

## Oral health of special needs patients in Romania – from individual to community concern

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### Background

In Romania there is a large number of special needs people in general and children in special that live either in institutions or in families. A few figures according to government statistics are suggestive:

#### Disabled children in state care

- 6,809 children in public and private placement centers and family-type homes
- 2,913 children in professional foster care

#### Disabled children in families

- 56,000 children in natural families
- 1,039 children in extended families
- 7,120 children in other family arrangements.

Many of these children learn in special schools, being deprived of the integrated environment that could enhance personal independence, appreciation and acceptance from their non-disabled peers.

In Romania disabled peoples' needs have been underestimated or overlooked for a long time. Besides adapted education, one of the underdeveloped domains for people with disabilities in our country is health. Access to medical services is, in present, still rather difficult for special needs patients, both for those living in institutions and for those living with families.

**Key words:** oral health, special needs, screening, dental treatment.

### Facts

Dental health is an important issue for mentally and/or physically impaired persons in Romania. Special needs persons represent in our country, for the time being, a category of patients highly underserved from the dental point of view. Of these, the mentally impaired seem to be particularly affected. There are several reasons for this situation:

- Health care for special needs patients usually focuses on their main illness, leaving dental care on a secondary place.

- Mentally impaired patients sometimes have difficulties in expressing pain/discomfort. In absence of regular dental check-ups this may lead in time to an aggravated dental condition.

- At the moment, in Romania there is a total lack of a dedicated network of dental offices where these patients could get dental care.

- In Romania, the National Health Insurance Trust pays for children's dental treatment provided in state clinics or in private dental offices it has an agreement with. However, there is a maximum amount of money that can be paid monthly for each dentist that has a contract with the National Health

Insurance Trust. This amount can be easily reached by treating normal people, and the fact that no supplementary funds are allocated for working with special needs patients leads to a lack of economic motivation for practitioners to provide dental treatment for this category of patients.

- Regarding adults' treatment, only a few dental treatments are paid for by the National Health Insurance Trust. This, together with the situation described for children and with the fact that many disabled persons have a very poor financial status make dental treatment usually unaffordable for them, regardless their age.

- Dental schools' curricula can not include a satisfying training program to prepare dentists for working with disabled persons.

- Dentists tend to avoid treating patients with special needs because of: a) little knowledge on approaching and treating these patients; b) fear of uncontrollable consequences of dental treatment on patient's general condition and behavior; c) economic reasons (time/benefit ratio).

- When disabled persons live in suburban or rural areas, their access to dental treatment is even

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more difficult, due to: a) insufficient number of dental offices in these areas; b) physical/economic traveling difficulties of these patients.

### Oral health statistics

There is little available data on dental and periodontal health of special needs people/children in Romania. Very few statistics were made, mostly after 1990. However, this situation tends to change lately, as oral health of special needs people is repeatedly being assessed during Special Olympics –Special Smiles (SO-SS) events carried out since 2005, with a total of almost 1000 athletes already screened.

A study on oral health of special needs athletes conducted during an international SS event (International Friendship Games, 2005) showed that Romanian athletes' oral condition was poor, with a prevalence index (Ip) of caries over 94% [1]. Only 9.8% of the existing caries were treated at the moment of the examination and one third of the subjects had gingivitis, as a result of poor oral hygiene [1]. A comparison between Romanian athletes and foreign guests revealed a ss poorer situation of the first regarding DMF-T and presence of calculus and gingivitis (table I).

A comparison between Romanian SO athletes' oral status (194 subjects, mean age  $15.43 \pm 1.51$  years) to other reported data revealed that 68% of the Romanian special needs athletes had never seen a dentist despite the need [2], versus 33% reported by Gizani et al for a group of 613 Greek mentally challenged children (mean age 12.3 years) [3]. However, Gizani et al [3] found, in 2006, a percentage of only 8.39% treated caries in a group of mildly mentally impaired Greek children (171 subjects, aged  $11.46 \pm 1.92$  years), results very similar to our own (RI=9.8%, table 1).

In another study conducted upon a group of 318 mentally impaired athletes, aged 10 to 18 years (mean age  $15.19 \pm 1.83$  years), screened during 2005-2006, the calculated DMF-T index was  $6.09 \pm 4.62$  (range 0 to 23). The restoration index, showing the percentage of treated caries among existing decay [ $RI = F / (F + D)$ ] was  $9.94\% \pm 23.39$  (range 0 to 100%). Only 15.2% of the examined subjects had a RI higher than 80%, while 26.3% had a very low RI, of 10%

or under, showing little or no concern regarding dental treatment despite the need (figure 1) [5].

