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**PSYCHOLOGICAL CARE FOR SCHOOL-AGE PATIENTS WITH
COVID-19 AT HOSPITALS FOR INFECTIOUS DISEASES**

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Abstract

The Scientific Medical Research Center for Children's Health of the Ministry of Health of Russia was the first pediatric center to explore psychological state of 119 children (aged between 6.5 and 17) with COVID-19 during their hospital admission and outline the guidelines for psychological and pedagogical support. The authors analyzed medical and counseling documentation, conducted interviews, observations, screening tests. Based on physical and psychological factors (the main psychological difficulty), the patients can fall into three groups: 5 individuals (4 %) were very ill, with unstable signs of mental activity; 57 individuals (48 %) were mainly in a moderately grave state with severe feelings associated with the disease; 55 individuals (46 %) were in a satisfactory physical state, with mild and mainly situational difficulties in adapting to a hospital environment, and 2 individuals (2 %) were in a satisfactory physical state, in a relatively stable positive psychological state. Keeping track of physical and psychological severity and the main psychological difficulties allows hospital staff to provide children and adolescents with differentiated psychological care in specific "red zone" conditions.

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1. Introduction

According to many hallmark studies, in most cases of COVID-19 disease, children and adolescents have a mild progression (Baranov, 2020; Starshinova, 2020). What is more, there is a significant deterioration in health among pediatric patients against the background of chronic somatic and mental illnesses (Spasennikov, 2020; Starshinov, 2020; Sulaimanova & Alikbarova, 2020; Volkova & Shesternya, 2020).

In addition, some authors articulate the fact of psychotraumatization in the adult and child population in the coronavirus situation (Brooks, 2020; Danese, 2020; Jiao, 2020; Wu & McGoogan, 2020). Obviously, “red zone” patients experience the greatest emotional stress when their fears for health and life are confirmed by severe symptoms due to poor physical health (Ludvigsson, 2020; Shen & Yang, 2020; Wu & McGoogan, 2020).

Children and adolescents with coronavirus disease in a real-life hospital setting encounter a number of psycho-traumatic factors, such as:

- unstable physical state, intermittent progress and unclear treatment outcomes (Darlington, 2020; Götzing et al., 2020; Jain, 2020);
- infectious unit admission with quarantine everyday life, prohibited visits from relatives (Baruchel, 2020; Ellis, 2020; Tummala & Muhammad, 2020);
- a large amount of traumatic information received by children from the media (Jiao, 2020; Racine, 2020) and from the immediate environment¹ (Zhou, 2020).

Undoubtedly, stabilizing the psychological state of patients, including the category of patients most vulnerable to emotional stress, children and adolescents, will provide psychological support when they are treated in a hospital for infectious diseases (Lazurenko, 2014, 2017, 2020).

All of the above indicates the need for systematic psychological support for primary schoolchildren and adolescents admitted to an infectious diseases hospital. According to observations, they make up 60 % of the entire cohort of pediatric patients. Scarce publications on the content of psychological counseling to children admitted to the “red zone” gave rise to the present study.

2. Problem Statement

It is important to determine the major psychological difficulties faced by children with COVID-19 who are being treated in the “red zone” and the content of differentiated psychological and pedagogical care to children.

3. Research Questions

To address the problem, it is necessary to identify the following research questions:

1. What are the main factors that outline the content of psychological and pedagogical support provided in an infectious diseases hospital?
2. What groups do the patients fall into?

¹ Based on the findings, about 30 % of parents also get sick, and some need intensive care unit (ICU) admission, with an uncertain course and prognosis for the disease

3. What will be unique about psychological and pedagogical care to children in a particular group?

4. Is there a difference in the content and forms of psychological support to children with COVID-19 from children with chronic somatic pathology?

4. Purpose of the Study

The paper aims to study psychological state of paediatric patients with coronavirus disease during their hospital admission and to determine the guidelines for psychological and pedagogical support.

5. Research Methods

The research methods involved analysis of medical and psychological-pedagogical information, interviews, observations, questionnaires. The severity of medical condition and specific hospital environment determined non-acceptance of traditional psychological assessments. The children were examined in a hospital ward, observation and screening tests were applied, which involved a “Three Wishes” technique (for primary schoolchildren), an adapted “Incomplete Sentences” technique (for adolescents), free-subject paintings; a questionnaire of 10 questions aimed at clarifying children’s physical well-being, their wishes for everyday life and leisure activities to be arranged in a ward (Prikhozhan & Tolstykh, 2005; Sviridova, 2018). Statistical processing relied on descriptive statistics, Pearson’s test χ^2 , for $p \leq 0.05$. Since psychological age of children may not correspond to their physical/passport age (in about 20 % of cases), besides and based on observations, interviews and screening tests, an expert assessment of mental development (normative/non-normative) was carried out according to two criteria: a) need and interest patterns; b) the degree of psychological autonomy in communication and behavior. The results obtained made it possible to assess the nature and depth of child’s experiences and are further called upon to elaborate the content of psychological support.

