

Importance of oral health education for parents and educators in children's oral health: A literature review



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ABSTRACT

The active engagement of parents and educators reveals a profoundly significant impact on the transformations of children's habits. The purpose of this study was to analyze, through a literature review approach, how much the participation of

parents and educators as role models can effectively influence the oral health conditions of growing children. It is crucial to highlight that oral health education provided by parents, educators, and caregivers plays an essential role in children's oral health. The insight acquired in this educational process translates into a direct impact on the prevalence of oral diseases, such as caries and periodontal conditions, in children. The recurrent observation indicated an inverse correlation between the level of health education of those involved and the incidence of these oral diseases, reinforcing the need for a comprehensive educational approach. Thus, the results of this literature review not only corroborate the positive influence of the participation of parents and educators in the promotion of children's oral health, but also highlight the importance of continuous educational strategies. The awareness knowledge disseminated through these educational practices are key to shaping healthy oral habits from childhood, laying a solid foundation for lifelong oral health. Therefore, this study emphasizes the need for persistent educational initiatives aimed at a lasting impact on children's oral health.

Keywords: Pediatric dentistry, child, tooth, oral hygiene.

1 INTRODUCTION

Health promotion comprises initiatives aimed at understanding health-disease processes, addressing both risks to oral health and protective factors (KAUR, 2009; SURESH *et al.*, 2010). Knowledge and awareness about healthy practices result in the assimilation or change of habits, as well as the acceptance of new values, all associated with maintaining well-being, improving quality of life, and preventing any diseases (NAIDU & NUNN, 2020; BRAMANTORO *et al.*, 2021).

Behaviors acquired in the early stages persist throughout life, underscoring the crucial importance of adequate oral health education (BULDUR & GÜVENDI, 2020). Preschool children are considered the main target group for health education, due to their ease in adapting and incorporating new habits, being in a phase conducive to learning (ALHUMAID *et al.*, 2020).

7

The focus on health in the family context has been reiterated as an essential strategy to adapt to the current health system, especially in strengthening primary health care and promoting quality of life. The family plays a crucial role as a learning environment for individuals who understand their needs (ALSHLOUL, 2023). The assessment of oral health-related quality of life in children influences parents' perception of oral health, promoting more effective communication between patients, parents, and dental teams (GEORGE *et al.*, 2019).

The implementation of educational strategies aimed at parents of preschool children is of great importance, since the behavior of these adults in relation to oral health has a direct impact on the prevalence of caries in the oral cavity of children (GAO *et al.*, 2020). Dealing with the challenge of integrating education, health, and family into children's oral health education programs makes the active inclusion of parents and teachers imperative (MALELE-KOLISA *et al.*, 2019). In this sense, the objective of this study is to carry out a literature review to assess how the knowledge and participation of parents and educators can influence the oral health conditions of this population.

2 MATTER AND METHODS

A literature review was conducted in the PUBMED, SCIELO and GOOGLE SCHOLAR databases. The selection included scientific articles that address the importance of oral health education for parents and educators in children's oral health. Specific keywords were used, such as "dental health literacy", "pediatric dentistry", "oral health education", "oral health prevention".

3 LITERATURE REVIEW

Throughout childhood, children absorb knowledge by observing and imitating habits, attitudes, and values present in their physical and social environment, which exert a direct influence on them (NAIDU & NUNN, 2020; SRILATHA et al., 2021). The incidence of oral diseases can be reduced or even prevented through the early establishment and subsequent maintenance of proper oral hygiene practices, as well as the promotion of healthy eating (NINGRUM et al., 2021). In this context, the child's main influencers are those closest to them, i.e., parents, guardians, and caregivers, who represent the main support systems and are essential references for the internalization of good health practices (GOMAA et al., 2019; KHAN et al., 2022).

The habits and knowledge of parents and caregivers play a significant role in children's oral health, directly influencing the development of cavities. Children who adopt inappropriate practices have a higher propensity to develop cavities compared to those who cultivate healthier habits (GOMES *et al.*, 2020). In addition, the unfavorable socioeconomic condition of the family, when associated with poor oral health habits on the part of the parents, also contributes to the emergence of dental caries (TOMAZONI *et al.*, 2019; KHAN *et al.*, 2022).



Understanding the development of oral diseases, identifying their causes and symptoms, understanding the practices of recovery and maintenance of oral health, as well as knowing the prevention and treatment guidelines provided by the dentist, are measures that enable the individual to make decisions that are beneficial to their health (TOMAZONI *et al.*, 2019). These actions not only benefit adults, but also have a positive impact on children, since it is adults who are responsible for forming and maintaining healthy habits, which are essential for the proper growth and development of children's dentition (NAIDU & NUNN, 2020; BRAMANTORO *et al.*, 2021).

