

DENTAL ANXIETY AS A SPECIAL PLACE IN SCIENTIFIC KNOWLEDGE

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ABSTRACT

Anxiety and fear are part of the normal development of a child, and, as a rule, the development of fear and anxiety is transient. Panic fear of dentists is a disease called dentophobia, odontophobia or dental phobia. A person suffering from such a disease simply cannot cross the threshold of a dental office, even when the toothache becomes completely unbearable. It is important here to distinguish normal anxiety before a visit to the doctor from a panic state. If anxiety gives way to the arguments of reason, then, naturally, there is no disease. If, at the mere thought of dental treatment, your blood pressure jumps to unknown heights, your heart starts racing, and you are unable to follow even the simplest instructions from the doctor, then you have dental phobia. As you cannot hide from dental problems. Caries and tooth loss are fraught with gastrointestinal diseases, migraines, even scoliosis. In addition, prevention is not only much less painful, but also costs less than serious treatment. So, what should dentophobes do?

Key words: Fear, dental phobia, fear of the dentist, children's reactions, correction of fear and anxiety.

The problem of anxiety occupies a special place in modern scientific knowledge. A significant amount of research has been devoted to it, not only in psychology, but also in medicine, physiology, philosophy, and sociology.

In the last decade, interest in the study of anxiety has increased significantly due to drastic changes in the life of society, generating uncertainty and unpredictability of the future and, as a consequence, experiences of emotional tension, worry and anxiety. At the same time, it should be noted that even now in our country anxiety is studied mainly within the narrow framework of specific, applied problems (school, exam, competitive anxiety, anxiety before visiting the dentist, during dental procedures, etc.). This situation in the study of the problem of anxiety is largely due to the logic of the development of domestic psychological science, in which the study of emotions, emotional states, and dominant emotional experiences of an individual was carried out mainly at the psychophysiological level, and the area of stable formations of the emotional sphere remained essentially unexplored. The study of anxiety in children and adolescents (genetic aspect) is also, as a rule, of a clearly applied, “service” nature. Understanding anxiety as an emotional state, and anxiety as a stable personal formation (the latter term is also used to refer to the entire phenomenon as a whole), we proceed from the fact that a certain level of anxiety is normally characteristic of all people and is necessary for a person’s optimal adaptation to reality. The presence of anxiety as a stable formation is evidence of disturbances in personal development that impede normal development, activity, and communication. Anxiety is considered here as an emotional-personal formation, which, like any complex psychological formation, has a cognitive, emotional aspect. Anxiety is considered as an experience of emotional discomfort associated with the expectation of trouble, the premonition of impending danger. The fact that anxiety, along with fear and hope, is a special, anticipatory emotion, ensures its special position among other emotional phenomena. The main problem with dental appointments is that most of the procedures seem to be or are invasive. A child in a dental clinic is surrounded by a huge number of stimuli that cause physical discomfort and disturbing emotions, so the child patient’s behavior often takes on a protest character.

For some children, dental fears and anxieties do not go away and become persistent and problematic. There are many different mechanisms that have been proposed to explain the development of childhood phobia in children; however, there is general agreement that the etiology of childhood dental phobia is multifactorial.

Exogenous sources of child phobia are external factors, which include direct experience (for example, traumatic) and indirect experience (indirect information). Endogenous sources of dental phobia are internal factors that make people susceptible to the development of dental anxiety.

The vast majority of children suffer from needlephobia and are concerned about the sensation of pain, especially during intraoral anesthesia. Especially, palatal injections cause dental phobia.

The presence of fears and anxieties is considered part of normal child development and follows the consistent and predictable pattern of adult life. Poor communication between the dentist and the patient not only contributes to the development of dental phobia, but also plays an important role in maintaining dental anxiety. It is therefore important that dental staff are aware of how their behavior can affect children. Strategies for the correction of dental fear and anxiety (DFE) in children include, but are not limited to, minimally invasive dental aspects such as atraumatic restorative treatment (AVL) and chemical-mechanical caries removal (CMCA) techniques; hypnosis; behavioral interventions or behavior management techniques; music; relaxation and pharmacological agents, including the use of benzodiazepines and antidepressants. Medicines provide only short-term effective solutions, but there is a high relapse rate and an increased risk of drug side effects.

Choosing the right treatment for dental anxiety is not always easy. A cooperative dental patient is critical to the success of treatment, so it is important for the dentist to manage the psycho-emotional state of the patient, especially the child.

Some countries have established specialized dental clinics that can be used by adult patients with severe dental anxiety, and these clinics provide specialized care, including both non-pharmacological and pharmacological treatments. In addition to

helping patients treat dental anxiety, these clinics promote short-term and long-term dental care.

