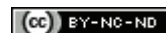


# An Integrated Approach to Deal with Mental Health Issues of Children and Adolescent during COVID-19 Pandemic

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## ABSTRACT

The pandemic caused by COVID-19 has left few countries untouched. It is a far-reaching implication on humankind, with children and adolescents, being no exception. Although the prevalence and fatality are negligible among children, a possible impact on their psychological and mental health cannot be disregarded. The unprecedented change in the way of living is bound to be having some psychological consequences on children and adolescents. The experiences gathered in childhood and adolescence are known to contribute to shaping the physical, emotional, and social well-being in adult life. Children are highly susceptible to environmental stressors. The present situation has the potential of adversely affecting the physical and mental well-being of children. To save the children from the long term consequences of this pandemic, a holistic approach integrating biological, psychological, social and spiritual methods of enhancing mental health have become essential. A concerted effort of government, Non Government Organisations (NGOs), parents, teachers, schools, psychologists, counselors and physicians are required to deal with the mental health issues of children and adolescents. This paper discusses the possible role of these agencies in the holistic intervention of this crisis.

**Keywords:** Global pandemic, Home confinement, Mental health, Psychological impact

## INTRODUCTION

Difficult to treat pneumonia of an unknown origin was observed in December 2019, in Wuhan, Hubei Province, China [1,2]. The World Health Organisation (WHO) described it as the 2019 novel coronavirus (COVID-19) on January 7, 2020. It has become a global challenge because of its rapid spread, the number of critically ill patients and the absence of definitive treatment. The efforts of developing a vaccine for the same is yet to see the light of the day.

Knowledge of COVID-19 in the paediatric age group is largely limited to case reports and case series, but the exact epidemiological and clinical pattern remains unclear [2]. Initiatives taken to limit the pandemic, such as social distancing, closure of the school and offices and the closing of all non-essential shopping areas have thrown life out of gear. Each and every individual is forced to lead a non-normal way of life. Additionally, predominantly being housebound, fear of getting infected or parental loss, and remaining away from outdoor games and sports, all have the potential to affect child psychology.

### Transmission Route and Clinical Features

Coronaviruses are enveloped, single-stranded RNA viruses with glycoprotein spikes; it gives crown-like appearance under an electron microscope [3]. Symptomatic patients are the most frequent source of COVID-19 infection. The virus spreads through respiratory droplets when patients sneeze or cough [4,5]. Though the spread of disease among the children is negligible, there is a significant concern about their mental health. With the WHO's declaration as a global pandemic, the world has come to a state of standstill. Social distancing has been the only way left out, and countries declared lockdown and shut down [6]. Social distancing and closure of schools have confined the children to the home, restricting their outing, outdoor and physical activities. This drastic change in lifestyle has led to a variety of social, psychological and educational problems, though not physiological.

### Factors Affecting the Well-Being of the Child and Adolescent

Stemming out of the epidemic, different stressors like fear of getting infected, inadequate information about the disease and

preventive measures; boredom and frustration, sense of insecurity and uncertainty; no interpersonal contact with friends, classmates, teachers; staying home twenty-four hours a day, seven days a week with the same person, lack of enough personal space; financial problems faced by the family, etc., results in enduring mental health problems in children [7].

Government of India declared the closure of educational institutions to save children from getting infected, which forced them to stay inside. Prolonged home confinement due to school closure during any epidemic has adverse effects on the physical as well as mental well-being of children [8]. Studies show that school closure during weekends or summer vacation reduces the physical activity, thus making the child less physically active, which results in increased screen time, disturbed sleep patterns, irregular eating habits, weight gain, and other associated physical and psychological problems [9,10]. Working from home, adjusting with new lifestyles, and the financial loss is enough to create distress among parents. Parental distress facilitates the development of distress symptoms in children [11]. The mental health problems caused by family issues, the conflict between spouses, tension with parents, and other anxiety within the family affect the child's well-being. Reports on a survey in the USA showed that people facing financial troubles have a higher level of psychological distress and usually face difficulty in conducting work responsibilities and taking care of their children [11]. The practice of social distancing during this pandemic has led to financial loss, further affecting their parenting skills [12]. Studies show financial losses during a natural disaster, Ebola epidemic in West Africa during 2014-16, which led to an increase in child abuse, neglect, and exploitation cases. During this lockdown, in February 2020, domestic violence cases increased more than three times in Jianli County in Hubei province in China, as indicated in a police report in media. Similarly, the increase in the number of child abuse cases has been reported in Texas [13-15]. Studies showed that there was an increase in the number of post-traumatic stress disorder and other mental health issues post-natural and human-made disasters (Indian Ocean Tsunami, 2004; The Great East Japan Earthquake and Tsunami, 2011), mainly due to excessive exposure to mass media [16].

