

# Annals of Global Health

# Children and Adolescent Mental Health in a Time of COVID-19: A Forgotten Priority

**VIEWPOINT** 

 $]u[ubiquity\ press$ 

AGNES BINAGWAHO D
JOYEUSE SENGA

\*Author affiliations can be found in the back matter of this article

#### **ABSTRACT**

Globally, 10–20% of children and adolescents experience mental health conditions, but most of them do not receive the appropriate care when it is needed. The COVID-19 deaths and prevention measures, such as the lockdowns, economic downturns, and school closures, have affected many communities physically, mentally, and economically and significantly impacted the already-neglected children and adolescents' mental health. As a result, evidence has shown that many children and adolescents are experiencing psychological effects such as depression and anxiety without adequate support. The consequences of not addressing the mental health conditions in children and adolescents extend through adulthood and restrict them from reaching their full potential. The effects of COVID-19 on children and adolescents' mental health highlight the urgent need for multisectoral home-grown solutions to provide early diagnosis and treatment and educate caregivers on home-based interventions and community outreach initiatives to address children and adolescents' mental health challenges during this pandemic and beyond.

#### CORRESPONDING AUTHOR:

Prof. Agnes Binagwaho, MD, M(Ped), PhD

University of Global Health Equity, Kigali Heights, Plot 772, KG7 Ave, Floor 5, Kigali, Rwanda vicechancellor@ughe.org

#### TO CITE THIS ARTICLE:

Binagwaho A, Senga J. Children and Adolescent Mental Health in a Time of COVID-19: A Forgotten Priority. Annals of Global Health. 2021; 87(1): 57, 1–5. DOI: https://doi. org/10.5334/aogh.3330

Binagwaho and Senga Annals of Global Health DOI: 10.5334/aogh.3330

In 2015, the Sustainable Development Goals recognized mental health as a critical component of the global health agenda [1]. The World Health Organization (WHO) estimates that 10–20% of children and adolescents experience mental health conditions, such as depression, anxiety, and behavioral disorders, that are not diagnosed and treated in a timely manner [2]. There is a severe shortage of trained mental health professionals for children and adolescents, with those living in low-and-middle income settings having the least support [3]. In spite of this burden, mitigation for mental illness, such as resources, programming, and system-level support, for children and adolescents remains a neglected priority.

This gap between the demand for mental health services and supply, which has existed long before the COVID-19 pandemic, poses a significant threat to the mental resiliency of our children and adolescents [4]. The COVID-19 pandemic has taken a dramatic toll across the globe and challenged families in unprecedented ways [5]. One study in the United States found that one in four parents reported that they were experiencing mental health deterioration and one in seven reported that their children's behavioral health had worsened as a result of food insecurity in the home, loss of childcare services, and disruption in healthcare services [6]. Untreated mental health conditions existing prior to COVID-19 or those stemming from it can disrupt children and adolescents' physical and mental functioning at school, at home, and in their communities [7]. Moreover, this distress can lead to extensive morbidity in the form of mental and substance-use disorders among children and adolescents [8]. Untreated diseases also increases the risk of selfharm, with suicide being the third leading cause of mortality among adolescents' aged 15 to 19 years old [9]. It is evidenced that the rate of suicide among adults is high in low-and-middle income countries. Hence, there is a need to assess the risk of suicide among children and adolescents living in these countries to ensure that the burden of suicide is addressed with immediate action if needed [10].

Although significant evidence has been published regarding the physical impact of COVID-19 on the health of children and adolescents, there is a need for more extensive research on the present and future secondary health impacts as well as psychosocial implications. In terms of secondary effects, the World Vision's COVID-19 Aftershocks Report estimated that 30 million children will be negatively affected by COVID-19 disruptions to the health care system, which will translate into increased rates of malnutrition, other preventable infectious diseases, and an inability to access essential vaccines [11]. The pandemic has also disrupted food systems and increased economic hardships on families, with many losing their jobs and unable to provide healthy meals for their children [12]. When the pandemic started, an analysis published in The Lancet estimated that an additional 6.7 million children under five years old could suffer from wasting due to food insecurity, with those children under the age of five in low-and middle-income countries being at highest risk for this suffering [13]. Inadequate nutrition can harm children's emotional, cognitive performance, and personal development, all of which are related to mental health [14]. This risk disproportionately falls upon children in low-and-middle-income countries, who will only be further left behind if policies fail to prioritize them.

