

# DENTISTRY FOR TURKISH RESIDENTS WITH SPECIAL NEEDS: A COMMENTARY

# ÖZEL GEREKSİNİMLİ BİREYLER İÇİN DİŞHEKİMLİĞİ

H. Barry WALDMAN, DDS, MPH, PhD İlknur TANBOĞA, DDS, PhD
Steven P. PERLMAN, DDS, MScD, DHL (Hon)

*Makale Kodu/Article code:* 692 *Makale Gönderilme tarihi:* 10.10.2011

**Kabul Tarihi:** 15.12.2011

## ÖZET

Türkiye'de yaklaşık 12-13 milyon engelli birey yaşamaktadır. Ulusal yasalara göre engelli bireylerin gerekli hizmetlerinin sağlanmasına rağmen bu bireylerin sosyal hayata girmeleri güçtür çünkü sosyal görüntüleri, onları toplumun bir üyesi gibi çalışmaktan dışlamaktadır. Engelli bireylerin yüksek dişhekimliği tedavi gereksinimlerine karşın, yeterli koruyucu ve tedavi edici protokol oluşturulmamış ve bu yönde olması gereken çalışmalar geliştirilmemiştir. Engelli bireylerin bu ihtiyaçlarının giderilmesi amacıyla, mezuniyet öncesi ve sonrası sürekli eğitim programlarıyla dişhekimlerinin bu konuya yönlendirilmeleri ve hastların hizmet alımlarındaki güçlüklerin ortadan kalkması sağlanabilir. Genel dişhekimlerinin katıldığı bir çalışmada, dişhekimlerinin engelli bireylere tedaviden kaçmadığı aksine istekli oldukları ancak dişhekimliği eğitimlerinde bu populasyon konusunda sınırlı eğitim aldıkları rapor edilmiştir. Bunun için, diğer ülkelerin eğitim akreditasyon standartları, dişhekimliği öğrencilerin eğitiminde model olarak kullanılabilir.

**Anahtar Kelimeler:** Özel gereksinimli bireyler, Dental Eğitim, Türkiye.

### **ABSTRACT**

There are approximately 9 million residents with disabilities in Turkey. Despite national legislation to assure individuals with disabilities needed services, including education and employment, social inclusion of these individuals is difficult since societal views exclude them from functioning as members of a community. While there are no national studies of the dental needs of individuals with disabilities in Turkey, there are mixed reports of local studies of patients with disabilities which indicate the need for increased oral hygiene and restorative services, as well as a greater incidence of patient guidance difficulties. Nevertheless, a study of practitioner involvement in the care of individuals with patients with disabilities reported the willingness to provide care, but limited preparation of dental students to provide service for this population. Examples of dental education accreditation standards in other countries are used as models for the improvement in the preparation of dental students to provide services for individual with special needs.

**Key words:** Disabilities, Dental Education, Turkey.

### **Overview**

Individuals with disabilities: Disability is still the most important public health problem in the world. Many countries including Turkey, utilize World Health Organization's forecasts because of their lack of statistical information on disabled population.

The statistics about disableds are the most important data's for the planning of forward looking health politics. <sup>1</sup> The latest report issued in Turkey by the Prime Ministry's Directorate for the Disabled for 2002 indicated that 12.3 percent of the overall population – approximately 8.5 million people – was

<sup>\*\*\*</sup> Prof Dr, Global Clinical Director, Special Olympics, Special Smiles ,Boston University School of Dental Medicine Boston MA,USA



<sup>\*</sup> Prof Dr, Department of General Dentistry Stony Brook University, NY, 11794-8706 USA

<sup>\*\*</sup> Prof Dr, Clinical Director, Special Olympics, Special Smiles, Turkey

disabled, including physical, visual, hearing and intellectual disabilities.<sup>2</sup> By 2010, there were more than 9 million individuals with disabilities – based upon the assumption that the proportion of the population with disabilities remained the same.<sup>2</sup> The proportion of people with orthopedic, vision, hearing, and intellectual disabilities was 2.6 percent (higher in rural areas and among males) and 9.7 percent with chronic illnesses (higher in urban areas and among females). The Marmara Region had the highest proportion of residents with chronic illnesses (10.9 percent), Southeast Anatolia Region had the lowest proportion (7.2 percent).<sup>3</sup>

