

SCHIZOPHRENIA SPECTRUM DISORDERS IN CHILDREN AND ADOLESCENTS: PREVALENCE AND DIAGNOSTICS

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The significance of studying the prevalence, age- and sex-related differences and diagnostic aspects of schizophrenia spectrum disorders (F2 Schizophrenia, schizotypal and delusional disorders) in pediatric and adolescent patients of mental health facilities is linked to the upcoming release of the International Classification of Diseases, Revision 11 (ICD-11). Its whole chapters have been updated, including disorders in the schizophrenia group. Diagnostic challenges posed by this debilitating group of mental disorders are associated with the diversity of clinical presentations, the incompleteness of psychopathological phenomena syndromes, and vague atypical symptoms. Changes in the prevalence of these disorders identified by the analysis of medical records at a mental health facility for children (a decline in the number of patients with F20, schizophrenia, and a surge in the number of patients with F21, schizotypal disorder) and significant disagreement about and disagreement about the diagnostic criteria for schizophrenia spectrum disorders in children and adolescents, evaluation of their dynamics, outcomes, and the social functioning of the patient necessitate further prospective follow-up studies aimed at overcoming the identified difficulties in the diagnosis, treatment and rehabilitation of such patients.

Keywords: ICD-10, children and adolescents, schizophrenia spectrum disorders, clinical forms, diagnosis, prognosis

Author contribution: Pankova OF conceived and designed the study, analyzed the obtained data, wrote and edited the manuscript; Kazin NM collected and analyzed the obtained data, wrote the manuscript; Ivanova SM analyzed the obtained data and wrote the manuscript.

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СОВРЕМЕННЫЕ ПРОБЛЕМЫ В ИЗУЧЕНИИ РАСПРОСТРАНЕННОСТИ И ДИАГНОСТИКЕ РАССТРОЙСТВ ШИЗОФРЕНИЧЕСКОГО СПЕКТРА У ДЕТЕЙ И ПОДРОСТКОВ

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Актуальность изучения показателей распространенности, половозрастных особенностей и диагностики расстройств шизофренического спектра (раздел F2 Шизофрения, шизотипические и бредовые расстройства) у детей и подростков — пациентов детских психиатрических клиник объясняется предстоящим вступлением в действие Международной классификации болезней (МКБ-11), в которой существенные изменения внесены в целый ряд разделов, включая расстройства из группы шизофрении. Трудности диагностики данной группы инвалидизирующих расстройств связаны с полиморфизмом клинической картины, синдромальной незавершенностью психопатологических феноменов, наличием «стертых» атипичных форм. Выявленные при анализе стационарных карт пациентов одной из детских психиатрических больниц изменения в структуре заболеваемости (уменьшение числа пациентов с диагнозом шизофрении (F20) и значительное увеличение числа пациентов с диагнозом шизотипического расстройства (F21)), а также серьезные противоречия в вопросах диагностики, оценке динамики расстройств, исходов, уровня социального функционирования больных позволяют подчеркнуть необходимость дальнейшего изучения с использованием клинко-катамнестических методов для преодоления выявленных трудностей и противоречий в диагностике, лечении и реабилитации данных пациентов.

Ключевые слова: МКБ-10, дети и подростки, расстройства шизофренического спектра, распространенность, клинические формы, диагностика, прогноз

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According to statistics, the detection rate of mental disorders, including psychotic spectrum disorders, in the Russian population is declining [1]. At the same time, a Russian study conducted in 2000–2018 has revealed a rise in psychotic disorders among children and a high prevalence of mental illness among teenagers and children, compared to adults, amid a decline in the child and adolescent population [2].

