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Aartman, I.H.A.

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Chapter 2

TREATMENT OF DENTAL ANXIETY IN CENTERS FOR SPECIAL DENTAL CARE IN THE NETHERLANDS¹

¹ The Dutch version of this chapter has been published as: Aartman, I.H.A., Eijkman, M.A.J., & Makkes, P.C. (1998). Behandeling van angstige patiënten in instellingen voor bijzondere tandheelkunde. Van lokale initiatieven tot overkoepelend orgaan. *Nederlands Tijdschrift voor Tandheelkunde*, 105, 365-367.

Introduction

Dental anxiety is a common phenomenon. The most recent national figures dating from 1988 indicate that 22% of Dutch population in the age group of 16 and older may be considered as very anxious (Stouthard & Hoogstraten, 1988). Starting in the eighties, the treatment of anxious patients has been approached in a systematic manner. At that time, agreements were made with insurance companies about the payment of an hourly rate for the treatment of patients in centers for special dental care.

Currently, there are 19 centers for special dental care in the Netherlands where highly anxious adult dental patients can be treated. In most of these institutions, this care arose from and was influenced by the treatment of mentally or physically handicapped individuals. In the other institutions, the treatment arose from work carried out by staff members of the Dental Schools in existence at the time (Utrecht, Groningen, Nijmegen and Amsterdam). Over the course of the years, the institutions specialized increasingly; moreover, an umbrella society was founded: Special Dental Care Discussion Group (COBIJT).

In the discussion between the college of dental advisors of the Dutch health insurance companies (CAT) and COBIJT, regulations were drawn up in 1996 for special dental care provided in institutions. These guidelines outline a scheduled means of approach to referrals, consultation, diagnosis, selection and treatment of three patient groups to be treated in centers for special dental care (patients with a complete prosthesis, patients with cranio-mandibular disorders and highly anxious dental patients). In the case of anxious patients, the level of anxiety must be established objectively, making use of questionnaires (Makkes, Schuurs, Thoden van Velzen, Duivenvoorde, & Verhage, 1986). See for some of the guidelines Table 1.

In addition, the Quality of Health Care Institutions Act which became effective on 1 April 1996 (Dutch Bulletin of Acts, Orders and Decrees 1996, 80) established a number of criteria required if institutions were to offer responsible care. Responsible care is defined here as good quality care, which is in any case effective, efficient and patient-oriented and which responds to the real needs of the patient. In addition, care institutions must systematically verify, assure and, if necessary, improve their quality of care by means of quality control systems. Guidelines can be developed for this, and studies should be conducted assessing the effectiveness of care. The purpose of this article is to determine the current state of affairs in the centers of special dental care

before the Quality of Health Care Institutions Act and the implementation guidelines for Special Dentistry were in effect, and to offer an insight into the various ideas in the institutions with respect to the care of highly anxious adult patients.

Table 1 Implementation guidelines for anxious adult patients (Vademecum Tandheelkunde, 1998)

For highly anxious patients to be treated in a center, they must meet the following criteria:

- 1) The general dental practitioner, or the center during its first consultation, has remarked avoidance and difficulty in treatment.
 - 2) Adults: Scores from at least two of the three dental anxiety questionnaires DAS, K-ATB and DPFR should be at or above the following cut-off scores. DAS = 15-20; K-ATB = 28-45; DPFR = 5-7.
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Material and methods

Data were gathered from 12 Dutch centers for special dental care (see Table 2) where highly anxious adult dental patients are treated. In the remaining seven institutions a negligible number of patients was treated. Semi-structured interviews were conducted in these centers with the dentists responsible for the care of highly anxious adult dental patients. The interviews were conducted by one person and lasted 1 to 1,5 hours. Topics included the institution and personnel, initial contact and intake, treatment and follow-up. The study was conducted in the period of December 1995 to April 1996 (with the exception of the Center for Dental Specialities, Alkmaar Medical Center; that institution was visited in June 1996).

