

Care for Special Needs Patients in General Dental Practice in Flanders

by

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Abstract

Aim: *The aim of this survey was to assess professional attitudes and perceived barriers to dental care delivery for disabled and medically compromised patients, among dental practitioners in Flanders (Belgium).*

Methods: *A structured questionnaire consisting of items recording personal information, dental practice profile, training received, treatment delivered to special needs patients and attitude towards organisational aspects of care delivery for these patients, was completed by 157 Flemish dental practitioners out of a convenience sample of 199 dentists attending postgraduate courses (response rate of 78.9%).*

Results: *Most of the dentists were active as general dental practitioners (76.4%) working exclusively in private practice (80.9%). The delivery of dental care to patients with special needs was reported by 87.3% of the dentists. Referral for care delivery in a specialized centre was reported by 67.5% of dentists. The most frequently reported problem was the insufficient level of cooperation of the patient (81.5%). Professional cleaning was the most frequently performed type of treatment,*

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closely followed by restorative treatment and dental extractions. Least frequently performed treatment was orthodontic treatment, closely followed by endodontic treatment, periodontal treatment and prosthetic rehabilitation.

Conclusions: *Further research is needed to determine the type of training needed for dental practitioners, the kind of referral facilities for special dental care that need to be developed and initiatives to consider for optimizing dental care delivery in special needs patients in the Flemish dental setting.*

Keywords: *dental care for disabled, access to dental care*

Introduction

A society's ethical and moral values are reflected in the way it takes care of its most vulnerable members: children, elderly people, socio-economically deprived citizens and persons with developmental or other disabilities. This also includes the way of taking care of the oral health of these groups of individuals.

Although data concerning the oral health condition of disabled and medically compromised people are rather scarce, several reports have shown that disease levels are often higher among these groups of patients (1-4). This is almost consistently the case for levels of gingivitis and periodontal disease, but also for the prevalence and incidence of caries experience. In addition, it was demonstrated that dental treatment levels are lower than those encountered in healthy peers (4,5). Several studies confirmed that inadequate levels of comprehensive dental services were provided to children and adults with special health care needs (6-8).

Several reasons can explain these findings. Amongst these are accessibility of dental care facilities, willingness of dental practitioners to treat disabled and medically compromised patients and professional attitudes towards disabled people.

The aim of the present survey was to assess professional attitudes and perceived barriers to dental care delivery for disabled and medically compromised patients, among dental practitioners in Flanders (Belgium).

Methods

In order to assess the involvement of Flemish dentists in delivering care to patients with handicapping conditions and medically compro-

mised patients, a questionnaire was developed. The structured questionnaire consisted of items recording personal information (age, gender), dental practice profile (type and geographical location, chair-side assistance), training received (undergraduate, postgraduate), treatment delivered to special needs patients (frequency, types of treatment delivered, problems encountered), and attitude towards organisational aspects of care delivery for these patients (remuneration, training).

Since the questionnaire was developed as part of an international collaborative project, it was initially developed in English and afterwards translated into Dutch. The technique of back-translation was used to reduce possible bias due to the translation.

The questionnaire was validated by asking 10 dentists to complete the form and provide their comments in a subsequent interview.

The questionnaire was distributed to dental practitioners attending two different postgraduate courses organised by the dental school of the Catholic University of Leuven. A total of 199 questionnaires were distributed, of which 157 were returned (78.9%). Response rates to individual question items varied between 73.2 and 99.4%.

Data were entered into a database and analysed using statistical processing facilities offered by Excel software (Microsoft Office 2003).

Results

The mean age of the respondents was 42.1 years (+/- 10.1), with a range between 23 and 69 years. Gender distribution showed that 64% of respondents were female. Most dentists graduated from the Catholic University of Leuven (80.9%), smaller numbers from other dental schools in Flanders (17.2%) or abroad (1.3%). About 34% of the dentists received some kind of postgraduate training after obtaining their dental qualification. Most of the dentists were active as general dental practitioners (76.4%) working exclusively in private practice (80.9%); 18.5% combined this with part-time work in a hospital setting. Only 21.7% of the respondents reported working with chair-side assistance in their practice.

The delivery of dental care to patients with special needs was reported by 87.3% of the dentists, with 4.5% delivering care only to patients with mental disabilities, 10.8% only to patients with physical impairment and 72.0% to both groups of patients with special needs. When dentists reported to treat these patients, the mean number of contacts with special needs patients was 23 (+/- 31.2) patients per year,

with a range from 1 to 200. Referral for care delivery in a specialised centre was reported by 67.5% of dentists. The mean percentage of referral of patients was 29.9% (+/- 34.2)(range: 0-100).

Regarding specific training for the treatment of special care patients, about 41.4% of the respondents replied having received some training in this field during their undergraduate training. A specific postgraduate training was followed by 5.1% and 18.5% followed some one-day courses on the topic.

The main problems encountered by the dental practitioners when providing dental care to special needs patients, are shown in Table 1. The most frequently reported problem was the insufficient level of cooperation of the patient (81.5%).