Schizophrenia spectrum disorders in children and adolescents

The significance of studying schizophrenia spectrum disorders, which comprise a group of debilitating conditions, stems from the high frequency of their manifestation, diversity of clinical presentation, the incompleteness of psychopathological phenomena syndromes, and the occurrence of atypical

forms with vague symptoms [3–5]. Such clinical diversity results in the insufficient understanding of the essence and the prognostic role of these conditions, complicating the differentiation between their clinical forms. Diagnostic approaches to schizophrenia vary between countries; being diagnosed with schizophrenia and receiving treatment for this disease has a profound impact on one's mental health and future. In Europe and America, it is advisable to avoid the diagnosis of schizophrenia in children younger than 8–14 years. By contrast, schizophrenia and schizophrenia spectrum disorders are acceptable labels in Russia. The Russian version of ICD-10 has a separate entry for “childhood schizophrenia” under the F20.8 (other schizophrenia) category. The diagnostic aspects of schizophrenia spectrum disorders are demanding special attention in light of the upcoming ICD-11, as the clinical diagnostic paradigm will be shifting from the categorical to

the dimensional principle [6, 7]. Timely diagnosis is no less important than an accurate definition. Multiple foreign and some Russian publications provide evidence that early treatment at the prodromal stage can significantly reduce the risk of the first psychotic episode, improve the long-term outcome, maintain social drive and the high level of the patient's functioning [8–10]. These data underscore the importance of further research into the prevalence, diagnostic challenges and treatment of schizophrenia spectrum disorders.

Recent epidemiological data on schizophrenia spectrum disorders among children and adolescents are very scarce. There are a few publications on the prevalence of the major mental disorders, including schizophrenia spectrum disorders, among children and adolescents in the past 15 years [11, 12].

The analysis of medical records of patients undergoing medical examination and treatment at G. E. Sukhareva Research and Practical Center for Mental Health of Children and Adolescents in 1999–2019 allowed us to identify the main diagnostic challenges and problems of studying the prevalence of schizophrenia and schizophrenia spectrum disorders (F2) in children and adolescents since the adoption of ICD-10 in Russia. Throughout the specified period, the prevalence of F2 disorders remained stable (\pm standard deviation, SD) at 10.12 ± 1.61 . There was an insignificant increase in prevalence (both in relative and absolute values) during the past two years included in the analysis, which coincided with a rise in hospitalizations and probably reflected a growing trend in the prevalence of mental illness in children and adolescents.

Prevalence of schizophrenia spectrum disorders

Fig. 1 shows cumulative data for the entire analyzed period and data for the first and last years of our study. The following schizophrenia spectrum disorders prevailed among children and adolescents: schizophrenia (F20), schizotypal disorder (F21), acute and transient psychotic disorders (F23), and schizoaffective disorder (F25). Together, these conditions accounted for 99.6% of all mental illnesses in the studied cohort and formed the core of the spectrum.

Of all the patients with F2, 48.8% had schizophrenia, about one-third (32.3%) had schizotypal disorder, 11.7% had schizoaffective disorder, and 6.8% had transient psychotic disorder. Importantly, when ICD-10 was first introduced in 1999, schizophrenic patients made up 75.3% of all F2 patients. By 2019, the proportion of schizophrenic patients had decreased 3-fold, accounting for 25.8% of patients in the F2 group. By contrast, the number of patients diagnosed with schizotypal disorder had increased dramatically (6-fold

percentagewise and 19-fold in absolute values). The number of patients with schizoaffective disorder had increased almost 2.5-fold percentagewise and 7.8-fold in absolute values. The prevalence of transient psychotic disorders was the most stable.

The majority of the patients were 11–14 years old, except for the patients with schizoaffective disorder, who were 15–17 years old. Male patients dominated the group of patients with schizophrenia, schizotypal and schizoaffective disorders. Sex differences were minimal in the group of patients with transient psychosis: 53.1% were males and 46.9% were females.

Prevalence dynamics of schizophrenia and schizophrenia spectrum disorders over analyzed period

Fig. 2 shows that F20 and F21 curves behave differently. There is a gradual decline in schizophrenia prevalence, slowing a little in 2013, and a rise in the number of patients with schizotypal disorder in 2007, followed by stabilization until 2016 and a surge in 2017–2019. The level of confidence for the frequency of the diagnoses was assumed to be 0.95.