Results

Institution and personnel

In the 12 institutions visited in 1996, 47 dentists were working in departments of Anxiety Treatment and Care of the Handicapped, a total of approximately 16 full time equivalents (fte). These 47 dentists did not just work with anxious adults. The number of fte devoted to the treatment of anxious adult patients could not be determined, since in many institutions no administrative distinction was made between adults, children and handicapped persons.

All of the dentists working with anxious patients had taken a course in nitrous oxide sedation (NOS). In seven of the centers, all of the dentists attended one or more courses in hypnosis, and in four centers, half of the dentists working there had done so.

In general, it became clear that the working methods of the various dentists in an institution were comparable, although in some institutions the working methods of the dentists differed considerably, sometimes from the beginning of a treatment to the end.

Table 2 Institutions that were visited

1.	Stichting Bijzondere Tandheelkunde (SBT) (Center for Special Dental Care Amsterdam)	Amsterdam
2.	Centrum Tandheelkundige Specialismen afdeling Bijzondere Tandheelkunde (Center for Dental Specialties, Special Dentistry department)	Alkmaar
3.	Afdeling voor Bijzondere Tandheelkunde, Ziekenhuis Rijnstate (Special Dentistry department, Rijnstate Hospital)	Arnhem
4.	Haags Centrum voor Bijzondere Tandheelkunde (HaBijT) (Hague Center for Special Dental Care)	Den Haag
5.	Medisch Spectrum Twente, afdeling Bijzondere Tandheelkunde (Twente Medical Spectrum, Special Dentistry department)	Enschede
6.	Centrum voor Bijzondere Tandheelkunde (Center for Special Dental Care)	Groningen
7.	Centrum voor Bijzondere Tandheelkunde (Center for Special Dental Care)	Nijmegen
8.	Stichting Bijzondere Tandheelkunde Rijnmond (BijTeR) (Center for Special Dental Care Rijnmond)	Rotterdam
9.	Centrum Bijzondere Tandheelkunde (Center for Special Dental Care)	Tilburg
10.	Bijzondere Tandheelkunde, Afdeling Angstbegeleiding en Gehandicaptenzorg, Academisch Centrum Utrecht (Special Dentistry, Anxiety treatment and Care of the Handicapped department, Academic Center Utrecht)	Utrecht
11.	Afdeling Bijzondere Tandheelkunde, Stichting Fatima (Department of Special Dentistry, Fatima Foundation)	Nieuw-Wehl
12.	Centrum voor Tandheelkundige Hulp in Bijzondere Gevallen (Center for Dental Help in Special Cases)	Zwolle

In seven of the centers it was possible, sometimes to a limited extent, to refer a patient to a psychologist in a hospital or a psychologist affiliated with the center. In one center a psychologist was involved with the treatment of anxious patients. Ten of the 12 institutions had an arrangement with a hospital in the region for dental treatments under general anaesthesia (GA). All institutions had arrangements for referrals to a dental surgeon for dental surgery under general anaesthesia, if necessary.

Initial contact and intake

Patients generally make their appointments by telephone directly with the institutions and are not formally referred by a dentist or general practitioner. Patients obtain the telephone number from acquaintances, the dentist, general practitioner, newspaper, brochures, health insurance companies and the like. In most cases, a referral letter of the dentist or general practitioner is asked for only upon request of the center. Nine institutions made use of anxiety questionnaires as described in the Implementation Guidelines. One institution did not use a questionnaire and two institutions only used the Dental Anxiety Scale (DAS). The waiting period for patients before their first interview varied between a month and 1,5 years. The waiting period in four institutions was more than a year. In most institutions, the intake lasted 45 minutes to an hour. The first consultation was comparable in all of the centers, although a protocol was not always followed.

