

## Empowering Resilience: A Strategy for Children Left alone following the Covid-19 Death of their Parents

Abirami R.<sup>1</sup>, A. Nageswari<sup>2</sup>, M. Ramakrishna<sup>3</sup>, Arbind Kumar Choudhary<sup>4</sup>

### How to cite this article:

Abirami R., A. Nageswari, M. Ramakrishna, *et al.* Empowering Resilience: A Strategy for Children Left alone following the Covid-19 Death of their Parents. *Indian J Law Hum Behav* 2024;10(1):39-46.

### Abstract

In India, the fate of abandoned or parentless children rests upon the shoulders of the government, necessitating intervention when familial care is absent. Amidst the COVID-19 pandemic, concerns have escalated regarding the rising number of children orphaned or abandoned due to the crisis. Recent media reports have underscored the fluctuating estimates of these vulnerable children, indicating a worrying trend. Drawing from data provided by the Ministry of Women and Child Development and the National Commission for Protection of Child Rights, a retrospective analysis reveals a staggering 1,742 children losing both parents during the pandemic period. However, this number likely under represents the true extent of the issue, with ongoing data compilation processes across states. Remarkably, of the 9,346 children affected during the same timeframe, only a mere 3.9% resided in institutional care, emphasizing the reliance on guardians, family members, or surviving parents for support. A Retrospective Web Metanalysis conducted between July 2020 and July 2023 delved into the impact of COVID-19 on parentless children, highlighting the urgency for comprehensive policy interventions.

This research endeavors to influence national policies concerning the care and support of vulnerable children, advocating for direct financial assistance to mitigate their hardships. By addressing these challenges, the aim is to ensure a brighter future for these children, facilitating their integration into nurturing environments where they can flourish despite adversity.

**Keyword:** National policy; Covid-19; Covid orphan; Caregiver; Lockdown.

**Author Affiliation:** <sup>1</sup>3rd Year LLB Student, Faculty of Law, Kalinga University Kotni Near Mantralaya, Naya Raipur 492101, Chhattisgarh, India, <sup>2</sup>ML, <sup>3</sup>Practicing Advocate, Madras High Court, Madurai Bench, Madurai 625023, Tamil Nadu, India, <sup>4</sup>Assistant Professor of Pharmacology, Government Erode Medical College and Hospital, Erode, Tamil Nadu 638053, India.

**Corresponding Author:** Arbind Kumar Choudhary, Assistant Professor of Pharmacology, Government Erode Medical College and Hospital, Erode, Tamil Nadu 638053, India.

**Email:** [arbindkch@gmail.com](mailto:arbindkch@gmail.com)

**Received on** 22-07-2023

**Accepted on** 01-09-2023

## INTRODUCTION

The COVID-19 pandemic has wrought profound and multifaceted challenges upon India, with its most vulnerable populace children bearing a disproportionate brunt.<sup>1</sup> As articulated by the National Commission for the Protection of Child Rights (NCPCR), the pandemic's impact on children has been staggering, with a concerning 147,492 children reported either missing or affected.<sup>2,3,4</sup> In response to this crisis, the NCPCR's 'Baal Swaraj' initiative has emerged as a critical tool

for collating data on children in distress, particularly those who have tragically lost their parents or have been abandoned.<sup>5,6</sup>

Within this landscape of adversity, this research endeavors to shed light on the plight of COVID-19 orphaned children in India, while concurrently contributing fresh insights to the development of laws and policies aimed at addressing their needs. Our study seeks to comprehensively understand the various forms and circumstances surrounding COVID orphan children, and to critically assess India's current approach and response towards safeguarding their rights and well-being.<sup>7,8,9</sup> Embedded within the grim statistics lies a pivotal objective: to advocate for reform and corrective actions within India's legal and social frameworks, thereby enhancing the welfare and protection of children rendered parentless by the pandemic. Our analysis goes beyond mere examination, striving to bridge the gap between policy discourse and the lived experiences of COVID-19 orphaned children, ensuring that proposed changes resonate with the realities they face.<sup>10,11</sup>

To this end, our research objectives are manifold. Firstly, we aim to explore the diverse manifestations of COVID orphan children, encompassing scenarios ranging from parental loss to abandonment, and situations where extended family networks prove inadequate in providing care. Concurrently, we seek to scrutinize India's existing mechanisms for addressing the needs of COVID-19 orphaned children, evaluating the efficacy of legal provisions, policies, and support systems in meeting their unique challenges.<sup>12,13,14</sup>

Moreover, our study endeavors to illuminate the lived experiences of COVID-19 orphaned children within Indian society, examining aspects such as access to healthcare, education, emotional support, and overall well-being within various caregiving settings. Through rigorous analysis and empirical insights, we aspire to advocate for substantive reforms aimed at fortifying the protective net around these vulnerable children, encompassing enhancements in adoption processes, foster care arrangements, mental health support, educational opportunities, and financial assistance.