TABLE 1.
Problems encountered by dental practitioners when providing care to special needs patients

Problem encountered	Dentists reporting this problem (%)
Patient's level of cooperation	81.5
Communication with patient/family	38.5
Accessibility of dental practice	16.3
Insufficient/inadequate equipment	21.5
Lack of training	26.7
Lack of time	26.7
Financial reasons	11.9

Answer available for 135 participating dentists (85.9%)

Table 2 presents the frequency and types of treatment performed in these patients, while Table 3 presents the level of difficulty experienced by the respondents according to the different treatment types. Professional cleaning is the most frequently performed type of treatment, closely followed by restorative treatment and dental extractions. Least frequently performed treatment is orthodontic treatment, closely followed by endodontic treatment, periodontal treatment and prosthetic rehabilitation.

The level of difficulty is regarded highest for orthodontic treatment (61.9% with highest score) in special needs patients. The treatment of dental trauma, prosthetic work and periodontal treatment are also frequently scored as being difficult in these patients. Preventive acts are considered as the easiest treatment modalities to perform. An intermediate level of difficulty was reported for restorative treatment procedures and dental extractions.

TABLE 2.
Frequency and types of treatment performed in special needs patients
by dental practitioners

Treatment type	Frequent	Regular	Seldom	Never	Available answers
Professional cleaning	37.4	42.9	14.3	5.4	147
Fluoride application	16.5	28.1	38.8	16.5	139
Sealants	11.4	32.9	36.4	19.3	140
Dental extractions	9.2	41.5	35.9	13.4	142
Restorative treatment	16.6	48.3	27.6	7.6	145
Endodontic treatment	2.1	16.9	47.9	33.1	142
Periodontal treatment	9.3	15.7	35.0	40.0	140
Prosthetic rehabilitation	3.6	27.1	43.6	25.7	140
Orthodontic treatment	2.1	3.5	11.3	83.1	142

TABLE 3.
Level of difficulty experienced by dental practitioners
when treating special needs patients

Treatment type	High	Medium	Low	Available answers
Dental extraction	20.3	68.1	11.6	138
Restorative treatment	18.2	75.2	6.6	137
Prosthetic rehabilitation	44.9	54.3	0.8	127
Periodontal treatment	36.3	61.9	1.8	113
Dental trauma	53.6	45.6	0.8	125
Prevention	15.3	49.6	35.1	131
Orthodontic treatment	61.9	32.4	5.6	71

Discussion

Most dentists participating in this survey reported that they provided treatment to special needs patients, without any distinction between handicapping conditions (mental or physical impairment). The overall mean number of patients treated was low (23 patients/year – less than 1 patient every two weeks) and highly variable in number, demonstrating that dental treatment delivery for this type of patients is concentrated in specific dental practices. In addition, more than two thirds of practitioners referred patients to a specific centre for (advanced) care delivery. The need for referral was present in almost one quarter of patient contacts. These figures demonstrate the need for special care centres for the delivery of dental treatment in this patient group.

Only about 40% of the dentists remembered having received any training on the care for special needs patients during their undergraduate education. Although this percentage is low, less than 20% followed

a postgraduate course on the topic. This could be due to the fact that the interest in attending such courses is low or the offer of such training is not available, insufficient or not matching the needs felt by the profession. It seems to be necessary to investigate this in more detail.

Problems encountered when delivering treatment to special needs patients were mainly the poor level of cooperation of the patients. Financial reasons were reported least often. This shows that the dentist is willing to treat these patients, even if this requires more time and patience, without additional remuneration. A lack of specific training was mentioned by one quarter of the dentists.

Professional tooth cleaning was reported as the most frequently performed treatment act. However, 5.4% never and 14.3% seldom performed this act in their special needs patients. Plaque control can be regarded as the basis of the prevention of caries as well as gingivitis. Since oral hygiene is often difficult in special needs patients, professional support on a regular basis needs to be encouraged in these patients.

Dental extractions still remain a regularly performed treatment option in this patient group. When considering the fact that prosthetic treatment is seldom or never provided to these patients by the participating dentists (see table 2), it could be concluded that a large number of them remain without rehabilitation of oral functioning.

Orthodontic treatment is hardly ever performed in these patients and this type of dental treatment is regarded as highly difficult to provide in special needs patients. However, several reports have shown that treatment need is extremely high in this patient population (9,10). There are several possible explanations for this finding. Some patients probably are not able to cope with routine orthodontic treatment. In these groups interceptive orthodontics, including serial extractions, should be envisaged. On the other hand, the treatment of special needs patients is in most cases not included in the curriculum of orthodontic specialist training, not favouring the inclusion of these patients in their dental practice.

The present survey has some shortcomings that need to be considered. The number of dentists questioned was limited and not representative of dentists in Flanders. Participants in this questionnaire survey were mainly trained at the Catholic University of Leuven. This is not surprising since dentists were invited to participate while attending a postgraduate course organised by this university. However, this could have distorted the results obtained. It would be interesting to extend the survey to larger groups of dentists having received their training at different dental schools.

Conclusion

The results of this survey show that there is a high willingness of general dental practitioners in Flanders to treat special needs patients. However, some types of dental treatment needs remain largely unmet (e.g. orthodontic treatment but also endodontic, periodontal and prosthetic treatment). In order to change this situation, there is a need for more training, both at undergraduate and postgraduate level. In addition, structural measures will need to be considered. Dentists experienced the need for referring disabled and medically compromised patients to specialised care centres for advanced care delivery.

Further research is needed to determine the type of training needed, the kind of referral facilities to develop and initiatives to consider for optimizing dental care delivery in special needs patients.

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