



## Demographic Characteristics and Ethical Issues of Disabled Patients who Applied at a Disabled Dental Care Center in Turkey

Mehmet Karatas<sup>1</sup>, Neslihan Simsek<sup>2</sup>, Muharrem Ak<sup>3</sup>

<sup>1</sup>Inonu University Faculty of Medicine, Dept. of History of Medicine and Ethics, Malatya,

<sup>2</sup>Inonu University Faculty of Dentistry, Malatya

<sup>3</sup>Inonu University Faculty of Medicine, Dept. of Family Medicine, Malatya

### Abstract

**Aim:** This research was aimed to evaluate the demographic characteristics of the disabled patients who applied to the Disabled Dental Care Center (DDCC) at Faculty of Dentistry of Inonu University and the ethical issues that the dentists were faced with.

**Material and Methods:** The total number of disabled patients along with their genders and age intervals were determined from among the patients that applied to the Disabled Dental Care Center founded in September 2010 under the Inonu University Faculty of Dentistry.

**Results:** Since people with disabilities cannot perform dental care by themselves, their frequency of experiencing oral-dental health problems is considerably higher than that of normal people. In addition, the facts that disabled patients can go to dental care clinics under difficult conditions in the accompaniment of their families and that the patient may sometimes not let the dentist to carry out the medical intervention or the difficulty of the intervention are other factors causing bad dental health in this group of patients. From September 2010 to April 2012, 105 disabled patients were admitted to DDCC at Inonu University, Faculty of Dentistry.

**Conclusion:** The number of disabled patients admitted to the DDCC Faculty of Dentistry when compared to the number of disabled within Turkey, the number is significantly low. Mobilization, especially for persons with disabilities is an issue, such as difficulty of access to the dentist is major problem and result of a low number. The facts that the dentist will have to spare more time to disabled patients, the inadequacy of the monetary charge of the medical intervention, the requirement of a team to anaesthetize the patient are causes for the rejection of the patient by the dentist whereas the thought of the dentist that he/she could harm the patient in any way is the cause of various dilemmas.

**Key Words:** Disabled Persons; Dental Care For Disabled; Ethics.

### Türkiye’de Bir Engelli Diş Tedavi Merkezine Başvuran Hastaların Demografik Özellikleri ve Karşılaşılan Etik Sorunlar

#### Özet

**Amaç:** Bu araştırmamız ile Türkiye’deki bir engelli hasta diş tedavi merkezine sahip olan İnönü Üniversitesi Diş Hekimliği Fakültesine başvuran hastaların demografik özelliklerini ve diş hekimlerinin bu hastalarla ilgili olarak yaşadıkları etik sorunları ortaya koymayı amaçladık.

**Gereç ve Yöntemler:** İnönü Üniversitesi Diş Hekimliği Fakültesine bir diş problemi nedeniyle başvuran hastaların sosyodemografik özelliklerine kayıtlardan ulaşıldı.

**Bulgular:** Engelli hastalar kendi kendine ağız bakımlarını yapamadıklarından ağız-diş sağlığı sorunlarının görülme sıklığı normal bireylerden oldukça yüksektir. Ayrıca engelli hastaların aileleri tarafından diş sağlığı hizmeti verilen yerlere zor şartlarda gidebilmesi ve diş hekiminin de tıbbi müdahalesine hastanın izin vermemesi ya da müdahalenin zor olması da bu grup hastaların ağız-diş sağlıklarının kötü olmasına nedendir. İnönü Üniversitesi Diş Hekimliği Fakültesine bağlı olarak çalışan engelli hasta diş tedavi merkezine Eylül 2010 - Nisan 2012 tarihleri arasında başvuran engelli hastaların sayısını 105 olarak tespit ettik.

