

Assessment of School-Age Learners' Oral Health and Dental Hygiene Practices in Northern Samar: Implications for a Dental Health Education Program

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Abstract

This study investigates the perspectives of school-age learners on oral health and explores the significance of designing a dental health education program for the Division of Northern Samar. Combining quantitative and qualitative methodologies through a descriptive research design, the research describes the profile of Grade one to six pupils across four districts in Catarman. Additionally, the study examines the status and practices of oral hygiene among the respondents. The findings indicate that common foods offered to the pupils consist of rich and fish, rich and chicken, and rice and vegetables. Most of the pupil-respondents' parents have low income and college education, yet they remain optimistic about the importance of cleaning their children's teeth after every meal. Prevalent dental issues among the respondents include tooth decay and tooth loss, primarily attributed to inadequate brushing. However, the majority of the learners show consistent flossing practices and awareness of dental floss's significance to oral health. The study highlights the need for a comprehensive health education program in the Division of Northern Samar, as no such program has been previously designed.

Keywords: school-age learners, oral health, dental hygiene practices, dental health education program, Northern Samar

I. INTRODUCTION

Undeniably, oral health is a matter of growing concern among individuals of all ages, be it school-age learners or the elderly. Dental health practitioners, including the author, have been increasingly drawn to the significance of oral health, considering its impact on various aspects of the human system.

According to a joint report by the Department of Health and the Department of Education, dental caries (tooth decay) and periodontal disease (gum disease) are the prevailing oral health problems affecting the population. Shockingly, 87% of people suffer from tooth decay, while 48% experience gum disease, as reported in the 2011 NMEDS Survey. These widespread oral diseases can weaken the body's defense mechanisms and provide entry points for other serious and potentially life threatening infections, exacerbating existing health conditions. The consequences of poor oral health go beyond physical ailments; individuals affected by dental problems may experience speech difficulties, social withdrawal, and hindered opportunities for personal advancement.

While the researcher aims to contribute valuable data on oral health in the context of Northern Samar, there is currently limited available information from both the Department of Education and the Department of Health. However, a TV news report from February 18, 2015, revealed that the Philippines ranked second globally in terms of the incidence of oral health problems, with school-age learners being significantly affected. Conversations with teachers and observations of pupils' oral health confirmed the prevalence of such issues, leading to absenteeism and a negative impact on academic performance.

Recognizing that oral health is integral to overall well-being, as it affects crucial functions like eating, communication, and socialization, it becomes apparent that viewing the mouth separately from the rest of the body must cease. Neglecting oral health can lead to pain, poor nutrition, and compromised academic performance among school-age learners, impeding their quality of life.

Given that adolescents spend a substantial part of their day in educational settings, schools play a pivotal role in shaping their physical, mental, and social development. Thus, considering an oral health education program as an integral part of the educational system becomes imperative.

This paper takes a comprehensive look at school-age learners and schools as environments that impact various aspects of adolescent development, acknowledging the interconnectedness of academics, health, and social well-being. Numerous studies have revealed significant associations between school performance and oral health conditions, with dental issues leading to missed school days and compromised academic achievement.

The Division of Northern Samar currently lacks comprehensive preventive programs for oral health care, highlighting the need for increased dental health education to elevate oral health standards among learners. Furthermore, limited knowledge exists regarding the oral health attitudes and behavior of children, crucial indicators of the efficacy of applied dental health education programs.

To address these gaps, this study aims to provide essential data for future research and enable comparisons with children's oral health attitudes. Additionally, the study advocates for the development of teacher training programs that incorporate oral health knowledge and evidence-based dental health education strategies within school settings, empowering primary school teachers to actively promote oral health among young learners. By doing so, this research seeks to contribute to the improvement of oral health practices and standards among school-age learners in Northern Samar.

II. METHODOLOGY

This study employed a descriptive research design to investigate the oral health status of school-age learners within the Division of Northern Samar, specifically focusing on four districts in Catarman. Both qualitative and quantitative methodologies were utilized, following the IPO framework. The input, process, and output model was adopted to structure the variables studied in this research.

The variables considered in this study encompassed the school-age learners' profile, oral hygiene status, knowledge of oral hygiene, and practices related to oral hygiene. The learners' profile incorporated sub-variables such as nutrition and socio-economic conditions. Nutrition encompassed the types of foods typically consumed during breakfast, lunch, dinner, and between meals. Socio-economic conditions involved assessing parents' income, educational attainment, occupation, and education level.

The process of this research involved documenting the oral health status of the school-age learners, including sub-variables such as the presence of tooth decay, tooth loss, filled teeth, and plaque deposition. Additionally, the knowledge and practices related to oral hygiene were examined. Specific aspects of knowledge included tooth brushing frequency, occasions of tooth brushing, time spent on brushing teeth, use of toothpaste, brushing methods, toothbrush preferences, intervals for exchanging toothbrushes, and reasons for brushing or not brushing. Furthermore, practices concerning the use of dental floss, toothpicks, and mouth rinsing were also documented.