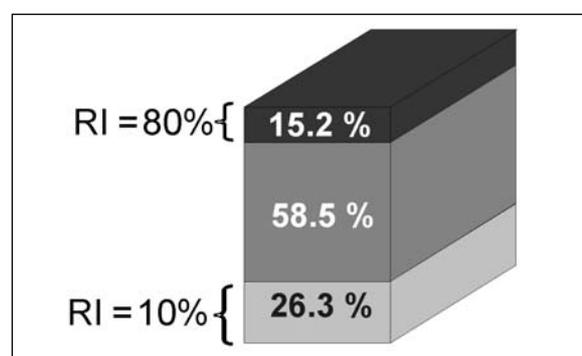


Figure 1. Restoration index range in a group of 318 mentally impaired Romanian athletes [Vinereanu et al, 2007]

Comparisons between normal and mentally challenged subjects reveal a much poorer condition in the special needs subjects. Vinereanu et al [5] report a percentage of 42.2% of the subjects needing prosthetic restoration (crown / bridge) of at least one first permanent molar, while the corresponding figure for normal subjects of the same age is 32.2% (ss difference,  $p < 0.01$ ). Moreover, 37.4% of the special needs patients had one or more first permanent molars either extracted or to be extracted, versus 18.8% of the control group (ns).

### Screenings outcome

There are several benefits of these screenings conducted on the occasion of various SO events. On one hand, each athlete is given an oral health evaluation bulletin specifying his/her dental treatment needs as well as the emergency degree. Special needs athletes are also instructed on adapted oral hygiene techniques. As a reward for their patience and co-operation, they get "goodie-bags" containing oral health products and learn how to use them in a very pleasant and funny way (figure 2). Besides patient-related benefits there are volunteer-related ones – young dental practitioners and students get in contact with special needs potential patients, get used to dealing with them and hopefully learn to treat them with more comprehension and less circumspection [6].

Table I. Oral status of mentally challenged SO athletes. Comparison between Romanian and foreign athletes [Vinereanu et al, 2006].

Parameters	Romanians	Foreigners	Differences ss/ns (t test)
Ip (%)	94.1	87.9	ns
DMF-T	7.9	4.8	ss, $p < 0.01$
RI (restoration index) (%) $RI = [F / (D + F)] \times 100$	9.8	15.1	ns
Gingivitis (%)	29.4	9.1	ss, $p < 0.05$
Calculus (%)	33.3	12.1	ss, $p < 0.05$



Figure 2.  
(a,b) Oral hygiene techniques.

Moreover, the screenings provide data, and gathering data leads to detecting the problem: in Romania, oral health of special needs people in general and children in special is, at the moment, a delicate issue. Not only there is need for dental and periodontal treatment, but the practical solutions for actually providing this treatment are currently missing. An increasing number of disabled persons are referred directly to University Clinics in all academic centers of the country (almost exclusively to the Paedodontics Departments) in order to be treated, as very few practitioners choose to treat this category of patients, even though many patients with mental retardation can co-operate and allow themselves to be treated under common dental office circumstances [7]. Dental and periodontal diseases tend to be overlooked by parents and caregivers until pain occurs. By the time they seek treatment, these patients usually have a really severe dental condition, which makes treatment more complex, requires a larger number of sessions and limits the results, especially when general anesthesia becomes necessary. If the costs of the treatments are also brought into attention, a complex picture of the situation can be drawn. It is obvious that every mentally disabled patient seeking dental treatment and not being able to get it is a big concern for his/her family or caregivers. On a macro level, providing treatment for the mentally challenged becomes an important matter of community concern.

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## Conclusions

Special needs persons represent in Romania, for the time being, a category of patients highly underserved from the dental point of view, regardless the type and degree of impairment. There is still a lot to be done in this respect, beginning with special needs patient sections in post graduate training programs and continuing with sustained efforts to find “pathways” for providing dental treatment for this category of patients. Specialized dental clinics with trained staff would really make a difference, while professional advice and correct information on oral health for special needs patients, families and caregivers could help decrease dental and periodontal disease prevalence among this category and thus reduce treatment needs and costs.

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