

Review

Small Hands - Big Battles: Challenges Encountered by Indian children and the Approaches Implemented by the Indian Government to Alleviate Them during COVID-19 Pandemic

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Abstract: Since the origin of COVID-19, everyone is getting accustomed to the new rules and regulations, travel restrictions and new lifestyle. Constant changes in the government advisories and the COVID-19 guidelines poses a real challenge for children to adapt to causing stress, anxiety and other mental health issues. Therefore, it is imperative to raise awareness about the challenges that Indian children are dealing with to help them better cope with this stressful and frantic time. The focus of this review is on various child-related problems that the Indian government is trying to tackle such as stress, depression, malnutrition, school closures, digital divide, child labor, child trafficking in context of mental health issues caused by them during COVID-19.

Highlights:

The reader will come to appreciate that:

- Digital-divide caused by shifting offline learning to online mode.
- Strategies implemented by Indian government to combat malnutrition
- Effect of COVID-19 lockdown on children suffering from mental disorders
- Child labor and trafficking and the strategies that aim to decrease child labor during the pandemic
- Educating the children appropriately regarding COVID protocols

Keywords: digital-divide; malnutrition; child psychology; child-labor; COVID-19; India

Introduction

The world has currently been plagued with the origin of COVID-19. With current reported cases being more than 200 million along with 4 million deaths out of which India has recorded more than 31 million cases and more than 0.4 million deaths as of 9 August 2021[1]. As this disease is airborne and there is a lack of definite treatment, the only way to stop its transmission is through home confinement which has led to the implementation of the world's strictest lockdown. From a quarantine point of view, there has been a significant psychosocial impact along with various other problems, especially on children due to the drastic change in their day-to-day lifestyle and mental excursions[2].

During the pandemic, recreational spaces like schools, playgrounds were shut down for a long time, causing distress, confusion and irritation among children. All these negative aspects of home isolation led to psychological impacts on their minds triggering phobias, anxiety disorders, depression, PTSD, and suicidal thoughts[3]. Abrupt closure of schools has created mental pressure on them causing bad moods and subtle aggression. Malnutrition, digital-divide, child-labor and trafficking are among other reasons that have affected the mental health of children as discussed in this review.

School closures and the Digital-Divide

In India, parents send their children to schools between the ages of 3-4 years. Schools are essential institutions that provide education with promotion of personal hygiene, physical activity, and healthy food and body habits while maintaining a balance of discipline and freedom. But the progression of the pandemic and shutting down of schools and colleges, educational institutions took their teaching from in-person to online mode to ensure continuation of curriculum, making all the multimedia devices a major necessity. It became challenging for children residing in urban-slums and rural areas to access these lectures. Several cases were reported where poor families had to sell their precious assets to be able to afford a smartphone for keeping up with online education. The inequality in access to online education among students coming from high and low-income backgrounds created a digital divide which can be directly related to increasing school dropout rates, pushing the children into labor and early marriages[3, 4].

Governmental policies to fight digital-divide among children

As offline education is still not an option continuing equitable education online became inevitable. The Ministry of Human Resources Development (MHRD) promoted digital education through online platforms and also through various mediums of TV and RADIO.

There are several online programs developed by the Indian government engaging teachers, parents and students explained below:

e-PATHSHALA and NROER platforms: contains 1886 audios, 2000 videos, 696 e-books for classes 1st to 12th in different languages[5].

Swayam platform: It hosts 1900 courses covering both school and Higher Education in all subjects including engineering, humanities and social sciences, law and management courses[5].

Swayam Prabha platform: It is an exclusive DTH platform having 32 TV channels transmitting free of cost educational content for students 24/7[5].

Contribution of Non-Governmental Organizations to curb the Digital Divide

Apart from government organized programs, several Non-Governmental Organizations stepped forward to deliver services to educate India. Some of the important NGOs are enlisted below along with their contributions:

Sampark

Sampark Foundation, operating in six states, has reached more than 10 million children throughout India. 'Sampark Smart Shala' makes use of innovations such as mobile applications, board games to keep students engaged in lessons specifically catering to students in rural areas. Sampark has also launched Har Ghar Science STEM for Girls to construct science labs[6].