In terms of psychosocial impact, the challenge of social isolation on children and adolescents and their mental health must be addressed. An April 2020 UNICEF report found that nearly all children lived in a setting with some restriction on social mobility, 60% of children worldwide lived in countries under full or partial lockdowns, and an estimated 1.5 billion children had disrupted schooling [15]. With this restriction of movement and ability to engage as freely as before with support networks such as extended family or teachers, there was increased reporting of child abuse. Though services to address child abuse concerns were increasingly needed, 104 countries reported an interruption in services related to the protection of violence against children due to COVID-19 [16].

Factors such as social isolation, school closures and lockdowns, deaths of relatives, economic instability, and uncertainty about the future must be seriously considered as we assess the impact of COVID-19 on our children and adolescents [17]. Similar to the effects of war, violence, and poverty, COVID-19 has features ripe for generating transgenerational trauma that can lead to serious negative mental health consequences on children and adolescents given the traumatic

Binagwaho and Senga

Annals of Global Health

DOI: 10.5334/aogh.3330

toll that the pandemic has had on their parents. For example, studies conducted in Rwanda on the legacy of the 1994 Genocide against the Tutsi have shown that children and adolescents are affected by their parents' post-traumatic disorder [18]. Some studies have shown that children and adolescents who were not even born at the time of these dramatic events were still affected [19].

At a systems-level, there was already a severe shortage of mental health care professionals worldwide prior to COVID-19 [20]. This shortage is worse when it comes to child and adolescent services where there is fewer than 0.1 child psychiatrists per 100,000 population in low-and-middle-income countries as compared to 1.19 per 100,000 population in high-income countries [21]. For those children with mental health conditions that predated the pandemic, their ability to obtain needed follow-up treatment such as medications or therapy was hindered due to disruptions in mental health services throughout the pandemic [22]. Without adequate health professional support, children and adolescents are forced to cope with conditions such as anxiety, loneliness, depression, and substance-use disorders – all of which were exacerbated by the pandemic and are associated with reduced quality of life during adulthood [23, 24].

# **LOOKING AHEAD**

Although far more research will be needed to capture the full extent of both near- and long-term psychological effects of COVID-19 on children and adolescents, we cannot wait to act. To effectively respond to the mental health needs of children and adolescents, we must hold health systems accountable to prioritize their mental health in both the ordinary as well as the extraordinary times. Governments and key community stakeholders must work together to implement sustainable solutions for children and adolescents' mental crisis during this pandemic and beyond. Specific ideas include the provision of early diagnosis and treatment, educating caregivers on homebased interventions and community outreach services to protect and care for their children's and adolescents' mental health. A study conducted in Liberia to evaluate the implementation of community-based expressive arts programs for children and adolescents after the Ebola outbreak showed that focusing on expressive art activities such as play and yoga decreased mental stress symptoms among children and adolescents [25]. Moreover, other interventions such as the production of culturally adapted literary texts like My hero is you: How Kids Can Fight COVID-19! show the importance of storytelling and initiating family discussions to mitigate mental distress among children, help children understand the effects of the pandemic, and build their mental health literacy on how to deal with them [26]. Each of these efforts should build into the health and community systems so that they can be sustained as well as promote collaboration across sectors. Children and adolescents' voices must be part of shaping these solutions.

To provide an example from Rwanda, under the patronage of the Ministry of Health in partnership with the Africa Centers for Disease and Control and the support of the World Health Organization, the University of Global Health Equity (UGHE) hosted the launch of the Children Depression Screening Tool (CDST) for early detection of depression for children living in stressful conditions and suffering from chronic diseases [27]. The CDST is a rapid, open-source, and easy-to-use screening tool created and validated in Rwanda to identify children ages seven to fourteen who are at risk of depression and refer them to mental health professionals for appropriate care [28]. The CDST was developed as an accessible tool that would ensure cultural adequacy in a mental health service provision. Although other tools exist, the CDST is age-specific, easily adaptable to other cultures by mental health practitioners and can be administered in five minutes by non-health professionals after a short training [27–29]. There is a plan to use the CDST in a school-based program in Rwanda, which is a useful example of a multisectoral home-grown solution that aims to improve mental health services for children and adolescents, not only in the COVID-19 era but beyond [27].

