

Assessment of Anxiety in Younger Schoolchildren (Based on the Results of a Survey of Parents)

EA Tepper* and TE Taranushenko

Department of Pediatrics of Institute of Postgraduate Education, Krasnoyarsk State Medical University Named After Prof. Voino-Yasenetsky, Institute of Postgraduate Education for Pediatricians, Krasnoyarsk, Russia

***Corresponding Author:** EA Tepper, Department of Pediatrics of Institute of Postgraduate Education, Krasnoyarsk State Medical University Named After Prof. Voino-Yasenetsky, Institute of Postgraduate Education for Pediatricians, Krasnoyarsk, Russia.

Received: May 12, 2023; **Published:** July 24, 2023

Abstract

Introduction: Children's anxiety and the possibility of timely correction in case of early manifestations of this condition are topical issues of children's health care, since timely solution of the problem at preschool and primary school age can prevent the accumulation of negative emotional experience and prevent the development of negative personality traits in the future. Children's anxiety refers to the individual psychological characteristics of the child, which, unfortunately, are not always noted in a timely manner by the adult environment of the child.

Purpose of the Study: To assess the level of anxiety in children in the first years of schooling.

Research Methods: An observational study with a prospective evaluation of the results was carried out in the conditions of a typical school in Krasnoyarsk in the period March-May 2021. At the first stage (formation of the target group), the results of a survey of parents of 70 children of primary school age (grades 1 - 4) were analyzed using the Lavrentiev method. G.P., Titarenko T.M. (1992). The sample of children had no gender differences, the median age of the examined was 8.9 (8.4; 10.4).

Results: The approach used (surveying parents) made it possible to identify a group of children with increased anxiety, which was not previously considered as a borderline condition that requires close attention due to the high risk of developing an anxious-neurotic personality type, a negative impact on the intellectual development of the child and somatic well-being. It was found that out of 70 examined children of primary school age, in 50 cases (71.4%), personality traits were noted, which made it possible to identify 5 behavioral options. At the same time, the predominant types were irritability (44.5%), disorders of adaptive reactions (42.8%) and increased excitability (20.4%) ($p \leq 0.05$).

Keywords: Children; Schoolchildren's Health; Behavioral Disorders; Childhood Anxiety

Relevance

Primary school education is the foundation for providing further education and vocational education. During this period, the child forms the foundations of personality, builds relationships with adults and peers, and establishes an attitude to future activities and the requirements of parents and teachers. Interest in the problem of personal anxiety in children is confirmed by numerous scientific publications, in which the process of formation of anxiety states in school conditions is of particular concern to specialists [1-3].

According to the World Health Organization, the school is considered as a socially significant factor in the development of maladjustment among school children's because primary school education for a child is associated with certain difficulties (new social contacts,

problems of adaptation, the requirements of parents and teachers for the success of educational activities, etc.), which lead to feelings, depressed mood, uncertainty, indecision and fears [4].

Anxiety in the general sense refers to the subjective manifestation of a person’s troubles and is regarded as an experience of emotional discomfort, a premonition of an unpleasant situation or danger. The difficulty lies in the fact that anxiety can become a stable personality characteristic with confrontation in relation to real possibilities, and the subsequent impact on emotional well-being, a sense of confidence, security, etc. [5,6].

Currently, there are studies showing that anxiety, originating in childhood, under adverse circumstances, becomes a stable set of habits and preferences, mental attitude and a set of psychophysical characteristics that determine everyday behavior. The risks of developing anxiety may appear as early as preschool and primary school age [7,8].

Studies confirm that the number of children with increased anxiety, insecurity, and emotional instability is increasing. The consolidation and strengthening of anxiety occurs according to the mechanism of a “vicious psychological circle”, leading to the accumulation of negative emotional experience, which generates negative prognostic estimates, determines the attitude to external factors and contributes to the persistence of anxiety. The experience of trouble in school conditions is designated in different ways: “school neurosis”, “school phobia”, “didactogeny”, “didactogenic neuroses”. Each of the definitions points to different states of schoolchildren, but they all lead to emotional instability and maladjustment [9-11].