It is praiseworthy that the mass media promptly reports the global crisis. The social media is flooded with information about the global pandemic, but unverified information further aggravates the distress [17,18].

### Behavioural Manifestations

Among children, the typical psychological manifestations to any traumatic event are depression, anxiety, behavioural problems and psychiatric issues like acute stress reaction, adjustment disorder, panic disorder, post-traumatic disorder and anxiety disorder specific to childhood and psychotic disorders [19,20]. Sprang G and Silman M conducted a study on post-traumatic stress disorder in parents and youth after the health-related disaster. It showed that the quarantined children had four times higher mean post-traumatic stress scores than those who were not [21]. Post-traumatic distress creates a substantial problem in one's social and educational functioning [22]. Previous exposure to traumatic events increases the vulnerability to post-traumatic stress disorder. Factors like the severity of event or level of exposure [23], subjective trauma characteristics like a perceived threat, intensity of fear, helplessness play a significant role [10].

### Integrated Intervention Strategy

Children are highly susceptible to environmental stress around them. Early years' experiences contribute significantly to shaping their physical, psychological, emotional, and social well-being as a successful adult. The latest commission on 'the future of the world's children' advocates for adopting a holistic approach to address the issues, which saves the children from long term consequences [24]. This pandemic has affected the physical, psychological, social, emotional, and educational well-being of the child. An integrated approach consisting of psychological, social, educational, and clinical assistance should be adopted for current pandemic mental health intervention [25]. To deal with the negative consequences of prolonged home confinement, the government, non government organisations working in this field, the community, school, teachers and parents should join hands.

**Parents:** For children, parents are always the closest and most reliable resource to get help from. They can come forward to identify the physical and mental turbulence their child is going through and resolve them by comforting and consoling them [26,27].

Parents are the best role model, and children often imitate them in developing and maintaining healthy behaviour. So, they should be extra-cautious in their behaviour and parenting style during home confinement. Children should be provided with a safe, reassuring and secure environment to freely ventilate their anxiety, frustration and fear, which gives impetus to resolve these problems. One of the chief sources of stress is epidemic related news, so parents should take care to keep their children from excessive exposure to such news. Clarifying doubts through open discussion is beneficial in reliving their panic and anxiety [26,27]. Parents should take advantage of the prolonged home confinement to improve parent-child interaction, enhance their self-sufficiency skills by involving them in household activities, strengthen the family bond and meet the child's psychological needs by adopting the right parenting approach. Elder children can be encouraged to do household activities of their choice. Parents should refrain from nagging, which further intensifies the situation. Restriction of the screen time, which will indirectly reduce the exposure to indiscriminate information and having optimistic discussions with their children about what is happening around the world and how it can be controlled, may be helpful.

**Parents' committee:** Parents' committee in association with schools, can take steps to mitigate the social, psychological and educational issues of their children. They can help psychologists, counselors,

psychiatrists, physicians and educationists in providing online services to their children. Postpandemic, systematic screening of the psychological problems can be done, followed by a psychological intervention program which should include supportive counseling, cognitive behaviour therapy and grief-focused psychotherapy [28,29].

**Schools:** Play a crucial role at this juncture. They should take steps to design courses keeping in mind the present constraints and deliver education. Particular attention should be given to provide the environment where children can freely interact with their teachers about their feelings and get proper guidance and counseling. They should integrate health promotion schedules, physical activities, balanced dietary patterns, healthy lifestyle, yoga, meditation and mindfulness in the school curriculum [8].

**Paediatrician:** Paediatrician or doctor is the first person with whom parents discuss the health of their children. So, the physician should adopt an integrated approach while diagnosing the illness of the child. The help of psychologists or counselors can be taken along with his usual treatment, and medication: as the root cause of illness may be non organic.