The purpose of the study was to determine the level of anxiety in children at an outpatient dental appointment in order to improve the efficiency of providing dental care to children. The study was conducted at Samarkand State Medical University in 2019-2023. Children who applied to the dental clinic, 100 child patients were selected using a sampling method, who were divided into two groups - the control group (46 children) and the main group (54).

The examined children, according to physiological and biochemical age standards, were divided into age groups:

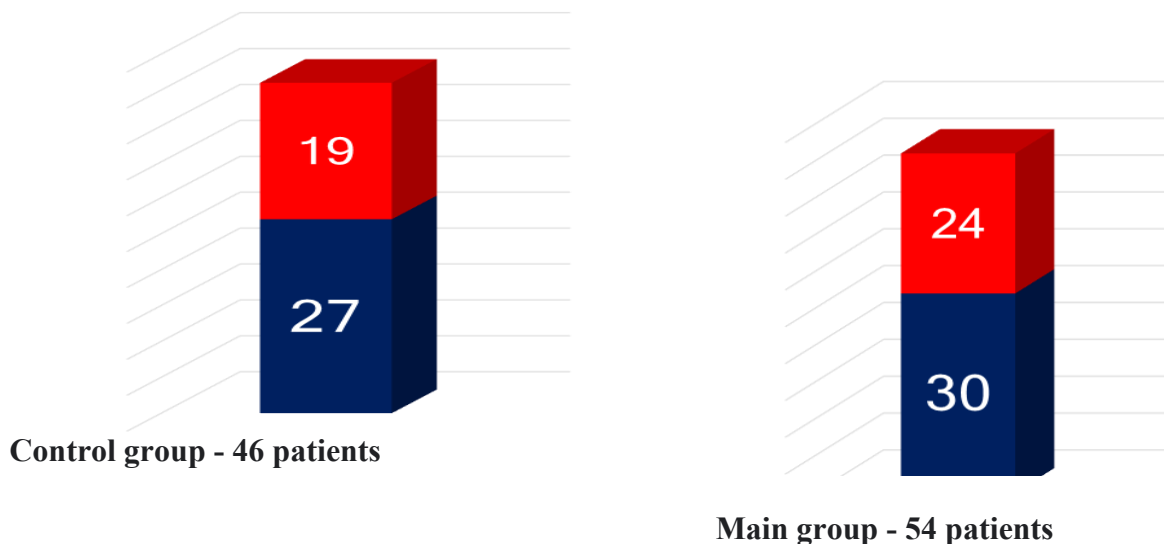


Figure 1 Children examined

The objectives of the psychological and sociological research included: assessing emotional tension, identifying dental phobia, objectively assessing the behavior of children at dental appointments, identifying factors causing dental anxiety. The objectives of the study of somatic status included: measurement of diastolic blood pressure, measurement of heart rate with subsequent calculation of the vegetative Kerdo index. The objectives of the biochemical study included: studying the concentration of salivary cortisol and determining the rate of salivation.

Changes in the activity of the autonomic nervous system are the result of the influence of dental anxiety experienced by the child. Fear and anxiety are the cause of the development of autonomic reactions that affect the functioning of the cardiovascular system. An indicator of the ANS activity changing under the influence of psycho-emotional stress is the Kerdo autonomic index, the calculation of which requires values of heart rate and diastolic blood pressure. For this purpose, children's heart rate and blood pressure were measured twice - before and after the use of NFMCP.

The Frankl behavioral scale was used - an objective assessment of anxiety, according to which the behavior of children at the dental office can be divided into four categories: absolutely negative, in which treatment is refused; negative – treatment is accepted with reluctance; positive – treatment is accepted with caution; absolutely positive – good contact with the doctor, laughter and joy of the child.

In children aged 6 years, the Luscher color test was used to assess the psycho-emotional state, according to which 4 points scored by the patient correspond to a favorable emotional state, 3 - satisfactory, 2 - unsatisfactory (requires specialist help), 1 - the child is in a crisis state and needs help from a psychologist or psychotherapist. Depending on age, all children were divided into 3 groups: 6-year-olds (19 children), 7-10-year-olds (46 people), 11-15-year-olds (45 people).

In a sociological study to identify the causes of dental anxiety, it was revealed that most anxiety at an outpatient dental appointment is caused by the expectation of pain - $50\% \pm 2.15$. The next big irritant is local anesthesia (injections) - $33\% \pm 2.97$; $32\% \pm 2.3$ are afraid of the sound of a drill; the light of the lamp causes psycho-emotional stress in $3.8\% \pm 1.1$, and the dentist's comments about the condition of the oral cavity – in $2.7\% \pm 1.3$ children.