The term “behavioral and psychological disorders” is used in the work as a convenient descriptive term that does not consider pathogenic and psychodynamic mechanisms, but indicates a distinctive variability in behavior (agitation, hyperactivity, psychomotor retardation), which, in accordance with WHO recommendations, may imply a violation of psychological functioning and a decrease in productivity in fulfilling a social role (schooling, interaction with peers and parents, etc.). In other words, these features of childhood, which are characterized by the peculiarity of emotional reactions. This approach does not contradict the general rule of ICD-10 and does not imply a specific nosology, but is recommended for a certain age group and is of interest for assessing behavior, dynamic monitoring and deciding whether corrective measures are needed (without drugs and medications).

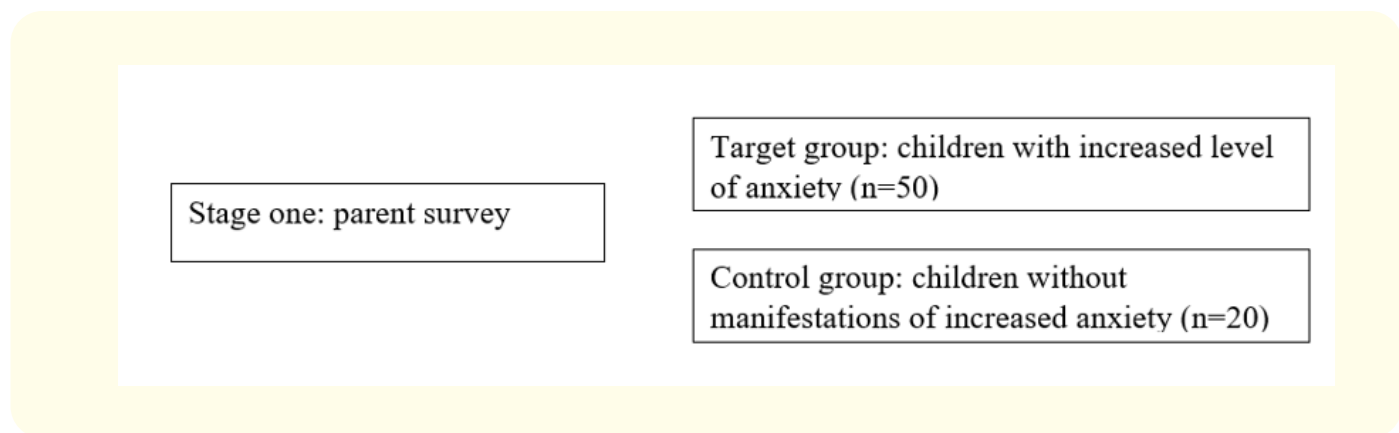
Purpose of the Study

To assess the level of anxiety in children in the first years of schooling.

Research Methods

To achieve this goal and based on the hypothesis of a high level of anxiety in children at the stage of primary school education, an initial target sample of children was formed. The selection was carried out by a continuous method based on behavioral disorders noted by parents, for subsequent comparison of the data obtained in the target and control groups. An observational study with a prospective evaluation of the results was carried out in a typical school in Krasnoyarsk.

Study design



At the stage of formation of the target group, the results of a survey of parents of 70 children of primary school age (grades 1 - 4) were analyzed using the methodology of Lavrentieva G.P., Titarenko T.M. (1992); this questionnaire is designed to determine the level of anxiety in children of a specified age [12]. The questionnaire includes 20 questions-statements (a positive answer to each proposed statement is estimated at 1 point) with subsequent calculation of the total score, based on which a conclusion was made about the level of anxiety of the child.

The assessment of the main indicators of the study included the results of the following data:

- High level of anxiety: 15 - 20 points
- Average level of anxiety: 7 - 14 points
- Low level of anxiety: 1 - 6 points.

Statistical processing was performed using the STATISTIKA 6.0 application package. For all data, absolute indicators and a percentage characterizing the proportion of children with a certain trait, the median (Me), and quartile intervals (Q1-Q3) were calculated. Comparison of qualitative features was carried out using the calculation of differences by the Z-test according to V.Yu. Urbach with elucidation of differences in samples and the value of variance [13].

This study was approved by the Ethics Committee of the Krasnoyarsk State Medical University named after Professor V.F. Voyno-Yasenetsky Ministry of Health of the Russian Federation (protocol No. 58 dated February 10, 2020). The studies were conducted after the signing of the informed consent by the legal representatives of the child. The study was performed without financial support.