The school plays a crucial role as a learning environment, going beyond its specific pedagogical responsibilities. In addition to its educational function, the school institution assumes a considerable social and political responsibility aimed at the formation and transformation of society (ACHMAD *et al.*, 2021). This responsibility encompasses fostering citizenship and ensuring access to opportunities for learning and development, both individually and collectively. This fully justifies the initiatives aimed at the school community and its surroundings, aiming to materialize the health promotion proposals (ACHMAD *et al.*, 2021; RIOLINA *et al.*, 2020).

Teachers play a crucial role in interacting with children on a daily basis, being the professionals closest to them after the family. Therefore, its influence is not limited to students, but also extends to family members (PRIYA et al., 2019; NINGRUM et al., 2021). Faced with this reality, educators have a valuable opportunity to positively impact children by motivating them to adopt healthy oral hygiene habits (TOMAZONI *et al.*, 2019). Establishing effective collaboration between education and dentistry is essential for the prevention of oral diseases, with an emphasis on those most common in childhood, such as dental caries and periodontal diseases (SHARIFIFARD *et al.*, 2020).

Education professionals recognize the absence of health promotion in the school environment, emphasizing, however, the need for greater commitment on the part of the government and civil society (BRAMANTORO et al., 2021). In addition, they highlight the importance of establishing specific and interdisciplinary professional training in undergraduate, graduate and professional training courses to effectively address these topics in the classroom (NAIDU & NUNN, 2020; BRAMANTORO et al., 2021). The health status of the population is influenced by the context in which it is inserted, and interpersonal and family relationships play a fundamental role in the biopsychosocial development of children (GOMES et al., 2020). Their health is affected by several factors, which include social, psychological and environmental aspects, with parents and guardians being direct role models for children during childhood. Thus, parents' attitudes towards eating habits and oral hygiene have a significant impact on children's oral health (KAUR, 2009; GOMES et al., 2020).

Socioeconomic status is a crucial indicator of potential health risks, playing a significant role in the prevalence of tooth decay. Lower financial capacity is associated with a number of factors, including access to health services, education levels, lifestyle, sanitary conditions, housing, and access



to products (BERGERON et al., 2020; SWE et al., 2021). In addition, a higher incidence of tooth decay and lower adherence to and frequency of brushing were found in 3-year-olds living in rural areas compared to those living in urban areas (VAN CHUYEN et al., 2021).

It is of paramount importance that oral health promotion programs aimed at the population, especially aimed at children, adapt to the social, economic, financial and cultural reality of the target audience. In addition, it is crucial that these initiatives have a long-term approach, favoring possible transformations in habits and attitudes towards oral health (SWE *et al.*, 2021). In addition to educators, health professionals, notably dentists, have the responsibility to play the role of educational mediators, providing a playful and attractive approach to educating communities (SURESH *et al.*, 2010; SRILATHA *et al.*, 2021).

4 CONCLUSION

It is crucial to integrate oral health issues in the school environment as an essential tool of Basic Education, especially considering the importance of providing knowledge to the age group most susceptible to dental diseases. The goal is to prevent problems such as tooth decay or premature tooth loss by promoting healthy lifestyles. To achieve this purpose, it is imperative to carry out multisectoral and multidisciplinary actions, uniting the education and health sectors to provide a better quality of life. It is recognized that oral health goes beyond the dental office and is therefore not limited to just dental practices. Guidance and knowledge play key roles in instigating new attitudes and habits aimed at oral health. Health promotion should incorporate information, communication and health education. In this context, it is of paramount importance to establish a support network for oral health, involving families, schools and educators. Thus, it is recommended that oral health education be included in the school curriculum, in addition to the guidance provided to families.

7

REFERENCES

Achmad, H., Armedina, R. N., Timokhina, T., Goncharov, V. V., Sitanaya, R., & Riyanti, E. (2021). Literature review: Problems of dental and oral health primary school children. Indian Journal of Forensic Medicine & Toxicology, 15(2).

Alshloul, M. N. (2023). Oral health knowledge, attitude, and practice among school children in Abha-Saudi Arabia. The Journal of School Nursing, 39(4), 295-304.

AlHumaid, J., Gaffar, B., AlYousef, Y., Alshuraim, F., Alhareky, M., & El Tantawi, M. (2020). Oral health of children with autism: The influence of parental attitudes and willingness in providing care. The Scientific World Journal, 2020.

Bergeron, D. A., Talbot, L. R., & Gaboury, I. (2020). Oral health status of schoolchildren living in remote rural Andean communities: A cross-sectional study. Journal of International Society of Preventive & Community Dentistry, 10(2), 156.

