

Screening-Diagnostics of Preclinical Mental States during Preventive Psychiatric Examinations of Adolescents

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Abstract

The aim of the study is a comparative assessment of the data of psychodiagnostic screening questionnaire and the results of psychiatric preventive examination of adolescents. Materials and methods. In the period 2017 - 2019, during preventive psychiatric examinations, a clinical examination and psychodiagnostic screening questionnaire were conducted (these studies were carried out independently in the interval of 1 week). In total, 719 adolescents of high school students of secondary schools in Kirov were examined, the average age was 15.2 ± 0.68 years. Results. Psychodiagnostic screening allows significantly more often to detect prenosological signs of anxiety, depression, asthenia, aggression in adolescents in comparison with clinical preventive psychiatric examination. Summary. The inclusion of psychodiagnostic screening in preventive psychiatric examination of adolescents as a preparatory stage will allow to identify more effectively the initial symptoms of mental disorders and prenosological conditions at the stage of clinical examination and to start psychoprophylactic and rehabilitation measures in a timely manner.

Keywords: Adolescents; Psychodiagnostic Screening; Prevention of Mental Disorders

Abbreviations

STPI: State Trait Personal Inventory; CDI: Child Depression Inventory; MFI-20: Multidimensional Fatigue Inventory

Introduction

Mental health of the young generation in the modern world is under the constant influence of socio-economic, information stresses, which often adversely affect the psyche of the emerging personality [1]. In this regard, the monitoring of mental health of adolescents, psychoprophylactic measures, psychohygienic education of the younger generation, their relatives and teachers is a promising environmental direction of medicine.

The main task of preventive psychiatry is the early detection of preclinical (prenosological, premorbid) forms of mental disorders and risk groups. The term preclinical (prenosological, premorbid) psychopathological states described in the works of S. B. Semichov (1987), Yu.a. Alexandrovsky (2000), etc., include a group of phenomena occupying an intermediate position between the mental norm and pathology. In this regard, it is customary to distinguish the concepts: constitutional premorbid, psychopathological and psychosomatic diathesis, pre-pain [2].

In adolescence, pre-painful psychopathological states for a long time may have a hidden low-symptom character and manifest themselves in the form of subclinical forms of anxiety, subdepression, aggression, asthenia and/or maladaptive behaviors (autoaggressive, addictive, oppositional-protest, criminal), which complicates their early detection [3,4].

Ignoring by parents and teachers of deviant forms of behavior and psycho-emotional discomfort in adolescents later in an unfavorable psychological climate and social situation leads to the emergence of a clinic of affective, neurotic, personal and behavioral disorders that require longer-term drug and psychotherapeutic correction [5].

Thus, prenosological psychopathological states in adolescence have low-symptomatic phenomena of affective, neurotic, psychosomatic, personality disorders, often masked by behavioral deviations in the form of autoaggressive behavior, chemical and non-chemical addictions, delinquency.

According to the Order of the Ministry of health of the Russian Federation of August 10, 2017 N 514N in Russia preventive medical examination by the psychiatrist of minors of 14 - 17 years is annually carried out. The main tasks of preventive psychiatric examination is the diagnosis of mental diseases, preventive psychoprophylactic and psychoeducational work with persons who have a high risk of developing mental pathology, including measures aimed at psychosocial rehabilitation of the surrounding environment.

According to our data, in the process of routine clinical psychiatric examination it is possible to detect only obvious manifestations of mental disorders. We analyzed the data obtained during preventive psychiatric examinations in 2019. It was examined by psychiatrists 8 262 minors 14 - 17 years old, studying in secondary schools in Kirov. Among students, mental disorders were detected only in 189 people (2.29%). When examined by psychiatrists, the following were revealed: intentional self-harm in 0.58%, depressive spectrum disorders- 0.45%, stuttering- 0.13%, Internet addiction- 0.06%, tics- 0.05%, hyperkinetic behavior disorder- 0.05%, neurasthenia- 0.05%, socialized behavior disorder- 0.04%, non-socialized behavior disorder- 0.04%, eating disorders (anorexia)- 0.02%, anxiety disorders- 0.01%. The findings clearly do not correspond to the true prevalence of mental disorders in adolescents.

To increase the effectiveness of detecting the initial signs of mental disorders and prenosological conditions, it is necessary to introduce psychodiagnostic screening questionnaire into preventive psychiatric examinations [6].

Aim of the Study

The aim of the study was a comparative assessment of the data of psychodiagnostic screening questionnaire and the results of preventive psychiatric examination of adolescents.

Materials and Methods

In the period 2017-2019 in the process of preventive psychiatric examinations was examined clinically and psychodiagnostically using psychodiagnostic screening questionnaire (these studies were conducted independently in the interval of 1 week). A total of 719 adolescents (high school students of secondary schools in Kirov) were examined, the average age was 15.2 ± 0.68 years. The study included adolescents with the informed consent of their parents and the voluntary consent of the teenager. Adolescents with chronic somatic diseases and adolescents with existing mental disorders were excluded from the study.

