in promoting dental health among school-age children. The provision of proper and balanced food choices, with an emphasis on fish rich in calcium, reflects parents' efforts in fostering good dietary habits. Additionally, the positive perception of parents towards the importance of regular tooth brushing after meals indicates their awareness of the significance of maintaining healthy milk teeth for effective food chewing.

Regarding nutrition and socio-psychological conditions, the study revealed that the majority of parents were college graduates with modest incomes, predominantly engaged in government work or housekeeping. While this suggests limited resources, it also indicates that parents are well-informed about dental hygiene practices. Strengthening efforts to educate parents further on oral health and dental care can empower them to better support their children's dental well-being.

Based on the data analysis, the following recommendations are proposed:

1. Parental guidance should focus on discouraging the consumption of foods high in acids, such as citrus fruits, while promoting the intake of foods beneficial for oral health, such as omega-3 fatty acids, vitamin D-rich fish, vitamin C-rich oranges, apples, and carrots.
2. Collaborative efforts between schools and parents should be encouraged to enhance the monitoring and supervision of school-age children's oral hygiene practices, particularly regarding tooth brushing, flossing, toothpick use, and rinsing. Educational workshops and awareness campaigns can be organized to instill healthy dental habits in children from an early age.
3. The Division of Northern Samar and school health departments should adopt and implement the health program proposed by the researcher to address issues related to tooth decay and plaque deposition effectively. Regular dental check-ups and preventive interventions should be integrated into school health programs to promote overall dental health and reduce the prevalence of oral health problems among school-age learners.

By implementing these recommendations, it is anticipated that the dental health and overall well-being of school-age learners in the Division of

Northern Samar will be significantly improved, leading to a healthier and more informed generation.

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