

RESEARCH ARTICLE**Health and psychological Problems Faced by Children due to the COVID-19 pandemic - systematic review**Hana A. jameel alsaeed ¹, Rayan Ibrahim Khalil ²

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Corresponding author: Ahmed Sabah NeamatEmail: hanaalsaeed@uomosul.edu.iq**ABSTRACT**

Background: Coronavirus disease development The COVID-19 outbreak, which was one of the year's highlights, originated in China and spread rapidly through international travel and mobility. Nearly half of the world's population was paralyzed by this illness, which spread to numerous nations and caused them to stay indoors for extended periods of time owing to the mandated quarantine. those who are required to remain at home in order to stop the virus from spreading. However, this study will concentrate on how it affects and may affect the psychology of children aged 6 to 12 years in the future after schools have been closed. Different studies have sought to evaluate the impact of this pandemic from many aspects.

Methods: The objective of this review was to look at the research on the psychological challenges faced by kids during the COVID-19 epidemic. The pursuing databases were looked up: All publications published in the previous six months (March 2021 - September 2021) that were pertinent to the audit's subject matter were searched in PubMed, Google Scholar, Academia, and all other relevant databases. Twenty-two papers were chosen for the first screening, and five of those were included in the assessment.

Results: A review of all five studies revealed that current research focuses on analyzing several mental processes that COVID-19-related psychological health in children. Numerous socio-demographic variables, including gender, family size, and duration of isolation, as well as psychological ones, such a lack of social support and not interacting with other children, all play a part. A growing body of research, including increases in stress, anxiety, depressive symptoms, and sleeplessness, points to this being the case. Children who have COVID-19 may be at an increased risk for developing psychological stress, which might have long-term effects on their mental health, school performance, and social development.

Keywords : COVID-19, psychological Problems, pandemic.



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1. Introduction

Since the new Corona virus began to appear and spread in 2019, and according to the multiple studies conducted in this regard, children are less likely to be infected with the virus, but they are more affected psychologically, due to the changes that occurred in public life and the activities that they were practicing before the complete closure that I started applying all countries [1].

The impact of the Corona virus on the entire world and all segments of society. In addition to its impact on the lives of individuals and the low standard of living contribute to the spread of emotional distress and increase the risks of psychological disorders in the family in general and children in particular. The burden on parents has also increased in terms of closing schools and nurseries, and it fell on the parents to care for and educate children at the same time, which caused them psychological burdens [14,16].

In all communicable and infectious diseases, there are groups that are more affected than others according to their social and psychological characteristics, and because children and adolescents are in the process of growth and development, they deserve to be well taken care of to maintain their physical activity and their mental and psychological health. He witnessed the history of this epidemic unparalleled changes within the history of the new world. Among them, education has moved to be electronic through distance learning systems and sometimes through platforms and TV, and this is often a fundamental change within the lives of youngsters [4,18].

The researchers predicted that PTSD, anxiety, and sadness would occur during and after the injury based on their research. Children, for example, are more susceptible to long-term psychological repercussions. To answer the question: What are the psychological state effects of kids and adolescents on pandemic, we conducted a comprehensive, non-systematic search in four databases (PubMed, Scopus, Google). What are the fundamental characteristics of psychological state during a pandemic? Children respond to

stress in diverse ways, as evidenced by the selection of twenty-two articles for full-text reading. [1,20,22].

Materials and methods

1.1 Objectives of review

1.2 1.2 The purpose of this study is to provide an overview of research findings on the mental health issues that children in the community face as a result of COVID-19. The goal of this study was to determine the relationship between sociodemographic factors and the gender of the child. COVID-19 has caused psychological and mental changes in their mental state. Children's health issues and how they affect their academic performance and relationships with others

1.3 Article search

The following databases were used to conduct the literature search: Google Scholar's webpage, PubMed, Academia website, and a review of research published in international collections. Search terms utilized in the articles retrieved were: psychological state, problems, the impact of COVID-19, or Novel Coronavirus and quarantine, all sorts of publications published in the recent 6 months (March 2021 - September 2021), such as reviews, commentary, correspondence, and discussions, as well as recommendations made by each reviewed research, findings, and original research piece, were included in the search. Cross-references were used to extract reports when applicable.

Articles selection

Just unique exploration articles and articles about youngsters and what they endure during the spread of Crown were browsed among all articles pertinent to the review's subject, just as the total conclusion of a sum of 22 examination projects distributed in respectable global distributing houses like Elsevier. Starter screening was utilized to choose articles. Five pieces were looked over a sum of 22 as being pertinent to the review's theme: three were unique examination articles, two were publications, five were survey articles, four were letters to the proofreader, and two were considerations/four perspectives. There was a sum of 22 articles eventually.