**Sonuç:** Yaklaşık iki yıllık süre içerisinde İnönü Üniversitesi Diş Hekimliği Fakültesi Engelli Hasta Diş Tedavi Merkezine başvuran hasta sayısının Türkiye’deki engelli kişilerin sayısı ile mukayese edildiğinde bu sayının oldukça az olduğu ortaya çıkacaktır. Özellikle engelli kişilerin mobilizasyon sorunu, diş hekimine ulaşabilme zorluğu gibi birçok hastaya ait sorun bu sayının az olmasının önemli bir nedenidir. Diş hekiminin engelli hastaya daha fazla zaman ayıracak olması, yapılacak tıbbi müdahalenin maddi karşılığının yetersizliği, anestezi uygulayacak bir ekibin gerekliliği diş hekiminin hastayı reddetmesine ve hastanın zarar görmesine neden olabileceği ihtimali bazı ikilemlerin yaşanmasına sebeptir.

**Anahtar Kelimeler:** Engelli Kişiler; Engelliler İçin Diş Bakımı; Etik.

## INTRODUCTION

Ethics encompasses moral principles and tries to

regulate human behavior in the direction of universal principles via suggestions. Ethical behavior results in the distinguishing of wrong

from right, good from evil and virtue from shortcomings (1).

Ethical principles are more like suggestions rather than sanctions. Following these principles during medical applications prevents dentists to experience various dilemmas. Ethical principles are autonomy, beneficence, non-maleficence and justice (2).

Various dilemmas may arise especially during the dental treatment of disabled patients. It is possible that the patient will be harmed during the process starting from the arrival of the patient to health care service to the start and continuation of the medical intervention of the dentist. This possibility is the reason why dentists are stuck in a difficult situation during the health care services that they provide.

Disability is the limitation of function and activity. Disabilities can be inherent or acquired. Whereas sicknesses such as mental retardation, cerebral palsy and autism cause inherent disabilities; others such as trauma, cancer, diabetes, arthritis, AIDS, degenerative neurological diseases cause acquired disabilities (3).

Since people with disabilities cannot perform dental care by themselves, their frequency of experiencing oral-dental health problems is considerably higher than that of normal people. In addition, the facts that disabled patients can go to dental care clinics under difficult conditions in the accompaniment of their families and that the patient may sometimes not let the dentist to carry out the medical intervention or the difficulty of the intervention can be factors that prevent these group of patients to reach dental health care services or to give up already started treatments.

Hence, it may sometimes be necessary to apply premedication, sedation or general anesthesia during dental treatments of disabled patients in order to minimize physical and mental traumas.

The dentist should primarily treat all patients equally for their benefit without worsening their current status (justice principle) and should inform the patient due to their autonomy. For some disabled patients, the obligation to inform may not

be carried out properly. Because; the obligation to inform requires elements such as understanding, voluntariness, the ability to give consent should be available and the patient should give the relevant decision about the treatment without any influence (*guidance, enforcement*) (2,4).

The principle of non-maleficence which is one of the basic principles can be evaluated together with the principle of beneficence. Being beneficial to the patient first requires that no harm is given to the patient. In order to be beneficial; maleficence should be avoided and the patient should be protected from maleficence while easing what is efficacious. In addition; the reputation, privacy and freedom of the person should not be harmed. The treatment presented should offer the highest benefit with minimum or no maleficence (2,5,6).

## MATERIAL AND METHODS

The number of disabled people worldwide was obtained from previous studies carried out by the United Nations and included in our study. In addition, the number of disabled people in America and Turkey was obtained from studies carried out in previous years.

The websites of the Faculties of Dentistry in Turkey were examined and the faculties along with disabled patient dental care centers that serve disabled people were determined.

The total number of disabled patients along with their genders and age intervals were determined from among the patients that applied to the Disabled Dental Care Center founded in September 2010 under the Inonu University Faculty of Dentistry.

Data regarding categorical variables were summarized by numbers and percentages. The difference between males and females in terms of age interval groups was determined via exact method and Pearson Chi-square test.  $P < 0.05$  values were accepted to be statistically significant.

The Health Practices Declaration issued by the Social Security Institution was examined and the prices paid by disabled patients after dental

treatment were compared with those for patients who are not disabled.

After combining all this data, ethical dilemmas that dentists face at the Inonu University Faculty of Dentistry during patient admittance were the subject of our study.