The study used a clinical method involving psychiatric examination in the process of preventive examination. The psychodiagnostic method included psychodiagnostic screening questionnaire aimed at identifying psychological characteristics and prenosological signs of mental disorders in adolescents. The questionnaire was developed by the staff of the Department of psychiatry of the Kirov state medical University M. V. Zlokazova and N. V. Semakina (2017). The questionnaire questions were compiled on the basis of questionnaires by C. D. Spielberger (STPI) to identify anxiety, aggressiveness of A. Bass and A. Darkey, depression of M. Kovacs (CDI), asthenia of E. M. Smets (MFI-20). The questionnaire includes groups of questions aimed at identifying anxiety (10 questions); aggressiveness (34 questions to

determine irritation, physical and verbal aggression); depression (26 questions to diagnose negative mood, anhedonia, interpersonal problems, negative self-esteem, school inefficiency); asthenia (8 questions); Internet addiction (17 questions); suicide risk (1 question), disharmonious relationships with parents (4 questions). Questions of the questionnaire were made based on long-term practical experience of authors in work with teenagers.

A computer program of psychodiagnostic screening was created („Vyatka state University”, Lansikh Yu. V., 2018), which allows to quickly obtain results when conducting a mass survey of school students.

For statistical processing the program Microsoft Office Excel, descriptive statistics, Fisher criterion was used.

Results and Discussion

Comparative analysis of the results of psychodiagnostic screening and preventive psychiatric examination showed significant ($p \leq 0.01$) differences in the diagnosis of signs of anxiety, subdepression, asthenia.

Screening was significantly more likely to reveal signs of anxiety (anxiety, anticipation of trouble, doubts in decision-making, anxiety for possible failures, expectation of unsuccessful grades in school) in 36.4% of cases, whereas in clinical psychiatric examination anxiety disorders were diagnosed only in 2.1%.

Depressive signs (constant depressed mood, anhedonia, negative self-esteem, isolation, decreased appetite) were determined in 23.2% of cases during screening, and in preventive examination- 1.5%.

Significantly more often during screening asthenic manifestations (rapid fatigue, frequent fatigue, physical weakness, difficulty concentrating, emotional lability) were noted in 11.2% of adolescents, at clinical examination neurasthenic disorder (mental fatigue, emotional lability, headaches after excitement and mental stress, superficial sleep and morning weakness during the last school year) was diagnosed in 1.1%.

The survey revealed signs of verbal and physical aggression in 2.5% of the surveyed, at clinical examination - 0.8%.

Screening in this sample of adolescents also revealed signs of Internet-dependent behavior in 4.5%. Disharmonious relationships with parents were noted in 6.7% of adolescents surveyed.

Conclusion

The results obtained indicate the effectiveness of screening for the detection of prenosological mental States in adolescents in comparison with routine preventive psychiatric examination, in which only clinically registered mental disorders are detected. It is necessary to use psychodiagnostic screening of adolescents as a preparatory stage of preventive psychiatric examination.

Psychodiagnostic screening before a medical preventive examination will allow a psychiatrist during a clinical examination to pay special attention to adolescents at risk with the presence of prenosological psychopathological symptoms (signs of anxiety, depression, asthenia, aggression, Internet addiction), and if necessary, recommend in-depth examination by a psychiatrist and/or psychotherapist. Identification of initial symptoms of mental disorders and prenosological conditions will allow to start psychoprophylactic and rehabilitation activities in a timely manner.

Currently, we are implementing a project of interdepartmental cooperation of medical and educational organizations of the city of Kirov for the prevention of mental disorders and behavioral disorders in adolescents. It is planned to conduct a mass programmed psychodiagnostic screening of high school students in schools, followed by the use of the results for the examination of adolescents at risk by school psychologists and psychiatrists during preventive examination. For adolescents in need of specialized (psychiatric, psychotherapeutic and psychological) care, programs have been developed along with the succession work of specialists (psychiatrists, psychothe-

rapists, psychologists) of medical and educational organizations to improve the effectiveness of rehabilitation and psychoprophylactic measures.

Conflict of Interest

There is no conflict of interest.

Bibliography

1. Makushkin EV, *et al.* "Children and adolescents in situations of social distress". *Journal of Neurology and Psychiatry* 117.11 (2017): 3-12.
2. Kotsyubinsky AP and Sheinina NS. "Psychopathological diathesis and issues of primary prevention of mental diseases". *Siberian Bulletin of Psychiatry and Narcology* (2006): 128-130.
3. Bannikov GS. "Early detection of potential and actual risk factors for suicidal behavior in minors". *Journal of Suicidology* 31 (2018): 82-91.
4. Palatov S Yu., *et al.* "The Influence of external and internal factors on the occurrence of borderline disorders in adolescents-schoolchildren and students". *Journal of Mental Health* 43 (2009): 62-64.
5. Lebedev MA., *et al.* "Prevalence, structure and dynamics of pre-painful border States in adolescents and young adults". *Journal of Mental Health* 49 (2010): 68-83.
6. Semakina NV, *et al.* "On the need to develop screening tests to identify prenosological forms of mental and addictive disorders in adolescents". *Journal of Child and Adolescent Mental Health Issues* 2.17 (2017): 216-217.

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