

Preventive Oral Healthcare Programs Worldwide: A Narrative Review

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ABSTRACT

Oral diseases are becoming an increasing global burden. Children and adolescents suffer more from acute infection, dental pain, and discomfort caused due to these oral diseases. Untreated caries affect a child's ability to eat, speak, learn, and sleep. Severe untreated caries in children affect nutrition, growth, and weight gain. Preventive oral healthcare programs are an economical and powerful means of raising community health in future generations. Some of the oral healthcare programs conducted worldwide are the Healthy Teeth, Happy Smiles!, Blue Book oral health program, Smile Train India, Childsmile, MaliMali program, Love Teeth day, Colgate's "young India" Bright Smiles, Bright Futures, Chacha Nehru Sehat Yojna school health scheme (SHS), Neev School Oral Health Program, Pit and fissure sealant pilot project, and Let's 8020. Oral health education is effective in enhancing the knowledge and oral health-related behaviors in the target population. Only with the coordinated and synergistic efforts of all stakeholders will progress in areas of oral health governance, oral health promotion and disease prevention, the oral health workforce, oral health services, and oral health information systems be possible.

Keywords: Behavior, Dental health, Health education, School, Smile.

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INTRODUCTION

Oral diseases are becoming an increasing global burden. According to the global oral health status report, about 3.5 billion people are affected worldwide. The major oral diseases in accordance to the report are untreated caries of permanent teeth (2 billion cases), severe periodontal disease (1 billion cases), untreated dental caries in deciduous teeth (510 million cases), and edentulism (350 million cases).¹

Children and adolescents have higher oral pain and suffering as well as severe infections. A child's ability to eat, speak, learn, and sleep is impacted by untreated dental caries. Children with severe, untreated caries experience problems with nutrition, development, and weight gain.² Their attendance at school is also impacted by toothaches, which lowers their academic achievement. Young children are typically hospitalized for the removal of carious teeth under general anesthesia in several high-income nations.¹ People from more underprivileged origins are disproportionately affected by the effects of oral illnesses.

In order to meet children's demands for overall health, good oral health is crucial. The most prevalent and undertreated disorders in children are tooth decay and gum disease. For many kids, dental illness makes it difficult to eat, sleep, speak, play, learn, and smile. Children who have poor oral health are 12 times more likely to have more days with limited activities. Oral disorders cause more than 50 million hours of lost school time each year.³ Most oral illnesses or problems that affect youngsters can be avoided or treated. It is crucial that young people acquire the knowledge and abilities needed to achieve and maintain excellent health, particularly dental health. It is extremely crucial to promote oral health in schools.⁴ Dental problems include discomfort and tooth loss, which have an impact on a child's look, quality of life, ability to eat properly, and ultimately their growth and development.¹

Programs that promote preventive oral health are a potent and affordable way to improve community health for future generations.

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Various oral healthcare programs have been conducted worldwide to create awareness about the seriousness of oral diseases, reduce their prevalence, and promote the overall health of children. This review is about some of the different unnoticed preventive oral care programs that have been conducted worldwide.

VARIOUS PREVENTIVE ORAL HEALTHCARE PROGRAMS

Healthy Teeth, Happy Smiles!

An early intervention program called "Healthy Teeth, Happy Smiles!" that starts from birth is based on the Childsmile oral health improvement initiative of the Scottish Government (NHS Scotland, ND), which is in accordance with more current evidence summaries in England (National Institute of Health and Care Excellence, 2014; Public Health England, 2013). Including oral health in other areas of health and care, enhancing children's, parents', and carers' personal skills, and promoting collaboration with the local dentistry community to enhance prevention and raise awareness of oral health in early childhood settings were the program's strategic components.⁵

Blue Book Oral Health Program

To promote general health engagement in oral health promotion and to address the critical issue of early childhood caries (ECC), the Blue Book Program was created to give parents of newborns and early children in New South Wales (NSW), Australia, and child health professionals accurate and appropriate oral health information. The NSW Department of Health provides the Personal Health Record of New South Wales (NSW), also known as the “Blue Book,” to each parent of a newborn child in NSW, Australia. It is intended to be a tool that family doctors, pediatricians, and other general practitioners can use to document information on a child’s health, development, and growth and to provide parents and other primary carers with timely guidance.⁶

Smile Train India

International children’s charity Smile Train has a long-term solution for the solvable issue of cleft lip and palate. The “teach a man to fish” philosophy of the program is used to train local doctors to conduct cleft repairs in their own communities. These doctors then train new medical professionals, building a long-lasting, sustainable system. Contributions assist local hospitals in underdeveloped nations in providing year-round, completely free cleft repair surgery for children in need.⁷

Childsmile

The 2005 policy document for the Scottish Executive served as the catalyst for the Childsmile initiative. An action plan for modernizing dentistry care and promoting oral health in Scotland. By shifting the emphasis of treatment toward more proactive, preventative measures and promoting health improvement from a young age, it sought to improve children’s oral health in Scotland and reduce gaps in dental access and dental health. They focused on clinical prevention in primary dental care, health visitor-led health promotion, and community development-based projects. The initiative is based on the WHO Ottawa Charter’s 15 health promotion framework, which calls for promoting supportive settings, boosting community action, enhancing individual abilities, and refocusing health services.⁸