Trends in prevalence and diagnostic problems associated with schizophrenia spectrum disorders in children and adolescents

The analysis revealed a few trends in the prevalence of schizophrenia spectrum disorders (F2 according to ICD-10) and some problems associated with their diagnosis in children and adolescents. The most salient problem persisting over the last 3 years covered by the analysis was a diagnostic imbalance: a decline in the number of patients with schizophrenia (F20) and a surge in the number of patients with schizotypal disorder (F21). Of all the young inpatients of the Center, 32.2% had F21. In this subgroup, 71.2% were diagnosed with F21.8 schizotypal personality disorder, 6.3% were diagnosed with F21.3 pseudoneurotic schizophrenia, and 15.2% were diagnosed with F21.4 pseudopsychopathic schizophrenia.

Among older patients [13], 11.6% were diagnosed with F21, 47.7% were diagnosed with pseudoneurotic schizophrenia (F21.3) and 35.8% were diagnosed with pseudopsychopathic schizophrenia (F21.4). In 49.6% of cases, the provisional diagnosis of F21–F29 was established before schizophrenia was verified.

In our opinion, the term “schizotypal personality disorder” (F21.8) is incorrect because personality disorder cannot be diagnosed in children and adolescents; but it is legitimate to say that their schizoid traits are progressing. The criteria for