Pratham

It is a Mumbai based NGO that encourages children to attend school regularly. To engage underprivileged children in India it launched 'Karona Thodi Masti Thodi Padhai'[7].

Eklavya

Eklavya is a Madhya Pradesh based NGO that trains to teach at well-ventilated spaces within local, socially distanced locations[8].

Vidya

Vidya is a renowned NGO in major cities. Vidya receives donations for laptops, phones and other devices; students in need can pick them up at their convenience[9].

ThinkZone

ThinkZone focuses on improving educational outcomes in vulnerable communities by developing “tech plus touch”. More than 10,000 schoolchildren in India have benefited from its home-based initiative[10]. All the above mentioned strategy-webpages are mentioned in Table-1.

Table 1. Summary of Government and NGO based virtual platforms that helped to curb digital-divide.

Name of the platform	Government/NGO	Weblink
e-PATHSHALA	Government	https://epathshala.nic.in/
Swayam	Government	https://swayam.gov.in/
Swayam Prabha	Government	https://www.swayamprabha.gov.in/
Sampark	NGO	https://www.samparkfoundation.org/
Pratham	NGO	https://www.pratham.org/
Eklavya	NGO	https://www.eklavya.in/
Vidya	NGO	https://vidya-india.org/
ThinkZone	NGO	https://thinkzone.in/

Causes of Stress, Anxiety and depression during COVID-19

COVID-19 brought an era of digitization of education. Although digital-divide has been addressed by both government and NGOs there are also other factors that cause such as the fear of exams. The exams which used to be conducted at particular times of the year are now heavily dependent on the spread of cases and government-released guidelines that keep changing from day-to-day.

In accordance with the ongoing pandemic in India, The MHRD ordered Central Board of Secondary Education (CBSE) affiliated schools to promote all students of classes I to VIII to the next grade[11]. State and ICSE boards decided to follow the same foot-steps[12]. MHRD also declared that students of class IX and XI will be promoted to the next grade based on the school-based assessments[11].

In India X and XII class students are promoted after clearing the respective board exams. But due to the continuous rise in cases of COVID-19, MHRD cancelled Board exams for X which were to be held in May-2021 and students were mass promoted[13].

CBSE has issued new assessment scheme for Class X and XII dividing the session into two terms and hold board exams twice a year. A 30% reduction in syllabus was noted[14,15].

As the government took plenty of time to finalize what has to be done for each class and the decisions were revised daily, they caused stress to the children. Some children find it difficult to process last-minute changes in the exam schedule and due to the sudden schedule change, confusion around the syllabus arises that adds to the stress. A majority of children are not accustomed to write examinations online. Lack of experience, practice and prolonged period of dilemma gives rise to anxiety and tension to the students.

Malnutrition in India:

With a prolonged lockdown in India, acute deprivation of nutrition is faced by the underprivileged children. As per Global Nutrition Report-2020, stunting is seen in every 1 in 3 and wasting is seen in every 1 in 5 children[16]. According to Partha De et al, studies have found that children who are exposed to severe acute malnutrition early in life have

poor academic achievement, behavioral issues and poor cognitive function[17]. One of the main underlying reasons for developmental delays in India are malnutrition along with congenital factors, diseases, lack of access to a health care system, inadequate hygiene, poverty etc. In India, nearly 10% of children are believed to have developmental delay in early years of their lives[18,19,20] Thus it became imperative for government to prevent malnutrition especially at the time of the COVID-19.