Results and Discussion

Evaluation of the data obtained from the parents’ survey made it possible to form a target group for follow-up, which included 50 children with a high and medium level of anxiety. The control group consisted of 20 schoolchildren with stable behavioral characteristics according to the conclusion of their parents with the formation of five variants of the main behavioral disorders in the target group (the designated subgroups (variants) are based on the components of general anxiety (signs) proposed by the Philips test. Each of the variants is represented by a certain set of signs, from among those indicated in the questionnaire (Table 1).

Variants of the main (leading) violations	Numbers of questions of questionnaires (features) with positive answers	Target group		Control	
		Number of features	% of all features	Number of features	% of all features
Irritability	2, 3, 17, 24	22	44,5	3	15*
Adaptive disorders reactions	1, 5, 12, 14, 18	21	42,8	3	15*
Anxiety	4, 8, 13, 18	13	25,6	2	10
Hyperexcitability	6, 13, 14, 15, 16	10	20,4	0	0*
Autonomic disorders		8	15,5	2	10

Table 1: Note: * statistically significant differences between the two samples (z-test) at $p < 0.05$.

Subsequent assessment of anxiety was carried out in subgroups formed because of the options indicated above (Table 1). The first variant of the main disorders (subgroup 1) with increased irritability was recorded with the highest frequency - 44.5% and, according to all signs, statistically significantly prevailed compared to the control group ($p < 0.05$). It is known that increased irritability in a child is a certain state of the nervous system, which is manifested by excessive sensitivity to external stimuli, regardless of the reasons. Unfor-

tunately, in everyday conditions, parents and the environment of the child do not always pay attention to such behavioral features. At the same time, the correction of these disorders requires not only the elimination of irritating factors, but also, according to indications, drug therapy. According to our data, parents with the highest frequency noted excessive anxiety in response to any task and poor tolerance of expectation (impatience), which were recorded in 64% and 68% of responses, respectively (sign numbers in the questionnaire were 3 and 17).

The second variant of the main (leading) disorders (subgroup 2) with a disorder of adaptive reactions was set at 42.8%. The most common signs were indications of rapid fatigue with the impossibility of performing the assigned task (88% of the signs in the questionnaire -1 and 19), and low initiative with an unwillingness to perform new work in 58% of observations (the number of signs in the questionnaire - 18). The most frequent were indications of rapid fatigue with the impossibility of performing the assigned task (88% of the number of signs in the questionnaire -1 and 19), and low initiative with unwillingness to perform new work in 58% of observations (the number of signs in the questionnaire - 18). This variant of the identified features reflects the state of internal stress and emotional disorder hinders the productivity of the educational process and adaptation to changes in various situations. The disorder of adaptive reactions has various manifestations, but according to the data presented above, for primary school age, the most characteristic are signs of asthenia, apathy, and inertia in behavior.

The third variant of the behavioral response included anxiety, which was found in 25.8% of the data obtained (the number of features in the questionnaire was -14). At the same time, the main features noted by parents were passivity in completing tasks and assignments in 58% of cases (the number of signs in the questionnaire-19), as well as stiffness and tightness when doing homework in 28% of school children's (the number of signs in the questionnaire-4), sleep disturbances in the form of night terrors and difficulties in falling asleep, 20% each, respectively (sign numbers in the questionnaire -13 and 14). Particular attention deserves questionnaire references to sleep disorders, which, as is known, not only lead to a deterioration in daytime well-being, emotional mood and performance, but can form additional behavioral problems, affect school performance and are associated with an increasing risk of developing somatic pathology. The appearance of these symptoms deserves special attention from parents and, in some cases, requires specialist advice.

The fourth variant of personality characteristics was characterized by increased excitability and was detected in 20.6% of cases. The predominant manifestations of this variant were increased anxiety with frequent upsets - 40%, tearfulness - 24% (sign numbers in the questionnaire -16 and 24). These manifestations and excessive feelings, combined with irritability, are often due to high responsibility, workload, relationships with classmates and teachers, and the atmosphere in the classroom. These reasons should be leveled, and according to indications, medical correction should be considered.

