## Anticipating the Mental Health Effects of COVID-19 in Youth: Social Isolation in a Digital Age

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e have entered unusual times. As of this writing, the pandemic of COVID-19 is continuing to grow exponentially. New cases arise, policy changes quickly, and the entire world has become unified against a common enemy. In the United States, schools have been closed, recreational gatherings cancelled, and states locked down. Within medical education, students have been pulled off rotations, residents and attending physicians have found themselves reassigned to "the front lines," and clinics have begun more liberally adopting telehealth systems. Social media is buzzing about the disease, with videos of quarantine-inspired novelties, memes cataloguing fears and reactions, and several posts even questioning the legitimacy of the threat. In psychiatry, we find ourselves working to anticipate how the fallout will land in the realm of mental health, and questioning what we can do about it.

Attempts to predict and mitigate negative outcomes of the pandemic may be informed by prior pandemics as well as literature of "disaster mental health," a branch of research which delves into the psychological outcomes of large-scale catastrophes. While this field often focuses on the effects of regional natural disasters such as earthquakes, tornadoes, and floods, the themes apply to pandemics as well. This research has shown there to be an increased incidence of certain mental health diagnoses following disasters, including posttraumatic stress disorder, major depressive disorder, and generalized anxiety disorder. Some subpopulations have been found particularly vulnerable, including individuals with low socioeconomic resources, substance use issues or premorbid mental disorders, and children.<sup>2</sup> Therefore, it is fair to anticipate the development of more psychiatric illness during the current pandemic, with some individuals at greater risk than others. Considering this risk in our own patient populations, a first step is to evaluate each of our patients with respect to their own responses

and experience with COVID-19, paying special attention to our more vulnerable populations.

Currently, there are no formal, standardized assessment tools available that would allow us to systematically determine who may face the greatest psychological impact from a pandemic. However, the themes of the Psychological Preparedness for Disaster Threat Scale (PPDTS)-created to assess the response to the cyclones in Australia-may be extrapolated for use in evaluation of COVID-19 response.3,4 Psychological preparedness, as operationalized as a score on the PPDTS, is related to mental health through the course of disaster experience and response. The themes of the questionnaire may be simplified into 3 parts: 1) insight into one's own psychological response to the event, 2) capacity and confidence to psychologically and socially cope with this response, and 3) ability and confidence in managing external effects of the situation. Therefore, our own open-ended assessments of how individuals may be mentally responding to COVID-19 may include questions to gauge the individual's perception of their own internal response, any coping skills they utilize (in particular if they are turning to alcohol or substances), and to what degree they feel hopeless or in control regarding their role in the current pandemic. Based on our own clinical judgement as we gather more information, it may become clearer which individuals are struggling more than others with the pandemic and may require an increase in services and closer follow-up.

In the case of assessing children and adolescents, we must pay particular attention to the many ways the family may have been disrupted by the pandemic. Effects of COVID-19 impacting the family are not only limited to contracting the illness, but may also include: occupational stressors, marked alteration to routine of child supervision, decreased access to medical

care for family members and children, and difficulty acquiring goods and home essentials.5 While a child may be in tune to these changes, these stressors can also lead to indirect effects through the response of family members. Evidence from previous disasters indicate that these pandemic-generated woes may elicit maladaptive responses from caregivers or other members of the home, which could lead to deterioration of a caregiver's own mental health or increased alcohol or substance use. During prior economic crises, multiple correlations have been found which link unemployment, debt, and difficulty with housing payments to alcohol use, family violence, child maltreatment, and neglect.<sup>6</sup> Accordingly, with other pandemics, there have been reports to suggest school closures may lead to increased reports of child abuse.7 While the family may be a source of strength and support for a child during a global crisis, we must also be aware of the many ways new stressors in the family can negatively impact the child in this pandemic.