Results and conclusions: thus, dental anxiety and dental phobia in children and adolescents are often the reason for late seeking dental care, leading to a complication of the treatment process and a worsening prognosis; these patients have poor contact

with the specialist and often do not follow his recommendations. They also reduce the effectiveness of local anesthesia, leading to the fore need for additional anesthetic injections, and the present study found injections to be a major irritant for children, with $33\% \pm 2.97$ patients finding injections a cause for concern.



You should also avoid, if possible, excessive criticism about the condition of the patient's oral cavity, and spend more time on preventing the further development of existing dental diseases. The main focus in preparing children for dental treatment, the pediatric dentist should pay to explaining the safety of the sound of the turbine handpiece; painlessness of local anesthesia (with demonstration of thin small needles used) and subsequent manipulations after the onset of anesthesia. Additionally, it has been found that anxiety during dental treatment leads to poor cooperation with the dentist, leading to unnecessary difficulties in performing dental procedures and unsatisfactory results. It was found that insufficient attention is paid to psychotherapeutic methods for correcting psycho-emotional stress, despite their undoubted advantages.

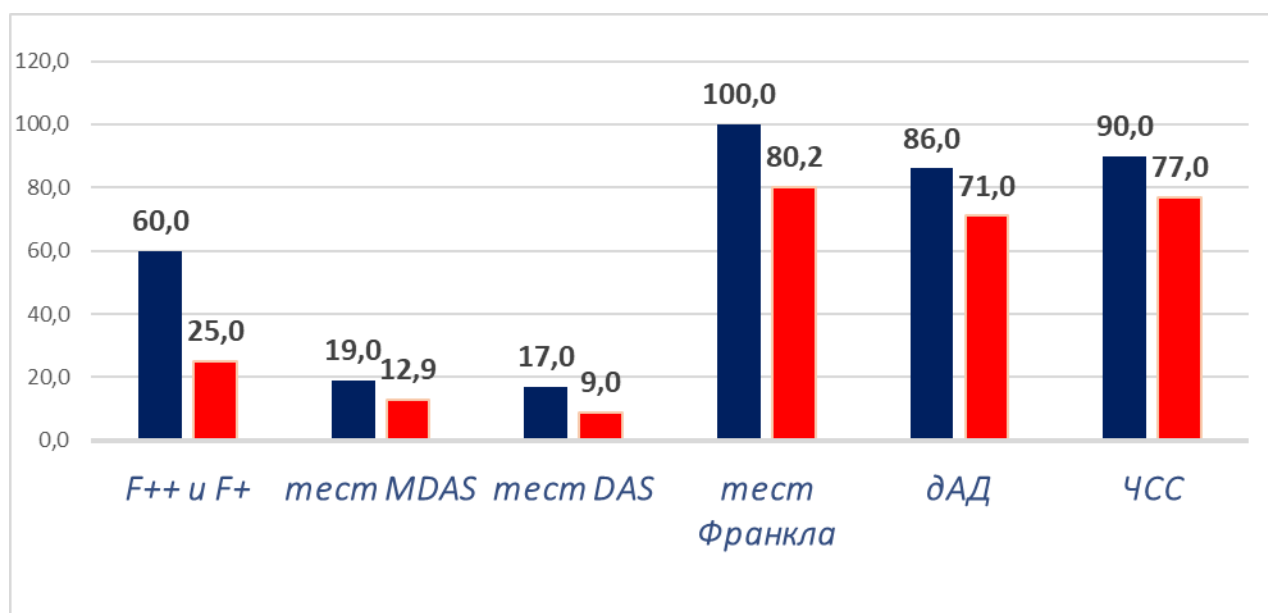
Conclusion: thus, we can conclude that dental anxiety is common among children 6-15 years old and as a result of our research, we found that children with low levels of anxiety more often visit the dentist for a preventive examination, and children with high levels of anxiety go to the dentist, as a rule, only in emergency cases;

- the diagnosis with which the child is referred to the dentist does not affect the level of anxiety;

- children who had a preliminary conversation before visiting the dentist experienced a lower level of anxiety;

- among the reasons for fear of visiting a dentist, the main ones are: anticipation of pain, discomfort during treatment and negative experiences of dental treatment in the past.

Table 2



Thus, we can conclude that visiting the dentist for preventive purposes reduces the child's anxiety level at the appointment; a preliminary conversation before visiting the doctor also has a beneficial effect. Possible causes of children's fears include the excitement and anxiety of the parents themselves.

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