Bramantoro, T., Santoso, C. M. A., Hariyani, N., Setyowati, D., Zulfiana, A. A., Nor, N. A. M., ... & Irmalia, W. R. (2021). Effectiveness of the school-based oral health promotion programmes from preschool to high school: A systematic review. PloS one, 16(8), e0256007.

Buldur, B., & Güvendi, O. N. (2020). Conceptual modelling of the factors affecting oral health-related quality of life in children: A path analysis. International Journal of Paediatric Dentistry, 30(2), 181-192.

Gao, X., Ding, M., Xu, M., Wu, H., Zhang, C., Wang, X., ... & Si, Y. (2020). Utilization of dental services and associated factors among preschool children in China. BMC Oral Health, 20, 1-10.

George, A., Sousa, M. S., Kong, A. C., Blinkhorn, A., Patterson Norrie, T., Foster, J., ... & Johnson, M. (2019). Effectiveness of preventive dental programs offered to mothers by non-dental professionals to control early childhood dental caries: a review. BMC Oral Health, 19, 1-9.

Gomaa, N., Tenenbaum, H., Glogauer, M., & Quiñonez, C. (2019). The biology of social adversity applied to oral health. Journal of dental research, 98(13), 1442-1449.

Gomes, A. C., Rebelo, M. A. B., de Queiroz, A. C., de Queiroz Herkrath, A. P. C., Herkrath, F. J., Rebelo Vieira, J. M., ... & Vettore, M. V. (2020). Socioeconomic status, social support, oral health beliefs, psychosocial factors, health behaviours and health-related quality of life in adolescents. Quality of life research, 29, 141-151.

Kaur, B. (2009). Evaluation of oral health awareness in parents of preschool children. Indian Journal of Dental Research, 20(4), 463-465.

Khan, A. J., Sabri, B. A. M., & Ahmad, M. S. (2022). Factors affecting provision of oral health care for people with special health care needs: A systematic review. The Saudi Dental Journal, 34(7), 527-537.

Malele-Kolisa, Y., Yengopal, V., Igumbor, J., Nqcobo, C. B., & Ralephenya, T. R. (2019). Systematic review of factors influencing oral health-related quality of life in children in Africa. African journal of primary health care & family medicine, 11(1), 1-12.



Naidu, R. S., & Nunn, J. H. (2020). Oral health knowledge, attitudes and behaviour of parents and caregivers of preschool children: implications for oral health promotion. Oral Health Prev Dent, 18(1), 245-252.

Ningrum, V., Bakar, A., Shieh, T. M., & Shih, Y. H. (2021, April). The oral health inequities between special needs children and normal children in Asia: A systematic review and meta-analysis. In Healthcare (Vol. 9, No. 4, p. 410). MDPI.

Priya, P. G., Asokan, S., Janani, R. G., & Kandaswamy, D. (2019). Effectiveness of school dental health education on the oral health status and knowledge of children: A systematic review. Indian Journal of Dental Research, 30(3), 437-449.

Riolina, A., Hartini, S., & Suparyati, S. (2020). Dental and oral health problems in elementary school children: A scoping review. Pediatric Dental Journal, 30(2), 106-114.

Sharififard, N., Sargeran, K., Gholami, M., & Zayeri, F. (2020). A music-and game-based oral health education for visually impaired school children; multilevel analysis of a cluster randomized controlled trial. BMC Oral Health, 20(1), 1-9.

Srilatha, Y., Shekar, B. R. C., & Krupa, N. C. (2021). Effectiveness of school-based dental health education on knowledge and practices related to emergency management of dental trauma and tooth avulsion: An educational intervention study. International Journal of Academic Medicine, 7(1), 39-61.

Suresh, B. S., Ravishankar, T. L., Chaitra, T. R., Mohapatra, A. K., & Gupta, V. (2010). Mother's knowledge about pre-school child's oral health. Journal of indian society of pedodontics and preventive dentistry, 28(4), 282-287.

Swe, K. K., Soe, A. K., Aung, S. H., & Soe, H. Z. (2021). Effectiveness of oral health education on 8-to 10-year-old school children in rural areas of the Magway Region, Myanmar. BMC Oral Health, 21(1), 1-8.

Tomazoni, F., Vettore, M. V., Baker, S. R., & Ardenghi, T. M. (2019). Can a school-based intervention improve the oral health-related quality of life of Brazilian children?. JDR Clinical & Translational Research, 4(3), 229-238.

Van Chuyen, N., Van Du, V., Van Ba, N., Long, D. D., & Son, H. A. (2021). The prevalence of dental caries and associated factors among secondary school children in rural highland Vietnam. BMC Oral Health, 21, 1-7.