The fifth (last) variant of the main (leading) disorders was deliberately singled out, since it is focused on signs characterizing autonomic dysfunction, and was noted in 15.5% of the responses to the survey. Parents paid attention to the following signs: a tendency to redden the face in an unfamiliar environment - 26%, excessive sweating during excitement, as well as often cold and wet extremities - 16% each, and a tendency to unstable stools - 8% of observations (sign numbers in the questionnaire - 9, 10 and 11). These manifestations may indicate violations of autonomic regulation because of functional changes in the ANS. The established symptoms cannot be fully considered as behavioral disorders. According to the literature, an imbalance in the vegetative status can initiate disturbances in the activity of internal organs (cardiovascular system, gastrointestinal tract, respiratory organs, endocrine glands, etc.) and is one of the most common pathological conditions in children and adolescents with a prevalence among schoolchildren up to 40 - 60%. Often, vegetative-visceral symptoms are a natural reflection of an anxiety state, accompanied by neurotic disorders and serve as a reason to consult a doctor. At the same time, behavioral disorders and emotional tension are underestimated, and the psychotraumatic situation is not eliminated.

Conclusion

The approach used (surveying parents) made it possible to identify a group of children with increased anxiety, which was not previously established and, accordingly, in the group of schoolchildren under consideration was not assessed as a borderline condition requiring

close attention due to the high risk of developing an anxious-neurotic personality type, negative influence on the intellectual development of the child and somatic well-being.

Along with this, a study devoted to the study of the level of school anxiety among school children's according to the parental survey showed the following: out of 70 observations, in 50 cases (71.4%), 5 variants of behavioral disorders were noted, of which irritability was predominant (44.5%), disorders of adaptive reactions (42.8%) and increased excitability (20.4%). Children of primary school age with manifestations of vegetative symptoms against the background of increased anxiety, which significantly increase the risk of developing functional disorders from various organs and systems, deserve special pediatric supervision.

Bibliography

1. Demidova IG. "Features of personal anxiety in children of younger adolescence". *Humanitarian Scientific Bulletin* 2 (2020): 76-81.
2. Avdeeva NN and Bodrova OS. "Factors causing school anxiety in children of primary school age". *Pedagogical Sciences* 3.90 (2018): 10-14.
3. Litvinenko NV and Chernova NN. "Causes of school anxiety in children of primary school age". *Successes of Modern Science and Education* 1.1 (2017): 179-181.
4. Bazhenova YuA and Radaeva OV. "Content features of school anxiety in children of primary school age brought up in a boarding school". *Pedagogical Bulletin* 15 (2020): 4-7.
5. Klimentieva NN and Olzoeva TS. "Correction of school anxiety in children of primary school age by means of animal therapy. Bulletin of the Buryat State University". *Education Personality Society* 1 (2021): 71-76.
6. Grekhova PV. "Features of the manifestation of school anxiety in students of primary school age. Psychology of special states: from theory to practice". Materials of the IV All-Russian scientific-Practical Conference of Students, Undergraduates and Graduate Students (2021): 28-30.
7. Zhdanova NE. "Features of the manifestation of school anxiety in children of primary school age. Crises of our time as a challenge to society, culture, operate". Materials of the XXIII International Scientific and Practical Conference (2021): 416-420.
8. Afanasenko DV. "The problem of school anxiety in children of primary school age. Social environment and personality. Collection of scientific papers". Ministry of Science and Higher Education of the Russian Federation; Federal State Budgetary Educational Institution of Higher Education "Tambov State University named after G.R. Derzhavin" (2022): 26-30.
9. Bartosh OP, et al. "Features of anxiety in children of primary school age in different cities of the Magadan region". *Reproductive Health of Children and Adolescents* 16.3 (2020): 5-14.
10. Stepanova VA. "School anxiety as a problem of the younger generation". *Scientific Almanac* 1.69 (2020): 88-90.
11. Sadchikova NG. "Comprehensive correction of the dynamics of changes in indicators of school anxiety". *Innovations. The Science. Education* 24 (2020): 1719-1727.
12. Lavrentieva GP and Titarenko TM. "Practical psychology for the educator". Kyiv (1992).
13. Urbakh VYu. "Statistical analysis in biological and medical research". Acad. honey. Sciences of the USSR. Moscow: Medicine (1975): 295.
14. Zavadenko NN. "Anxiety disorders in the practice of a pediatrician and a pediatric neurologist". *RMJ* 28.8 (2020): 23-29.

Volume 6 Issue 8 August 2023

©All rights reserved by EA Tepper and TE Taranushenko.