**Table 1.** The demographic characteristics of the patient their applied for the Disabled Dental Care Center (DDCC) between the years of 2010-2012.

Age (years)		Gender		Total
		Female	Male	
0-4		3 <sub>a</sub>	2 <sub>a</sub>	5
		60,0%	40,0%	100,0%
5-9		4,4%	5,4%	4,8%
		27 <sub>a</sub>	9 <sub>a</sub>	36
10-14		75,0%	25,0%	100,0%
		39,7%	24,3%	34,3%
15-19		14 <sub>a</sub>	7 <sub>a</sub>	21
		66,7%	33,3%	100,0%
20-24		20,6%	18,9%	20,0%
		9 <sub>a</sub>	5 <sub>a</sub>	14
25-29		64,3%	35,7%	100,0%
		13,2%	13,5%	13,3%
30-34		8 <sub>a</sub>	5 <sub>a</sub>	13
		61,5%	38,5%	100,0%
35-64		11,8%	13,5%	12,4%
		1 <sub>a</sub>	4 <sub>b</sub>	5
Total		20,0%	80,0%	100,0%
		1,5%	10,8%	4,8%
		4 <sub>a</sub>	3 <sub>a</sub>	7
		57,1%	42,9%	100,0%
		5,9%	8,1%	6,7%
		2 <sub>a</sub>	2 <sub>a</sub>	4
		50,0%	50,0%	100,0%
		2,9%	5,4%	3,8%
		68	37	105
		64,8%	35,2%	100,0%
		100,0%	100,0%	100,0%

## RESULTS

According to the 2009 United Nations data, half billion people in the world live as mentally, physically or emotionally disabled. One fifth of the population of USA is known to be disabled while 1/10<sup>th</sup> is heavily disabled (3,7).

According to a study regarding disabled people in turkey carried out in 2002 by the Disabled and Elderly Services 12.29% of the population was determined to be disabled.

([http://www.ozurluveyasli.gov.tr/upload/mce/es\\_ki\\_site/arastirma/bilgilendirmerehberi2.pdf](http://www.ozurluveyasli.gov.tr/upload/mce/es_ki_site/arastirma/bilgilendirmerehberi2.pdf))

It was determined that application to dentists varied according to education level and social security. According to a study carried out in 1993, it was determined that the ratio of dentist application of people with an education of 13 years and above applied to was 73.8 and that this ratio was 38.0% for people with an education of below 12 years. It was also determined that 14.2% of people with dental insurance apply to dentists whereas 6.6% of those who do not apply to dentists (3).

In the same study, it was determined that whereas 36.5% disabled patients applied to dentists in 15 years whereas the same ratio was 53.4% for patients who are not disabled (3).

According to a study carried out in the Florida state of America, it has been determined that the reason for why 60% of disabled patients cannot go to dental treatment is that the prices are high (8).

No clear data was obtained regarding the current number of disabled patients in Turkey, the ratio of dentist application, the number of people who applied to dentists based on insurance availability and education level.

It has been determined 105 that the number of disabled patients who applied to the Disabled Dental Care Center (DDCC) operating under Inonu University Faculty of Dentistry during the date of its foundation in September 2010 and April 2012.

It has been observed that of these patients 68 (64.8%) were female and 37 (35.2%) were male. Statistically significant differences were determined between males and females in the 25-29 age group. ( $p < 0.05$ )

Application to the Disabled Dental Care Center operating under Inonu University Faculty of Dentistry was 4.8% for 0-4 age group, 34.3% for 5-9 age group, 20.0% for 10-14 age group, 13.3% for 15-19 age group, 12.4% for 20-24 age group, 4.8% for 25-29 age group, 6.7% for 30-34 age group and 3.8% for 35-64 age group. It has been

observed that the highest number of applications was between the ages of 5-9.