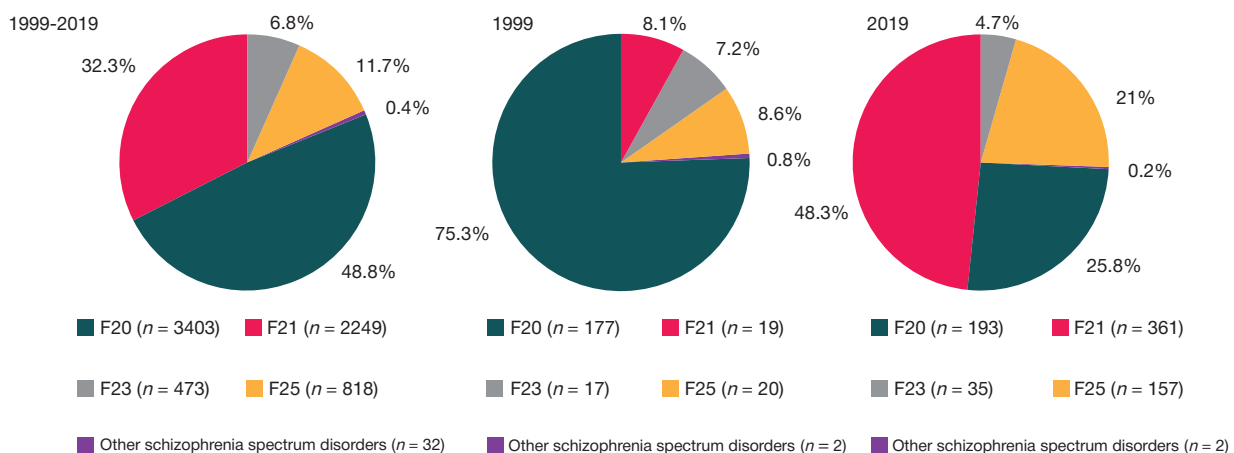


Fig. 1. Prevalence of schizophrenia spectrum disorders

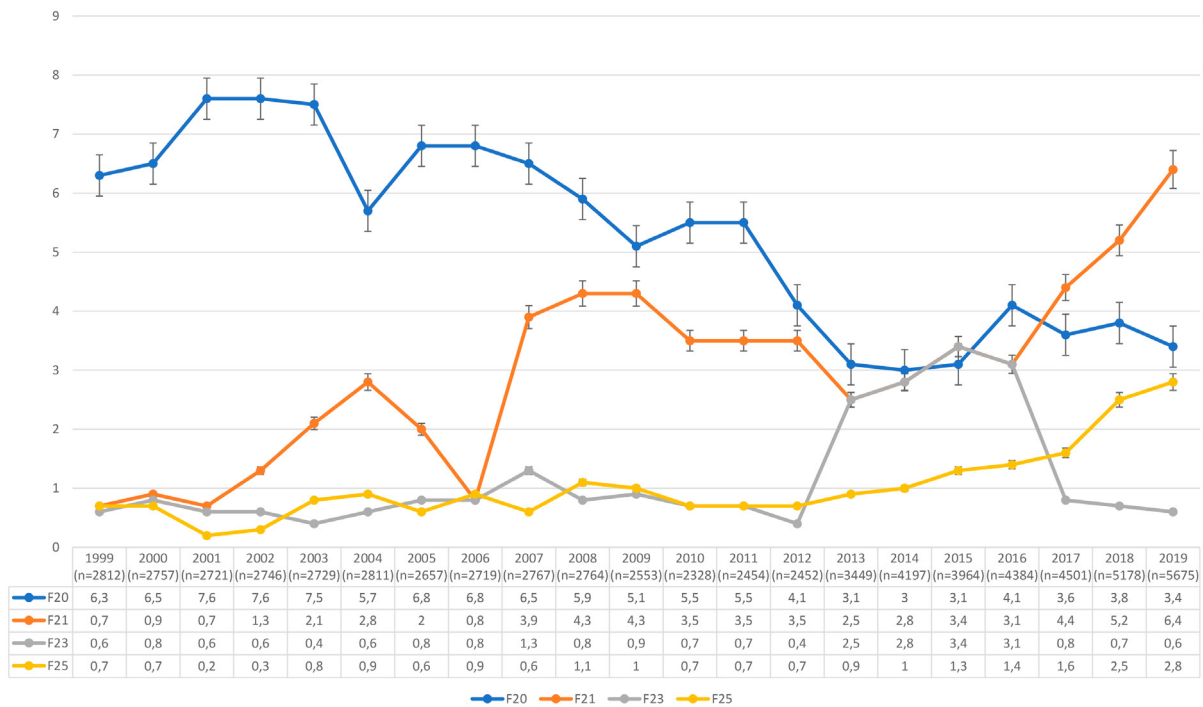


Fig. 2. Prevalence dynamics of schizophrenia and major schizophrenia spectrum disorders relative to the total number of hospitalized patients

the diagnosis of schizotypal personality disorder in children and adolescents do not include character traits; instead, they are based on the symptoms specified in the preamble of the Russian Thesaurus of Psychiatry, which is used to classify mental disorders. The preliminary analysis of medical records revealed that the reported clinical presentations did not meet the criteria for schizotypal disorder in many cases; however, in all age groups the number of patients diagnosed with schizotypal personality disorder (F21.8) increased at discharge.

In our opinion, this diagnostic transformation can be explained by social factors and stigma, which significantly affect clinical decision-making and force the clinician to come up with a diagnosis that would allow the patient to integrate into society. The stigma of schizophrenia has been widely discussed in Russian and foreign publications [14, 15]. Patients and their parents fear being stigmatized. This fear is not irrational because a grave psychiatric diagnosis can reduce career opportunities and chances to marry. Due to fear, patients delay a visit to public or private psychiatrists, psychologists, neurologists, etc. This prevents them from receiving timely health care, which, among other things,

includes social and pedagogical interventions, psychotherapy and other types of rehabilitation.

Conclusion

The main candidate explanations of the identified diagnostics problems are a) changes in the clinical presentation of the disease, such as the growing prevalence of non-psychotic forms of schizophrenia spectrum disorders, including attenuated and quasi-psychosis (this is partly supported by the relatively stable number of patients with transient psychosis (F23) and schizoaffective disorder (F25)); b) vague yet diverse symptoms at the prodromal stage before the onset of psychotic symptoms in children and teenagers, a dissociation between the severity of the condition and social functioning, insufficient clarity of diagnostic criteria; c) the stigma of schizophrenia and the tendency to mitigate it by establishing a more socially acceptable diagnosis. The identified difficulties and disagreement about the diagnostic criteria for schizophrenia spectrum disorders in children and adolescents, evaluation of their dynamics, outcomes, and the social functioning of the patient necessitate further prospective follow-up studies.

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