6. Findings

The study involved 119 children (aged between 6 and 17) with confirmed COVID-19, who were admitted to Research Center for Children’s Health. According to medical records, 4 % were seriously ill (awake), 34.6 % – in a state of moderate severity and 61.4 % – in a satisfactory condition. Of these, about 20 % of individuals were admitted with their parents or guardians. These were the children in a serious and moderate condition, as well as the patients in a satisfactory medical condition with a pronounced cognitive deficit.

The combination of physical and psychological factors (the main psychological difficulty) constituted the basis for 4 groups of patients (the significance of the relationship between the severity of the child’s condition and the main psychological problem was statistically confirmed using the Pearson’s test, χ^2 for $p \leq 0.05$).

The first group (4 %) was composed of the children in severe physical condition, with unstable signs of mental activity, requiring intensive care support. The patients spent a significant part of the day sleeping, and while awake, they showed just an instantaneous interest in what was happening in the ward

due to rapid fatigue and low efficiency. The patients had an unstable need for impressions and communication, as well as unfolding changes in an empathic attitude to the environment. Against the background of psychophysical exhaustion, the children developed such emotional disorders as excitement, anxiety, tearfulness, and low spirits. They were burdened by psychophysical discomfort and ICU admission (Buslaeva et al., 2016).

The second group (48 %) included the children mainly in a moderately grave state with severe feelings associated with the disease. They experienced fear and apprehension for their health and life, which was often exacerbated if their relatives were seriously ill. These children were in an unfavorable emotional state (depressed, anxious, or agitated), often complained of bad appetite and/or sleep, were fixed on psychophysical sensations, had difficulties in performing purposeful activities, maintained only formal contact with doctors and roommates.

Younger schoolchildren and personally immature adolescents on the one part, and personally mature adolescents on the other part, greatly differ in the way they show up their feelings. While younger schoolchildren and personally immature adolescents often cry, complain of homesickness or anxiety about the upcoming medical procedure, personally mature adolescents remain outwardly unaffected by the surrounding and their behavior does not usually raise high suspicions in adults. These adolescents behave with restraint, not showing their negative feelings, so that the health care staff and relatives have the impression that everything is fine with them.

Sometimes, communicating with adults, schoolchildren behave, on the contrary, overly intolerant and egocentric. Yet, it would be wrong to consider this a sign of bad manners or negative attitude to health care workers. In fact, this might stem from excessive emotional stress, violations of emotional-volitional regulation against the background of psychophysical exhaustion and traumatic experiences (fears for their own lives and the health of their loved ones).

The third group (46 %) united the children in a satisfactory physical condition, mainly with temporary adaptation difficulties in a hospital setting. Their psychological state was unstable, with the risk of distress. This was expressed in more intense experiences, super-high reactivity, susceptibility, difficulties in emotional-volitional regulation. Occasionally their activity and communication became less goal-directed.

The children admitted to hospital often find it hard to adapt due to a combination of certain socio-psychological factors including non-availability of a parent, lack of admission experience (Isaev, 2005), psychological immaturity or specific features of personality development, difficulties in organizing activities on their own, insufficient social orientation and communicative competence.

The smallest, the fourth group (2 %), consisted of the children, mainly in a satisfactory condition and a relatively stable psychological state, with a favorable adaptation to the situation. These patients retained sufficient self-control, high purposefulness, an interest in various activities and communication. The schoolchildren took care of themselves, and some were even able to support younger roommates by encouraging them to take part in free-time activities like reading books, doing home assignments, playing board games, making crafts, etc., take initiative in communication. However, further outward traumatic impacts and/or additional exposure to stressors can lead to a complete depletion of intrapersonal resources, which indicates the need to classify this category of children as a risk group.

Thus, psychologist's work depends on the severity of the condition and current psychological difficulties.