Under normal circumstances, the government of India runs Mid-Day Meal Scheme (MDMS). It is the world's largest school meal program that aims to achieve the goal of universalization of primary education. Under this scheme, cooked meals are provided to every child enrolled in classes I to VIII and attending the school[21]. MDMS addresses hunger and malnutrition, increase enrolment and attendance in school, improve socialization among castes, provide employment at grassroot level especially to women. The food provides balanced nutrients that prevent malnutrition along with the reduction of anemia and vitamin A deficiency thus building stronger minds[22]. During the lockdown, 6.4 million children were deprived of utilizing the benefits of this initiative. Moreover, take-home ration for children, pregnant, and lactating women were stalled. Nutritional Rehabilitation Centers are dedicated to treating malnutrition, remained closed for a long-time. All mentioned factors contributed to substantial increase in stunting, wasting, malnourishment, and reversal of India's nutrition indicators[23].

Strategies implemented by Indian government to combat malnutrition

With the approval of the Hon'ble Education Minister, the Central Government issued notices advising state governments and union territories to provide hot cooked Mid-Day Meals or Food Security Allowance (FSA), to all eligible children while their schools were closed. Under the FSA, eligible children were provided pulses and oil along to meet their nutritional requirement and safeguard immunity under the prevailing pandemic. The modalities for this purpose were to be decided by the respective States[22].

Cabinet Committee on Economic Affairs (CCEA) introduced 'Flexi funds' which were to be used to set up school nutrition gardens, and provide supplemental nutrition to children. State's finances would be used to cover Flexi fund expenditures. Priority areas in aspirational districts such as areas having high concentration of anemic children as per National Family Health Survey (NFHS) data; backward areas in various states; SC-ST dominant areas, etc. were listed. These districts were given the highest priority to provide food items[24].

Food grains were allocated to states and UTs at subsidized rates under the MDMS for the third and fourth quarter[25].

Child labor and child trafficking:

Child labor and child trafficking are the most over looked social issues that are being noticed since the arrival of COVID-19. Child labor refers to any form of work that deprives children of their childhood, interferes with their freedom and ability to attend school regularly, exposes them to exploitation and harms their development[26]. According to the estimates released in 'Child Labor: Global estimates 2020, trends and the road forward, ILO and UNICEF, 1 in 10 of all children worldwide face this drudgery accounting for a total of 160 million children of which 63 million are girls and 97 million are boys. Nearly half of all child laborers, which accounts to a whopping figure of 79 million, were doing hazardous work which puts their health, safety and moral development at risk.

Child labor increases the likelihood of having peer problems and is linked to worse emotional symptoms. The detrimental effects of child labor can be seen in the mental health dimension of prosocial behavior[27].

Hazardous child labor refers to work in hazardous or unhealthy situations that could lead to a child's death, injury, or illness as a result of low safety, health standards and

working conditions. It has the potential to cause permanent disability, sickness, and psychological harm[26].

Children may not fully realize the dangers they face, their small size may be utilized for working in dangerously cramped situations not accessible to adults, like child chimney sweeps or in difficult mining areas. They have a risk of getting hurt while being asked to operate heavy and complex farm equipment; riding large vehicles pose a risk of injuries and death from fall from them. Children working in the mining industry may be exposed to hazardous chemicals, face the risk of mine collapse, be exposed to mineral dust, and work with explosives. A lack of experience and false judgement of children at such dangerous sites can result in death, permanent disability and psychological damage[28].

The report released by ILO brings to light that due to occurrence of pandemic, progress to end child labor has stalled for the first time in 20 years. Without taking proper mitigation measures it is predicted that, the number of children in child labor could rise from 160 million in 2020 to 168.9 million by the end of 2022[29].

UNICEF estimates that 24 million children that have missed out on schooling because of labor will drop-out thus perpetuating the cycle of poverty as they miss out on the education and learning skills needed to get jobs in adulthood[30].

Child trafficking is one of the most problematic issues faced by the children employed for labor. It separates children from their safe environment and exploits their vulnerability. According to the International Labor Organization (ILO), 9,80,000 to 12,25,000 minors were compelled to work as a result of human trafficking[31].

The need for cheap malleable and docile labor in sectors and among employers where the working conditions and treatment of children badly violate the children's rights is directly linked to child trafficking - both within countries and beyond. Child soldiering, child domestic labor, prostitution and commercial sexual exploitation, drug couriering, camel jockeying and bonded labor are a few examples of exploitative or slavery-like behaviors in the informal economy[34]. COVID-19 made it very difficult to identify such victims[32].

