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Integration of oral health into primary health care: the role of dental hygienists and the WHO stewardship

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Abstract: Interest in addressing the unmet oral health needs of the citizens of the world has manifested itself, lately, in noteworthy expressions of commitment. Oral health is integrated with general health and support for community programmes offering 'essential oral health' within primary health care (PHC) is increasing. The *WHO Global Goals for Oral Health 2020* has assumed a more directed public health orientation, and the *Global Oral Health Programme* has its focus on modifiable oral risk behaviours. Last, but not the least, opportunities are being created, under the 'stewardship' of the World Health Organization (WHO), for the expansion of oral disease prevention and health promotion knowledge and practices in communities. A review of the literature on community-oriented oral health primary care reveals one dominant and disease-oriented practice model with dental practitioners being the principal and exclusive actors. One alternative to this biomedical model of care that may be better suited to translate health promotion principles into action at community levels is the practice that involves hygienists serving as primary oral health care providers. The WHO 'stewardship' should include the support of dental hygiene practice within PHC, many legislative restrictions and regulatory barriers would be relaxed, thus enabling dental hygienists to respond to the WHO's call for community-based demonstration projects. With their focus on preventive oral care, hygienists are 'best poised' to help accelerate the integration of oral health with primary care, particularly in the light of the compelling evidence confirming the cost-effectiveness of the care delivered by intermediate providers.

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Introduction

The *WHO Oral Health Report 2003* bears testimony to the advances made in the science and technology of oral health care and, at the same time, recapitulates the burden of oral diseases around the globe (1). The means to address the unmet oral health needs of the world's population have been advanced in two recent documents also published by the World Health Organization (WHO): The *Global Goals for Oral Health* proposes two goals, 10 objectives and 16 targets to be achieved by the year 2020: the goals and objectives are population-based and their formulation is guided by the principles of disease prevention and health promotion. The targets are constructed without absolute values, so that they could be established in consideration of local realities, i.e. the epidemiology of oral diseases and the socioenvironmental conditions (2). The emphasis on evidence-based approach to practice and stronger public health orientation expressively distinguish the current document from its 1981 predecessor.

The second WHO document – *The Global Oral Health Programme* – is currently one of the 'priority' programmes under the charge of the Department of Chronic Diseases and Health Promotion within the WHO. Its objectives, guided by the *Global Strategy on Diet, Physical Activity and Health*, are based on the common-risk factors approach, focusing on modifiable risk behaviours related to diet, nutrition, use of tobacco and excessive alcohol consumption (3, 4).

The fundamental thread that unites the recent WHO documents cited above with all discussions and suggestions pertaining to oral disease prevention and health promotion is the imperative to integrate oral health with general health care.

Integration of oral health into primary care

The call for the integration of health disciplines has been made continuously, at least in the United States, since the 1970s. Among the attributes proposed for this 'new health care system' were 'universal access, integration of service delivery in a single community-based site, and an organised body of compatible and mutually reinforcing policies and standards' (5). With regard to the integration of oral health with general health care, notable collaborative efforts were initiated between medical and dental practitioners in the areas of education and practice. Pilot studies helped identify the key curriculum content for the oral health education of primary care practitioners (6–13). Opportunities where oral health measures could effectively be embedded in the spectrum of general health care were explored (14–20). Furthermore, programmes designed to improve the oral health of the special populations, particularly the maternal and child groups, illustrated the importance of incorporating oral health standards and procedures within general health policies (21–26).

Primary health care

One approach to integration that has won the most support is to offer 'essential oral health' within the context of primary health care (PHC). The concept of PHC was granted recognition in 1978 at the *International Conference on Primary Health Care*, and its values, along with a set of principles and core activities, were spelled out in 10 articles that are known as *The Declaration of Alma Ata* (27). Comprised in the PHC values are:

- Essential health care based on practical, scientifically sound and socially acceptable methods and technology.
- Universal access to and coverage of health services based on health needs.
- Individual and community participation and self-reliance.
- Inter-sectoral approach.
- Prevention.

The *Declaration of Alma Ata* has since been adopted by many governments. Adapted to the health and socioeconomic conditions in each country, PHC has been interpreted, in some countries, as a healthcare strategy based on the principles of social justice, and seen as a way to increase access to health care. In others, it is also understood as a level of health services – the site of first contact, coordination and integration of services and programmes. In all cases, the principles of PHC are guiding the formation of an organized system of health care in which 'closeness to the population' and a continuing process of care are essential.

The original PHC framework did not include a strategy to integrate oral health with general health programmes. However, during the 'global review' conducted in 2003 – the 25th anniversary of the historic conference – a number of PHC models, with oral health integrated at various phases of implementation, emerged (28–38). While models for delivering PHC will continue to emerge in parallel to its evolution and develop-

ment, the process of integrating oral health into primary care has remained slow and unsteady. This is so despite the epidemic of oral diseases, the established oral-systemic link of some chronic diseases, and the increased demand and need for prevention-based health care. It is encouraging to note, nonetheless, that PHC remains central to WHO policies and strategies, and the 're-oriented' Oral Health Programme gives 'priority' to the integration of oral health with general health programmes (39).