Outside of the immediate family, it is important to note the additional threat on mental health that comes with social isolation during quarantine and associated over utilization of social media. Brooks et al. provide a timely piece regarding ways to reduce the psychological impact of guarantine and social distancing specifically.8 Among the authors' suggestions for mitigation of risk from quarantine is ensuring ongoing access to information, improving communication, and reducing monotony. Further advice that may be especially important for adolescents is praising the altruism of choosing to keep others safe through quarantine, while taking the focus off the loss of liberty from mandated sequestration. Although children and adolescents have been restricted from physically interacting with friends or large groups, their phones, tablets, and other screens allow them to continue to socially and emotionally connect with friends and family on a daily basis. Also, with social media, the population is able to commiserate through their similar experience in real time, perhaps reducing the sense of loneliness. However, social media access during social isolation does not come without risk. It has also been found that negative experiences

on social media are associated with higher perceived social isolation, while positive experiences do little to decrease these feelings. These findings underscore the importance of balancing social engagement online to limit over-exposing oneself to negative or deceptive social media.

The magnitude of impact of COVID-19 each individual faces will differ, with some children and adolescents at higher risk than others and therefore requiring different responses. For those facing a milder form of distress, practices including reassurance, normalization, and recommendations for stress reduction may be sufficient.10 When patients share feelings, we can validate them and help them challenge any cognitive distortions exaggerating the assessment of risk by a patient.11 We may direct our attention to reducing stress in the family and home, while promoting resilience practices in all children and adolescents. Some suggestions may be generalized for most patients, such as maintaining routines and limiting exposure to stress provoking pandemic-related media, intentionally setting aside time for relaxation, and promoting mindfulness and positive thinking.11,12 We may direct patients to resources and recommendations from the Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO) as summarized in Table 1.13,14 For individuals facing more significant distress and impairment, these practices remain appropriate, but may be insufficient, and increase in offered services such as more frequent therapy and follow-up may be necessary. Individuals in more acute scenarios undergoing such stress may benefit from Psychological First Aid, a manualized approach to disaster response in children to foster shortterm and long-term adaptation to trauma.15 The practice includes steps of engagement, providing safety and comfort, stabilizing overwhelming emotions, sharing resources for practical assistance with immediate needs, providing information on coping, and connecting to collaborative services and social supports.

The role of the child psychiatrist at this time of uncertainty remains at its core focused on improving patient care. During COVID-19, beyond our typical duty to

Table 1. Summary of Recommendations From the Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO)13,14

Domain	Recommendations
Physical health	Schedule well balanced meals
	<ul><li>Maintain sufficient sleep</li></ul>
	<ul><li>Prioritize regular exercise</li></ul>
	<ul><li>Avoid alcohol and other substances</li></ul>
Routines	Keep consistent sleep and wake times
	<ul><li>Maintain personal hygiene</li></ul>
	Structure time for both work and rest
	Set aside time for enjoyable activities
Relaxation	<ul><li>Practice deep-breathing exercises</li></ul>
	<ul><li>Practice stretching</li></ul>
	<ul><li>Practice meditating</li></ul>
Information	Stay informed on the pandemic
	Know where and how to get treatment
	Avoid over-exposure to the news
	<ul><li>Take breaks from social media</li></ul>
	<ul> <li>Correct misinformation when encountered</li> </ul>
Connections	<ul><li>Connect with individuals for emotional support</li></ul>
	<ul> <li>Connect with community and faith- based organizations</li> </ul>
Help	<ul><li>Offer help to others</li></ul>
	Seek help when needed

conduct assessments and manage treatment plans, we may also begin addressing concerns as they arise related to the pandemic while we anticipate more to come. A comprehensive assessment of the child or adolescent during a pandemic would include questions into the psychological preparedness, social and behavioral consequences on the family, prior mental health status, illness threatening life of the self or a family member, bereavement, separation from family, and socioeconomic status. Questions on the perceived personal effects of COVID-19, coping behaviors and ability to adapt, as well as effects on members of the household can be incorporated seamlessly into evaluations of patients in order to uncover higher risk individuals and inspire targets for management. Balancing use

of social media to mitigate social isolation and maintain connections without over exposure to negative experiences stands as a challenge to our patients that should not be underestimated, and an area to explore during patient encounters. Beyond the patients we see daily, we may also disseminate basic information promoting mental health in patients for front-line medical workers to share with patients as well, reaching a greater number of individuals. The recommendations from the CDC and WHO for decreasing stress during this time may also be circulated to patients and families, shared in offices, or posted in common areas of medical centers. Finally, we must not underestimate the power of every action to stop the spread of the illness, including informing parents about safe practices, as marginal reductions in the disease burden of the pandemic will translate to decreased risk for mental health sequelae.