No statistically significant relationship was determined between age interval groups and gender ( $p=0.47$ , Pearson Chi-square test). There are statistically significant differences for the 25-29 age group between males and females. ( $p<0.05$ )

In Turkey, oral-dental health services have been given at the Disabled Dental Care Center of Erciyes University Faculty of Dentistry since March 2011, at the Disabled Dental Care Center of Ondokuz Mayıs University Faculty of Dentistry since December 2011, at the Hacettepe University Faculty of Dentistry since April 2012. It has also been determined from the website of the Faculty of Dentistry at the Gazi University that starting from May 2012, a disabled dental care center will be active.

Disabled people can receive oral-dental care services in Turkey at the Faculties of Dentistry. In addition, the referred disabled patients can be treated by private dental care centers.

## DISCUSSION

Even though families are the best people to control their disabled individuals, their presence during medical interventions such as dental treatment may not have a sufficient relaxation effect. The dentist requires that the disabled individual stays calm and unmoving. Because it is very difficult to work in the narrow mouth area which requires intense concentration.

There are cases when even individuals who are not disabled decide not to go through with dental treatment fearing the apron of the dentist, the treatment chair, treatment tools etc.

Various reasons such as failure to communicate, experiencing difficulties in cooperation, the disabled patient not allowing oral examination or dental treatment result in bad dental health (9).

In addition, the physical or mental problems of disabled patients, problems of mobilization, health insurance and medical intervention difficulties may cause severe oral-dental health problems. (3,10).

Physical impediments, shortness of time, lack of necessary equipment are the most important problems faced during the dental treatment of disabled patients (10-12).

It is clear that individuals with mental retardation or developmental deficiencies are forced to get oral-dental health care services. The American Academy of Developmental Medicine and Dentistry (AADMD) has been founded in America in May 2002. Doctors, dentists and other specialists related to the dental treatment of disabled people have taken place in this academy. This academy has significantly eased the access of disabled patients to health services and oral-dental health care services. In addition, this academy has become a model for the education of doctors and dentists regarding the health and oral-dental health care of disabled patients (10).

In recent years, it has been emphasized that dental health care services for disabled patients are carried out at the newly founded dental health care services for disabled individuals and at various dentistry faculties in an attempt to protect the oral-dental health of disabled individuals and treat them.

The Disabled Dental Care Center at the Inonu University Faculty of Dentistry has been giving oral-dental health care services since September 2010. The treatment of about 105 disabled patients have been carried out starting from this date until April 2012.

It has been determined that 68 (%64.8) of these patients were female whereas 37 (%35.2) were male. Statistically significant differences have been observed between the male and female patients in the 25-29 age group.

The fact that Turkish Social Security Institution of Turkey pays back for the medical interventions carried out during the oral-dental health care treatment of a disabled patient in the same level as those of other patients causes setbacks in the dental treatments of disabled patients.

It is possible that the dentist will experience some dilemmas here. The fact that he/she will spare more time for the treatment of the disabled

patient, the inadequacy of the financial compensation of the medical intervention, the requirement of a team for anesthesia may cause the dentist to reject the patient or result in the injury of the patient.

Furthermore, despite the fact that disabled people with disability levels of over 40% have the right to apply to private dental clinics when they provide documents regarding their disabilities, such patients generally apply to faculties of dentistry.

The dental treatment of disabled patients require more attention and care prior to, during or after treatment due to their special conditions. The dentist should talk with the disabled patient prior to the treatment but in some cases this may not be possible. For cases when it is not possible to converse with the disabled patient, their family or guardian should be informed and their consent should be taken (3).

It is required that the disabled individual likes the dentist, trusts him/her and gets used to the treatment environment prior to the start of the treatment. Hence, the time that the dentist will spend with the patient is longer in comparison to those of other patients. Another factor that increases this time is that since treatment is carried out under the effect of general anesthesia or sedation, the mouth opening is not enough and that the dentist cannot use any other equipment for general anesthesia besides the hand of the dentist or his/her assistant.

Function level and mental capacity of the patient are important during treatment. Because communication of the dentist with the patient will ensure the success of the treatment. The treatment chair should be comfortable and secure. The dentist may need to adjust the position of patients with neuromuscular, cognitive or emotional disorders (3).

