

## IMPORTANCE OF CLINICAL AND PSYCHOLOGICAL PECULIARITIES OF ADOLESCENTS IN THE EVALUATION OF ADAPTATION TO NON-REMOVABLE ORTHODONTIC EQUIPMENT

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**Introduction:** Today, among all age groups, the problem of interruption of orthodontic treatment that has begun is still relevant. The main reasons for this phenomenon are the duration of use of orthodontic structures, the inconvenience associated with this, general health, age, social conditions, pain in the teeth, discomfort, diction disorders, lack of motivation. In addition, according to numerous authors, psychological factors play an important role in the course of the orthodontic treatment process. It is known that the peak of the clinical manifestations of dentition is in adolescence. It was during this period that adolescents are most difficult to respond to physical disabilities, which is often due to the lack of psychological defenses, the transformation of personal attitudes, including due to hormonal changes. Against this background, the inconvenience experienced by adolescents, the incorrect formation of attitudes to communicate with peers, the perception of their treatment forces them to often interrupt the initiated correction. Incomplete treatment is fraught with recurrent pathology, periodontal occlusive trauma, and dysfunction of the temporomandibular joint. In this regard, the psychosocial aspect of research in orthodontics remains highly relevant.

**Objective:** Assess the relationship of clinical and psychological features and adaptation to orthodontic appliances.

**Subjects and methods:** On the basis of the Clinical Center for Maxillofacial, Reconstructive-Restorative and Plastic Surgery, 40 adolescents aged 12-17 years were examined, which were divided into 2 groups in accordance with the periodization of the psychological development of D.B. Elkonin (group 1 - 12-14 years (20 adolescents), group 2 - 15-17 years (20 adolescents)). The main research methods were: dental, clinical and psychological methods, as well as a statistical method, which was carried out using an application package Statistica 12.0 and Microsoft Office Excel 2010. Psychometric techniques were used: 14-factor personal questionnaire of Cattell (option for teenagers from 12 to 18 years, consisting of 142 questions), test SAN (well-being, activity, mood), questionnaire of situational and personal anxiety of Spielberger - Khanin, a questionnaire was used to assess the degree of adaptation to fixed orthodontic equipment AKOL.

**Results:** Initially, an assessment was made of data obtained by the Kettel questionnaire. It was found that in group 1, high values of factor «E» were found, which determined the leadership style of interaction with others. However, this fact was not associated with true leadership, but rather was a feature that manifests itself more in extreme situations where there is a need to maintain temporary leadership in informal groups. In addition, such individuals were distinguished by high tenacity in the fight against norms, attitudes in the group, a tendency to self-affirmation. Also, high values in group 1 were found by the factor «Q3», which was reflected in high control of behavior, social sensitivity, care for their own reputation. The image of «I» of such personalities almost coincided with the requirements of society.

Patients of group 2, on the contrary, differed in high values of factor «I», which corresponded to the tendency to avoid responsibility in work and personal relationships. Such individuals were more characteristic of unreasonable anxiety, impatience, impracticality, lack of autonomy, dependence, demands to the attention of others. Such individuals did not tolerate rudeness and rough work. Estimates for the remaining scales of the Kettel questionnaire were in the range of moderate values.

The SAN questionnaire in groups 1 and 2 showed similar results, namely, reduced values on the «well-being» and «activity» scales, as well as average values on the «mood» scale, which indicated an even background of mood, and, at the same time, some psychophysical fatigue surveyed adolescents of both groups. It can be assumed that such data on the SAN questionnaire reflected fatigue associated with wearing fixing orthodontic systems. The Spielberger-Khanin anxiety questionnaire showed that in groups 1 and 2 the levels of situational and personal anxiety were in the zone of moderate values. At the same time, the level of situational anxiety was higher in adolescents of group 2. The levels of personal anxiety in both groups were close. Next, an assessment was made of the degree of adaptation to fixed orthodontic equipment using the AKOL questionnaire. The criteria of the questionnaire were the following gradations: good adaptation (3 points and below), satisfactory adaptation (4-6 points), poor adaptation (7-9 points), disadaptation (10 points and above).