According to the study conducted by Kiss et al. in the Mekong region, violence exposure comes out to be a known predictor of psychological morbidity in children, and it has also been linked to depression, anxiety, and suicide ideation among trafficked children who have come into contact with post-trafficking services[33].

As per Livia Ottisava et al., The most common clinical presentations pertaining to mental health in the trafficked group were post traumatic responses which included PTSD (22%) and affective disorders (22%). A high percentage of trafficked children displayed deliberate self-harm (33%), and 27% had a history of suicide attempt[34]. However, in their study, a considerable proportion of children presented with non-specific emotional and behavioral issues, underlining diagnostic complexity and the necessity for a multidisciplinary approach in their treatment.

Strategies that aim to decrease child labor and child trafficking during the pandemic

Countries like India which are experiencing humanitarian crises should be prioritized to decrease child labor. It includes extending social protection for children and their families, ensuring that the dropped-out children get enrolled, registering every child's birth, promoting decent work that delivers fair income, ensuring that child protection laws are in place in a functional system.

Informal micro- and small businesses functioning at the lower tiers of supply chains, deserve special attention. To discourage child labor risks in vendor supply chains, governments can lead through public procurement. In already heavily indebted countries, debt relief should be extended and debt restructured. International cooperation and partnership in overcoming global challenges needs to be employed.

To prevent child trafficking a continuous monitoring of crimes should be done towards the vulnerable population. Law enforcements should remain vigilant of these crimes[32].

Save the Children, an NGO in India speculated an increase in the number of orphans as a result of parental death due to COVID-19 and circulation of pleas to adopt them on social media would leave the children vulnerable to trafficking and abuse. The organization urged people to contact the government helpline 1098, instead of sharing details of orphaned children online[35]

Hospitals are instructed to gather declarations from sick parents to identify who their children should go to if they die, in order to avoid illicit adoptions[35]

Effect of COVID-19 on the delicate minds of children

Children aren't adept with theorizing the effect of a disaster and have an innate need for security and comfort in the world, they become vulnerable in the face of pandemic such as COVID-19. As separation, isolation and quarantine are the pillars of response towards control of pandemic, it consequently disturbs the rituals, norms that help in regulating the ways in which families function at time of crisis, unlike at time of disasters where in the victim's huddle and convergence is encouraged[36,37,38]

In a study, it was noted that 30% of children and 25% of parents who experienced quarantine met the criteria for PTSD. Also, if the adult respondent met clinical cutoff score, 86% of them had children who also met the clinical cutoff. Years later also quarantined individuals often experience anger, insomnia, detachment and PTSD[39]. As lockdown has enforced the stay of parents and children under the same roof, the burden of teaching and childcare lies on the parents. When a child demonstrates behavioral and physical reactions due to stress caused by COVID-19, parents remain inexperienced in age-appropriate responses, and interventions[40].

Effect of COVID-19 lockdown on children suffering from mental disorders and poverty

One in every six children aged 2 to 8 years suffers from a mental, behavioral, or developmental disorder[41]. Children suffering from mental disorders such as autism, ADHD, learning disability, developmental delays, and emotional difficulties have faced dire challenges. They find it difficult to understand the situation that demands staying confined in homes. The disruption of their daily routine and lack of engagement with peers has made them agitated and anxious. The shortage of medicines has made the situation worse[42].

India has the largest child population in the world of which 40 million are from lower socio-economic backgrounds[14]. These children have gone through some of the worst phases of mental stress and emotional trauma. They belong to poor families with parents working in farms and the rest to migrants. As the duration of lockdown increased, the source of income for children of such households decreased making them easy target for mental and physical abuse because they get increasingly exposed to unfavorable economic and social circumstances[43]. It is also noted that since the lockdown began, The Deputy Director of 'CHILDLINE 1098' India, announced that the calls received on the helpline suddenly doubled[29].

