THE UPSTREAM CAUSES OF ORAL HEALTH DISPARITIES IN BRAZIL

Brazilian population has been experiencing an overall improvement of the oral health status over the recent years.[1,2] The decline in dental caries occurrence in children and adolescents, and the rise in tooth retention among adolescents and adults may suggest a positive shift in oral health according to the last national oral health surveys.[3-5] However, periodontal disease prevalence increased among adults and the high levels of edentulism remained stable among elderly people.[1,2,6]

Once the distribution of dental diseases within and across populations does not occur at random, it is paramount to investigate the causal factors related to occurrence of oral health problems. Oral health research has a longstanding tradition of adopting the so-called individual risk factor approach to investigate the predictors of oral diseases. One of the main focus of this approach is on the role of individual health-related behaviours (eg. smoking) on oral health.[7] However, the risk factor approach has been challenged because it ignores whether unhealthy behaviours results from free choice or preference, or is influenced by the social environment where people are embeeded.[8] The latter advocates that contextual socioeconomic factors that are invisible for individuals influence the distribution of the diseases within and between societies.[8]

The "causes of the causes" of oral diseases is a comprehensive and contemporary concept that acknowledges that the determinants of health stand beyond the individual factors and social inequalities is a central element of health inequalities.[9] Therefore, the uneven distribution of oral diseases may be unnecessary and avoidable since it occurs as a consequence of the unjust and unfair distribution of social conditions that influences health, including poor living and working conditions, social deprivation and wealth concentration.[9]

Despite the positive improvements in oral health in Brazil during recent years, the distribution of oral diseases in Brazil has been characterised by strong regional inequalities.[1,2] Data from the SBBrasil Project 2010 have been used to evaluate the possible role of social inequalities on oral health. Overall, city-level measures of social inequalities including Human Development Index and contextual income inequality (measured using the Gini Index) were meaningful factors associated with dental trauma in children,[10] restorative treatment needs in adults,[11] lack of functional dentition and tooth loss in adults,[12] periodontal disease in adults and elderly people.[6] Further evidence also suggests an increase of socioeconomic inequalities in dental caries in adolescents,[13] and the persistent socioeconomic inequalities related to the lack of functional dentition in adults and older adults.[14]

The oral health improvement of Brazilian population did not occur similarly across all social groups. In fact, the oral health gap between socioeconomic groups increased over the recent years. This contrasting scenario reinforces the need for effective actions to reduce the oral health disparities between socioeconomic groups in Brazil. Dentistry should serve as a tool to tackle oral health inequalities and not the opposite. Dental professionals should reflect on their societal role to alleviate the suffering caused by dental diseases. Oral health prevention and the technological advances in dentistry benefited more people from the better-off social groups. Ultimately, challenging the current *status quo* of the dental profession is needed to promote social equity in oral health. Thus, tackling oral health inequalities requires governmental action through coherent actions by different sectors to gravitate towards equity.

The current national policy of oral health, the so-called Smiling Brazil ("Brasil Sorridente") is considered a comprehensive and ambitious oral health public policy. The complex oral health care network proposed and implemented by Smiling Brazil is essentially based on the expansion of primary dental care through the Family Health Strategy. Furthermore, dental specialty centers ("Centros de Especialidades Odontológicas" [CEOs]) were deployed as secondary care dental care units.[15] The increase in access to dental care and the greater provision of specialized dental care, since the implementation of the Smiling Brazil, mainly among socially deprived groups, is noteworthy. Nonetheless, Smiling Brazil faces two main challenges. The financial underinvestment that affects the policy implementation and its sustainability. Also, dental professionals still need training to work as part of primary health care teams. Much of the work to redress oral health inequities lies beyond the health sector. Therefore, inter-sectoral policies aiming to reduce the income gap between socioeconomic groups such as conditional cash transfer programmes (Bolsa Familia) are also important strategies to reduce oral health inequalities.[16] Current and future policy makers and health care administrators' agenda should address social inequalities to produce positive and sustainable oral health benefits, mainly among underprivileged social groups.

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