2. Results

Table1

The study Summaries inclusion in this review

Authors	Sample/n	Study design	Instrument use	The main finding
1.Maria,et.al (2020)	797 mother /Italy	Cross-sectional study	SDQ strength difficulties questionnaire and PSI: Parenting Stress Index Short form	Parents who have had more trouble dealing with quarantine are more stressed.

2. Debra, et. al (2020)	51 children/ Brazil	Comprehensive study	Online survey by using (ptss) post-traumatic stress disorder scale.	In children and adolescents, the study discovered significant incidence of worried youngsters and depression symptoms.
3. Michael et. al (2020)	1879 adolescents / Luzon Islands of the Philippines	Descriptive study	Anxiety and Stress Scales (DASS-21) and Impact of Events Scale-Revised (IES-R) ratings were utilized in the survey.	16.3 percent of respondents rated the outbreak's mental health impact as moderate to severe. 16.9% of people said they had moderate-to-severe depression symptoms, and 28.8% reported anxiety. The mean level of the IES-R was 19.57 (SD=13.12), whereas the mean degree of the DASS-21 was 25.94 (SD=20.59).
4. Yasmin et. al (2020)	384 parents /in Bangladesh	Cross-sectional study	By using mental health score and confirmatory factor analysis (CFA)	Pandemic of COVID-19 [Table 1]. There were critical contrasts found inside the downturn, uneasiness, and dozing problem scores of a considerable lot of the children among the four gatherings (sub-limit, gentle, moderate, and extreme aggravation), and there were a huge contrasts found inside the downturn, nervousness, and resting issue scores of a large number of the children among the four gatherings (sub-edge, gentle, moderate, and serious unsettling influence).
5. Ricardo & Gabriela (2020)	1003, Parents	Descriptive study	questionnaire based	73 percent of all samples require medical consultation, 61.5 percent experience dietary changes, with the majority citing an increase in food intake during the pandemic as a cause of dental problems, 66 percent of children require urgent dental care, and their parents are concerned about the effects of COVID-19 on their children's behavior.

3.1. Socio and demographic characteristics

Among the studies included within the review mean age The ages of the youngsters ranged from 6-14 years, as this group is that the main participants during this review in 4 studies it had been female (68.7% - 85.5%) [15,28] Xiang, state High levels of stress during this age bracket it had been related to higher levels of tension, depression, and distress [4]. The study by Spoorthy et al, [13,18,29] attempt to see the connection between age and psychological problems facing children. Although younger people (less than 10 years old) have higher self-assessment scores for depression than older adults or in their teens up to 17 years aged.

Younger children were psychologically affected and suffered from fear of infection for themselves and their families more than other age groups, due to their limited knowledge about the virus and the method of infection and prevention, as they showed a clear indicator of fear and panic about their safety from this epidemic.

Some studies have also indicated that children whose parents work in the medical field are more anxious and insecure due to the absence of one of the parents for long periods and because of the increase in working hours in health institutions, and it was considered one of the factors that cause stress for all parents, including children as well [16,24].

3.2. Psychological impact

School closures have a variety of effects on the behavior of children and teenagers. Concerns concerning good nutrition and lack of physical activity for children and adolescents have been raised in several articles. School activities provide energy to the everyday lives of children and adolescents, and their abrupt cessation has a painful effect on them, particularly those with ADHD. [2,25,27].

Expectations about the pandemic may have a variety of psychological effects on children and teenagers. Pessimistic views of the pandemic, such as the dread of becoming sick or having a relative become ill, may result in behavioral changes. [14,30].

3.3. Stress related COVID19

Most of studies tending to the mental status impacts of the pandemic on the populace as broad were attempted during before pestilences and from the beginning of the Coronavirus episode. Guardians and their kids in a single report, post-awful pressure was observed to be multiple times higher in more youthful kids who had been segregated contrasted with the individuals who had not been secluded. Following examination discovered mental and emotional well-being issues in youngsters during the Coronavirus

pandemic, with dread, sticking, distractedness, and crabbiness being the most of manifestations for more in younger [12,19,29].

3.4. Children psychological needs and care

"Recent literature on basic psychological needs has revealed a crucial distinction between satisfaction and frustrations of needs and designated them as separate concepts (. for example, one can feel low relatedness as a result of pandemic-induced quarantine, which reduces life satisfaction, but if one feels abandoned by people, he may feel the thwarting of his relatedness, which can lead to distress and other psychological issues)." As a result, when an individual's core psychological demands are thwarted by social surroundings or occurrences, he or she experiences frustration of the requirements) [11,26]. (As Vansteenkiste and Ryan pointed out, poor need satisfaction does not always imply need frustration; nevertheless, need frustration invariably entails low need satisfaction. The satisfaction of the criteria is crucial for human progress, but their frustration is important for maladaptation and ill-being [8,24]. Preventive measures that force us to social distancing and complete quarantine, which appears to play a really important role within the daily routines of youngsters in this age bracket, make it difficult to take care of the essential psychological needs of families during the amount of predominant quarantine. [10]. People need to occupy home and not leave many options for them to try to to on their own, which results in low satisfaction with themselves, which results in disorders and future psychological problems and feelings of frustration and loss of hope that life will return to normal again [5].

