

*Correspondence: Alexandra BOLOS
Clinical Psychiatric Hospital "Socola",
Șos. Bucium no. 34, code 700282, Iași, Romania
Email: alex_andr_bolos@yahoo.com*

Date of Submission: September, 19, 2011 / Acceptance: February, 06, 2012

THE ANXIETY IMPACT IN DENTAL PRACTICE

Georgiana MACOVEI, Alexandra BOLOS

Georgiana MACOVEI: M. D., Ph. D., Assistant Professor, Department of Implantology, removable prostheses, technology, Faculty of Dentistry, University of Medicine and Pharmacy "Gr. T. Popa" Iași, Romania; Senior dentist

Alexandra BOLOS: M. D., Ph. D., Assistant Professor University of Medicine and Pharmacy "Gr. T. Popa" Iași, Dept. of Psychiatry; Senior Psychiatrist, Clinical Psychiatric Hospital "Socola", Iași, Romania

ABSTRACT:

Introduction: The dental treatment brings the patient in a state of doctor dependence, often being associated with a sense of fear and anxiety.

The aim of the study: To assess the degree of anxiety regarding dental treatment in a group of patients and the possibility of its reduction / management.

Methods: The study was conducted on a group of 60 patients who completed the Corah's Dental Anxiety Scale, Revised (DAS-R) for the evaluation of anxiety in the dental office.

Results: The comparison results show that the first contact with the dentist prevails in the medium anxiety phenomena, while the evaluation of the last treatment session showed a downward modified high anxiety phenomena.

Conclusions: Anxiety produces an avoidance behaviour that results in a large onset of oral pathology, progressing to local and general complications. Due to a direct influence on oral health status, anxiety should be detected and treated properly, patients requiring a multidisciplinary approach.

Keywords: *anxiety, phobia, dental health, risk factors*

REZUMAT:

Introducere: Intervenția stomatologică aduce bolnavul într-o stare dependență față de medicul curant, de multe ori fiind asociată cu un sentiment de teamă, de anxietate.

Obiectivul studiului: Evaluarea gradului de anxietate în ceea ce privește tratamentul stomatologic la un lot de pacienți și a posibilităților de diminuare a acestuia.

Metode: Studiul s-a realizat pe un lot de 60 de pacienți care au completat chestionarul Corah's dental anxiety scale, revised (DAS-R) privind evaluarea anxietății în cabinetul de medicină dentară.

Rezultate: Compararea rezultatelor arată că la primul contact cu medicul stomatolog predomină anxietatea medie, iar evaluarea rezultatelor la ultima ședință de tratament a indicat modificarea valorilor în sensul scăderii fenomenelor ridicate de anxietate.

Concluzii: Anxietatea produce un comportament de evitare care are ca rezultat instalarea unei vaste patologii orale cu evoluție spre complicații locale și generale. Din cauza influenței directe asupra statusului sănătății orale, anxietatea trebuie detectată și tratată corespunzător, pacientul necesitând o abordare multidisciplinară.

Cuvinte-cheie: *anxietate, fobie, asistență medicală stomatologică, factori de risc*

INTRODUCTION

The dental treatment brings the patient into a state of doctor dependence, often being associated with a sense of fear and anxiety. Anxiety is defined as an unpleasant emotion, “an object without fear” (1, 2, 3). The difference between fear and anxiety is that anxiety involves an unjustified, disproportionate tension regarding some subjective apparent injury, while fear is an adaptive physiological response to a real danger. Cooperation within the medical team with an anxious patient is difficult, sometimes impossible.

THE AIM OF THE STUDY

To assess the degree of anxiety regarding the dental treatment in a group of patients and the possibility of its reduction / management by the medical team

MATERIALS AND METHODS

The study was conducted on a group of 60 patients presented at the Semiology Clinic Service of the Faculty of Dental Medicine UMF “Gr. T. Popa” Iași, during January 2011 and December 2011. Patients gave their consent to the assessment of their anxiety, while being presented to the dentist. The patients completed Corah’s Dental Anxiety Scale, Revised (DAS-R) questionnaire for the evaluation of dental anxiety. The study group was divided according to age, sex, educational level, as it follows: group 1: 30 – 44 years – 20 patients, group 2: 41 – 54 years – 15 patients, group 3: 55 – 64 years – 13 patients, group 4: 65 – 75 years – 12 patients including 30 women, 30 men, 18 patients with medium education and 42 patients with higher education status. There have been two evaluations of the anxiety degree, by filling the questionnaire in the first treatment session and in the last treatment session.