Helplessness faced by poor families sometimes manifested in form of violence towards children. This violence made children more vulnerable towards anxiety, depression and even suicide. Prolonged closure of schools forced the adolescents into child labor.

Various initiatives taken by Indian Government and NGOs to protect mental health of children:

During the lockdown, it became necessary to address and protect the mental health of children for which various initiatives were launched:

SAMVAD

Support, Advocacy & Mental health interventions for children in Vulnerable circumstances and Distress (SAMVAD) is a national initiative under the deployment of National Institute of Mental Health and Neuro Sciences (NIMHANS). It works in the areas of child protection, mental health of children in challenging situations. It includes a unique training curriculum on childhood trauma, interventions for children in conflict with the law, and forensics in child and adolescent psychiatry and mental health. It also provides Education and mental health assistance to children with special needs, in the context of adoption. As part of the project to provide coping techniques for children in distress nearly 1 lakh stakeholders, including child protection functionaries, tele-counsellors, have been trained.

The program intends to integrate local bodies to promote child protection and mental health inclusion in Panchayati Raj systems is being implemented in aspirational districts around the country to raise awareness and improve service delivery[44].

Manodarpan and Kiran

Manodarpan is an initiative by the Ministry of Education (MoE), as part of Atma-Nirbhar-Bharat-Abhiyan. In response to increasing vulnerability to anxiety, depression and ensuring well-being of students. Manodarpan service could be availed through toll-free number[45]. Similarly, The Ministry of Social Justice and Empowerment has created a toll-free helpline called Kiran[46].

Role of Rashtriya Kishor Swasthya Karyakram (RKSK) on Mental health during COVID-19

RKSK is an ongoing program launched by Ministry of Health and Family Welfare (MoHFW) in 2014. It is aimed at teenagers and addresses concerns like as nutrition, reproductive health, mental health, and substance misuse[47]. School-based approaches came to a halt but its peer educator system has been used to disseminate COVID-related information like teaching the value of social distancing, mask mandates, and hand hygiene etc[48]. Moreover, adolescents in containment zones were given access to teleconsultation via Adolescent Friendly Health Centres (AFHCs)[48].

Strategies to improve the mental and emotional wellbeing in children of all age groups

MoHFW along with NIMHANS released an advisory for 'taking care of Mental Health of children during COVID-19' which brought to light simple strategies such as:

1. **To provide assurance to children whenever needed:** Care takers should listen to the concerns of children and try to answer their queries about the pandemic.
2. **Keep the children in contact with their friends:** Kids should be encouraged to keep in touch with their beloved friends, cousins, relatives through calls or video calls. Caretakers should involve children in fun activities that can be done virtually.
3. **Managing children's anxiety and giving children clear information:** It is normal for a child to feel anxious during the lockdowns. Parents need to mind the changes in behavior of their children and ask if anything is bothering them. While children express their feelings or ask questions related to COVID, parents should listen without judging and provide honest answers with patience[49].
4. **Engaging kids in indoor activities:** It is important that parents find indoor ways to keep the minds of their children occupied by giving them puzzles to solve or by teaching them new skills such as cooking/knitting. Exercising must be incorporated.
5. **Making a routine of learning at home:** Parents should make sure kids maintain a regular habit of studying by following up on the assignments being given through schools[49].

Parental guide for children of specific age groups:

Above guidelines apply to kids of all ages but reactions and supportive interventions differ by developmental stage.

Infants and toddlers are aware of their parents' worries and can be distressed by them, for which parents need to be calm, patient and maintain normal routines.

Preschool Children often view illness as a punishment or result of wrongdoing. They are very concerned about the safety of their family members and may whine, become clingy, and have sleep problems. They need to be reassured and explained about what is happening in a simple manner.

School Aged Children can understand the cause of illness as an external one and are very enquiring about the facts and images of protective gear, masks and bodies that they may see or hear. They can be frightened and irritable for which they need reassurance, direct and honest answers. Open discussions should be done[40].