4. Discussion

According to peer-reviewed literature, children from certain groups or those who are exposed to certain risk factors are more likely to suffer psychological state disorders during the pandemic. Children with pre-existing health issues and those living in low-income households were identified as susceptible categories. Exposure to violence or child abuse, as well as infection with COVID-19, were all risk factors.

Previous research has shown that epidemics can result in serious conditions and mental health impacts on people in general, and young people in particular, because they lack the skills to present themselves, so can leading to the emergence of new psychological symptoms and the exacerbation of pre-existing diseases. Children can acquire dread of illness or death, excessive worry/anxiety, impotence, and a tendency to be responsible parents, regardless of exposure or damage, causing stress in both children and adults [2,19].

Studies conducted during the spread of the SARS virus also showed children are more likely to be injured after trauma stress disorder (PTSD), compared to adults in addition to anxiety and stress disorder [9,21].

Possible symptoms of shock as expected in the aftermath of any disaster and infectious diseases such as what happened in the case of the SARS epidemic as shown in (Table No. 1)

A study in China showed that children who were not injured and who were subjected to quarantine and whose parents were injured, had the ability to communicate with them via mobile devices. The spread of the pandemic at its height in the Republic of China at that time [6,20].

We identified mental health issues induced by the Pandemic and social isolation in our review. Obviously, children's reactions to fear varied in intensity and stage, particularly among younger children who had not been effectively educated about the condition by their parents or the society. Depression and anxiety are prevalent at all phases of life.

References

- C. Wang, R. Pan, X. Wan, Y. Tan, L. Xu, R.S. McIntyre, F.N. Choo, B. Tran, R. Ho, V. K. Sharma, C. Ho, A Longitudinal Study on the Mental Health of General Population during the COVID-19 Epidemic in China, *Brain, Behavior, and Immunity*, 2020, <https://doi.org/10.1016/j.bbi.2020.04.028>, 0–1.
- Cai, H., Tu, B., Ma, J., Chen, L., Fu, L., Jiang, Y., Zhuang, Q., 2020. Psychological impact and coping strategies of frontline medical staff in Hunan between January and March 2020 during the outbreak of coronavirus disease 2019 (COVID19) in Hubei, China. *Med. Sci. Monit.* 26, e924171.
- Coronavirus Disease (COVID-19) Epidemic among the General Population in China. de Miranda, D. M., da Silva Athanasio, B., de Sena Oliveira, A. C., & Silva, A. C. S. (2020). How is COVID-19 pandemic impacting mental health of children and adolescents?. *International Journal of Disaster Risk Reduction*, 101845.
- Dursun, O. B., Turan, B., Pakyürek, M., & Tekin, A. (2021). Integrating telepsychiatric services into the conventional systems for psychiatric support to health care workers and their children during COVID-19 pandemics: results from a national experience. *Telemedicine and e-Health*, 27(3), 269–275.
- for the 2019 novel coronavirus outbreak is urgently needed. *The Lancet Psychiatry* 7(3), <https://doi.org/10.3390/ijerph17051729>
- International journal of environmental research and public health* 17(5), 1729.
- J.J. Liu, Y. Bao, X. Huang, J. Shi, L. Lu, Mental health considerations for children quarantined because of COVID-19, *The Lancet Child & Adolescent Health* 4 (2020) 347–349, [https://doi.org/10.1016/S2352-4642\(20\)30096-1](https://doi.org/10.1016/S2352-4642(20)30096-1).
- Jiao, W. Y., Wang, L. N., Liu, J., Fang, S. F., Jiao, F. Y., Pettoello-Mantovani, M., & Somekh, E. (2020). Behavioral and emotional disorders in children during the COVID-19 epidemic. *The Journal of pediatrics*, 221, 264.
- Li ,Q., Guan, X., Wu, P., Wang, X., Zhou, L., Tong, Y., et al., 2020. Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. *N. Engl. J. Med.* 382 (13), 1199–1207.
- Patrick, S. W., Henkhaus, L. E., Zickafoose, J. S., Lovell, K., Halvorson, A., Loch, S., ... & Davis, M. M. (2020). Well-being of parents and children during the COVID-19 pandemic: a national survey. *Pediatrics*, 146(4).
- Psychological Responses and Associated Factors during the Initial Stage of the 2019 Šakan, D., Žuljević, D., & Rokvić, N. (2020). The role of basic psychological needs in well-being during the covid-19 outbreak: A self-determination theory perspective. *Frontiers in Public Health*, 8, 713.
- Spinelli, M., Lionetti, F., Pastore, M., & Fasolo, M. (2020). Parents' stress and children's psychological problems in families facing the COVID-19 outbreak in Italy. *Frontiers in psychology*, 11, 1713.
- Spoorthy, M. S., Pratapa, S. K., & Mahant, S. (2020). Mental health problems faced by healthcare workers due to the COVID-19 pandemic—A review. *Asian journal of psychiatry*, 51, 102119.
- Tee, M. L., Tee, C. A., Anlacan, J. P., Aligam, K. J. G., Reyes, P. W. C., Kuruchittham, V., & Ho, R. C. (2020). Psychological impact of COVID-19 pandemic in the Philippines. *Journal of affective disorders*, 277, 379–391.
- Xiang, Y.T., Yang, Y., Li, W., Zhang, Q., Cheung, T., Hg, C.H., 2020. Timely mental health care228-229. [https://doi.org/10.1016/S2215-0366\(20\)30046-8](https://doi.org/10.1016/S2215-0366(20)30046-8)