MaliMali Program

A school-based initiative – the MaliMali Program (MaliMali means “smile” in Tongan) to enhance children’s oral health is planned and run by South Pacific Medical Team (SPMT). In addition to additional activities, The MaliMali Program comprises the following three primary programs: a program that instructs kindergarten and primary school pupils on how to avoid cavities (including leaflet distribution, lectures, and suggestions on what to eat between meals), a project that promotes using fluoride toothpaste and offers toothbrushing tips, and a fluoride mouthwash delivery program (FMR). The MaliMali program has been promoted by the Tongan team for preventive dentistry, which is made up of dentists and dental therapists affiliated with the Dental Office of the Tongan Ministry of Health.⁹

“Love Teeth Day”

Since 1989, China has celebrated “Love Teeth Day” on September 20th across the country. The promotion of preventative oral public healthcare and oral health education was pushed upon all Chinese citizens. The National Committee for Oral Health and local committees at the provincial, county, and municipal levels planned and carried out the main actions to encourage preventive oral care.

The goals were to promote community participation in oral health education initiatives and to promote individual awareness of and engagement in dental self-care. The public was informed about oral health issues via a variety of mass media, including radio, television, and newspapers.¹⁰

Colgate’s “Young India” Bright Smiles, Bright Futures

In order to provide children with oral health education, Colgate-Palmolive and IDA joined together in 1976. In 2001, a campaign was started in Agra to promote oral health in schools. Its goals were to minimize the prevalence of dental caries, encourage preventative healthcare behaviors, and give kids the knowledge they need to practice excellent oral hygiene. Children in elementary schools between the ages of 6 and 14 are taught appropriate oral hygiene practices, the importance of night brushing and the correct brushing methods utilizing a tooth model and a toothbrush, where the value of a consistent oral hygiene routine is firmly ingrained in them. Each child receives a “Dental Health Pack” at the end of the program, which includes a toothbrush and toothpaste as well as attractive charts with helpful oral care advice. This is done to encourage the youngsters to practice healthy oral hygiene habits, such as brushing their teeth twice daily. Each classroom has a chart with information about oral hygiene so that students may refer to it and teachers can reinforce the message. Teachers at schools receive training and a “Teacher’s Handbook” to assist them in permanently ingraining healthy oral hygiene practices. The Teacher’s Guide is a thorough manual designed to assist instructors in promoting the importance of having Healthy Teeth. It employs graphics to illustrate the anatomy of a tooth, the phases of tooth decay, and the reasons of gum problems.¹¹

Chacha Nehru Sehat Yojna School Health Scheme (SHS)

In order to offer comprehensive health services to school-age children, with the creation of six school health clinics, the Government of Delhi Directorate of Health Services founded SHS in 1979. Under the seventh five-year plan, the program was expanded, and 64 school clinics were opened. Two government institutions, Maulana Azad Institute of Dental Sciences and DDU Hospital, which both perform routine screening programs and act as referral facilities, are responsible for the dental portion of the school health program.¹²

Neev School Oral Health Program (SOHP)

Neev SOHP would be implemented as a pilot project in all government schools in Delhi State run by the Government of NCT (National capital territory) of Delhi. A district plan would be created by the dental team and mobile dental clinic that would include all the schools throughout the year. The main goal is to schedule dental screenings and checkups and promote oral health through dental health education. By using a mobile dental clinic in the schools, it provides primary and secondary dental care and provides appropriate referrals for the Maulana Azad Institute of Dental Sciences’ superior care. All pupils in grades 6 through 10 from all public schools in each Delhi State district (at least 50 schools) will participate in the initiative for 1 year. Parents, school officials, and teachers are all given training and made a part of the team, eventually integrating into the current school-based healthcare system. The program is projected to cost Rs. 2,00,00,000 in total annually, and it will benefit over 80,000 schoolchildren in one district of the state.¹³

Pit and Fissure Sealant Pilot Project – National Oral Health Program (NOHP), AIIMS, New Delhi

The current pit and fissure sealant project was started as part of NOHP's major component, and representatives from 12 dental colleges were trained for it on May 1, 2017. Its objective is to prevent dental cavities in children between the ages of 6 and 14 by sealing 53,750 permanent molars.¹⁴

Let's 8020

The 8020 Promotion Foundation was created on December 1, 2000, with the help of a number of social groups and commercial enterprises, as requested by the Japan Dental Association and approved by the Ministry of Health and Welfare. The 8020 Campaign was started to assist people in keeping 20 or more of their own teeth until they are 80 years old. This was done after the foundation established the purpose of assisting the elderly to better and preserve their healthy lives. By the involvement of numerous industries and the implementation of activities aimed at all generations, the campaign chose a lifelong strategy to prevent tooth loss.¹⁵

CONCLUSION

Oral health education is effective in enhancing the knowledge and oral health-related behaviors in the target population. Therefore, involving important individuals in oral health education for school-aged kids – especially teachers and parents — would lead to a larger degree of improvement in kids' dental health. All stakeholders will continue to be motivated to take action as oral illnesses are acknowledged as major worldwide public health issues. Progress in areas such as oral health governance, oral health promotion and disease prevention, the oral health workforce, oral health services, and oral health information systems will only be possible with the coordinated and synergistic efforts of all stakeholders, including governments, the UN system, intergovernmental bodies, nonstate actors, NGOs, professional associations, youth and student organizations, patients' groups, academia, research institutes, and patient groups.

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