Adolescents have a developed sense of understanding illness and imagine alternate possibilities, they are able to understand the gravity of events and their implications causing them to have genuine apprehension about future for. They can display a spectrum of moods like fear, anger, worry and sadness as their freedom of movement and socializing is restricted[40].

Feelings and opinions of an adolescent need to be respected and discussed. Parents should show interest in what their kids see on social media. Parents should try to remain transparent about the issues they are facing as a result of the pandemic and share the mechanisms they intend to cope.

Conclusion

Under abnormal circumstances of lockdown, the families lost their freedom of movement and the humdrum of routine life was disturbed. The adverse effects of the pandemic were unfortunately faced by the poor, the weak, and the children. Eventually as adults started getting used to daily changing government guidelines it remained difficult for a child to accept them even though many parents adapted work-from-home and stayed with them the whole-time. The responsibility of handling the needs of children remains in the hands of their parents, caretakers and the community they belong to. Educating the children appropriately regarding COVID protocols, addressing their worries, paying attention to their education are some of the important tools to manage physical and psychological well-being of children. In initial stages of the pandemic, as governments struggled with establishing system to contain and mitigate it's effected social issues that have always lurked in the background suddenly came to forefront such as child labor affecting the mental and physical health of the children. Keeping in mind the mental health of the children in India, the Indian government and NGOs accomplished schemes such as SAMVAD, Manodarpan, Kiran and RKSK. The Indian government still managed to implement a lot of strategies in the favor of children such as dropped-out children getting registered back to school, registering every child birth and also increasing the pay-scale of the income of their parents. There are also other strategies that were implemented in an attempt to decrease the rate of malnutrition such as the Mid-Day Meal Scheme. Along with these, the government is also involved in taking action against the child trafficking increase by implementing helpline 1098. These strategies have not only helped addressing the issues related to malnutrition, child labor and digital divide but also helped in easing the norms and decreasing the stress in children. Along with the government, significant contributions were also made by several NGOs. Even though the psychological and physical needs of every child differ from each other, the government is trying to meet them and make a significant impact in the life of every child during COVID-19. The hand-in-hand contribution of parents and the communities will help children cope up from the damage caused by the pandemic to receive and create the bright Indian future as promised.