RESULTS

Evaluation results from the first visit showed a predominance of medium anxiety in a number of 27 patients as 8 patients, in group 1, 9 in group 2 and 5 patients in groups 3 and 4. Lack of anxiety was observed in a number of 18 patients (3 patients in group 1, 2 patients in group 2, 6 patients in group 3 and 7 patients in group 4). In a total of 11 patients, were found the presence of a high degree of anxiety, as it follows: group 1: 6 patients, group 2: 3 patients, group 3: 2 patients, group 4: no patients. In a total of 4 patients (3 patients in group 1 and 1 patient in group 2), the results indicated the presence of dental phobia.

The evaluation of treatment results at the last meeting indicated medium anxiety in a total of 23 patients including 10 patients in group 1, 7 patients in group 2, 4 patients in group 3 and 2 patients in group 4. Lack of anxiety was observed in a total of 25 patients (3 patients in group 1, 4 patients in group 2, 8 patients in group 3 and 10 patients in group 4). A high degree of anxiety was recorded in 8 patients (group 1: 4 patients, group 2: 3 patients, group 3: 1 patient, group 4: no patients). The presence of dental phobia was found in the same 4 patients (3 patients in group 1 and 1 patient in group 2).

Regarding gender difference, during the first evaluation of female patients, the results obtained were: dental phobia in 3 patients, 6 patients with high anxiety, medium anxiety in 11 patients, and 10 patients showed no anxiety phenomena. During the second evaluation of female patients, results were as it follows: dental phobia in 3 patients, 4 patients with high anxiety, medium anxiety in 10 patients, 13 patients showed no anxiety. In males during the first evaluation, the results were: 1 patient showed dental phobia, high anxiety in 5 patients, medium anxiety in 16 patients, 8 patients with no anxiety. During the second evaluation, for males, the results were: dental phobia in 1 patient, high anxiety in 4 patients, medium anxiety in 13 patients and 12 patients with no anxiety phenomena.

According to the educational level, we observed a higher degree of anxiety present in patients with higher education than the ones with medium education, mainly in the first two groups.

DISCUSSION

Comparing the results, it is shown that, during the first contact with the dentist, medium anxiety prevails in 45 % of total cases, followed by no signs of anxiety in 30 % and 18.3 % patients with high anxiety. Dental phobia is present in a small number of patients 6.7 %. Distribution of the study groups shows a higher score for dental phobia, especially present in patients of group 1 and 2. The high degree of anxiety develops with a decrease inversely proportional to age, patients in group 4 having no positive result for it. Most patients fit in the medium anxiety bracket during the first visit to the dentist, the number of patients in this group of anxiety being inversely proportional to the age group. Patients who have shown no signs of anxiety have been present in all study groups, many belonging to group 3 and 4. It is interesting to note the absence of phobia in patients of these groups.

During the second evaluation, changes occurred to the degree of anxiety, so 4 patients who initially had high anxiety in the second evaluation found themselves among those with medium anxiety. For a total of 6 patients with medium anxiety in the first evaluation, the situation changed with no anxiety during the second evaluation. For patients who experienced phobia in the first evaluation, the situation did not improve. The percentage distribution became the following: medium anxiety 39.3 %, 14 % high anxiety, dental phobia 6.7 %, 40 % lack of anxiety. There is a growing percentage of patients with no anxiety in the second evaluation.

The risk factors for dental anxiety are sex, age, socio-economic level and educational level. There is a clear female preponderance for high anxiety during the first evaluation, while the male dominated the field of medium anxiety. During the second evaluation, results improved significantly, fact which could be explained by the different physiological and emotional nature of the two sexes.

Also, the age range between 30 – 54 years is more prone to anxiety than those between 55 – 75 years. Decrease with age in the degree of anxiety may be due to accumulated life experience, but also to physiology of aging itself. (4) Anxiety disorders are more common in patients with higher degree of education than medium education, probably because of the access to different types of information, including medical ones. The patient's degree of training and education is also a way of approach between doctor and patient.