The anticipated output of this study was the development of an Oral Health Education Program tailored to the specific needs of the Division of Northern Samar. By understanding the oral health status, knowledge, and practices of the school-age learners, the research aims to contribute to the formulation of effective strategies and interventions to improve oral health standards within the educational system. The ultimate goal is to promote better oral health practices and create a positive impact on the overall well-being and academic performance of the learners in the Division of Northern Samar.

III. RESULTS AND DISCUSSION

This study provides insightful findings regarding the dietary habits and oral hygiene status of school-age learners. The common foods consumed by the pupil-respondents were predominantly rice and fish, rice and chicken, and rice and vegetables. The majority of the pupil respondents' parents were characterized by low income, with many being government employees and housekeepers, and having college education. These parents held an optimistic outlook on the importance of cleaning their children's teeth after every meal, emphasizing the significance of maintaining healthy milk teeth for proper food chewing.

Regarding the status of oral hygiene among the school-age learners, the study revealed a prevalent issue of tooth decay. A significant number of respondents were found to have multiple instances of tooth decay, with the majority experiencing such problems at the age of 6-7 years old. The primary reasons identified by the pupils for tooth decay were attributed to not brushing their teeth regularly and consuming chocolates and candies. Additionally, while most respondents had no tooth loss, a noteworthy proportion exhibited tooth loss, potentially influenced by their perceptions towards brushing, types of food consumed, and factors contributing to tooth decay. The pupils' understanding of oral health appeared to be focused on the importance of regular tooth brushing for plaque removal.

When evaluating the knowledge of the respondents towards oral hygiene practices, the study observed that the pupils had an average knowledge level towards tooth brushing. However, their knowledge on using dental floss and toothpicks was moderately high, suggesting a degree of awareness about these practices. The overall level of practice on oral hygiene, encompassing tooth brushing, use of dental floss, toothpick, and rinsing, was assessed as "moderately high." These findings indicate a promising foundation for oral health practices among the school-age learners but also underscore the need for targeted interventions and educational initiatives to improve overall oral hygiene habits.

In conclusion, this study sheds light on the dietary patterns and oral hygiene status of school-age learners, indicating both positive aspects and areas that require attention. It highlights the significance of parental attitudes towards oral care and the role they play in shaping their children's oral health behaviors. The prevalence of tooth decay and the relatively high occurrence of tooth loss call for comprehensive oral health education programs and interventions to foster better oral hygiene practices among the young population. By addressing these findings, educational authorities and health practitioners can collaboratively work towards promoting the long-term oral health and well-being of the school-age learners in the Division of Northern Samar.

VI. CONCLUSION

Based on the findings of this study, it can be concluded that the school-age learners are provided with appropriate and nutritious food, particularly rich in calcium, which is essential for good oral health. However, concerning the socio-economic conditions of the parents, it is evident that many of them have limited resources and unstable occupations, which may impact their ability to prioritize oral health care. Despite this, parents showed optimism in recognizing the importance of cleaning their children's teeth after meals, indicating an awareness of the significance of maintaining healthy milk teeth for proper food chewing.

Regarding the oral hygiene status of the school-age learners, tooth decay emerged as a prevalent issue, starting at an early age during preschool education. The learners were aware that inadequate tooth brushing was the primary cause of tooth decay, indicating some level of knowledge about oral health care. However, a significant number of respondents had experienced tooth loss, suggesting a considerable risk to their oral health. The learners displayed an average level of knowledge and practice towards oral hygiene, indicating room for improvement in their oral health habits.

To solve this, the institution must implement a comprehensive and age-appropriate oral health education program within schools, focusing on the importance of regular tooth brushing, proper use of dental floss, and the avoidance of harmful practices like using toothpicks. The program should address the significance of maintaining healthy milk teeth and the long-term impact on oral health. Engage parents in oral health awareness programs to emphasize the importance of oral hygiene practices and the prevention of tooth decay and loss. Workshops and seminars can empower parents to provide proper guidance and support to their children's oral health care. Promote regular dental check-ups for school-age learners to identify and address oral health issues early on. Collaborate with local dental clinics and professionals to provide accessible and affordable dental services to the students. Integrate oral health initiatives into existing health programs within the Division of Northern Samar, emphasizing the interconnections between oral health and overall well-being. Develop and enforce school policies that encourage and support oral health practices, including supervised tooth brushing sessions and access to oral care facilities on school premises.

By implementing these recommendations, it is hoped that the oral health status and practices of school-age learners in the Division of Northern Samar will improve, leading to better overall oral health and well-being among the young population.

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