## **Take Home Summary**

COVID-19 will leave a lasting impression on our youth. This article applies lessons from disaster mental health literature and prior pandemics to anticipate child and adolescent mental health struggles, and shares suggestions for patient interactions during the pandemic.

## References

- 1. Douglas PK, Douglas DB, Harrigan DC, Douglas KM. Preparing for pandemic influenza and its aftermath: mental health issues considered. Int J Emerg Ment Health. 2009;11(3):137-144.
- 2. Roudini J, Khankeh HR, Witruk E. Disaster mental health preparedness in the community: A systematic review study. Heal Psychol Open. 2017;4(1). https://doi. org/10.1177/2055102917711307
- 3. Zulch H. Psychological preparedness for natural hazards-improving disaster preparedness policy and practice. Glob Assess Rep Disaster Risk Reduct. 2019. Accessed May 15, 2020.
- 4. Zulch H, Morrissey S, Reser J, Creed P. Psychological Preparedness For Natural Disasters. First Int Conf Urban Sustain. 2012:25. https://hazards.colorado.edu/uploads/ basicpage/Zulch.pdf. Accessed May 15, 2020.

- Fegert JM, Vitiello B, Plener PL, Clemens V. Challenges and burden of the Coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health: A narrative review to highlight clinical and research needs in the acute phase and the long return to normality. *Child Adolesc Psychi*atry Ment Health. 2020;14(1):20. https://doi.org/10.1186/ s13034-020-00329-3
- Wahlbeck K, McDaid D. Actions to alleviate the mental health impact of the economic crisis. World Psychiatry. 2012;11(3):139-145. https://doi. org/10.1002/j.2051-5545.2012.tb00114.x
- International P. REPORT: Ebola: Beyond the Health Emergency; 2015. http://plan-international.org/ebolareport. Accessed June 17, 2020.
- Brooks SK, Webster RK, Smith LE, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. Lancet. 2020;395(10227):912-920. https://doi.org/10.1016/S0140-6736(20)30460-8
- Primack BA, Karim SA, Shensa A, Bowman N, Knight J, Sidani JE. Positive and Negative Experiences on Social Media and Perceived Social Isolation. Am J Heal Promot. 2019;33(6):859-868. https://doi. org/10.1177/0890117118824196

- Pfefferbaum B, North CS. Mental Health and the Covid-19 Pandemic. N Engl J Med. April 2020. https://doi. org/10.1056/nejmp2008017
- 11. Ho CS, Chee CY, Ho RC. Mental Health Strategies to Combat the Psychological Impact of COVID-19 Beyond Paranoia and Panic. *Ann Acad Med Singapore*. 2020;49(1):1-3.
- 12. Shah K, Kamrai D, Mekala H, Mann B, Desai K, Patel RS. Focus on Mental Health During the Coronavirus (COVID-19) Pandemic: Applying Learnings from the Past Outbreaks. *Cureus*. 2020. https://doi.org/10.7759/cureus.7405
- 13. World Health Organization. #HealthyAtHome Mental health. 2020:1-19. https://www.who.int/campaigns/connecting-the-world-to-combat-coronavirus/healthyathome/healthyathome---mental-health. Accessed June 17, 2020.
- 14. Centers for Disease Control and Prevention. Mental Health and Coping During COVID-19 | CDC. Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/managing-stress-anxiety. html. 2020. Accessed June 17, 2020.
- Brymer M, Jacobs A, Layne C, et al. National Child Traumatic Stress Network and National Center for PTSD. Psychological First Aid: Field Operations Guide. 2nd Edition. 2006

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