The treatment should be planned so that the disabled patient is comfortable and if this is not possible, the treatment should be carried out under sedation. Hence, the dentist may need to contact other health officers such as anesthetist, neurologist or psychiatrist (3,12).

In addition, the bleeding and infection status of disabled patients should be monitored by the dentist after the treatment since disabled patients are more sensitive (3).

The Commission on Dental Accreditation has been founded in America in 1975 in accordance with a special standard for the dental care of both normal and disabled patients. This commission ensures that dentists give more qualified services by adhering to various standards (13).

More qualified and accessible oral-dental health care services can be given in our country with the foundation of such commissions in our country. In addition, both practical and theoretical courses should be available in the curriculum of dentistry faculties regarding the dental health care of disabled patients (10,13,14).

A greater number of disabled individuals will benefit from oral-dental health care services with the help of such an approach. When we consider that 12.29% of our population is disabled, it is not hard to guess that a great number of disabled individuals require dental treatment. It can be seen that the number of people applying to disabled dental care centers during the two year period of the study is quite insufficient.

## REFERENCES

1. Veatch RM. Biyoetiğin Temelleri. Çeviren: Tolga Güven. Cordisgroup. İkinci Baskı. İstanbul. 2010.s:64-87.
2. Beauchamp TL, Childress JF: Principles of Biomedical Ethics. Third ed. Oxford Univ Pres. 1989.
3. Stiefel DJ. Dental care considerations for disabled adults. Spec Care Dentist. 2002;22(3);265-395.
4. Hekimlik Meslek Etiği Kuralları. Türk Tabipleri Birliği. 1998.
5. Tıbbi Deontoloji Tüzüğü. Resmi Gazete. 1960;No:10436.
6. Jewell MD. Teaching Medical Ethics. British Med Jour. 1984;Vol 289:364-5.
7. Holder M, Waldman HB, Hood H. Preparing health professionals to provide care to individuals with disabilities. International Jour of Oral Sci. 2009;1(2);66-71.
8. Rapalo DM, Davis JL, Burtner P, et al. Cost as a barrier to dental care among people with disabilities; a report from the Florida behavioral risk factor surveillance system. Spec Care Dentist. 2010;30(4);133-9.
9. Çağırın EY, Efeoğlu C, Balcıoğlu T, et al. Mental Retarde Hastalarda Dental Tedavi: Retrospektif İnceleme. Türkiye Klin J Med Sci. 2011;31(4):830-6.
10. Fenton SJ, Hood H, Holder M, et al. The American Academy of Developmental Medicine and Dentistry:

- Eliminating Health Disparities for Individuals with Mental Retardation and Other Developmental Disabilities. Jour of Dental Educ.2003;67(12);1337-44.
11. Edwards DM, Merry AJ. Disability Part 2: Access to dental services for disabled people. A questionnaire survey of dental practices in mersey side. British Dental Jour. 2002;93;253-5.
  12. Del Cojo MB, Lopez NEG, Garcia JDN, et all. Dental treatment for disabled children in the Spanish Public Health System. Med Oral Patol Oral Cir Bucal. 2007;1;12(6);E449-53.
  13. Waldman HB, Perlman SP. Nuances in standards terminology and the care of individuals with special needs. J Can Dent Assoc. 2010;76;a7.
  14. Innovations in Dental Education: Developmental medicine and developmental dentistry fellowships. Jour of Dental Educ. December 2003;67,12:1341-2.

Received/Başvuru: 14.09.2012, Accepted/Kabul: 31.10.2012

**Correspondence/İletişim**

**Mehmet KARATAS**  
İnönü University Faculty of Medicine, Dept. of  
History of Medicine and Ethics,  
MALATYA/TURKEY  
Tel: 0505 83954448  
E-mail: drkaratas@hotmail.com

**For citing/Atıf için:**

**Karatas M, Simsek N, Ak M. Demographic characteristics and ethical issues of disabled patients who applied at a disabled dental care center in Turkey J Turgut Ozal Med Cent 2013;20(1):24-29 DOI: 10.7247/jtomc.20.1.6**