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# Rethinking dental care in Iran

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**Letter to Editor**

## Editor in Chief

In the midst of a global pandemic, which shut down the routine delivery of dental care in many parts of the world, the World Health Assembly issued the first ever resolution on oral health,[1] a milestone development for global oral health. To support this resolution, in January 2022, the World Health Organization (WHO) published the global strategy to tackle oral diseases after a comprehensive consultation with national and international stakeholders.[2] Unsurprisingly, among its six guiding principles, two directly urged policy makers to reform dental care and the dental workforce. These principles were: (a) integration of oral health in primary health care and (b) innovative workforce models to respond to population needs for oral health.

The emphasis of the WHO's landmark document on reforming dental care and the dental workforce laid bare the shortcomings of the current model of dental care delivery, which were exposed again during the coronavirus disease 2019 (COVID-19) pandemic. Dental care, with the exception of few countries, is delivered mainly privately solely by dentists who have maintained their monopoly over dental care to varying extents. In other words, unlike other areas of health care, where the nurses, doctors, midwives, community health workers, and other providers are involved in delivery of care within primary care, private dentists are the sole providers of dental care in many countries including Iran. In this commentary, we elaborate as to why these two guiding principles of the WHO draft global strategy are highly relevant to dental care in Iran; thus, they should be taken on board to fix the failed state of our dental care.

Delivery of dental care in Iran is largely excluded from primary care despite dental problems being widespread in Iran. Dental caries, for example, is experienced by nine out of ten Iranian children even before going to school.[3] It is anticipated that the great majority of the adult and elderly population also suffer from dental caries and other dental conditions. Dental diseases, if remained untreated, cause pain and discomfort, affect quality of life (QOL), and incur cost for the society. Despite dental disease being recognized as a public health problem, dental health is often overlooked in public health discussions globally; hence in planning primary care. Similar to other non-communicable diseases (NCDs), dental health problems are inextricably linked with underlying social, political, and cultural constructs. It would be then naive and unfair to expect the dental profession to eradicate dental problems, which are deeply embedded in the fabric of societies. Notwithstanding, it is expected that the dental care system is organized to work toward addressing the dental needs of the population which are caused by dental diseases. As the WHO draft global strategy on oral health implies, the current paradigm of dental care has not always been successful in addressing this objective. The current

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restorative model of dental care delivery has been criticized for being reductionist in perspective, lacking in theory base, focusing on lifestyle, being paternalistic in style, and isolationist in delivery.[4] These are some of the historical limitations of the current model of dental care delivery, which hampers the effective contribution of dentistry to public health. In addition, dentistry is undergoing transformation, which imposes new challenges for addressing the real needs of the population. Dentistry, for example, increasingly relies on the advancement of new technologies and techniques for provision of complex and expensive treatments. The introduction of dental implants and wide application of composite filling materials for aesthetic purposes are two examples of this transformation in dentistry. The inclination to provide often expensive technology-driven treatments inevitably takes attention away from less technique-sensitive yet necessary routine dental treatments such as fillings for they are not as profitable. Medicalization of the smile in the dental profession also serves as a new challenge for addressing the needs of the public. Driven by advancements of new technologies and perhaps fuelled by social media 'selfie-culture', dentistry in many parts of the world has now mutated from a health care profession to a confused mixture of business and profession, which focuses on creating and selling 'smiles'.