Oral health and PHC

The oral health primary care practices that have been hitherto reported in the literature follow the current model of dentistry with dentists being the principal and exclusive actors. The conventional dental practice, though, conforms to the disease-oriented biomedical model of care and is technically-driven, thus less appropriate for prevention-based interventions at community levels. Moreover, being part of the curative system of care that can only serve relatively few people at high costs, it has earned its criticisms. 'What is needed is a turn towards a system [of care] that meets the principles of primary health care,' advises one expert (40). Others concur, elaborating on stronger commitment to prevention – thus minimizing invasive clinical interventions, and a 'social and behavioural', rather than technical orientation.

Outside dentistry, leaders speak of the 'disconnect' that exists between the oral health needs of the population and the prevalent dental delivery system, questioning its organisation and financing as well as workforce. 'The standard response to the lack of dental services is to suggest increasing the number of dentists', reads a commentary in the *Health Affairs* (41). While 'some increase may be warranted', its authors continued, 'it may be more useful to understand this problem less as a problem of supply of practitioners and more as a poor fit between part of the current practice model'.

The critique of the traditional dental practice also includes its practitioners. 'Oral Health Professionals often fail to achieve improvements in the oral health of the community,' reads the 2003 report of the 'Commission of National Experts', convened by the American Dental Educators Association (42). Although somewhat elusive, the explanation put forward is that '… they [oral health professionals] are not provided [with] or lack the skills necessary to share their knowledge and expertise with those beyond the dental office'. Later, the Commission acknowledges that the 'reduced access to oral health care [is] one of the prices of professional isolation that has too often characterised dentistry…'

Thus calls are being made, within and outside the dental profession for improving the methods of oral care delivery, and for changing the current pattern of practice, which would entail taking a few 'radical steps'. The latter also includes challenging the notion that dentists should remain exclusive providers of primary oral health care.

PHC and dental hygienists

The core PHC activities, adopted during the *Alma-Ata Conference*, that are relevant to oral health are:

- Promotion of lifestyles that are conducive to health.
- Education.
- Prevention through self-care and regular check-ups.

The affinity of dental hygiene in scope and aim to PHC is discernible particularly when the above activities are viewed in connection with the historical role of dental hygienists. As early as 1929, dental hygienists provided preventive services outside traditional dental practice. However, today's dominant hygiene model of care is confined largely within private dental offices, and the economics of this arrangement, particularly the opportunity cost to the society, remains to be fully assessed. Furthermore, the unusual regulatory control over hygiene education and licensure has been restricting hygienists to practice under supervision, thus limiting their ability to provide primary oral health care where it is needed most. This is so despite the worldwide shortage, or 'maldistribution', of dentists and the recommendations of policy experts for 'more productive use' of dental personnel.

A review of the trends and changes that have since taken place reveals that dental hygienists are the only healthcare professionals and members of the oral health teams whose primary function continues to be the prevention of oral diseases and promotion of wellness (43). Moreover, dental hygiene continues to evolve as a profession, attaining increased responsibility for its education and regulation as well as greater autonomy (44). New practice arrangements with broader community-based and multi-disciplinary configurations have emerged (45, 46). In addition, a slight increase in dental hygiene-independent practice, albeit following the biomedical model of care, has been observed (47, 48). While the latter has helped hygienists refine their entrepreneurial skills, the former has led to the cultivation of more collaborative relationships in the workplace and in the larger health community. Finally, evidence of research reveals the contributions of hygienists in terms of quality of care and cost-containment, for both traditional and non-traditional settings (49–50).

The WHO 'Stewardship' and the dental hygienists

Opportunities are being created, through the stewardship of the WHO, for the expansion of 'oral disease prevention and health promotion knowledge and practices among the public through community programmes and in health care settings' (51). This call which also includes 'implementation of community-based demonstration projects for oral health care', presents dental hygienists with the opportunity to prevail in their historic role as oral health 'prevention specialists'. There could indeed be no better time to lift the 'tacit ignorance' exhibited towards dental hygienists, when oral health is being integrated into general health, and the proper means for its improvement are brought together. More countries are reportedly reforming their health sectors and the strategy of their reforms is guided by the philosophy and principles of PHC. Additionally, both the Millennium Development Goals and the *Commission on Macroeconomics and Health* are assuming new financial inputs to health care (52).

Should the WHO stewardship include the support of dental hygiene within PHC, many barriers and legislative restrictions to the full use of dental hygienists would be relaxed. Thus empowered, dental hygienists would help accelerate the integration of oral health within primary care, and make oral services visible, and accessible. Oral health care would also be affordable particularly in light of the compelling evidence that has confirmed the cost-effectiveness of the care delivered by intermediate health care providers. It is worth noting, in conclusion, that the first steps would also be taken to guarantee the 'consumer's right' to choose their own primary oral health care providers.

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