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References

- [1] <https://covid19.who.int/>
- [2] Wang G, Zhang Y, Zhao J, Zhang J, Jiang F. Mitigate the effects of home confinement on children during the COVID-19 outbreak. *Lancet*. 2020;395(10228):945-947. doi:10.1016/S0140-6736(20)30547-X
- [3] Ghosh, R., Dubey, M. J., Chatterjee, S., & Dubey, S. (2020). Impact of COVID -19 on children: special focus on the psychosocial aspect. *Minerva pediatrica*, 72(3), 226–235. <https://doi.org/10.23736/S0026-4946.20.05887-9>
- [4] Annual Status of Education Report 2020; <http://www.asercentre.org/Keywords/p/371.html>
- [5] Indian National Commission for cooperation with UNESCO responding to COVID-19; <https://www.education.gov.in/en/indian-national-commission-cooperation-unesco-responding-covid-19>
- [6] <https://www.samparkfoundation.org/>
- [7] <https://www.pratham.org/>
- [8] <https://www.eklavya.in/about-us-eklavya>
- [9] <https://vidya-india.org/>
- [10] <https://thinkzone.in/about-us/>
- [11] <https://www.indiatoday.in/education-today/news/story/cbse-students-of-classes-1-to-8-to-be-promoted-directly-classes-9-and-11-on-basis-on-internal-assessment-hrd-minister-1662249-2020-04-01>
- [12] <https://indianexpress.com/article/education/cisce-to-promote-class-1-to-8-students-without-exams-6345984/>
- [13] <https://www.cbse.gov.in>
- [14] <https://www.cisce.org>
- [15] <http://cbseacademic.nic.in/>
- [16] 2020 Global Nutrition Report: Action on equity to end malnutrition. Bristol, UK: Development Initiatives.
- [17] Singh S, Srivastava S, Upadhyay AK. Socio-economic inequality in malnutrition among children in India: an analysis of 640 districts from National Family Health Survey (2015-16). *Int J Equity Health*. 2019 Dec 27;18(1):203. doi: 10.1186/s12939-019-1093-0. PMID: 31881899; PMCID: PMC6935164.
- [18] Grantham-McGregor S. A review of studies of the effect of severe malnutrition on mental development. *J Nutr*. 1995 Aug;125(8 Suppl):2233S-2238S. doi: 10.1093/jn/125.suppl_8.2233S. PMID: 7542705.
- [19] Hutchinson SE, Powell CA, Walker SP, Chang SM, Grantham-McGregor SM. Nutrition, anaemia, geohelminth infection and school achievement in rural Jamaican primary school children. *Eur J Clin Nutr*. 1997 Nov;51(11):729-35. doi: 10.1038/sj.ejcn.1600473. PMID: 9368806.
- [20] Walker SP, Wachs TD, Grantham-McGregor S, Black MM, Nelson CA, Huffman SL, Baker-Henningham H, Chang SM, Hamadani JD, Lozoff B, Gardner JM, Powell CA, Rahman A, Richter L. Inequality in early childhood: risk and protective factors for early child development. *Lancet*. 2011 Oct 8;378(9799):1325-38. doi: 10.1016/S0140-6736(11)60555-2. Epub 2011 Sep 22. PMID: 21944375.
- [21] Karande S, Gogtay N J. Impact of the mid-day meal scheme in India. *J Postgrad Med* [serial online] 2014 [cited 2021 Jan 30]; 60:113-5. Available from: <https://www.jpgmonline.com/text.asp?2014/60/2/113/132302>
- [22] D.O.Letter of JS(EE-I) dt.20-03-2020 reg. provision of Food Security Allowances to the children under MDMS during closure of Schools; http://mdm.nic.in/mdm_website/
- [23] Rajpal S, Joe W, Subramanian SV. Living on the edge? Sensitivity of child undernutrition prevalence to bodyweight shocks in the context of the 2020 national lockdown strategy in India. *J Glob Health Sci*. 2020 Dec;2(2):e19
- [24] D.O.Letter of Joint Secretary (EE-I) reg. provision of Supplementary Nutrition under MDMS (dt. 31-08-2020); http://mdm.nic.in/mdm_website/
- [25] Allocation of food grains to States/UTs under National Programme of Mid-Day Meal in Schools (MDMS) for the 3rd Quarter (October to December, 2020) and 4th Quarter (January to March, 2021) during summer vacations of 2020 and drought affected States during 2020-21 -reg.(dt.01-09-2020); http://mdm.nic.in/mdm_website/

