

We are concerned that the dental profession, worldwide, has lost its way.

We are a group of senior scientists—researchers, academics and intellectuals—from various parts of the world, with over 250 years' combined experience of working to improve the oral health of communities. The group is entirely independent of any institution, government body or corporate entity.

We met for a few days in March 2017 under the hospitality of Prof Emeritus Alfonso Escobar at his home in the Andes of Colombia, known as La Cascada Mare, to share our concerns about the future of dental care and dental education. Each of us prepared a detailed paper of our experiences over the last half century, our assessment of the problems, and suggestions for the way forward. Each paper was discussed in detail. The following statement represents our analysis of the problem and provides some recommendations about what should be done.

The problem

Despite current knowledge of the causes of oral diseases, globally most people continue to experience significant levels of disease and disability. Although technological and scientific developments over the last 50 years have contributed to improvements in the quality of life for some, oral diseases continue to cause pain, infection, tooth-loss and misery for a vast number of people. While in many middle and high income countries, there have been marked overall improvements in oral health, oral health inequalities both between and within countries are now a major problem. The overall improvements in oral health have been the result of general improvements in living standards and conditions, changing social norms in society (improvements in personal hygiene and reduction in smoking) and the widespread use of fluoride toothpastes, rather than due to the clinical interventions of dentists.

Globally the profession has had little direct impact on the scale of the problem. Clinical interventions account for only a small proportion of improvements in the health of populations. This is as true of oral health as of general health.

The world has witnessed significant growth in social inequalities between the rich and the poor: the wealthiest 1% own more than half of global wealth, with only eight individual men, according to OXFAM, owning the same wealth as half of the world's population. Austerity policies worldwide (commonly referred to as 'structural adjustment programs' in the global South) have diverted social and welfare spending away from the public to the private sector in the belief that 'the market' can meet social needs, despite evidence to the contrary. This has led to the creation of a two-tier health service—one for the rich, and the other, limited and often of poorer quality, for the majority.

Corporations and insurance companies are increasingly taking over the provision of health services, including dental services, in many countries. The treatment regimens that they promote are designed more to ensure adequate returns on investment for their shareholders than to improve the health status of the community, resulting in a tendency for the provision of excessive and sometimes inappropriate treatments.

We are fearful that with the decline in public funding for universities, research is losing its independence as funding is increasingly sought from industry—for example from manufacturers of pharmaceutical, surgical, dental materials and equipment, hygiene and cosmetic products—which warps both research priorities and clinical procedures.

Major food and beverage companies continue to promote the consumption of refined carbohydrates, free sugars in drinks, confectionary and in processed foods, even though these are major contributory factors for dental decay, not to mention obesity and diabetes. Advertisements of these products frequently and unjustifiably imply health benefits.

We believe that the dental profession, as presently constituted, is inappropriately educated for dealing adequately with oral health problems faced by the public. In many countries, there is an overproduction of dentists, most of whom provide services only in the main urban centers where private practice is more lucrative and services often fail to reach those in more remote areas of the country. In some cases, overproduction results in unemployment.

While there is no doubt that the intention of the profession is to improve health, commonly used treatment regimens for tooth decay (drillings and fillings) and gum diseases (scaling and polishing) do not by themselves arrest or control their progression. Furthermore, filling teeth inevitably leads to a cycle of replacements of increasing size, ultimately shortening the life of the dentition.

Dentists are paid for, or evaluated based upon, the number of such procedures performed, rather than for establishing health. In the private sector, dentists are under constant pressure to ensure adequate returns on investment. Frequently, this results in overtreatment.

The two most common oral diseases, dental caries and gum diseases, are both reversible and, in most cases, can be controlled by individuals and communities using simple measures. The progress of dental decay can be arrested even in teeth with open cavities provided the pulp (the “nerve”) has not become infected. The use of dentists who have been trained for some 4-6 years to undertake such simple measures seems inappropriate.

Diseases of the soft tissues of the mouth and of the jaw bones are debilitating and sometimes fatal. The prevalence of cancers of the mouth and throat continue to rise at an alarming rate in some populations, but with sometimes inadequate attention from the profession.