Too many children and adolescents have been suffering for far too long, and COVID-19 has only exacerbated and broadened this pain. In order to optimize their mental health, we must prioritize them now. We owe it to each one of them, wherever they live, to act intentionally, swiftly, and collectively as parents, community leaders, pediatricians, educators, mental health specialists, policymakers, investors, and all those who wish to improve their lives. Collectively – across all

sectors of government (not only the health and education sectors), private institutions, and civil societies – we must invest and innovate sustainable solutions for the current and future mental health of our children and adolescents. This requires that we do not simply repair broken systems but reimagine a better way for delivering care to bolster the mental resiliency of our children and adolescents, now and for future generations.

# **COMPETING INTERESTS**

The authors have no competing interests to declare.

#### **AUTHOR AFFILIATIONS**

Agnes Binagwaho Dorcid.org/0000-0002-6779-3151
University of Global Health Equity, Kigali, Rwanda

Joyeuse Senga Dorcid.org/0000-0002-1369-5046
University of Global Health Equity, Kigali, Rwanda

# **PUBLISHER'S NOTE**

This paper underwent peer review using the Cross-Publisher COVID-19 Rapid Review Initiative.

# **REFERENCES**

- Votruba N, et al. Sustainable development goals and mental health: learnings from the contribution
  of the FundaMentalSDG global initiative. Global Mental Health (Cambridge, England). 2016; 3: e26. DOI:
  https://doi.org/10.1017/gmh.2016.20
- 2. **Kessler RC, Angermeyer M,** et al. Lifetime prevalence and age-of-onset distributions of mental disorders in the World Health Organization's World Mental Health Survey Initiative. *World Psychiatry*. 2007; 6(3): 168–176.
- 3. **Radez J,** et al. Why do children and adolescents (not) seek and access professional help for their mental health problems? A systematic review of quantitative and qualitative studies. *European Child & Adolescent Psychiatry*. 2020; 1–29. DOI: https://doi.org/10.1007/s00787-019-01469-4
- 4. **O'Raw LE.** An urgent request for evidence-based mental health intervention research in low-income and middle-income countries; 2019. DOI: https://doi.org/10.17140/PCSOJ-5-149
- 5. **Feinberg ME**, et al. Impact of the COVID-19 pandemic on parent, child, and family functioning. *Family Process*; 2021. DOI: https://doi.org/10.1111/famp.12649
- 6. **Patrick SW,** et al. Well-being of parents and children during the COVID-19 pandemic: a national survey. *Pediatrics*. 2020; 164(4). DOI: https://doi.org/10.1542/peds.2020-016824
- Golberstein E, Hefei W, et al. Coronavirus disease 2019 (COVID-19) and mental health for children and adolescents. JAMA Pediatrics. 2020; 174(4): 819–820. DOI: https://doi.org/10.1001/ jamapediatrics.2020.1456
- 8. **Mohammadi MR,** et al. Social anxiety disorder among children and adolescents: A nationwide survey of prevalence, socio-demographic characteristics, risk factors and co-morbidities. *Journal of affective disorders*. 2020; 263: 450–457. DOI: https://doi.org/10.1016/j.jad.2019.12.015
- Smith L, et al. Sexual behavior and suicide attempts among adolescents aged 12–15 years from 38 countries: A global perspective. Psychiatry Research. 2020; 287: 112564. DOI: https://doi.org/10.1016/j.psychres.2019.112564
- 10. **Pirkis J,** et al. Suicide trends in the early months of the COVID-19 pandemic: an interrupted time-series analysis of preliminary data from 21 countries. *The Lancet Psychiatry*. 2021.
- COVID-19 aftershocks. Secondary impacts threaten more children's lives than the disease itself.
   2020. https://www.wvi.org/sites/default/files/2020-04/COVID19%20AFTERSHOCKS%20SECONDARY%20
   IMPACTS%20THREATEN%20MORE%20CHILDREN%E2%80%99S%20LIVES%20THAN%20DISEASE%20
   ITSELF 0.pdf. Accessed November 24, 2020.
- 12. **Boast A, Munro A, Goldstein H.** An evidence summary of Paediatric COVID-19 literature. *Don't Forget the Bubbles*. 2020.
- 13. **Headey D, Heidkamp R, Osendarp S,** et al. Impacts of COVID-19 on childhood malnutrition and nutrition-related mortality. *Lancet*. 2020; 396(10250): 519–521. DOI: https://doi.org/10.1016/S0140-6736(20)31647-0

