SCI-CONF.COM.UA

SCIENTIFIC RESEARCH: MODERN CHALLENGES AND FUTURE PROSPECTS



PROCEEDINGS OF IV INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE NOVEMBER 18-20, 2024

MUNICH 2024

SCIENTIFIC RESEARCH: MODERN CHALLENGES AND FUTURE PROSPECTS

Proceedings of IV International Scientific and Practical Conference Munich, Germany

18-20 November 2024

Munich, Germany 2024

UDC 001.1

The 4th International scientific and practical conference "Scientific research: modern challenges and future prospects" (November 18-20, 2024) MDPC Publishing, Munich, Germany. 2024. 735 p.

ISBN 978-3-954753-06-2

The recommended citation for this publication is:

Ivanov I. Analysis of the phaunistic composition of Ukraine // Scientific research: modern challenges and future prospects. Proceedings of the 4th International scientific and practical conference. MDPC Publishing. Munich, Germany. 2024. Pp. 21-27. URL: https://sci-conf.com.ua/iv-mizhnarodna-naukovo-praktichna-konferentsiya-scientific-research-modern-challenges-and-future-prospects-18-20-11-2024-myunhen-nimechchina-arhiv/.

Editor Komarytskyy M.L.

Ph.D. in Economics, Associate Professor

Collection of scientific articles published is the scientific and practical publication, which contains scientific articles of students, graduate students, Candidates and Doctors of Sciences, research workers and practitioners from Europe, Ukraine and from neighbouring countries and beyond. The articles contain the study, reflecting the processes and changes in the structure of modern science. The collection of scientific articles is for students, postgraduate students, doctoral candidates, teachers, researchers, practitioners and people interested in the trends of modern science development.

e-mail: munich@sci-conf.com.ua

homepage: https://sci-conf.com.ua

©2024 Scientific Publishing Center "Sci-conf.com.ua" ®

©2024 MDPC Publishing ®

©2024 Authors of the articles

УДК 616.89-008.441-084:616.314.17-008.1-018.1

APPLICATION OF METHODS AND EXERCISES TO OVERCOME ANXIETY IN PATIENTS WITH GENERALIZED PERIODONTAL LESIONS

Horodnov Yevhen

graduate student of the Department of Stomatology IPO, National Medical University named after O. O. Bogomolets Kyiv, Ukraine

Introduction. The professional activity of a dentist is one of the most emotionally stressful. This is connected with a large number of unpredictable and uncontrollable professional situations, with an unregulated work regime, with a high degree of professional and personal responsibility. In modern conditions, in order to provide comprehensive dental care to patients, the doctor must take into account not only the nature of the main disease, but also the features of the patient's anxiety state and his attitude to dental treatment.

Dystrophic-inflammatory diseases of the periodontium (primarily generalized periodontitis) are an urgent problem in dentistry. This is due to their significant prevalence, constant progression of the dystrophic-inflammatory process, first of all, generalized periodontitis. These diseases require long-term treatment and close interaction between the dentist and the patient. Unfortunately, dental treatment causes some fear in patients, during a dental appointment, doctors observe anxiety, psycho-emotional tension and fear in approximately 40.9% of patients [1; 2].

In the dental office, the patient's reaction to previous dental manipulations is accompanied by emotional stress and varies from episodes of dental anxiety to the development of neurosis. Persistent psycho-emotional attitude to pain, negative experience of previous treatment, dental anxiety before the intervention delay the patient's visit to the doctor for a long time. All this negatively affects the results of treatment, aggravates and complicates treatment during a dental appointment. The level of anxiety of patients, both personal and reactive, caused by a visit to the dentist plays a significant role during the appointment with the doctor, affects trust during

communication and affects the quality of dental services in general [2].

The analysis of the literature on this issue allows us to consider anxiety from different points of view. Some of them allow the statement that increased anxiety arises and is realized as a result of a complex interaction of cognitive, affective and behavioral reactions that provoke the impact of various stresses on a person.