**Government:** The government should take necessary steps to improve awareness about the impact of home confinement on physical and mental health during such a situation. Proper guidelines should be made to develop and implement online learning. The course content should be such that it must meet the educational requirements; at the same time, it should not overload the students. The help of academicians, health professionals, and NGOs working in this area can be taken to design educational courses about healthy lifestyle and psychosocial support system. Educationists and expert professionals can take the initiative to develop age-specific, attractive promotional videos that can be used to encourage children on how to have better physical activities, balanced diet, maintain personal hygiene, maintain physical and social distancing to keep the virus away and keep themselves engaged, happy and positive during this period of home confinement [29]. Health Department should be given clear guidelines to maintain the routine vaccinations of the children.

**NGOs:** Parental and family tension disturbs the child's well-being. So, the mental health problems caused by family issues, the conflict between spouses, stress with parents, and other anxiety within the family can be resolved by seeking online help from psychologists and social workers. This social network can come to the rescue of disadvantaged or single-parent families [30]. NGOs can serve as the mediator in assisting parents to take the help of counselor, psychologist, or physician in dealing with mental health issues of their children.

**Technology:** The adverse effect of social distancing, can be minimised by effective use of technology. Both young and older children can be engaged in video calls with their relatives, classmates, friends with whom they are attached. Parents should monitor the use of mobile phones and the internet of their older children and restrict them from overuse. Children can be engaged in some online games and apps to break their monotony and get relief from boredom, but with parental monitoring [31].

### CONCLUSION(S)

The world is going to face a tough time in dealing with an upcoming psychological pandemic stemming from this Covid-19. Children, the future of any nation, are the worst sufferers. It has considerable social, psychological, educational, and emotional consequences on them. So, an integrated approach should be adopted in resolving these issues effectively. A collaborative effort by government, NGOs working in this field, parents, teachers, school, psychologists, counselors, technology and the physician will be beneficial in handling this multi-faceted problem of children and saving them from the long term consequences of this pandemic.