- 14. **DiGirolamo AM,** et al. Early childhood nutrition and cognitive functioning in childhood and adolescence. *Food and Nutrition Bulletin*. 2020; 41(suppl 1): S31–S40. DOI: https://doi.org/10.1177/0379572120907763
- 15. **UNICEF.** Don't let children be the hidden victims of COVID-19 pandemic. www.unicef.org/press-releases/dont-let-children-be-hidden-victims-covid-19-pandemic. Accessed December 24, 2020.
- 16. **United Nations Children's Fund.** Protecting Children from Violence in the Time of COVID-19: Disruptions in prevention and response services. 2020.
- 17. **De Figueiredo SC**, et al. COVID-19 pandemic impact on children and adolescents' mental health: Biological, environmental, and social factors. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*. 2021; 106: 110171. DOI: https://doi.org/10.1016/j.pnpbp.2020.110171
- 18. **Perroud N, Rutembesa E,** et al. The Tutsi genocide and transgenerational transmission of maternal stress: epigenetics and biology of the HPA axis. *World J Biol Psychiatry*. 2014; 15(4): 334–345. DOI: https://doi.org/10.3109/15622975.2013.866693
- 19. **Hatcher AM,** et al. "Effect of childhood poverty and trauma on adult depressive symptoms among young men in peri-urban South African settlements. *Journal of Adolescent Health*. 2019; 64(1): 79–85. DOI: https://doi.org/10.1016/j.jadohealth.2018.07.026
- 20. **World Health Organization.** The impact of COVID-19 on mental, neurological and substance use services: results of a rapid assessment. 2020.
- 21. Mental Health Atlas 2017. Geneva: World Health Organization; 2018. Licence: CC BY-NC-SA 3.0 IGO.
- Maalla MN. Hidden scars: the impact of violence and the COVID-19 pandemic on children's mental health. Child Adolesc Psychiatry Ment Health. 2020; 14: 33. DOI: https://doi.org/10.1186/s13034-020-00340-8
- 23. **Meherali S, Punjani N,** et al. Mental health of children and adolescents amidst COVID-19 and past pandemics: A rapid systematic review. *Int J Environ Res Public Health*. 2021; 18(7): 3432. PMID: 33810225; PMCID: PMC8038056. DOI: https://doi.org/10.3390/ijerph18073432
- 24. **Chen H,** et al. Impact of adolescent mental disorders and physical illnesses on quality of life 17 years later. *Archives of Pediatrics & Adolescent Medicine*. 2006; 160(1): 93–9. DOI: https://doi.org/10.1001/archpedi.160.1.93
- 25. **Decosimo CA**, et al. Playing to live: Outcome evaluation of a community-based psychosocial expressive arts program for children during the Liberian Ebola epidemic. *Global Mental Health*. 2019; 6. DOI: https://doi.org/10.1017/gmh.2019.1
- Inter-Agency Standing Committee. My hero is you, storybook for children on COVID-19 [Online].
   Inter-Agency Standing Committee. 2020. https://interagencystandingcommittee.org/iasc-reference-group-mental-health-and-psychosocial-support-emergency-settings/my-hero-you. Accessed May 23, 2021.
- 27. **University of Global Health Equity.** Children mental health webinar. *https://www.youtube.com/watch?v=W2HJhwH4xL0*. Accessed April 13, 2021.
- 28. **Binagwaho A, Remera E, Bayingana AU,** et al. Addressing the mental health needs of children affected by HIV in Rwanda: Validation of a rapid depression screening tool for children 7–14 years old. *BMC Pediatr*. 2021; 21: 59. DOI: https://doi.org/10.1186/s12887-020-02475-1
- 29. **Gupta S,** et al. Addressing pediatric mental health during COVID-19 and other disasters: A national tabletop exercise. *Disaster Medicine and Public Health Preparedness*. 2021; 1–13. DOI: https://doi.org/10.1017/dmp.2021.122

Binagwaho and Senga Annals of Global Health DOI: 10.5334/aogh.3330

#### TO CITE THIS ARTICLE:

Binagwaho A, Senga J. Children and Adolescent Mental Health in a Time of COVID-19: A Forgotten Priority. Annals of Global Health. 2021; 87(1): 57, 1–5. DOI: https://doi. org/10.5334/aogh.3330

Published: 29 June 2021

#### COPYRIGHT:

© 2021 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See <a href="http://creativecommons.org/licenses/by/4.0/">http://creativecommons.org/licenses/by/4.0/</a>.

Annals of Global Health is a peerreviewed open access journal published by Ubiquity Press.