The author K. Horney (1978) drew attention to the fact that the emergence and consolidation of anxiety is connected with the dissatisfaction of the leading age-related needs of the child, which acquire a hypertrophied character [5].

D.Watson (1984) believed that neurotic disorders are conditioned emotional reactions and occur according to the scheme of I. P. Pavlov. In the course of his research, the author discovered that it is easy to cause acquired anxiety, but it is extremely difficult to achieve its disappearance [8].

C. D. Spilberger (1975) and R. S. Lazarus (1984) believe that "anxiety" emphasizes the experience of emotional discomfort associated with the expectation of trouble or anticipation of the threat of danger. In other words, the term "anxiety" is most often used to describe an unpleasant, temporary mental state of an individual caused by the influence of stressful factors.

Anxiety occurs when an individual perceives a certain stimulus or situation as containing potential elements of danger, threat or harm [7; 6].

S. V. Black (2007), studying the neuro-psychophysiological states of anxiety in a person, showed that the personality traits that characterize his state are associated with a decrease in the power of the frequency components of the electroencephalogram (EEG).

These features are related to the activity of the frontal, temporal, parietal and central areas of the cerebral cortex. The characteristics of evoked and related EEG effects indicate the specifics of the patients' anxiety response: it begins earlier in them, but the analysis of information requires more time [4].

The analysis of literary works makes it possible to generalize that a person's long stay in a state of anxiety leads to exhaustion and the development of typical psychosomatic disorders.

The purpose of the work is the study of scientific developments, the elaboration of research results and the determination of methods of prevention and overcoming anxiety in patients with generalized periodontal lesions.

Research materials and methods. To achieve the goal, an examination of 157 patients with generalized periodontal diseases associated with manifestations of anxiety at the age of 35–55 was carried out. The gender composition of the patients was as follows: men (28.7%) and women (71.3%) with manifestations of the initial and intermediate state of periodontal tissue lesions.

Research results and their discussion. During the initial examination of patients with generalized periodontal diseases associated with manifestations of anxiety, complaints of bleeding during the intake of solid food (94.8% of patients), discomfort in the gums (87.3%), and complaints about the mobility of individual teeth came to the fore. (42.7%), bad breath from the oral cavity (58.5%) and rapid formation of dental plaque (62.4%). During the objective examination, hyperemia, cyanotic shade of the gums, change in the shape of the gingival papillae, thickening of the marginal edge, looseness and swelling of the gums were found in the patients. Significant deposits of supragingival and subgingival calculus were observed in 72.4% of the examined. To the indicated in 42.5% of patients, periodontal pockets were observed, which had a depth of 2.0 mm to 4.0 mm, mainly in the area of the interdental spaces. We also found gender differences in the satisfactory condition of the oral cavity, which was more often diagnosed in women 17.7% versus 25.9% in men (p<0.01). As a result, insufficient oral hygiene was more often observed in men (51.5%) versus 27.3% (p<0.05) in women. The obtained results indicate the poor condition of the oral cavity in patients, which is one of the etiological factors of periodontal diseases.

We also tested the Korach DAS dental anxiety scale. The results of the research claim that patients do not feel any special worries while waiting for a meeting with a dentist (21.5% of women and 36.7% of men), 14.6% of female patients and 26.5% of male patients experience anxiety, they are afraid of painful feelings of 37.5% of women and 16.9% of men, 24.5% of women are frightened by

possible actions of the doctor and 18.5% of men. According to the results of the survey, it was found that relaxation in the dentist's chair during the preparation of the drill for work is characteristic of 3.0% of women and 10.1% of men: the state of anxiety is inherent in 17.2% of female patients and 32.6% of male patients; tension is present in 28.3% of women and 23.2% of men; 21.9% of women and 17.7% of men feel anxiety and fear.