The percent of the population with disabilities increases with age, especially among individuals with chronic illnesses. The increase in the proportion with disabilities in older ages is particularly significant given the increasing numbers of residents who reach their 70s, 80s and beyond. The proportion of women with disabilities is greater than the proportion of men in all groups thirty years and over. <sup>4</sup>

Legalities and actualities: The 2005 Law on Disabled People provides guidelines for classification of different kinds of disabilities, and includes provisions for care services, rehabilitation, early diagnosis, employment and education of people with disabilities. The law stresses the need to combat discrimination against people with disabilities, and stipulates that discrimination based on a disability is a crime. The law also compels employers and public institutions to make the necessary modifications in the work place to accommodate these individuals in the workplace. <sup>5</sup> The United Nations Convention on the Rights of Persons with Disabilities which standardized these obligations and implementation mechanisms with regard to the rights of persons with disabilities was signed by the Republic of Turkey on 30 March 2007.<sup>6</sup>

However, "... only 21.71 percent of disabled people, excluding those with chronic diseases, are in the labor force ...The general tendency of people is to stay as far away as possible from disabled people ...There is a general exclusionist structure for disabled people in Turkey..." "Hiding of the people with disabilities by their families, their exclusion by the society and unsuitability of the urban system to their needs are most important issues keeping them back from daily life." A recent study of wheelchair

accessibility to public facilities in Istanbul reported that, "...wheelchair users experience many accessibility problems in public environment of the most urbanized city (i.e. Istanbul)... in a developing country.<sup>8</sup> In Turkey, 36.4 percent of all people with disabilities are illiterate, significantly higher than the rate in the overall population (15.5 percent). Only 2.4 percent of people with disabilities have undertaken higher education.<sup>1</sup>

## **Poverty**

"Financial problems are the most important factors that affect the psychology of the parents of disabled people." 9

Turkey is not a poor country by global standards, although the Turkish Statistical Department found that a fifth of the population were at risk of poverty. "Public awareness tends to be limited to the misapprehension that such widespread poverty is a problem of individuals themselves rather than the lack of an adequate social support system. Awareness of how poverty affects children ...is more limited still." 10 Turkey is ranked 33<sup>rd</sup> among 81 developing countries in terms of income and human development.<sup>11</sup> Nevertheless, while being elderly or a person with disabilities increases the risk of financial catastrophe, the system of risk pooling/health insurance available in Turkey, on average, better protects against significant medical expenses, "...than in many other countries with comparable income levels..."12

# Why the concerns for oral health care?

The many difficulties faced by millions of individuals with disabilities in Turkey may seem endless. In such an environment, the need for dental care would at best seem to be a marginal afterthought. In addition, "it has been reported that the ordinary Turkish person does not perceive oral health as important and considers it to be a low priority." <sup>13</sup> Nevertheless, the needs are real, especially for individuals with special needs. Kozol succinctly summarized the realties of inadequate oral health services for individuals with and without associated disabilities:

"Children (and adults) get used to feeling constant pain... (from) bleeding gums, impacted teeth and rotting teeth... They go to sleep with it. They go to school (and



work) with it...The gradual attrition of accepted pain erodes their energy and aspirations." <sup>14</sup>