Our research seeks to raise awareness about the distinctive challenges facing COVID-19 orphaned children, advocating for child-centric approaches that prioritize their rights and holistic development. By influencing policy discourse and institutional practices, our ultimate objective is to galvanize stakeholders towards effectuating meaningful change, thereby creating a more compassionate and

supportive environment for COVID-19 orphaned children to thrive and flourish amidst adversity.

---

## MATERIALS AND METHODS

---

The **Cross-Sectional Retrospective Web Metanalysis** represents an innovative and robust study design that combines cross-sectional and retrospective analyses to comprehensively explore specific topics. Over a span of four months, this research initiative involves extensive data collection from web-based news articles and published research papers. We employ web scraping and data extraction tools to ensure access to a wide range of reputable sources. Rigorous statistical and qualitative analysis methods are subsequently applied to the collected data, including content analysis, sentiment analysis, topic modelling, and trend identification. Through this approach, our study aims to uncover prevailing themes, perspectives, and opinions related to the subject matter, thereby contributing valuable insights for decision-making, policy formulation, and further research.<sup>15,16</sup>

---

### *Inclusion Criteria*

---

To ensure the relevance and breadth of our research, we established specific inclusion criteria:

1. **Focus on COVID-19 Orphaned Children:** We considered only studies and reports directly related to children who lost their parents during the COVID-19 pandemic. This deliberate focus allows us to understand the unique circumstances faced by pandemic orphans and parentless children.
2. **Diverse Data Sources:** We collected data from both primary and secondary sources, including books, articles published in reputable journals, newspaper articles, and legal dictionaries. By incorporating diverse sources, we aimed to capture a comprehensive view of the topic, drawing from academic research and real-life experiences shared in the lay press.

---

### *Multi-Dimensional Approach*

---

Our study takes a multi-dimensional approach, focusing on various aspects of the experiences of COVID-19 orphaned children:

1. **Support Systems:** We explore the available support systems for these vulnerable children.
2. **Legal Implications:** We examine legal aspects

concerning their welfare and guardianship.

3. **Psychological Effects:** We investigate the psychological effects they might face due to parental loss and the broader impact of the pandemic on their lives.

---

## DATA COLLECTION AND ANALYSIS

---

To gather necessary data for our analysis, we conducted comprehensive searches using specific key terms related to the topic. These key terms included:

- "COVID-19 impact on children without parents"
- "Pandemic orphans"
- "Parentless children during Covid-19"
- "Rise in orphaned kids due to Covid-19"
- "COVID-19-related child abandonment"
- "Support for COVID-19 orphaned children"
- "Children who lost parents to Covid-19"
- "Guardianship of Covid-19 orphans"
- "Adoption of Covid-19-affected children"
- "Psychological effects on Covid-19 orphaned children"

After collecting the data, we employed thematic synthesis and content analysis to identify recurring themes and patterns across the literature. This analytical approach allowed us to draw connections between different studies and extract valuable insights into the challenges faced by children without parents during the COVID-19 pandemic.

---

### Contribution and Implications:

---

By adopting a cross-sectional retrospective web metanalysis, we strive to contribute to the existing knowledge base. Our findings shed light on the unique and critical issues faced by COVID-19 orphaned children. Policymakers, healthcare professionals, and support organizations can use these insights to formulate effective strategies and interventions that address the needs and well-being of this vulnerable population during and after the pandemic.

---

## RESULT

---

Impact of COVID-19 on Parentless Children: A Retrospective Web Metanalysis (1 July 2020 – 6 July

2023)

Researchers conducted a retrospective web metanalysis to explore the impact of COVID-19 on parentless children during the pandemic. Utilizing Google News, Bing News, and Yahoo News web search engines, along with academic databases including Google Scholar, Microsoft Academic, and NCBI (PubMed), a comprehensive collection of relevant articles was assembled. In total, 4,880 results from Google News, 1,190 from Bing News, and 40 from Yahoo News were analyzed, alongside 938 results from Google Scholar, 493 from Microsoft Academic, and 30 from NCBI Literature Resources.

