



Toward Competence-based Education: Time to Update Dentistry Content of Medical Curricula in Iran

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Dear Editor-in-Chief

According to the US Surgeon General, physician should take part preventing oral diseases; a matter that is almost overlooked (1). Visiting a pediatrician, parents often prioritize nutritional and growth issues and oral health is seldom a concern (2).

Probably, one of the major barriers to this neglected part of clinical examination is this part of review of system (ROS) has been never thought during undergraduate and postgraduate training. (3). This shortfall may be related to already crowded Pediatrics residency programs and deficient knowledge of faculty members (1). In a survey among graduating pediatric residents in America, 71% felt not enough trained on infant oral health and 73% claimed that they received less than three hours of specific training of oral health during residency program (4). Annual time devoted to this subject was 1-2 hours reported by 52% of family medicine residency program directors from the United States in 2008 (5).

In 2004, society of teachers of family medicine (STFM) established "Smile for Life: A national oral health curriculum for family medicine" released in 2005, which was updated in 2008 and 2010 (6). Smile for life (3rd version) possesses 8 sections discussing topics related to the oral health including relation of oral health to systemic health, adult oral health, child oral health, oral emergen-

cies, oral health and pregnant patient, fluoride application, oral examination and geriatric patient (7). By the year 2006, oral health medicine became a mandatory part of family medicine curricula in United States (6).

Of importance, attention to the dental caries and periodontitis and early signs of oral cancers is critical and should be noted and screened by a medical clinician especially in children, elderly, uninsured, underserved and urban population, respectively. WHO report of disability-adjusted life year (DALY) score of Iran in 2004 was a total of 1,542 and 3,622 for +60 and 0-14 year-old groups (per 1000 population). For 0-14 year old category, scores for asthma, dental caries and diarrhea are as the followings: 53, 37 and 277. For +60 category a total of 13 scores was related to the oral non-noeplastic diseases (i.e., edentulism 6, dental caries 7), while mouth and oropharynx cancer constitutes 5 out of 170 total cancers score when compared to 6,7, 9, 40 and 43 scores attained by breast, prostate, colon, esophageous and stomach cancers, respectively (8). Child hood dental caries as the most known chronic disease of childhood has remarkable consequences of poor growth, impaired nutrition and school performance, which adversely affect esthetics, chewing and speech. ¹Moreover, high cost of emergency dental visits should be taken into account.

Importance of screening role of a primary health care or a pediatrician should never be underestimated. Performance of oral examination by a dentist is more proficient than a medical clinician, though chance to visit a medical doctor or having medical insurance is as many times as visiting a dentist or having dental insurance coverage during life (9). In addition to the child oral care, adult practitioner especially in the fields of general internal medicine, neurology, endocrinology, radio-oncology and family physicians should be knowledgeable of bidirectional periodontal-systemic health relation, oral manifestation of systemic diseases, adverse drug reactions within oral cavity and side effects of systemic medications on oral soft and hard tissues (10).

Both main references for pediatrics and internal medicine board examination in Iran include chapters on oral development and oral diseases, though in brief. According to the recent extension of pediatrics program in Iran, from a 3- to 4-year program, incorporation of a professional oral examination course and pediatrics' dentistry rotation in the local dental schools would increase confidence and competence of a clinician performing oral care.

Each year, a considerable number of graduated general practitioners are sent to serve as a family doctor in many underserved and urban areas of the country. A compact teaching course before dispatching or during late internship is recommended. Indeed this course increases the potential and efficacy of these health care providers to screen and primary manage of oral health issues related to the at risk covered population including children, pregnant women and the elders. For example, there is probable correlation of periodontitis and preterm birth (11). On the other hand, hormonal fluctuation during pregnancy increases the chance of plaque-induced gingivitis. This may progress into the advanced periodontitis, loss of supporting alveolar bone, tooth loosening and tooth loss, if left unmet. You may observe this common scenario when an edentulous female patient is presented to the prosthodontics clinics. Many pregnant women avoid brushing due to its unpleasant feeling during pregnancy, which inevi-

tably increases the chance for dental caries. Notably, a carious lesion would serve as a contagious reservoir for future transmission of such cariogenic bacteria into the infant mouth during kissing or attempting to taste or temperature moderating of the food by mother. Hence, the vicious cycle may be broken just by a professional advice, screening, and referral.

In conclusion, concerning the successful curricula of pioneer countries, an official and mandatory advanced oral examination courses may be incorporated into current undergraduate and post-graduate disciplines. Moreover, continuous medical courses with practical workshops would increase the competency of graduated clinicians to perform a professional and efficient oral examination with adequate insight on oral hard and soft tissues importance.

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