Studies of populations having little or no access to dental care show that, despite often poor oral hygiene, most people keep most of their teeth for most of their lives. Dental caries is the main reason for teeth needing to be extracted, and dentists are the principal cause of tooth loss because of the cycle of repair referred to above.

There has been a disturbing growth of specialization within dentistry, which has tended to result in excessive and inappropriate treatments. For example, more than half of all root-fillings fail. Certain specializations, where there are many lucrative opportunities, are turning dentists into ‘cosmeticians’. Many of the specializations are based on stimulating desires amongst the public which then justify the provision of interventions based on ‘responding to demand’.

Dentistry is drifting, it seems, away from its task of prevention and control of the progression of disease and of maintaining health. The mouth has become dissociated from the body, just as oral health care has become separated from general medicine.

We believe dentistry is in crisis. Things must change.

What needs to be done?

Since clinical interventions account for only a small proportion of health improvements, the dental professions should be in the forefront of efforts that call for a reduction in income disparities and for a more just world in which everyone has access to resources and conditions for good health and well-being. Those industries whose products are harmful to health, especially producers of free sugars in foods, drinks, and producers of foods containing refined carbohydrates, should be required to label their products as harmful (just as has been done in many parts of the world in relation to tobacco and alcohol). The decline in government spending on the social sector cannot be justified in the light of excessive expenditures on war, the military, arms and other destructive initiatives. Corporations and industry should not be permitted to unduly influence research or clinical practice.

The dental profession is over-trained for what they do and under-trained for what they should be doing.

Control of the most common oral diseases requires relatively little training and could and should be performed in most cases by community healthcare workers. Demonstration projects on the effectiveness of such approaches are needed.

With the over-production of dentists in most parts of the world, there is an urgent need for a reassessment of the training of dentists.

Dentistry should become a specialism of medicine, just as ENT (ear, nose & throat), ophthalmology, dermatology, etc. are specialisms of medicine. As such, oral health physicians would be responsible for providing leadership of the oral health team, in the management of advanced disease and the provision of emergency care, relief and management of pain, infections and sepsis, management of trauma, diagnosis and management of soft-tissue pathologies and, where justifiable from the point of view of the maintenance of health, interventions to re-establish a functional dentition and orofacial reconstruction. Since the management and control of most common diseases could be undertaken by primary healthcare workers, a relatively small number of such oral health physicians would need to be trained. In addition, a relatively small number of public health dentists would be needed to coordinate oral health needs assessments, implement and evaluate community-based oral health improvement strategies and to act as oral health advocates to ensure the closer integration of oral health into wider policies.

The growth of specializations within dentistry, while resulting in lucrative practice for the specialist, does little to improve public oral health. Such growth should be limited.

There needs to be more public discussion about the achievements and limitations of the way the dental profession is currently structured.

The implications of the above recommendations are obvious: changing dentists into oral health physicians necessitates thorough revision of the education profiles of dental schools: an overhaul of the current curriculum for training of dentists; a reduction in the number of dentists trained; and an improvement in the quality of courses, especially ensuring that training is linked to the needs of the population. Inevitably, this will mean the closure of many of the existing dental schools in those countries that have created a disturbing number of new schools in the past decade or so. Proposals for the establishment of new dental schools would need to be seriously reassessed.

Meanwhile, efforts need to be made to dissuade dentists and other oral health personnel from carrying out procedures (such as drilling and filling, scaling and polishing) that shorten the life of the dentition. Such procedures should be restricted to exceptional conditions where the restoration of a functional dentition justifies the risk. Dentists need to be rewarded for maintaining health rather than for carrying out invasive and often unnecessary procedures. Oral healthcare interventions should be determined by the best interests of attaining health and a functional dentition rather than by the financial interests of individual practitioners or shareholders of corporations and insurance companies.

The current state of dentistry worldwide is dire. It requires radical solutions. This short declaration has been produced to stimulate discussion about what needs to be done in the interest of the health of the majority of humankind. We recognise that the changes may take time to implement. Each country will need to assess how best to bring these about.

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