That is, a visit to the dentist causes many patients stress, anxiety, restlessness, nervousness of varying degrees. When carrying out medical interventions that require the accuracy of manipulations, an anxious patient harms the doctor's work and negatively affects the quality of the performed manipulation.

Since a high level of anxiety negatively affects the patient's personality and the effectiveness of his treatment, it is necessary to select appropriate methods and techniques for preventing anxiety. For this purpose, we have selected methods and exercises that help to harmonize the psycho-emotional state of a patient suffering from as much from anxiety and stress as from their consequences (psychosomatic pain, insomnia, chronic fatigue, etc.).

Prevention of the negative impact of anxiety on the body consists in reducing the time or force of stress factors on a person by means of self-regulation of breathing, thinking, imagination or muscle tone. Such prevention can be carried out both during a stay in an anxious or stressful situation, and after leaving it. At the stage of psychological support, individual consultations with a medical psychologist or psychotherapist were carried out as necessary, the dynamics of changes in the characteristics of anxiety were monitored.

Under the influence at the psychophysiological level, the researcher O. Igumnova understands the mastery of the means of normalization of vegetative functions, neutralization of neuropsychological stress, techniques of relaxation and inhibition of unwanted reactions in difficult situations; acquiring activation skills, increasing general tone, increasing internal stability and neuropsychological stability of the individual [3].

To overcome dental anxiety, we have selected a variety of modern techniques

and exercises that can be used for self-help and correction of emotional states. Techniques are effective only for a certain group of people - there are no techniques that are effective for everyone.

It is easier for one person to normalize his psychological state through muscle relaxation, for another through motor activity; someone better uses the possibilities of imagination, and someone - abstract and logical thinking. Therefore, you can try all the techniques, and it is worth using only those of them that turned out to be the most effective.

Methods of breathing control. When a person is worried, his breathing becomes frequent and shallow. If in stressful situations you make sure that your breathing remains deep and slow, you can prevent an excessive emotional reaction.

«Rhythmic breathing». When you notice that you start to get excited (excited, tense, indignant), start breathing "one - two - three". Inhale (1 - 2 - 3), exhale (1-2-3). Then try to make the exhalation even longer (1 - 5, 1 - 7).

«Breathing through the hands». In order not to be distracted by the number, you can simply imagine that you are "breathing with your hands": you inhale air through one hand, and exhale through the other. Thanks to this simple technique, you will not only be able to maintain a slow breathing rate, but also not lose contact with the body.

«Combined breathing». This method makes it possible to simultaneously use three groups of techniques for the prevention of anxiety: slowing down breathing, maintaining contact with the body, and relaxing the body muscles. To do this, it is necessary to inhale first on a full chest so that it rises noticeably. Then "move" the air to the abdomen (it should also inflate). Exhalation is carried out in two stages: first, air is pushed out from the abdomen, then from the chest. 4-5 such combined inhalations and exhalations will help you feel much calmer and relaxed.

Exercise «Breath control».

Purpose: relief of physical and emotional tension, relaxation.

Instructions: This is an effective means of influencing muscle tone and emotional centers of the brain. Slow and deep breathing (with the participation of the

abdominal muscles) reduces the excitability of the nervous centers, promotes relaxation, that is, relaxation. Frequent (chest) breathing, on the contrary, ensures a high level of activity of the body, supports nervous and mental tension. While sitting or standing, try, if possible, to relax the muscles of the body and focus on breathing. To the count of 1-2-3-4, take a slow deep breath (at the same time, the stomach protrudes forward, and the chest is still); for the next four counts, breath is held; then smooth exhalation to the count of 1-2-3-4; again a delay before the next breath on the count of 1-2-3-4.

Already after 3-5 minutes of such breathing, you will notice that your condition has become noticeably calmer and more balanced.

Exercise «Alternate nostril breathing».

Purpose: relief of physical and emotional tension, relaxation.

