## УДК 616.89-053.2:[616.98:578.834.1]

## D. R. Jayaweera, G. B. Rathnawwera

Scientific supervisor: Senior lecturer at the Department of Pediatrics L. S. Sergeichik

Educational establishment
"Gomel State Medical University"
Gomel, Republic of Belarus

## THE IMPACT OF COVID-19 ON CHILDREN'S MENTAL HEALTH

#### Introduction

In March 2020, the World Health Organization officially classified the global transmission of COVID-19 as a pandemic, resulting in unforeseen and unparalleled repercussions for young people across the globe [1]. The lasting implications of the COVID-19 pandemic on the well-being of children and adolescents are still uncertain [2]. Following the onset of the pandemic, there was a notable surge in anxiety and depressive symptoms among children and adolescents. These symptoms exhibited a discernible increase from April to May 2020, followed by a subsequent decrease. However, with the emergence of the second wave of the pandemic, there was a renewed rise in these symptoms [3]. Numerous governments implemented nationwide lockdown measures, resulting in the closure of schools and the initiation of remote learning. Additionally, social distancing protocols restricted families from visiting public spaces or interacting with individuals from outside their own households. Children and adolescents of various age groups were confronted with a novel reality where they experienced a sense of isolation, disruptions to their daily routines, and a pronounced and significant decline in both physical activity and opportunities for social interaction [1].

## Goal

The primary objective of this article is to underscore that COVID-19 transcended being solely a respiratory infection, as it had multifaceted implications for children. Given that children are in a crucial stage of brain development and skill acquisition, these mental alterations can have lasting effects on their future prospects. Accordingly, the intention is to disseminate awareness by means of comparing survey results and drawing substantiated conclusions.

### Research material and methods

In order to facilitate data comparison, a survey was administered using a Google Form and distributed among parents with children below the age of 6 and below. Additionally, the survey was extended to children and teenagers between the ages of 7 to 18, as they were capable of filling out the form independently. To determine the appropriate questions for the child respondents, reliance was placed on scientific articles sourced from reputable international journals available through platforms such as PubMed, Google Scholar, and ScienceDirect. (See literature below) The selected keywords employed for the literature search encompassed "COVID-19," "pandemic," and "pediatric mental health."

## The results of the research and their discussion

For the sake of convenience, the participants in the survey were categorized into three distinct age groups: children aged 3 to 6 years, 7 to 12 years, and 13 to 18 years. Among the respondents, 16.7% fell within the 3 to 6 years age range, 18.6% fell within the 7 to 12 years age range, and the majority, comprising 64.7% of participants, fell within the 13 to 18 years age range. In terms of gender distribution, the results indicated that 53.4% of the participants were girls, while 46.6% were boys.

In order to gather insights into the overall mental well-being of participants during the period of the pandemic, a query was posed regarding their contentment with staying at home. The ensuing outcomes are visually depicted in the chart presented below. (*See figure 1 below*).

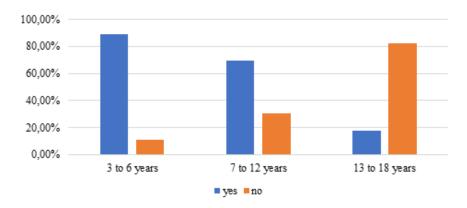


Figure 1 – Responses from the participants to "Where you happy to be at home during the pandemic?"

Based on the analysis of the charts, it is evident that children aged 13 and above expressed a greater level of discontentment with being at home. Conversely, children below the age of 6 exhibited a notable affinity for staying at home. Children who experience happiness and contentment are more likely to carry those positive emotions into adulthood. As a result, assessing childhood well-being in a forward-looking manner establishes enduring and advantageous connections to adult functioning [4].

Anxiety disorders stand as the prevailing psychiatric conditions observed in children and adolescents, impacting nearly 1 in 12 children and 1 in 4 adolescents [5]. Consequently, in order to assess the varying levels of anxiety experienced by children across different age groups during the COVID-19 lockdown period, the ensuing inquiries were posed:

- Question 1: Did you often have fights with your parents/ siblings due to frustration?
- Question 2: Were you scared you or a loved one will get contacted by the COVID-19 virus?
- Question 3: During the lockdown days, did you find it difficult to have face to face conversation with people?