The study focused on assessing the role of grandparents living with their grandchildren in multigenerational households, highlighting their significant contribution to caregiving. The loss of grandparents or other senior relatives aged 60 or older, who co-reside with the children, was found to have a profound impact on the affected kids. Recognizing the critical role of including these family members in public health efforts, prioritizing their vaccination is crucial to prevent unnecessary deaths and enhance the effectiveness of preventive measures.

---

### 1. Google News (4,880 results):

---

The search yielded numerous articles discussing various aspects of the impact of COVID-19 on children without parents, covering topics such as child abandonment, psychological effects on orphaned kids, and support initiatives for these children.

---

### 2. Bing News (1,190 results):

---

Similar to Google News, Bing News revealed numerous articles addressing the rise in the number of orphaned kids due to COVID-19 and the challenges in providing adequate care and support for them.

---

### 3. Yahoo News (40 results):

---

Though fewer in number, the articles on Yahoo News echoed those found on other search engines, emphasizing the pandemic's impact on children who lost their parents to COVID-19.

---

### 4. Google Scholar (938 results):

---

A substantial number of research articles were found on Google Scholar, delving into the socio-economic consequences for orphaned children

during the pandemic and exploring potential solutions for supporting them effectively.

#### **5. Microsoft Academic (493 results):**

---

Similarly, Microsoft Academic returned a significant number of research articles, indicating academic interest in studying the plight of parentless children affected by COVID-19.

#### **6. NCBI Literature Resources (30 results):**

---

While fewer in number, the articles from NCBI likely provided in-depth scientific insights into the medical and healthcare aspects of COVID-19 orphaned children.

This web meta-analysis underscores a substantial interest in understanding the impact of COVID-19 on parentless children, with thousands of articles and research papers addressing various aspects of the issue. The findings underscore the need for comprehensive support systems and interventions to address the challenges faced by COVID-19 orphaned children and ensure their well-being and future prospects.

## **DISCUSSION**

---

#### ***Covid Orphan Children Status:***

---

It was anticipated that approximately 10.5 million children would lose their main or secondary caregivers to COVID between January 2020 and May 2022. These children suffer greatly, experiencing mourning, inadequate care, and isolation from family members. The loss of caregivers also translates to reduced access to essential resources like food, aid, and shelter, while increasing their vulnerability to violence and abuse. Despite ongoing efforts, children worldwide continue to lose parents and caregivers to COVID, necessitating robust support systems to mitigate their suffering.<sup>17,18</sup>

#### ***Policy Challenges and Responses:***

---

Addressing the needs of children orphaned by COVID-19 presents several challenges, including accurately identifying and reaching affected children, ensuring their emotional and psychological well-being, determining suitable guardianship arrangements, and providing access to basic necessities.<sup>19</sup> Governments, local authorities, and NGOs must collaborate to develop

coordinated responses tailored to local needs, prioritizing the protection and support of orphaned children.<sup>20</sup>

#### ***Strengthening Food Assistance for COVID Orphans:***

---

Efforts to enhance food assistance for COVID orphaned children are imperative, including social and financial aid, the introduction of food vouchers, donation of school meals to food banks, and improved emergency food ration distribution. International examples, such as France's allocation of funds to support vulnerable populations, provide valuable insights for implementing effective food assistance programs.<sup>21,22</sup>

#### ***Policy Measures to Safeguard and Support Children:***

---

Government support programs, counseling services, legal assistance, welfare schemes, child protection measures, and community support initiatives are essential components of a comprehensive response to safeguard and support orphaned children.<sup>23,24</sup> These measures aim to address various challenges faced by orphaned children, including emotional distress, legal guardianship, access to basic necessities, and protection from exploitation.

#### ***Mitigating Mental Health Problems:***

---

Efforts to mitigate mental health problems among orphaned children involve maintaining access to mental health services, supporting community-based online services, and addressing the psychological impacts of the pandemic.<sup>25,26</sup> Tailored interventions, such as online stress management sessions and virtual support groups, offer valuable support to children facing emotional challenges.

#### ***Ensuring Continuity of Learning and Parental Support:***

---

Policy measures to ensure the continuity of learning and parental support for COVID orphan children's education include providing access to online learning resources, training parents, offering psychosocial support, connecting children with mentors, and creating supportive communities.<sup>27</sup> Financial assistance schemes like the PM Cares for Children scheme play a crucial role in facilitating access to education for orphaned children.