## REFERENCES

- [1] Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, et al. Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. *New England Journal of Medicine*. 2020;382(13):1199-207. doi: 10.1056/NEJMoa2001316.
- [2] Huang C, Wang Y, Li X, Ren L, Zhao J, Yi Hu. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet*. 2020;395(10223):497-506. doi: 10.1016/S01406736(20)30183-5.
- [3] Zhu N, Zhang D, Wang W, Li X, Yang B, Song J, et al. Coronavirus investigating, and research team. A novel coronavirus from patients with pneumonia in China, 2019. *N Engl J Med*. 2020;382(8):727-33.
- [4] Chan JF, Yuan S, Kok KH, To KK, Chu H, Yang J. A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: A study of a family cluster. *Lancet*. 2020;395:514-23. doi: 10.1093/lanf/iaa077.
- [5] Chen ZM, Fu JF, Shu Q, Chen YH, Hua CZ, Li FB, et al. Diagnosis and treatment recommendations for paediatric respiratory infection caused by the 2019 novel coronavirus. *World Journal of Pediatrics*. 2020;16:240-46. doi: 10.1007/s12519-020-00345-5.
- [6] WHO guideline: COVID-19: IFRC, UNICEF, and WHO issue guidance to protect children and support safe school operations, guidance includes practical actions and checklists for administrators, teachers, parents and children.
- [7] Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, et al. The psychological impact of quarantine and how to reduce it: A rapid review of the evidence. *Lancet*. 2020;395(10227):912-20, published online February 19. Available From: [https://doi.org/10.1016/S2215-0366\(20\)30077-8](https://doi.org/10.1016/S2215-0366(20)30077-8).
- [8] Brazendale K, Beets MW, Weaver RG, Pate RR, Turner-McGrievy GM, Kaczynski AT, et al. Understanding differences between summer vs. school obesogenic behaviours of children: The structured days hypothesis. *Int J Behav Nutr Phys Act*. 2017;14:100. Available from: <https://doi.org/10.1186/s12966-017-0555-2>.
- [9] Wang G, Zhang J, Lam SP, Li SX, Jiang Y, Sun W, et al. Ten-year secular trends in sleep/wake patterns in Shanghai and Hong Kong school-aged children: A tale of two cities. *J Clin Sleep Med*. 2019;15:1495-502.
- [10] Foy DW, Madvig BT, Pynoos RS, Camilleri AJ. Etiologic factors in the development of post-traumatic stress disorder in children and adolescents. *Journal of School Psychology*. 1996;34(2):133-45.
- [11] Internet People financially affected by COVID-19 outbreak are experiencing more psychological distress than others. Available From: <https://www.pewresearch.org> (Accessed on: April 28, 2020).
- [12] Stress and parenting during the coronavirus pandemic. Research Brief Available From: <https://www.parentingincontext.org> (Accessed on: April 18, 2020).
- [13] Brooks-Gunn J, Schneider W, Waldfogel J. The great recession and the risk for child maltreatment. *Child Abuse Negl*. 2003;37;(10):01-16.
- [14] Curtis T, Miller BC, Berry EH. Changes in reports and the incidence of child abuse following natural disasters. *Child Abuse & Neglect*. 2000;24(9):1151-62. Available from: [https://doi.org/10.1016/S0145-2134\(00\)00176-9](https://doi.org/10.1016/S0145-2134(00)00176-9).
- [15] Cerna-Turoff I, Kane JC, Devries K, Mercy J, Massetti G, Baiocchi M. Did internal displacement from the 2010 earthquake in Haiti lead to longterm violence against children? A matched-pairs study design. *Child Abuse Negl*. 2020;102:104393.
- [16] Garfin DR, Thompson R, Holman EA. Mental and physical health effects of acute stress following traumatic events: A systematic review. *Journal of Psychosomatic Research*. 2018;112:107-13. Available from: <https://doi.org/10.1016/j.jpsychores.2018.05.017>.
- [17] Dalton L, Rapa E, Stein A. Protecting the psychological health of through effective communication about COVID-19. *Lancet Child Adolesc Health*. 2020;4(5):346-47. doi: 10.1016/S2352-4642(20)30097-3.
- [18] Centre for Disease Control. Helping Children Cope with Emergencies. Available from: <https://www.cdc.gov/childrenindisasters/helping-children-cope.html> (Accessed on: April 21, 2020).
- [19] Brewin CR, Dalgleish T, Joseph S. A dual representation theory of posttraumatic stress disorder psychological review. 1996;103(4):670-86.
- [20] Kar N. Psychological impact of disasters on children: A review of assessment and interventions. *World J Pediatr*. 2009;5(1):05-11. <https://doi.org/10.1007/s12519-009-0001-x>.
- [21] Sprang G, Silman M. Posttraumatic stress disorder in parents and youth after health-related disasters. *Disaster Med Public Health Prep*. 2013;7:105-10.
- [22] National Institute for Health & Clinical Excellence. Post-traumatic stress disorder: The management of PTSD in adults and children in primary and secondary care. London: Gaskell and the British Psychological Society. 2005.
- [23] Pine DS, Cohen JA. Trauma in children and adolescents: Risk and treatment of psychiatric sequelae. *Biological Psychiatry*. 2002;51:519-31.
- [24] Clark H, Coll-Seck AM, Banerjee A, Peterson S, Dalglis SL, Ameratunga S, et al. A future for the world's children? A WHO-UNICEF-Lancet Commission. *Lancet*. 2020;395:605-58.
- [25] Cloninger Robert C. The science of well-being: An integrated approach to mental health and its disorders. *World Psychiatry*. 2006;5(2):71-76.
- [26] National Health Commission of the People's Republic of China. Guideline for psychological crisis intervention during 2019-nCoV. Jan 26, 2020. Available From: <http://www.nhc.gov.cn/jkjs3577/202001/6adc08b966594253b2b791be5c3b9467.shtml> (Accessed on: February 29, 2020 [in Chinese]).
- [27] WHO. Coronavirus disease (COVID-19) advice for the public. Available From: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public> (Accessed on: February 29, 2020).
- [28] Perrin EC, Leslie LK, Boat T. Parenting as primary prevention. *JAMA Pediatr*. 2016;170:637-38.
- [29] Mason F, Farley A, Pallan MJ, Sitch A, Easter C, Daley AJ. Effectiveness of a brief behavioural intervention to prevent weight gain over the Christmas holiday period: Randomised controlled trial. *BMJ*. 2018;363:k4867.
- [30] Liu S, Yang L, Zhang C, Xiang YT, Liu Z, Hu S, et al. Online mental health services in China during the COVID-19 outbreak. *Lancet Psychiatry*. 2020;7(4):e17-18.
- [31] Can technology ease loneliness during COVID19 lockdown. Available from: <https://www.weforum.org/agenda/2020/04/neuroscience-loneliness-technology-lockdown-coronavirus-covid-quarantine/>. Accessed on: April 22, 2020.

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