Yeasmin, S., Banik, R., Hossain, S., Hossain, M. N., Mahumud, R., Salma, N., & Hossain, M. M. (2020). Impact of COVID-19 pandemic on the mental health of children in Bangladesh: A cross-sectional study. *Children and youth services review*, 117, 105277.

J. McGrath, ADHD and Covid-19: current roadblocks and future opportunities, *Ir. J. Psychol. Med.* (2020),

<https://doi.org/10.1017/ipm.2020.53>.

17. H. "Oğütü, Turkey's response to COVID-19 in terms of mental health, *Ir. J. Psychol. Med.* (2020) 1–4,

<https://doi.org/10.1017/ipm.2020.57>

18. G. Sani, D. Janiri, M. di Nicola, L. Janiri, S. Ferretti, D. Chieffo, Mental health

during and after the COVID-19 emergency in Italy, *Psychiatr. Clin. Neurosci.* 74 (2020), <https://doi.org/10.1111/pcn.13004>, 372–372.

T. Franic, K. Dodig-Curkovic, Covid-19, child and adolescent mental health –

Croatian (in)experience, *Ir. J. Psychol. Med.* (2020) 1–4, <https://doi.org/10.1017/ipm.2020.55>.

20. H.H. de Anda, S. Braithwaite, EMS, Criteria for Disaster Declaration, 2020. <http://www.ncbi.nlm.nih.gov/pubmed/30969625>.

[://www.ncbi.nlm.nih.gov/pubmed/30969625](http://www.ncbi.nlm.nih.gov/pubmed/30969625).

Cai, H., Tu, B., Ma, J., Chen, L., Fu, L., Jiang, Y., Zhuang, Q., 2020. Psychological impact and coping strategies of frontline medical staff in Hunan between January and March 2020 during the outbreak of coronavirus disease 2019 (COVID19) in Hubei, China. *Med. Sci. Monit.* 26, e924171.

Chan, A.O.M., Huak, C.Y., 2004. Psychological impact of the 2003 severe acute respiratory syndrome outbreak on health care workers in a medium size regional general hospital in Singapore. *Occup. Med. Oxf. Engl.* 54, 190–196.

Folkman, S., Greer, S., 2000. Promoting psychological well-being in the face of serious illness: when theory, research and practice inform each other. *Psychooncology* 9, 11–19.

Hall, R.C.W., Hall, R.C.W., Chapman, M.J., 2008. The 1995 Kikwit Ebola outbreak: lessons hospitals and physicians can apply to future viral epidemics. *Gen. Hosp. Psychiatry* 30, 446–452.

Ho, C.S., Chee, C.Y., Ho, R.C., 2020. Mental health strategies to combat the psychological impact of COVID-19 beyond paranoia and panic. *Ann. Acad. Med. Singapore* 49, 1–3.

Kang, L., Li, Y., Hu, S., Chen, M., Yang, C., Yang, B.X., et al., 2020. The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus. *Lancet Psychiatry* 7, e14.

Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., et al., 2020. Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA network open* 3, e203976.

Lee, S.M., Kang, W.S., Cho, A., Kim, T., Park, J.K., 2018. Psychological impact of the 2015 MERS outbreak on hospital workers and quarantined hemodialysis patients. *Compr.*

Rana, W., Mukhtar, S., Mukhtar, S., 2020. Mental health of medical workers in Pakistan during the pandemic COVID-19 outbreak. *Asian J. Psychiatry* 51, 102080.

Sim, K., Huak, Chan, Y., Chong, P.N., Chua, H.C., Wen, Soon, S., 2010. Psychosocial and coping responses within the community health care setting towards a national outbreak of an infectious disease. *J. Psychosom. Res.* 68, 195–202.