### Well-being of Children in the Digital Environment:

Efforts to ensure the well-being of children in the digital environment encompass supporting access to digital resources, promoting multi-stakeholder dialogue, fostering cooperation in policy-making, educating children on responsible digital citizenship, protecting children's privacy, and enhancing digital literacy skills.<sup>28</sup> These measures aim to safeguard children from online exploitation and empower them to navigate the digital world safely.

### Policy Options to Curtail the Rise in Child Poverty:

Policy options to mitigate child poverty include supporting parental employment, assisting families with children, providing income support, supporting single parents, and facilitating access to essential services through community-based information services. These measures aim to alleviate financial hardships faced by vulnerable families, thereby reducing the risk of child poverty.<sup>29,30</sup>

In conclusion, addressing the needs of COVID-19 orphaned children requires a multifaceted approach encompassing policy interventions, community support, and collaborative efforts across sectors. While significant strides have been made, ongoing vigilance and proactive measures are essential to safeguarding the well-being and future prospects of orphaned children amidst the challenges posed by the pandemic.<sup>31</sup>

## **RECOMMENDATIONS**

To address the needs of orphaned children due to COVID-19 in India, it is imperative for the government to adhere to Indian guidelines and consider implementing the following suggestions:

1. **Comprehensive Support Programs:** Develop dedicated support programs tailored to the unique cultural and social context of India. These programs should encompass financial assistance, educational support, psychosocial counseling, and healthcare services, aligning with the Juvenile Justice Act and other relevant legislation.<sup>32</sup>
2. **Foster Care and Adoption Policies:** Strengthen existing foster care and adoption policies in accordance with Indian laws, such as the Juvenile Justice (Care and Protection of Children) Act, to ensure the welfare of orphaned children. Streamline procedures to expedite the placement of children in stable and loving homes while maintaining rigorous checks and balances to prevent exploitation.<sup>33,34</sup>
3. **Educational Support:** Provide access to quality education and learning resources that are culturally sensitive and inclusive. Offer scholarships, digital learning tools, and mentorship programs tailored to meet the educational needs of orphaned children, in alignment with national education policies.
4. **Psychosocial Support:** Establish counseling services and support groups grounded in Indian cultural norms to address the emotional and psychological needs of orphaned children. Create safe environments for them to express their feelings and experiences, incorporating traditional healing practices where appropriate.
5. **Healthcare Coverage:** Ensure equitable access to comprehensive healthcare services, including vaccinations, in line with India's healthcare policies. Collaborate with healthcare providers to deliver culturally competent medical care that addresses the specific health needs of orphaned children.
6. **Legal Protections:** Strengthen legal safeguards for orphaned children based on Indian legal frameworks to prevent exploitation and abuse. Implement child protection policies and mechanisms that uphold the rights enshrined in the Indian Constitution and international conventions ratified by India.<sup>35</sup>
7. **Community Awareness:** Conduct culturally relevant awareness campaigns to engage communities and sensitize them to the challenges faced by COVID-19 orphaned children. Foster community involvement and support through culturally appropriate outreach initiatives and partnerships with local stakeholders.
8. **Specialized Training for Caregivers:** Provide culturally sensitive training and support for caregivers, including foster parents and extended family members, to equip them with the necessary skills to meet the unique needs of orphaned children in India's diverse cultural landscape.
9. **Collaborations with NGOs:** Forge partnerships with Indian non-governmental organizations (NGOs) and civil society organizations (CSOs) to leverage their expertise and resources in supporting orphaned children. Foster collaboration between government agencies and NGOs to enhance service delivery and

reach marginalized communities effectively.<sup>36</sup>

**10. Long-term Monitoring:** Establish robust monitoring and evaluation mechanisms grounded in Indian governance structures to track the well-being and progress of orphaned children over time. Utilize data-driven insights to inform evidence-based policy decisions and interventions that prioritize the welfare of orphaned children in India.<sup>37</sup>

By adhering to Indian guidelines and implementing these culturally sensitive suggestions, the government can effectively address the needs of COVID-19 orphaned children in India, ensuring their holistic development and well-being in alignment with the country's legal and cultural frameworks.