Patients who have received positive experiences, no accidents or unpleasant complications will enter into the medical office with confidence, and cooperation. Instead, those who have had traumatic experiences will be cautious, stressed, anxious (4, 5). The anxious patients mostly complained of such experiences in their medical history. It has been observed that an element influencing the degree of anxiety occurs when the questionnaire filling is done: first visit, other appointments. Anxiety decreased significantly after several appointments in many patients. In the management of anxiety, it is very important to obtain the patient's trust by establishing effective communication between the medical team and patient.

We must distinguish between the fear caused by previous bad dental experiences, traumatic and therapeutic maneuvers and particular psycho-emotional load of each patient and his/her educational volitional-cognitive level.

Among the clinical signs of anxiety type disorders that may be encountered in the dental office, we mention psychological symptoms (feeling bad without justification, the fear itself), subjective physical symptoms (feeling of suffocation, precordial discomfort and difficulty in breathing), objective physical symptoms (tachycardia, palpitations, dry mouth, pallor / congestion, digestive problems) and symptoms included in the diagnostic systems, frequently encountered in anxious patients: feelings of occipital tension, headache, blurred vision, tinnitus, changes in blood pressure, bowel disorders (2).

CONCLUSIONS

The presence of high dental anxiety can lead to limited visits to the dental office, in case of emergencies only. Anxiety produces an avoidance behaviour that results in a large onset of oral pathology evolution with local and general complications. Because of a direct influence on oral health, the anxiety status should be detected and properly treated, the patient requiring a multidisciplinary approach. (6)

In the dental office, we must recognize anxiety and try to reduce stress by calming our patients, by applying techniques to reduce stress, such as behavioural distraction / relaxation on the principle that it is impossible to be anxious and relaxed at the same time. These techniques give positive results, of course, if there is a positive interaction between dentist and patient (7, 8, 9, 10).

The doctor will explain the procedures before beginning the treatment, the information about treatment will be precise and clear, comprehensible. The patient will be cautioned about the possible pain, we will try to create a calm atmosphere of well being. The patient should have feeling that is actively involved in all the maneuvers and that can decide to accept treatment.

ACKNOWLEDGMENTS AND DISCLOSURE

The authors declare that they have no potential conflicts of interest to disclose.

REFERENCES:

1. Micluția, I. (2000). *Anxietatea*, Cluj-Napoca, Ed. Medicală Universitară "Iuliu Hațieganu".
2. Micluția, I. (2007). *Tulburările anxioase. Ghid diagnostic și therapeutic*, Cluj-Napoca, Ed. Medicală Universitară "Iuliu Hațieganu".
3. Stein, D. J. (2004). *Clinical Manual of Anxiety Disorders*, Washington, D.C., The American Psychiatric Publishing, Inc.
4. Locker, D., Liddell, A., Burman, D. Dental fear and anxiety in an older adult population. *Community Dent Oral Epidemiol.* 1991 Apr;19(2):120-4.
5. Eli, I., Uziel, N., Baht, R. and Kleinhauz, M. (1997). Antecedents of dental anxiety: learned responses versus personality traits. *Community Dentistry and Oral Epidemiology*, 25: 233–237. doi: 10.1111/j.1600-0528.1997.tb00932.x
6. Eitner, S., Wichmann, M., Paulsen, A. and Holst, S. (2006). Dental anxiety – an epidemiological study on its clinical correlation and effects on oral health. *Journal of Oral Rehabilitation*, 33: 588–593. doi: 10.1111/j.1365-2842.2005.01589.x
7. Seeman, K., Molin, C. Psychopathology, feelings of confinement and helplessness in the dental chair, and the relationship to the dentist in patients with disproportionate dental anxiety. *Acta Psychiatry Scand* 1976;54:81-91.
8. Corah, N. L., O'Shea, R. M., Bissell, G. D. The dentist – patient relationship: perceptions by patients of dentist behaviour in relation to satisfaction and anxiety. *J Am Dent Assoc.* 1985 Sep;111(3):443–446.
9. Corah, N. L., Gale, E. N., Illig, S. J. Assessment of a dental anxiety scale. *J Am Dent Assoc.* 1978 Nov; 97(5): 816–819.
10. De Jongh, A., Adair, P. and Meijerink-Anderson, M. (2005). Clinical management of dental anxiety: what works for whom?. *International Dental Journal*, 55: 73–80. doi: 10.1111/j.1875-595X.2005.tb00037.x