Treatment and follow-up

There was no information available with regard to the exact number of patients who were treated with the given treatment modes. For patients who were treated without pharmacological aids, such techniques as tell-show-do, gradual *in vivo* or *in vitro* exposure (De Jongh, 1994) and a stop sign were used. In all institutions dentists made occasional use of relaxation exercises. In seven institutions dentists indicated that they made use of hypnosis; although, it is not clear in how many cases this was a matter of formal hypnosis. In every center it was possible to treat patients using NOS, although the motive for using NOS was not the same in all of the centers. Some centers used NOS relatively more often for their patients than others. Its use seemed to be related to the experience of the individual dentist with it and the dentist's willingness to use it.

In two institutions it was possible to treat patients by means of intravenous sedation (IVS); the drug used in both institutions was propofol. GA was possible in 10 of the 12 institutions. Just as in the case of nitrous oxide sedation, the decision for general anaesthesia was made jointly by the dentist and the patient. There was no uniformity to the criteria for the decision to use GA.

In general, treatment under GA does make the patient treatable, but the procedure is not specifically oriented towards reducing anxiety. In six of the ten institutions which

use GA, there was moderate to extreme restraint in the use of this treatment mode. Fewer than 10% of the highly anxious dental patients were treated under GA. On the other hand, there was one institution where a patient's desire to be treated under GA was always granted, unless there were too few cavities to warrant such an extensive procedure.

As far as criteria for re-referral of patients are concerned, six centers indicated that they treated patients to the point that further treatment could be carried out elsewhere. Four centers carried out treatment until a stable oral health was achieved, and two centers indicated that their final goal was sometimes treatability, sometimes performance of all dental procedures required at the moment. Ten institutions made exceptions for a small group of patients; those patients remained under treatment if it appeared impossible to return them to a general dental practitioner due to their anxiety.

None of the institutions followed their patients systematically after they had left the institution.

Discussion

In conclusion, we may state that a great deal of experience in the treatment of highly anxious adult patients has been gained in the centers for special dental care over the past 10 years. Due to the increasing demand for specialized treatment, there have been more and more dentists available for these patients; none the less, the long waiting lists indicate that the institutions can not meet demand for treatment in most cases. Before the implementation of the Quality of Health Care Institutions Act, not all of the institutions met all of the new requirements set forth in the new legislation.

Criteria for anxiety diagnosis and the selection of patients are partially set forth in the Implementation Guidelines. The expectation is that the institutions will follow these guidelines more and more in the future; a second study should indicate whether that is indeed the case. The research described here may function as a preliminary measurement to such a study.

The objective of treatment in an institution according to the Implementation Guidelines is to influence the patient behaviorally in such a way that the patient will be able to be treated in a normal dental practice. If that is not possible, treatment will be conducted until a reasonable state of oral health has been achieved. Many centers do

not follow this objective of graded levels of treatment; the institutions more frequently implement the first or second objective only.

There were also differences between institutions and between individual dentists with regard to their preference for a given treatment mode. In general terms, the philosophy of the institutions is to treat patients first of all by behavioral management techniques. If that turns out to be insufficient, a form of sedation or GA is used. However, it seemed that in every day practice the decision to use GA was made sooner when a large number of dental procedures needed to be carried out.

Under the terms of the Quality of Health Care Institutions Act it is recommended that a group of adult anxious patients be followed with a certain amount of regularity to be able to determine the effectiveness of the treatment over the long term. Research should reveal which treatment modalities are most suitable for which type of patient. This would make it possible to bring diagnosis and treatment into agreement with each other, and consequently to work more effectively and efficiently.

References

- Jongh, A. de (1994). Angststoornissen in de tandartspraktijk. Deel 2. Behandeling van patiënten met angst. *Nederlands Tijdschrift voor Tandheelkunde*, 101, 238-239.
- Makkes, P.C., Schuurs, A.H.B., Thoden van Velzen, S.K., Duivenvoorden, H.J., & Verhage, F. (1986). Criteria voor de selectie van volwassenen met een extreme angst voor de tandheelkunde. *Nederlands Tijdschrift voor Tandheelkunde*, 93, 317-21.
- Stouthard, M.E.A. & Hoogstraten, J. (1988). Angst voor de tandheelkundige behandeling. *Nederlands Tijdschrift voor Tandheelkunde*, 95, 268-70.