In order to prevent acute psychological experiences to occur during progressive physical improvement and increase psychological capabilities, the first-group children needed to receive systematic emotional support and communication, new impressions that could be provided by both health care staff and close adults. Professional psychological support should primarily be aimed at the stabilization of emotional state, the development of a positive attitude towards treatment and the ability to understand and express one's own psychological needs (Freud, 2020; Venger & Morozova, 2016; Yul & Williams, 2001). Psychologists, whenever possible, should tell those parents whose children are seriously ill how they can get through a traumatic situation. First of all, they are told that the current situation has an excessive emotional stress, so they should not reproach themselves for increased emotionality or passivity. To save their own resources, adults need to adhere to psycho-hygienic requirements (get sufficient sleep, nutrition, fulfil their personal needs). To streamline psychological state of a seriously ill child during treatment, it is useful to make sure that a child is involved in activities and communication in a systematic and feasible way. It is important not to wait for a quick recovery, but both an adult and a child should learn to live productively every day. It is helpful to remind parents that they are not alone. The team of professionals does everything required and possible to help their child. Medicine does not stand still and every day scientists are getting closer to solving this problem (Mukhina, 1999; Vasilyuk, 1984). Parents whose children have similar health problems unite in public organizations, in social groups on the Internet to share their experience and come up with a solution together. Social support bodies and charitable foundations also do their best to provide children in need with all necessary expensive medicines and high-tech treatment.

To secure/improve the psychological state of the second-group children, daily psychological support was provided on a case-to-case basis including counseling in a crisis situation, aimed at reducing the severity of experiences. All children who went through tough times (especially when their parents were seriously ill) were given the opportunity to be listened to, to "throw out" their experiences with the help of a free-subject painting, not until they were willing and wanted to do it themselves (Venger & Morozova, 2016).

In some cases, due to specific psychophysical state (the severity of symptoms and the degree of physical impairment), a psychologist recommended to see a neurologist.

In a difficult situation (for example, when parents started feeling worse and were admitted to intensive care unit), psychologists gave relatives remote psychological advice in order to stabilize their emotional state and tell about some impactful ways to support their child (Karabanova, 2005; Rtischeva & Lazurenko, 2017; Vygotsky, 1984). The experts reminded parents of the need to show universal human care for their child (like bringing favorite food, reading a favorite book, paying for a phone bill) and an adverse effect that numerous calls, unnecessary questions, advice, attempts to calm them down might have on their emotional state.

For the third-group patients, the main directions of psychological and pedagogical support involved advising on admission and treatment regimen, on compliance with the rules of behavior in the ward; short-term counseling on situational psychological problems; assistance in solving everyday issues,

promoting communication with roommates; attempts to involve children into all-round activities: educational, creative, productive.

A follow-through psychological and pedagogical care about the children, aimed at organizing their leisure time and communication in the ward of the infectious diseases department, made it possible to effectively and quickly adapt children to hospital stay, improve their psychological state and significantly reduce the risk of distress.

The patients of the fourth group required integrated psychological support to strengthen intrapersonal resources (Portnova, 2007; Sukhareva, 1959; Tarabrina, 2009). The children who got worse or received alarming information about their parents' worse condition deserved special attention. In these cases, the schoolchildren needed additional emotional support that was possible to provide thanks to close cooperation of psychologists with attending physicians, nurses and patients' relatives. The children in a relatively stable positive emotional state and those from other groups with a reduced severity of experiences found it extremely useful to organize communication and joint activities with other children. This created more favorable climate and encouraged mutual assistance. Subject to the psychological age of the participants, this might be a joint painting/composition, a board game involving interaction/competition, joint construction. Due to some peculiarities of emotional state, insufficient communication skills and self-organization, a psychologist was responsible for organizing joint activities in the first two or three classes. Gradually, the role of the leader was taken over by older adolescents, and sometimes by the most active younger adolescents and younger schoolchildren. Yet, the psychologist kept encouraging the children to use their initiative and helped perform activities, with respect to the limitations that were inevitable in the infectious hospital.

Since the majority of school children were being admitted without their parents and needed their constant support, the psychologist's duty was to provide remote counseling to adults. All parents of newly admitted children were given the opportunity to receive remote psychological support (in the form of a reminder, telephone conversation). The adults were told about the rules of stay and the regime in the department, the list of necessary personal belongings and the rules for their transfer, they were reminded of the need to take care of organizing the child's leisure time. In particular, for organizing leisure activities and communication, a schoolchild was advised to have an inexpensive phone, academic and science fiction literature, a set for creativity (for example, for drawing, origami, knitting) and portable board games. During their children's treatment, the parents/legal representatives got familiar with the results of psychological monitoring (their children's current psychological state and needs) and the necessary methods of psychological support.

7. Conclusion

Thus, due to a stressful nature of social conditions caused by the pandemic, once treated in the "red zone" of an infectious hospital, all children experience psychological difficulties and need psychological support.

The content and forms of psychological support provided for children in the "red zone" depend on the severity of children's somatic state, their psychological age, pressing psychological needs and the type of psychological experience of a traumatic event, the nature of which is no less important than the actual

psychological response to it. In all cases when the severity of children's psychological state is not so obvious for their relatives and medical personnel, one of the most important tasks of a psychologist is to organize mediation between the child, on the one hand, and adults, on the other.

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