

## EDITORIAL

### IS PERIODONTAL DISEASE A PUBLIC HEALTH ISSUE IN COLOMBIA?

Oral health inequalities are a good indicator of socio-economic contrasts in a country. This could be explained because people living in low socioeconomic strata receive an insufficient and inadequate education in oral health, lack the economic resources to visit a dentist, and frequently cannot acquire basic oral hygiene products. Furthermore, the limited economic resources designated in public health programs for oral diseases prevention and treatment are based in the misconception of separating oral health from general health and the idea of dental treatment as «esthetic» without recognizing the negative impact on people quality of life secondary to dental pain and tooth loss<sup>1</sup>. In 2003, the World Health Organization (WHO) emphasized the need to promote oral health and published a guidance document for every nation to define their goals in oral health indicators by the year 2020<sup>2</sup>.

Periodontal disease is highly prevalent worldwide and is also a major cause of tooth loss. Gingivitis, the mildest form of periodontal disease is caused by the biofilm (bacterial plaque) accumulating in the tooth surface adjacent to the gingival tissue (gums). Periodontitis, the more severe type of periodontal disease is characterized by the destruction of connective tissue and dental bone support after an inflammatory host response secondary to infection by periodontal bacteria (*Porphyromonas gingivalis*, *Actinobacillus actinomycetemcomitans*, *Treponema denticola*, *Tannarella forsythensis*, among others)<sup>3</sup>. Untreated periodontitis may eventually cause tooth loss. In accordance with the Third National Survey of Oral Health (ENSAB III) 50.2% of people living in Colombia have some degree of periodontal disease. Among those, 17.7% of the cases are classified from moderate to severe periodontitis<sup>4</sup>.

Periodontitis causes an inflammatory response with elevation of multiple acute phase reactants like fibrinogen and C-Reactive Protein (CRP)<sup>5</sup>. In diabetic patients periodontitis is related to a poor glycemia control<sup>6</sup>, increased risk of nephropathy<sup>7</sup>, and mortality<sup>8</sup>. Furthermore, several studies have found that periodontitis is related to an increased incidence of cardiovascular diseases (acute myocardial infarction, cerebrovascular accident, and peripheral vascular disease) and pregnancy complications (preeclampsia, prematurity, and low birthweight)<sup>9,10</sup>.

Recent randomized clinical trials (RCT) support the link between periodontitis and systemic diseases. Treatment of periodontitis with *scaling and root planning* (a procedure for subgingival plaque removal occasionally combined with antibiotics) has shown to decrease glycosylated hemoglobin levels in diabetic patients<sup>11</sup>, to improve endothelial function<sup>12</sup>, and to reduce in five times the pregnant mothers' risk of having a premature childbirth<sup>13</sup>.

Despite the periodontitis high prevalence and its relation to multiple systemic diseases, Colombia lacks an adequate public health policy aimed to the prevention and treatment of periodontal disease. The *Health Promotion Companies* (in Spanish: *Entidades Promotoras de Salud* (EPS) -are the health insurance companies in Colombia) only are accountable for oral health education, prevention, and periodontitis diagnosis. However, EPS reach only to diagnose the patient, because periodontal treatment is not included in the Mandatory Health Program (*Plan Obligatorio de Salud* (POS) in Spanish -the list of health services, procedures and medications that anybody affiliated to an EPS has the right to access)<sup>14</sup>. Ironically, the Oral Health National Program - 2006 - (Social Protection Ministry - Resolution Number 3577 - 2006) emphasizes the component of oral health as a part of the general health with the objective of «guaranteeing the access of oral health services to the population»<sup>15</sup>. Additionally, the *Technical Protocol for the Early Detection of Pregnancy Alterations* (Resolution Number 412 - 2000) establishes the remission to a dentist in the first prenatal care visit with the purpose of «to evaluate the oral health status, to control the risk factors for periodontal disease and caries, and to support adequate oral hygiene practices»<sup>16</sup>. However, periodontal treatment in pregnant women is not included in the POS.

General medical practitioners and specialists could play a pivotal role in the promotion of oral health. However, most doctors do not know general health periodontitis implications, are not trained to diagnose periodontal disease, and are not sensitized to refer high-risk patients as diabetic and pregnant women to the dentist. The perception of medicine and dentistry as individual health sciences has made difficult the development of an effective oral health policy to improve oral health indicators.

It is necessary to implement cost-effective policies of public health to decrease oral health inequalities in Colombian population. Oral health goals in Colombia can only be accomplished by a public health strategy including education programs to the community, facilitating the dentist-physician collaboration, increasing access of the population to dentist, and give financial support to interdisciplinary research projects. Additionally, periodontitis treatment should be included in the POS, especially for diabetic patients and pregnant women.

This year the *Universidad del Valle* will present the anterior proposal to the Colombian Association of Dentistry Faculties (ACFO), to the Colombian Association of Medical Faculties (ASCOFAME) and to the Colombian Association of Nurses Faculties (ASCOFAEN) with the aim of to elaborate a recommendations manuscript for the Ministry of Health consideration on this issue.

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