For the purpose of simplifying graph presentation, the "yes" responses were aggregated together, as were the "no" responses. This approach facilitated the formulation of conclusions regarding the participants' levels of anxiety. The chart below showcases the final result (See figure 2 below).

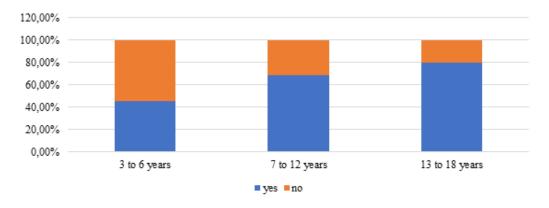


Figure 2 – Total results of the responses given by children of each age category for the above-mentioned questions no: 1, 2 & 3

Based on the analysis of the chart, it is evident that children aged between 13 and 18 exhibit higher levels of anxiety and uncertainty. This observation can potentially be attributed to their increased comprehension and awareness of the COVID-19 situation compared to younger children.

#### Conclusion

In summary, when considering all the collected data, the findings consistently indicate a heightened risk of negative implications on the mental health of children during the COVID-19 pandemic and associated lockdown period. This heightened risk can be primarily attributed to factors such as limited social interactions with peers, disruptions in familiar environments, and the dissemination of alarming information regarding the relatively unknown virus. As health-care professionals, it is our opportunity to utilize research findings and disseminate awareness to parents and the general population, with the aim of preventing the emergence of a generation burdened by mental illness.

#### LITERATURE

- 1. Magklara, K. The impact of the COVID-19 pandemic on children and young people / K. Magklara, M. Kyriakopoulos // Psychiatriki. -2023. -N 34(4). -P. 265–268.
- 2. SEROCoV-KIDS Study Group. Impact of the COVID-19 pandemic on children and adolescents: determinants and association with quality of life and mental health-a cross-sectional study / V. Richard [et al.] // Child Adolesc Psychiatry Ment Health. -2023. N 17(1). -P. 17.
- 3. *Miao*, *R*. Impact of the COVID-19 pandemic on the mental health of children and adolescents: A systematic review and meta-analysis of longitudinal studies / R. Miao, C. Liu, J Zhang, H. Jin // J Affect Disord. − 2023. − № 340. − P. 914–922.
- 4. Author manuscript; available in PMC 2012 Jun 19. Published in final edited form as: J Posit Psychol. 2011. № 6(1). P. 75–87.
- 5. Kowalchuk, A. Anxiety Disorders in Children and Adolescents / A. Kowalchuk, SJ Gonzalez, RJ. Zoorob // Am Fam Physician. 2022. № 106(6). P. 657–664.

## УДК 616.24-008.442-08-037-053.2

## N. Palliyaguruge Abeywickrama Gunarathna Umesha Niranji

Scientific Guide: Senior Lecturer L. S. Sergeichik

Educational Establishment "Gomel State Medical University" Gomel, Republic of Belarus

# COMPARATIVE ANALYSIS OF CLINICAL PRESENTATION AND RISK FACTORS IN CYANOTIC AND PALLID BREATH HOLDING SPELLS IN PEDIATRIC PATIENTS

## Introduction

Breath-holding spells (BHS) are a common phenomenon in pediatric patients, characterized by a sudden, involuntary interruption of breathing that can lead to transient loss of consciousness [1]. These spells are typically classified into two main types based on the predominant color change observed during the episode: cyanotic and pallid BHS [2]. Cyanotic BHS are characterized by a bluish discoloration of the skin and mucous membranes, while pallid BHS present with a pale or pallor appearance [1, 2]. Understanding the clinical presentation and risk factors associated with cyanotic and pallid BHS is essential for accurate diagnosis, appropriate management, and improved outcomes in pediatric patients. Despite both types of BHS sharing a common underlying mechanism of autonomic dysregulation, they may exhibit distinct features that warrant further investigation [2]. This study seeks to investigate how cyanotic and pallid breath-holding spells differ in terms of their colour changes, duration, frequency,