



# Special Care Dentistry Education: A Necessity for Health System in Iran

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## To Editor,

### *Patients with Special Needs: Definition and Importance*

As defined by the United Nations, individuals are considered to have disabilities if their long-term physical, mental, intellectual, or sensory impairments, combined with societal attitudes and environmental obstacles, prevent them from participating in society fully and equally.<sup>1</sup> Iran's Comprehensive Law on the Protection of the Rights of Persons with Disabilities, in its first article, mandates the government to create the necessary conditions to guarantee the rights of persons with disabilities and to ensure they receive essential protections. According to this law, a person with a disability is someone who, as determined by the Medical Commission of the Welfare Organization (Behzisti), has a continuous and significant impairment in general health and function due to a physical, mental, or combined problem, in a way that reduces the individual's independence in social and economic contexts.<sup>2</sup> According to the official statistics of the Welfare Organization for 2019, the population of persons with disabilities in Iran was approximately 1.8 million people.<sup>3</sup> Evidence indicates that multimorbidity, prevalent in over 66% of the Iranian elderly population, compromises their oral health-related quality of life, and health service providers must prioritize this issue.<sup>4</sup>

Health systems have a professional and ethical commitment to promoting the health of all members of society. Patients with Special Needs (PSN) include individuals who require adaptive dental care due to physical, mental, sensory, or psychological disabilities, chronic conditions (such as cerebral palsy, Down syndrome, autism, multiple sclerosis, or immunodeficiency), or specific conditions associated with aging. As of 2022, the World Health Organization (WHO) estimates that 15% of

the world's population live with a disability, and many face substantial difficulties in obtaining necessary dental and oral health services.<sup>5</sup> These patients are at higher risk of tooth decay, periodontal disease, and chewing problems. Attention to this group is not only necessary from a medical and human rights perspective, but neglecting their oral health can lead to systemic complications such as respiratory infections, cardiovascular disease, and reduced quality of life.<sup>6</sup>

### **Oral Health Status and Dental Service Shortages**

Studies show that patients with special needs experience lower levels of oral health than the general population. They have higher plaque scores, greater caries prevalence, and poorer periodontal health than other population groups.<sup>7</sup> Children with visual impairment experience more dental traumatic injuries than other children.<sup>8</sup> These problems are caused by several factors, including.<sup>9</sup>

- Physical barriers: Many dental providers lack appropriate facilities for patients with motor or cognitive limitations.
- Shortage of qualified and trained dentists: Many dental schools do not offer comprehensive training programs for the management of these patients.
- Fear and anxiety: Patients with neurodevelopmental disorders (such as autism) often have reduced cooperation with the dentist due to sensory sensitivities and require special behavioral techniques.
- High treatment costs: Some of these patients require general anesthesia or sedation for dental procedures, which is costly.

According to the International Association for Disability and Oral Health (IADH), special care dentistry is the practice of providing dental care to people whose oral



health is impacted, directly or indirectly, by an activity limitation, health condition, or disability, considering their personal and environmental circumstances.<sup>10</sup> As mentioned, one of the most important challenges in accessing oral health services for people with special needs is the lack of a skilled and willing workforce to provide services to these populations.

A study on students with disabilities attending special needs schools in Kerman revealed poorer oral health compared to the general population, high caries experience, very poor oral hygiene, and a high prevalence of gingival disease. The authors advocated for improvements in both general dentistry and residency programs to meet the substantial unmet oral health needs of this group.<sup>11</sup>

However, the oral and dental diseases of people with disabilities are the same as those seen in the general population. The procedures used to treat these patients are often basic procedures that general practitioners can easily perform, and they can treat the oral and dental problems of 90% of this population.<sup>12</sup> To reach this goal, dentists need specific training to gain the competence required for treating patients with special needs. The majority of these patients can be treated in general practice, though those with more complex conditions will likely need specialized care.<sup>12</sup>

#### **Educational Efforts of Dental Schools Worldwide**

Special care dentistry is increasingly being recognized as a dental specialty internationally. Australia, New Zealand, Ireland, Canada, and the United Kingdom are among the countries developing postdoctoral degrees in the field of special needs dentistry. In countries such as Brazil, Malaysia, Indonesia, the United Kingdom, and the United States, separate course units have been established for special care dentistry training, and the needs of these populations have received increasing attention in recent years. In many developed countries, training in special care dentistry is considered an essential part of the curriculum for dental students. For example:

- **United States:** The American Dental Association (ADA) has mandated that all dental schools offer special courses in treating patients with special needs. Universities such as Harvard and the University of California, Los Angeles (UCLA), have specialized clinics for these patients and utilize clinical simulations to train students.
- **United Kingdom:** British dental schools are required by General Dental Council standards to provide training in the management of patients with intellectual and physical disabilities. King's College London has made internship programs in rehabilitation centers mandatory for students.
- **Australia:** The University of Melbourne offers specialized courses in dentistry for patients with

special needs, emphasizing collaboration with medical and occupational therapists.

- **Malaysia:** The Universiti Malaya in Malaysia offers special training programs for dental students in the treatment of patients with special needs. The university, in collaboration with rehabilitation centers, has designed practical internships to familiarize students with the challenges of treating these patients. The Malaysian Dental Association has also established standards for the inclusion of courses related to patients with disabilities in the curricula of dental schools.
- **Brazil:** The Brazilian government has enacted supportive legislation requiring dental schools to include practical training in dentistry for patients with special needs in their curricula. In Brazil, the University of São Paulo (USP) is a pioneer in teaching dentistry for patients with special needs. The university has specialized clinics dedicated to providing services to patients with physical and mental disabilities.

Insufficient time in the curriculum, inadequate funding, and a lack of trained educators to teach these units are among the obstacles to education in this field that can be mentioned.

#### **The Need to Include Special Care Dentistry in the Curriculum of Dental Students**

In the absence of formal education programs in this field of dentistry in Iran, efforts have been made to fill this gap with alternative approaches. A series of workshops on the principles of dentistry for the elderly and people with disabilities are held with a social accountability approach, addressing the oral health status of the elderly and disabled, challenges and programs for improving oral health in these groups, principles of sedation, treatment planning, special considerations, and related case studies. Since 2019, this series of workshops has been conducted in more than 10 dental schools—some hosting the workshops more than once—and this number is currently increasing.

Given the growing population of patients with special needs in Iran, especially due to the aging population and the rise in neurodevelopmental disorders, it is essential to include “special care dentistry” in the curriculum of dental students. Without such training, future dentists will lack the necessary competence to serve this vulnerable group, thereby contributing to inequality in access to dental services. Special care dentistry is an undeniable necessity in the health system. The Ministry of Health and Medical Education of the Islamic Republic of Iran, in cooperation with dental schools, should develop standard educational programs and specialized clinics for these patients to ensure justice in health.

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No conflicts of interest to declare

**Data Availability Statement**

All the data are publicly available on the website of the universities mentioned in the paper. No new data was created in this study.

**Ethical Approval**

This is not an original study and no experiment has been conducted thus there is no ethical approval code.

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