## CONCLUSION

The plight of COVID-19 orphaned children in India necessitates urgent and comprehensive action from the government, civil society, and other stakeholders, in alignment with constitutional Indian law and international conventions. Through a retrospective web metanalysis and analysis of existing literature, this study has shed light on the multifaceted challenges faced by orphaned children due to the pandemic and proposed evidence-based recommendations to address their needs. Firstly, it is evident that orphaned children require immediate support across various domains, including financial assistance, education, healthcare, and psychosocial counseling, in accordance with the principles of equality, non-discrimination, and the best interests of the child enshrined in the Indian Constitution. The government must prioritize the establishment of dedicated support programs tailored to the unique cultural and social context of India, ensuring compliance with constitutional provisions and existing legislation such as the Juvenile Justice Act. Strengthening foster care and adoption policies, providing access to quality education, ensuring equitable healthcare coverage, and strengthening legal protections are essential components of this support framework, guided by the fundamental rights guaranteed under Articles 14, 15, 21, and 39(f) of the Indian Constitution. These rights emphasize equality before the law, prohibition of discrimination, protection of life and personal liberty, and the duty of the State to ensure the well-being of children. Moreover, fostering community awareness and engagement is crucial for addressing the stigma and discrimination often faced by orphaned children, in line with the principles

of social justice and inclusivity enshrined in the Directive Principles of State Policy (DPSP) under Part IV of the Constitution. Culturally sensitive awareness campaigns and partnerships with local stakeholders can help mobilize community support and resources to ensure the well-being of orphaned children, guided by the spirit of fraternity and social solidarity.

Specialized training for caregivers and collaborations with NGOs play a pivotal role in augmenting support systems for orphaned children, consistent with the principle of cooperative federalism and shared responsibility between the State and civil society organizations. By equipping caregivers with culturally sensitive skills and leveraging the expertise of NGOs, the government can enhance service delivery and reach marginalized communities effectively.

Long-term monitoring and evaluation mechanisms are essential for tracking the progress and well-being of orphaned children over time, ensuring accountability and transparency in governance, as mandated by the principles of good governance and rule of law under the Constitution. Data-driven insights derived from monitoring efforts can inform evidence-based policy decisions and interventions, ensuring continuous improvement in support services for orphaned children, in line with the principles of participatory democracy and accountability.

Addressing the needs of COVID-19 orphaned children in India requires a concerted effort from all stakeholders, guided by constitutional Indian law and international conventions on children's rights. By adhering to constitutional principles and implementing culturally sensitive recommendations, the government can provide orphaned children with the necessary support and resources to thrive despite the challenges they face. Through collective action and sustained commitment, we can ensure that every orphaned child in India receives the care, protection, and opportunities they deserve for a brighter future, in accordance with the principles of justice, liberty, and equality enshrined in the Constitution.

## REFERENCES

1. Asrani, P., Eapen, M., Hassan, Md., Sohal, S. (2021) Implications of the second wave of COVID-19 in India. *The Lancet*.
2. 147,492 children lost parents due to Covid since April 2020: NCPCR to SC. The National Commission for Protection of Child Rights has