As a result, it was found that the median value according to the AKOL questionnaire in group 1 was 4 points, which corresponded to satisfactory adaptation. In group 2, on the contrary, the median value according to the AKOL questionnaire corresponded to 1.5 points, which explained the good adaptation of these patients. To assess the relationship of clinical and psychological indicators and the degree of

adaptation to fixed orthodontic equipment, multiple regression analysis was used. The value according to the AKOL questionnaire was selected as the dependent variable, the values of the scales of the Cattell questionnaire, the SAN questionnaire and the Spilberger-Khanin anxiety questionnaire were taken as predictors capable of predicting the value of the dependent variable. As a result, a multiple linear regression model was constructed, which with 75 percent probability predicted the quality of adaptation in patients. Statistically significant predictors of the regression model were Kettell's questionnaires «E», «I», «Q3». The estimated potential predictors of the questionnaires used were not statistically significant.

**Conclusions:** This study was devoted to assessing the relationship of the clinical and psychological characteristics of adolescents undergoing orthodontic treatment, and the degree of adaptation to fixed orthodontic equipment. The findings of the study indicate that the quality of adaptation of adolescents is predominantly linearly dependent on their personal characteristics, which were determined using the Cattell questionnaire. Understanding the psychological characteristics that make it possible to predict the adaptation potential of a teenager to fixed orthodontic equipment will allow the orthodontist to take a more differentiated approach to providing quality orthodontic care to each teenager, depending on his personal characteristics.

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## IMPORTANCE OF THE VOCATIONAL EDUCATION AND COMPETENCES OF PARENTS IN THE RECOGNITION PSYCHOGENIC PSYCHIATRIC DISORDERS AMONG CHILDREN

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**Background:** Research, set in different countries, shows a lower coverage level of diagnostic and curative assistance of juvenile patients with psychiatric disorders than in adults, and also problems with professional training of child mental health specialist. The results of epidemiological research-based studies were compared with the level of registered prevalence of PTSD (Posttraumatic Stress Disorder) of children in the Sverdlovsk region, this comparison showed a significant (by a thousand) difference. The Factor of parental competence needs to be studied, since parents often minimize the symptoms of PTSD of their children.

The aim of the research is to investigate the ability of specialists from mental hospitals and ability of parents to correctly recognize the PTSD in children.

**Subjects and methods:** We investigated 55 specialists from mental hospitals (age  $43.314 \pm 2.978$ , 16 male, 39 female). It was 13 psychotherapists, 11 clinical psychologists, 31 psychiatrists. 26 specialists had training in PTSD before this research (10 male, 16 female, age  $40.464 \pm 3.105$ ). Control group consisted of 29 specialists (6 male, 23 female, age  $46.783 \pm 5.471$ ).

Also we investigated 109 parents of adolescents (age of adolescents  $15.7 \pm 1.02$ ). Had been surveyed 50 parents of patients of the Child Psychiatric Clinic and 59 parents of healthy students of school №138 of Ekaterinburg. Main group consisted of 59 parents (7 male, 52 female, age  $40.21 \pm 1.04$ ). Control group consisted of 50 parents (7 male, 52 female, age  $40.21 \pm 1.04$ ). We used the semistructured inquirer. The ability to correctly recognize the disorders was revealed using the amount of right answer. We gave every answer mark "correct/incorrect". It was made correlation analysis of obtained data (answers, socio-demographic features, and professional qualities).

**Results and discussions:** We revealed that level of identification of PTSD among others disorders had low result (level of identification of PTSD in young children was 65.4%, in adolescent - 67.3%). We didn't reveal significant correlation between correct identification of PTSD and socio-demographic features of specialists ( $p > 0.05$ ).

We revealed that psychiatrists have low level of identification of PTSD in young children (V Cramer = 0.485,  $p < 0.05$ ). But psychologists have high level of identification of PTSD in young children (V Cramer = 0.363,  $p < 0.05$ ). It was revealed that there is significant correlation between experience in training in PTSD and level of correct identification of PTSD in young children (V Cramer = 0.614,  $p < 0.05$ ).

Consequently, psychiatrists have low level of identification of PTSD in young children in comparison to psychologists. We assume that the reason of this is the predominance of biomedical model in psychiatrists as opposed to biopsychosocial model. Psychiatrists demonstrate the improvements of ability in identification of PTSD after thematic training. So they have low level of competence in clinical features of PTSD in children.