- [26] Kaur, Navpreet, and Roger W Byard. "Prevalence and Potential Consequences of Child Labour in India and the Possible Impact of COVID-19 – a Contemporary Overview." *Medicine, Science and the Law* 61, no. 3 (July 2021): 208–14. <https://doi.org/10.1177/0025802421993364>.
- [27] Trong-Anh Trinh (2020) Mental Health Impacts of Child Labour: Evidence from Vietnam and India, *The Journal of Development Studies*, 56:12, 2251-2265, DOI: 10.1080/00220388.2020.1746280
- [28] Byard, R.W. Farming deaths – an ongoing problem. *Forensic Sci Med Pathol* 13, 1–3 (2017). <https://doi.org/10.1007/s12024-017-9839-8>
- [29] International Labour Office and United Nations Children's Fund, *Child Labour: Global estimates 2020, trends and the road forward*, ILO and UNICEF, New York, 2021.
- [30] <https://www.unicef.org/press-releases/unicef-executive-director-henrietta-fores-remarks-press-conference-new-updated>
- [31] <https://www.ilo.org/ipec/areas/Traffickingofchildren/lang--en/index.htm>
- [32] [https://www.unodc.org/documents/Advocacy Section/HTMSS_Thematic_Brief_on_COVID-19.pdf](https://www.unodc.org/documents/Advocacy%20Section/HTMSS_Thematic_Brief_on_COVID-19.pdf)
- [33] Kiss L, Yun K, Pocock N, Zimmerman C. Exploitation, violence, and suicide risk among child and adolescent survivors of human trafficking in the Greater Mekong Subregion. *JAMA pediatrics*. 2015;169(9):e152278–e. doi: [10.1001/jamapediatrics.2015.2278](https://doi.org/10.1001/jamapediatrics.2015.2278)
- [34] Ottisova L, Smith P, Shetty H, Stahl D, Downs J, Oram S. Psychological consequences of child trafficking: An historical cohort study of trafficked children in contact with secondary mental health services. *PLoS One*. 2018 Mar 8;13(3):e0192321. doi: 10.1371/journal.pone.0192321. PMID: 29518168; PMCID: PMC5843209.
- [35] <https://reliefweb.int/report/india/save-children-fears-trafficking-and-abuse-amid-social-media-pleas-adopt-india-s-covid>
- [36] Fiese BH, Spagnola M. The interior life of the family: looking from the inside out and the outside in. In: Masten AS, ed. *Multilevel Dynamics in Developmental Psychopathology: Pathways to the Future*. New York, NY: Taylor & Francis Group/Lawrence Erlbaum Associates; 2007:119-150.
- [37] Luthar SS. Resilience in development: a synthesis of research across five decades. In: Cicchetti D, Cohen DJ (eds.). *Developmental Psychopathology: Risk, Disorder, and Adaptation*, 2nd ed. Hoboken, NJ: John Wiley & Sons Inc; 2006:739-795.
- [38] Masten AS, Obradovic J. Disaster preparation and recovery: lessons from research on resilience in human development. *Ecology Soc*. 2008;13(1):9.
- [39] Sprang, Ginny, and Miriam Silman. "Posttraumatic Stress Disorder in Parents and Youth After Health-Related Disasters." *Disaster Medicine and Public Health Preparedness* 7.1 (2013): 105-10. Print.
- [40] Elizabeth A Rider, Keeping children emotionally healthy during the covid-19 pandemic, <https://blogs.bmj.com/bmj/2020/04/14/elizabeth-rider-keeping-children-emotionally-healthy-covid-19-pandemic/>
- [41] <https://www.cdc.gov/childrensmentalhealth/data.html>
- [42] Singh S, Roy D, Sinha K, Parveen S, Sharma G, Joshi G. Impact of COVID-19 and lockdown on mental health of children and adolescents: A narrative review with recommendations. *Psychiatry Res*. 2020 Nov;293:113429. doi: 10.1016/j.psychres.2020.113429. Epub 2020 Aug 24. PMID: 32882598; PMCID: PMC7444649.
- [43] PTI Govt helpline receives 92,000 calls on abuse and violence in 11 days read more at: economic times. *India Times*. 2020 https://economictimes.indiatimes.com/news/politics-and-nation/govt-helpline-receives-92000-calls-on-abuse-and-violence-in-11-days/articleshow/75044722.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
- [44] <https://nimhanschildprotect.in/reports/>
- [45] <https://www.pib.gov.in/PressReleaseDetailm.aspx?PRID=1651352>
- [46] https://www.nhp.gov.in/rashtriya-kishor-swasthya-karyakram-rksk_pg
- [47] Kumar MM, Karpaga PP, Panigrahi SK, Raj U, Pathak VK. Impact of COVID-19 pandemic on adolescent health in India. *J Family Med Prim Care*. 2020 Nov 30;9(11):5484-5489. doi: 10.4103/jfmpc.jfmpc_1266_20. PMID: 33532383; PMCID: PMC7842466.
- [48] Ministry Of Health and Family Welfare, Government of India, *Guidance Note on Provision of Reproductive, Maternal, Newborn, Child, Adolescent Health Plus Nutrition (RMNCAH+N) Services during & Post COVID-19 Pandemic*

[49] <https://www.mohfw.gov.in/pdf/mentalhealthchildrean.pdf>