- informed the Supreme Court that a total of 1,47,492 children since April 1, 2020. Press Trust of India | NewDelhi Last Updated at January 16, 2022 15:24 IST : ref: 1,2,3,4,5,6
3. Bahl, K., Gupta, R., Gupta, S., Kaka, N., Kshirsagar, A., Madgavkar, A. and Manyanka, J. Digital India: Technology to transform a connected nation. McKinsey Global Institute.
  4. <https://www.mckinsey.com/~media/McKinsey/Business%20Functions/McKinsey%20Digital/Our%20Insights/Digital%20India%20Technology%20to%20transform%20a%20connected%20nation/MGIDigital-India-Report-April-2019.pdf>
  5. OECD Policy Responses to Coronavirus (COVID-19) Combatting COVID-19's effect on children Ministry of Women and Child Development Welfare Schemes for Orphan Children Posted On: 07 FEB 2020 4:41PM by PIB Delhi Updated 11 August 2020
  6. Hillis, Susan D *et al.* Global minimum estimates of children affected by COVID-19-associated orphanhood and deaths of caregivers: a modelling study, *The Lancet*, Volume 398, Issue 10298, 391 - 402
  7. Committee on the Science of Children Birth to Age 8: Deepening and Broadening the Foundation for Success; Board on Children, Youth, and Families; Institute of Medicine; National Research Council; Allen LR, Kelly BB, editors. *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation*. Washington (DC): National Academies Press (US); 2015 Jul 23. 4, Child Development and Early Learning. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK310550/>
  8. Bhattacharya, S. (2021, June 28). More Younger People Without Comorbidities Died In Second Wave, Data Show. *IndiaSpend*. <https://www.indiaspend.com/covid-19/covid-19-second-wave-deaths-data-variants-comorbidity-7579-97>
  9. Tuesday, July 20, 2021 More than 1.5 million children lost a primary or secondary caregiver due to the COVID-19 pandemic Addressing the impact of caregiver deaths critical for pediatric mental health, authors note. <https://www.nih.gov/news-events/news-releases/more-15-million-children-lost-primary-or-secondary-caregiver-due-covid-19-pandemic>
  10. Covid orphans are a tragic legacy of India's pandemic By Vedika Sud, Esha Mitra and Julia Hollingsworth, *CNN* Updated 2:56 AM EDT, Sat June 12, 2021
  11. Bhowmick, N. (2021, April 23). How India's second wave became the worst COVID-19 surge in the world. *National Geographic*. <https://www.google.nationalgeographic.com/distribution/public/amp/science/artice/how-indias-secon>d-wave-became-the-worst-covid-19-surge-in-the-world.
  12. Impacts of COVID-19 on food security and nutrition: developing effective policy responses to address the hunger and malnutrition pandemic. <https://www.fao.org/3/cb1000en/cb1000en.pdf>
  13. World Health Organization. 14.9 Million excess deaths associated with the COVID-19 pandemic in 2020 and 2021 [press release]. World Health Organization. May 5, 2022. Accessed May 5, 2022. <https://www.who.int/news/item/05-05-2022-14.9-million-excess-deaths-were-associated-with-the-covid-19-pandemic-in-2020-and-2021>
  14. Hillis, Susan D *et al.* Global minimum estimates of children affected by COVID-19-associated orphanhood and deaths of caregivers: a modelling study. *The Lancet*, Volume 398, Issue 10298, 391 - 402
  15. Diwakar, V. (2020), From pandemics to poverty: the implications of coronavirus for the furthest behind, Overseas Development Institute, <https://www.odi.org/blogs/16754-pandemics-poverty-implications-coronavirus-furthest-behind>.
  16. Dong, Y., X. Mo and Y. Hu (2020), "Epidemiological characteristics of 2143 pediatric patients with 2019 coronavirus disease in China", *Journal: Pediatrics* Citation, <http://dx.doi.org/10.1542/peds.2020-0702>.
  17. Ducharme, J. (2019), Social Media Hurts Girls More Than Boys, <https://time.com/5650266/social-media-girls-mental-health/>.
  18. Ecpat International (2020), Why Children are at Risk of Sexual Exploitation During COVID-19, [https://ecpat.exposure.co/covid19?fbclid=IwAR3Z7DgyDZ8NeKwfaN6fkB6zwXdFYnQ-Ouk5D8A55S-t\\_cN1x2igwPpfkzo](https://ecpat.exposure.co/covid19?fbclid=IwAR3Z7DgyDZ8NeKwfaN6fkB6zwXdFYnQ-Ouk5D8A55S-t_cN1x2igwPpfkzo).
  19. EPIC (2020), Survey of Residential Services During the Covid-19 Restrictions, EPIC - Empowering People in Care, Dublin, <https://www.epiconline.ie/publications/>.
  20. Dalton L, Rapa E, Stein A. Protecting the psychological health of children through effective communication about COVID-19. *Lancet Child Adolesc Health*. 2020 May;4(5):346-347. doi: 10.1016/S2352-4642(20)30097-3. Epub 2020 Mar 31. PMID: 32243784; PMCID: PMC7270522.
  21. UNICEF Global COVID-19 Final Report March 2021 <https://www.unicef.org/media/95311/file/Global%20COVID19%20Situation%20Report%20Final,%20February%20-%20December%202020.pdf>
  22. Sandhiya Priyadarshini D & Maya Rathnasabapathy (2021). The Impact of Resilience among Orphans: A Review. *International Journal of Indian Psychology*, 9(3), 67-74. DIP:18.01.009.20210903, DOI:10.25215/0903.009
  23. McMahan CL, Staples H, Gazi M, Carrion