In addition to the aforementioned concerns, the delivery of dental care in Iran is adversely affected by the domination of the private sector, monopoly of dentists, limited contribution of primary care, and ineffective regulatory bodies. The combined effect of these factors has created a largely unaffordable dental care system, which fails to deliver the necessary care to those who need it. Founded on free market healthcare, the current model of dental care in Iran is designed to provide treatment, which is sometimes not even needed (i.e. cosmetic treatment) to a small section of the population who can afford to pay the unregulated fees for private treatments. In this system, providers of dental care whose monopoly over dental care has been protected by the law are the main beneficiaries of this unfair arrangement. As a result, while the dentist to population ratio in Iran (of 4.4 per 10,000 population) is higher than in the majority of countries in the WHO Middle East and North African region and it also competes with some developed countries, there remain major issues with access and affordability of dental care. The fact that nearly half of active dentists in Iran are registered to work in the province of Tehran, where the capital city is located, and the eleven-fold rate of dentists per population in this province compared to some other provinces is only the tip of the iceberg.[5] The increase in the number of dental specialty training programs and trainees across the country is also an indication of moving in a direction where routine treatments become less accessible and less affordable.

With this background, the WHO call for bringing radical reform to dental care and revisiting our approach toward training the oral health workforce is certainly relevant to Iran. In developing the future workforce for oral health, we need to reflect upon the previous failed experiences of reforming dental care. During the past four decades, there have been at least three major attempts to restructure and reshape the dental workforce in Iran to increase access to dental care, all with questionable outcomes. Two of these changes involved adopting role substitutions and one involved a substantial increase in the number of dental schools. The first reform occurred in the post revolution era and involved training thousands of locally recruited dental therapists from mainly geographically remote areas in the 1980s to provide basic dental care including



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filling and tooth extraction within primary care. This seemingly successful program facilitated access to dental care via dental therapists who were the backbone of primary dental care for nearly a decade. This initiative, however, had to be suspended following parliamentary legislation, which allowed dental therapists to become licensed dentists and therefore enter the private sector. The second major transformation in the dental workforce occurred in the 2000s when there seemed to be a political drive to increase access to medical and dental care. The stakeholder at the time however pursued this objective by establishing several new dental schools across the country to train more dentists with no clear plan to employ them in the public sector. While this initiative multiplied the number of dental schools and dental students, its impact on access to dental care and improving health outcomes remained unclear. The third attempt to reform oral health workforces aimed to widen access to dental care professionals by establishing a new university course in 2015 to train a new cadre known as 'dental technicians'. This program set out to train dental technicians to carry out restricted dental procedures within primary care. Less than two years after its commencement, the course was suspended due to lack of resources for employing the graduates in the public sector. In addition, this initiative faced unanimous opposition by dental associations who were concerned that the future dental technicians could use the aforementioned loophole to enter the private sector. As a result, apart from a small number of new graduates of dental programs, who are required to serve within primary care for a period of up to two years, no other oral health workforce has been defined to serve in the public sector, hence leading to the domination of the private sector over dental care delivery in Iran.

Even in the most affluent countries such as Canada, where the cost of dental care is at least partly paid by private insurance, there exist striking unfair inequalities in access to dental care.[6] Placing reliance merely on the private sector in a country such as Iran, with a substantial proportion of the population living in poverty has never been justified. In fact, we have known for decades that the current arrangement for delivery of dental care in Iran needs to be revised to ensure its fairness, efficiency, and effectiveness. The equitable access to dental care, due to domination of private sector in Iran, however, has not received the attention it deserves and sometimes swept under the rug. It is beyond the scope of this commentary to explain how and why this occurred. On the other hand, it is promising that the need to reform Iranian dental care through exploring innovative ideas has been acknowledged by academics in the field of dental public health.[7]

To conclude, in line with the WHO draft global strategy on oral health, we ought to consider new models of oral health workforce in Iran to pave the way for the integration of basic oral health services within primary care; hence more equitable and affordable access to dental care. The WHO global strategy has now shown us where we have gone wrong and that is 'training [of dental workforce] focused on educating highly specialized dentists rather than community oral health workers and mid-level providers'.

The new WHO oral health strategy, therefore, urges us to explore a new oral health workforce, which involves a new mix of dentists, mid-level oral health care providers such as dental assistants, dental nurses, dental prosthetists, dental therapists, and dental hygienists to facilitate the integration of oral health within primary care. Dental care in Iran is bound to rely neither on the private sector nor on dentists as sole providers of dental care services.



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