Instructions: A person closes one nostril, inhaling through the other, and then moves to exhalation through the other nostril. In a sitting position, place your left hand on your left knee. To begin, inhale and exhale. Raise your right hand to your nose. Bend the index and middle fingers to the palm, leaving the thumb, ring finger and little finger extended. Close the right nostril with the thumb of the right hand. Inhale through the left nostril. Close the left nostril with the ring finger. Release the right nostril and exhale. Inhale through the right nostril. Close the right nostril with the thumb. Release the left nostril and exhale. Alternate nostril breathing, known as Nadi Shodhana, is a yoga breathing technique that can lower blood pressure and improve focus. However, if during the exercise a person begins to feel dizzy, one should return to normal breathing.

Exercise «Breathing with frequency».

The goal: to help reduce anxiety and allow the person to enter a relaxed state.

Instructions: Lying with your eyes closed, inhale through your nose with your mouth closed, counting to six. The lungs should not be too full. Exhale slowly and carefully, counting to six, without forcing your breath. Continue the exercise if necessary for up to 10 minutes. After performing the exercise, the person should remain still and focus on feeling well for several minutes. Although the resonant

frequency of breathing varies from person to person, a typical range is 4-5 to 7 breaths per minute.

Conclusion. Therefore, the treatment of periodontal tissues today includes therapeutic, surgical, physiotherapeutic and other measures, which are the basis for preventing the development and progression of destructive changes in the periodontium. But no less important diagnostic techniques in outpatient dental practice are: observation of the patient's behavior, his motility, emotional and vegetative reactions; survey allowing to find out the peculiarities of subjective experiences and the patient's attitude towards them, so the dentist must not only know the basics of medical psychology and psychoprophylaxis, but also apply them in his daily practice; mastery of preventive techniques and exercises for overcoming anxiety. These techniques can help the patient cope with some of her symptoms, such as rapid breathing, palpitations, and muscle tension.

REFERENCES

- 1. Antonenko M. J. Scientific development of a daily strategy for the prevention of periodontal diseases in Ukraine [Naukove obgruntuvannia suchasnoi stratehii profilaktyky zakhvoriuvan parodonta v Ukraini]: dis. Doctor of Medical Sciences; Ministry of Health of Ukraine, National Medical University named after O. O. Bogomolets. Kyiv; 2012. 419 p. [Ukrainian]
- 2. Antonenko M. Y., Borisenko A. V., Horodnov Y. V. Predictors of anxiety in patients with generalized periodontal disorders [Predyktory tryvozhnosti u khvorykh z heneralizovanymy urazhennia myparodonta]. In: Science and society: modern trends in a changing world. Proceedings of the 1st International scientific and practical conference. Vienna, Austria, 2023. P. 72-80.
- 3. Igumnova O. B. Directly psychocorrections of negative mental states of students [Napriamy psykhokorektsii nehatyvnykh psykhichnykh staniv studentiv.]. Scientific notes of the National University "Ostrozka Academy". Series: Psychology and pedagogy. 2014;30:64-68[Ukrainian]
 - 4. Chorny S. V. Neuro and psychophysiological analysis of the development of

anxietyin people [Neiro ta psykhofiziolohichnyi analiz stanu tryvozhnosti u liudyny]: author's abstract. dis. On health sciences. Ph.D. level biologist Sciences: spec. 03.00.13 Simferopol; 2007. 21p. [Ukrainian]

- 5. Horney K. Gentle rebel of psychoanalysis. New York: Dial Press; 1978.
- 6. Lazarus R. S, FolkmanS. Stress, Appraisal and Coping. New York: Springer; 1984. P. 381–403.
- 7. Spielberger C, Sarason.J.G. Stress and anxiety. Washington, D. C; 1975. P. 12–56.
- 8. Watson D, Clark L. Negative affectivity: the disposition to experience aversive emotional states. Psychol. Bulletin. 1984; 96(3): 465-490. Horodnov Yevhen Vadimovych https://orcid.org/0009-0002=8743-4217