- R, Hsieh J. SARS-CoV-2 targets glial cells in human cortical organoids. *Stem Cell Reports*. 2021 May 11;16(5):1156-1164. doi: 10.1016/j.stemcr.2021.01.016. PMID: 33979600; PMCID: PMC8111796.
24. Kaur R, Vinnakota A, Panigrahi S, Manasa RV. A Descriptive Study on Behavioral and Emotional Problems in Orphans and Other Vulnerable Children Staying in Institutional Homes. *Indian J Psychol Med*. 2018 Mar-Apr;40(2):161-168. doi: 10.4103/IJPSYM.IJPSYM\_316\_17. PMID: 29962573; PMCID: PMC6008989.
25. Sg PK, G AK, Sp R, V VS, Dandona R. A comparative assessment of generalized anxiety, conduct and peer relationship problems among AIDS and other orphaned children in India. *BMC Psychiatry*. 2016 Sep 21;16(1):330. doi: 10.1186/s12888-016-1042-z. PMID: 27655351; PMCID: PMC5031326.
26. Gilbert, R. *et al.* (2009), "Burden and consequences of child maltreatment in high-income countries", *The Lancet*, Vol. 373, pp. 68-81, <http://dx.doi.org/10.1016/S0140>.
27. Gottschalk, F. (2019), "Impacts of technology use on children: Exploring literature on the brain, cognition and well-being", *OECD Education Working Papers*, No. 195, OECD Publishing, Paris, <https://dx.doi.org/10.1787/8296464e-en>.
28. Grierson, J. (2020), "MPs call for action over expected rise in child sexual abuse during pandemic |", *The Guardian*, [https://www.theguardian.com/society/2020/apr/16/mps-call-for-action-over-expected-rise-in-child-sexual-abuse-during-coronavirus-pandemic?CMP=Share\\_AndroidApp\\_Email](https://www.theguardian.com/society/2020/apr/16/mps-call-for-action-over-expected-rise-in-child-sexual-abuse-during-coronavirus-pandemic?CMP=Share_AndroidApp_Email) (accessed on 17 April 2020).
29. Group, U. (ed.) (2020), *The Impact of COVID-19 on children*, United Nations, New York, <https://unsdg.un.org/resources/policy-brief-impact-covid-19-children> (accessed on 20 April 2020).
30. Gudbjartsson, D. *et al.* (2020), "Spread of SARS-CoV-2 in the Icelandic Population", *New England Journal of Medicine*, p. NEJMoa2006100, <http://dx.doi.org/10.1056/NEJMoa2006100>.
31. Kessler, R. *et al.* (2007), "Lifetime prevalence and age-of-onset distributions of mental disorders in the World Health Organization's World Mental Health Survey Initiative.", *World psychiatry : official journal of the World Psychiatric Association (WPA)*, Vol. 6/3, pp. 168-76, <http://www.ncbi.nlm.nih.gov/pubmed/18188442> (accessed on 4 July 2018).
32. Livingsgtone, S. (2020), *Coronavirus and #fakenews: what should families do?*, <https://blogs.lse.ac.uk/medialse/2020/03/26/coronavirus-and-fakenews-what-should-families-do/>.
33. Morgan, K. *et al.* (2019), "Socio-economic inequalities in adolescent summer holiday experiences, and mental wellbeing on return to school: Analysis of the school health research network/health behaviour in school-aged children survey in wales", *International Journal of Environmental Research and Public Health*, Vol. 16/7, <http://dx.doi.org/10.3390/ijerph16071107>
34. National Crime Agency (2020), *Law enforcement in coronavirus online safety push as National Crime Agency reveals 300,000 in UK pose sexual threat to children*, <https://www.nationalcrimeagency.gov.uk/news/onlinesafetyathome>.
35. Unwin HJT, Hillis S, Cluver L, *et al.* Global, regional, and national minimum estimates of children affected by COVID-19-associated orphanhood and caregiver death, by age and family circumstance up to Oct 31, 2021: an updated modelling study. *Lancet Child Adolesc Health*. 2022;6(4):249-259.
36. Thomas T, Tan M, Ahmed Y, Grigorenko EL. A Systematic review and meta-analysis of interventions for orphans and vulnerable children affected by HIV/AIDS worldwide. *Ann Behav Med*. 2020;54(11):853-866.
37. Global Orphanhood estimates real time calculator. Imperial College London. Published February 14, 2022. Accessed May 6, 2022. [https://imperialcollegelondon.github.io/orphanhood\\_calculator/#/country/Global](https://imperialcollegelondon.github.io/orphanhood_calculator/#/country/Global)