While no national studies have been carried out in Turkey to determine the oral health condition of individuals with special needs, local studies indicate that individuals with special needs have poor oral hygiene, higher prevalence of dental caries, and more need for restorative services than individuals in the general population. Within one of these groups, Children with autism, are in the risk group for dental health because of their reduced motor skills, medications, weak oral hygiene. These children are often unable to tolerate dental examinations because of the fear associated with sights and sounds in the dental operatory. Parents frequently avoid taking their children with autism for routine examinations because of the children's fear of dental procedures. In a thesis carried in Turkey aimed to train autistic children with autism by special education programs to cooperate during a dental examination was one of the purpose of the study. It is observed that coperation of the autistic children increased by the education (p<0,05). <sup>15</sup> Also, in one study of children with autism in Turkey, it was reported that at younger ages, they had better caries status than children without autism. 16 Oral health behavior in children with cleft lip palate living in Istanbul was evaluated and it was observed that dietary habits (like bottle feeding- breastfeeding) in children with caraniofacial disorders far more risky and early education and constant oral hygiene follow-up plays an important role for prevention in these patients.<sup>17</sup> Occurring in one in 500 children, Cerebral palsy is a common physical disability in Turkey. In a study consisted of 45 children with CP aged between 8-16 years (mean+sd, 11,82±2,62) with no other systemic disturbances accompanying CP evaluated for the oral health status, dentofacial and occlusal development in order to make an assessment about their dental health needs. The study highlighted that oral health problems of the children with CP is a cumulative score of the neglected oral hygiene as well as the dental and occlusal developmental irregularities such as significantly more Class II type of occlusion, anterior open-bite and overjet, higher prevalance of enamel hypoplasia, dental erosion and trauma than the control group of healthy subjects. 18

Special Olympics Special Smiles: The Special Smiles program is an effort to increase access to dental care for Special Olympics athletes, as well as people in general with intellectual disabilities. Dental screenings are used as a means to increase awareness of the state of the athletes' oral health for the athletes themselves, as well as their parents and/or caregivers.

Being a part of Special Olympics Programme has begun in Turkey following Dr. Tanboga participitation to the 'Train the trainer' in Ireland 2003. Since then, with leading of Prof.Dr. Ilknur Tanboga, Clinical director of Turkey Branch of Special Smiles, PhD students studying in Pediatric Dentistry Doctorate Programme in Marmara University has attended many tournaments related this organisation and evaluated the oral health status of athletes and supplied basic equipments needed to provide good hygiene from manufacturers and distrubuted them after monitoring. 19,20

In a study which compared athletes from numerous countries (including Turkey) with athletes from the United States, it was reported that the athletes from the international countries were more likely to have untreated caries (50 percent), and less likely to have restorations (20 percent) and sealants (1.8 percent). <sup>21</sup>

It should be noted that these findings (of oral health needs) are for a population of individuals with intellectual disabilities with increased supportive programs and not necessarily representative of general population of individuals with intellectual disabilities.

Attitudes: As young men and women train for careers in the dental and other health professions, opportunities for contact with and care for individuals with disabilities are essential if they are to overcome the all too often standard perceptions and attitudes which result in the rejection, exclusion and discrimination against individuals with disabilities. "Only if early contact is established with patients (with disabilities), practical educational strategies are adopted, and the students are provided with information on attitudes about the disabled, will a social model of disability be introduced into the curriculum." <sup>22</sup>



# Dentists and the treatment of individuals with special needs

Numerous reasons are stated for not treating people with disabilities in private practice, including: "...too much time is required to perform procedures, the patient may have a life threatening medical emergency, funds for treatment are difficult to obtain, procedures are too difficult or there are difficulties of (physical) access to the (operatory), the dentists neither received special training, nor have they the special equipment, and they are apprehensive dealing with disabled people, other patients may be offended (e.g. waiting room disturbances) (sic) and these disabled patients usually require hospitalization. " <sup>23</sup>

In a study of dentists attending two conventions, the vast majority (71 percent) reported that they treated patients with disabilities, and two-thirds claimed that they had no drawbacks about treating patients with disabilities. However, approximately 60 percent "...believed that dentists are apprehensive/incompetent (in treating patients with disabilities)." <sup>23</sup> In addition, "...47-50% of the participants agreed that ... patients (with disabilities) needed to be treated in a hospital environment since there they could be medically treated should serious problems arise, (and practitioners lacked) an appropriate education about the disabled patients." <sup>23</sup>

# **Dental school programs**

This need for "experience and contact with people with disabilities" was the basis for establishing dental school accreditation requirements to ensure adequate basic science and clinical experience in the predoctoral training programs in many dental schools in other countries. For example in Canada and the United States:

"Graduates must have sufficient clinical and related experiences to demonstrate competency in the management of the oral health care for patients of all ages. Experiences in the management of medically-compromised patients and patients with disabilities and/or chronic conditions should be provided." (Standard 2.4.1) <sup>24</sup>

"Graduates must (sic) be competent in assessing the treatment needs of patients with special needs." (Standard 2-26)  $^{25}$ 

In a study designed to examine the general dentists practicing in Istanbul, Turkey towards taking education towards a specialty of Special Care in Pediatric Dentistry shown that large group of oral health work force willing to treat these patients but mostly wondering about how could they reach to take education for this special field. By this means, results focusing on the need of establish and implement partnerships with universities or governmental health departments to support an advisory function to coordinate and provide policy and program guidance in the country.

### The challenge

The need is for schools of dentistry to follow the accrediting steps taken by the dental profession in other countries to ensure the adequate basic science and clinical experience in predoctoral clinical programs to prepare graduates to provide for the wide range of individuals with special needs. However, developing such an effort is possible only if the profession and the general public can be convinced of the need for these programs. To this end:

- There is a need for a national health survey (including oral health) of people with disabilities with particular emphasis on the conditions in the rural areas. The current limited series of reports emphasize the conditions in the major urban areas.
- There is a need to identify the type and availability of current dental service centers for individuals with disabilities. Such an effort to catalogue dental school and health department programs, as well as the number of private dental practitioners, would provide an essential basis for lobbying for improved educational programs and service arrangements. <sup>26</sup>
- There is a need to enhance national organizations to stimulate an awareness of the varied needs of individuals with disabilities. Such organizations would serve as an advocate to raise standards, to support demonstration programs and lobby to increase the commitment to have children with disabilities (where possible) placed in the regular school system, to increase employment opportunities and to foster acceptance in the general community.

Only then can one anticipate the establishment of real programs in schools to prepare dental students to care for individuals with



disabilities. Such an effort can not be relegated to small groups of trained specialists. The reality is that such an effort can be successful only with specially trained specialists (e.g. pediatric dentists) and the participation of the broad range general practitioners who have been prepared to provide these needed services. <sup>27</sup>

### **REFERENCES**

- Akar T, Demirel B. Bir üniversite hastanesine başvuran özürlülerin analizi. Turkiye Klinikleri J Foren Med 2008;5(3):101-8.
- 2. T.C. Başbakanlık Devlet İstatistik Enstitüsü Başkanlığı ve T.C. Başbakanlık Özürlüler İdaresi Başkanlığı. Türkiye Özürlüler Araştırması 2002.
- 3. T.C. Başbakanlık Türkiye İstatistik Kurumu Haber Bülteni. 21 Ocak 2008. sayı: 9.
- International Classification of Functioning, Disability and Health. World Health Organization, Geneva, 2001.
- Human Rights Abuses in the Psychiatric Facilities, Orphanages and Rehabilitation Centers of Turkey. Mental Disability Rights International, 2005.
- T.C. Başbakanlık Devlet İstatistik Enstitüsü Başkanlığı ve T.C. Başbakanlık Özürlüler İdaresi Başkanlığı, 2010.
- Baris ME, Uslu A. Accessibility for the disabled people built environment in Ankara, Turkey. Afr J Agricult Res 2009;4(9):801-14.
- 8. Evcil AN. Wheelchair accessibility to public buildings in Istanbul. Disability and Rehabilitation: Assist Tech 2009;4(2):76-85.
- Uskun E, Gundogar D. The levels of stress, depression and anxiety of parents of disabled children in Turkey. Disabil Rehabil 2010;32(23): 1917-27.
- 10. UNICEF Preventing child poverty in Turkey. Web site: http://www.unicef.org/ turkey/sy19/cp/ 39. html Accessed July 19, 2010.
- 11. Kisa A, Yilmaz F, Younis M, Kavuncubasi S, Ersoy K, Rivers PA. Delayed use of healthcare services among the urban poor in Turkey. Education, Business and Society: Contemporary Middle Eastern 2004; 2 (3): 232 40.
- 12. Yardim MS, Cilingiroglu N, Yardim N. Catastrophic health expenditures and impoverishment in Turkey. Health Policy 2010;94(1): 26-33.

