

Dental Students' Curriculum: An Ample Opportunity for Promoting Oral Health in Primary Schools

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Dental diseases affect children's performance at schools and their future success in life. It has been reported that children with dental problems are 12 times more likely to miss school or experience activity restriction than their healthy peers, that might threaten their emotional and social well-being.¹ Dental caries is still a common problem in Iran. According to the last national survey, only 26% of 12-year-old students and 0.5 % of 15-year-old students were caries-free.²

Schools provide an effective and ideal platform for improving the oral health of children and adolescents. Since oral health behaviors, beliefs, and attitudes are shaped during childhood; oral health messages can be reinforced throughout the school years. In addition, schools can provide supportive measures to promote oral health, including policies and programs to increase school safety to reduce facial and dental trauma, to improve student healthy nutrition patterns, to educate them about their oral health, and to identify children in need of dental treatment at early stages and refer them to receive timely treatments. Schools also have plenty of opportunities to communicate with families and increase their awareness toward the oral health of children.³

Therefore, schools can be considered a special place to implement oral health promotion programs. The experience of running "Oral Health-Promoting Schools" in different parts of the world testifies to this claim.^{4,5} Key steps recommended by the WHO to consider in this protocol include establishing or involving a school health team and a community advisory committee, conducting a situational analysis, obtaining political, parental, and community commitments, establishing supportive school health policies, and setting goals and objectives.⁶

Although some health issues are considered in the primary schools in Iran, there is not an established comprehensive plan for oral health promotion. On the other hand, by overcoming the health-oriented approach at the policy making levels of Ministry of Health and Medical Education, dental schools have carried a strong potential for improving public oral health. The Department of Community Dental Health in dental schools of Iran is responsible for teaching the oral health promotion concepts, strategies, and programs and creating the necessary attitude and awareness among dental students to empower them in providing preventive

services. Therefore, there is a good opportunity in the general dental practitioner curriculum to teach students how to use their potential in line with targeted population oral health promotion.

In a pilot program designed, implemented and evaluated at the Isfahan University of Medical Sciences during Sept 2018- June 2021, coordinated efforts were initiated to integrate the dental education curriculum headlines and the recommended principles of "oral health promoting (OHP) schools".⁷ In this program, in coordination with the Province Education Council and the Vice Chancellery of Province Health, dental students -as part of their dental public courses- were to attend some selected primary schools, where they had the responsibility for oral health screening of the schoolchildren, determining their preventive and restorative needed care, and referring them to receive the proper care. Also, they were to provide face-to-face education in small groups using flipcharts and big-size demonstration toothbrush and dental arches, disclosing tablets (Svenska Dentorama, Sweden), dental floss, disposable mirrors, soft toothbrush and fluoridated paste and supervised toothbrushing in the schools' yards. In addition, dental students were asked to educate parents in two-day workshops organized by the school administrators. Two printed worksheets were also designed, published and distributed in the selected schools to reinforce and remind the headings taught by dental students. As part of the dental public health practical courses, schoolchildren were invited to dental school clinics, where fissure sealant treatment and fluoride varnish therapy were provided to them free of charge by dental students. The final part of this integrated program was the provision of primary and secondary preventive care to schoolchildren using portable dental equipment placed in the schools. All of the provided educations and cares were under the supervision of the Dental Public Health Department professors. The evaluation phase indicated the effectiveness of this model in terms of knowledge and practice improvement among schoolchildren, their parents, and teachers, and in increasing the coverage of professional preventive care and simultaneously, the effective community-based training of dental students.⁸

This model of OHP schools would be a good opportunity to

both promote the oral health of schoolchildren at a critical age that permanent teeth and oral health behaviors are shaped and also to utilize the potentials of dental schools to provide oral hygiene instructions and working in community-based fields. This project might also improve and strengthen the interdisciplinary cooperation between the health sector and educational council which could be a good example of advocacy in health system. In addition, this

project could increase the awareness of supportive members (teachers and parents) about the importance of OH. Therefore, it worth planning to implement this model by other dental schools at least in Iran. Considering the number of dental schools in the country and current dental students (about 2000), this model can benefit both the schoolchildren in deprived schools and also university students.

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