- 13. Topaloglu-Ak A, Eden, E, Frencken JE. Managing dental caries in children in Turkey a discussion paper. BMC Oral Health, 2009; 9:32.
- 14. Kozol J. Savage inequities: children in America's school. New York: Harper Perennials, 1999.p 20-1.
- 15. Erdinc IO, Tanboga I.Caries Prevalence, Oral Health Status and Feeding Habits Of Autistic Children and Evaluation Of Behaviour Management For Dentistry. Thesis, 2008, Marmara University Dentistry Faculty Health Institute, Pediatric Dentistry Doctorate Programme.
- 16. Namal N, Vehit HE, Koksal S. Do autistic children have higher levels of caries? A cross-sectional study in Turkish children. J Indian Soc Pedod Prev Dent. 2007 Apr-Jun;25(2):97-102.
- Huroglu N, Tanboga I. Oral health behavior in children with cleft lip palate. Thesis, 2008, Marmara University Dentistry Faculty Health Institute, Pediatric Dentistry Doctorate Programme.
- 18. Karataban P, Tanboga I. Investigation of Occlusion via Cast Analysis and Evaluation of the Dental Caries Prevalance, Periodontal Status and Muscle Dysfunctions in children with Cerebral Palsy. Thesis, 2008, Marmara University Dentistry Faculty Health Institute, Pediatric Dentistry Doctorate Programme.
- 19. Tanboga I, Menteş A, Eren F, Haznedaroğlu E, Erdinç I, Altinok B. The Use Of Glass Ionomer Surface Protection Material (GC Fuji VII) on Permanent Teeth of Special Olympics Athletes. 18. Congress of the International Association for Disability and Oral Health (IADH), Goteborg, Sweeden, 23-26 August, 2006.
- 20. Tanboga I, Erdinc I, Altinok B. Oral Health Status of Special Olympics Athletes In Turkey. 18. Congress of the International Association for Disability and Oral Health (IADH), Goteborg, Sweeden, 23-26 August, 2006
- 21. Reid BC, Chenette R. Macek MD. Special Olympics: the oral health status of U.S. athletes compared with international athletes. Special Care In Dentistry 2003;23(6): 230-3.
- 22. Sahin H, Akyol AD. Evaluation of nursing and medical students' attitudes towards people with disabilities. J Clin Nurs. 2010 Aug;19(15-16):2271-9.



- 23. Alacam A, Yildirim S, Cinar C, Bal C, Gurbuz F. The evaluation of the approach of Turkish dentists to oral health of disabled patients: a pilot study. Brit J Develop Disabil 2004;50(1):47-57.
- 24. Commission on Dental Accreditation of Canada. Accreditation Requirements for Doctor of Dental Surgery (DDS) or Doctor of Dental Medicine (DMD) Programs. Updated November 30, 2006. Web site: http://www.cda-adc.ca/cdacweb/en/Accessed June 25, 2010.
- 25. Commission on Dental Accreditation. Accreditation Standards for Dental Education Program; Modified February 1, 2008. Standard 2-26. Web site: http://www.ada.org/prof/ed/accred/standards/predoc.pdf Accessed June 24, 2010.
- 26. Tanboga I, Mete S, Kaya S, Ozbay G. The role of special care in pediatric dentistry programmes on the quality of life of children with special health care needs in Istanbul, Turkey. Abstract. J Disabil and Oral Health 2010;11(3): p.1402.
- 27. Waldman HB, Perlman SP. A special care dentistry specialty: sounds good, but... J Dental Edu 2006; 70(10):1099-102.

## Yazışma Adresi

İlknur TANBOĞA Regional Advisor, Special Olympics, Special Smiles Chair Turkish Society of Pediatric Dentistry Head of Department of Pediatric Dentistry, Marmara University, School of Dentistry, Istanbul, TURKEY

Tel: 05324927799 Fax: 02122588190

E-mail: itanboga@marmara.edu.tr

