Mental Health Crisis:

Depression, Anxiety, and COVID-19

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In December 2019, the world began facing a threat quite unlike anything seen before. An outbreak of a novel coronavirus occurred, originating in the Wuhan district of China, caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). To date, more than 188 countries and territories have been impacted, few worse than the United States (U.S.). More than 2.07 million COVID-19 cases have been diagnosed in the U.S., with roughly 116,000 fatalities and 622,000 recoveries. The urgency associated with this pandemic has prompted a national public health response, including stay-at-home orders, mandatory quarantining, employment restrictions, and travel bans. These measures have been enforced at both the local and national levels. People are facing greater restrictions on their normal livelihood than ever before. The social and economic consequences of these measures are unparalleled in the level of disruption caused at the individual and family level.

One of the biggest impacts that the U.S. is facing due to COVID-19 is an increase in mental illness, particularly of depression and anxiety. Major depressive disorder (MDD) is a mood disorder, typically episodic, characterized by symptoms of depressed mood and anhedonia lasting for at least two weeks, with specific criteria as outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). Anxiety is a term that encompasses a broad range of disorders that share features such as excessive and persistent fear, worry, and/or the presence of avoidance behaviors. The DSM-5 categorizes these illnesses as broadly as generalized anxiety disorder or as precisely as specific phobias or social anxiety. Both MDD and anxiety are widely accepted to have multifactorial etiologies, with contributions from developmental, environmental, genetic, neurobiological, and psychosocial factors.

In 2017, roughly 7.1% of U.S. adults were living with MDD and 10% described having some degree of depression every year. Almost 18.1% of the population, about 40 million people, live with some degree of anxiety every year. Depression alone costs the economy an estimated \$210.5 billion annually in direct and indirect costs. Further data suggests that anxiety costs over \$42 billion a year in direct and indirect costs. We expect these values to be grossly underreported, likely related to stigmatization and variable access to care, causing many to refrain from seeking help. 11

A recent poll performed after the start of the COVID-19 crisis indicates as many as 50% of U.S. adults may be suffering from mental illness, particularly depression and anxiety. People respond to stress and change in numerous ways, which can translate into unhealthy reactions or behaviors, such as psychiatric illness, excessive substance use, and even blatant noncompliance with public health directives. At its worst we have seen this reflected in xenophobic behaviors and outright paranoia about the reality of coronavirus and its consequences, leading some groups to be scapegoated and inequalities more magnified than pre-coronavirus. At

The consequences of the pandemic on employment and financial stability of American households are pronounced. In a sample representative of roughly 35% of U.S. adults, nearly 26% noted having lost their job, 21% of U.S. adults have had their hours reduced, 13% have taken a pay cut, and 7% were furloughed since policies such as the quarantine and stay-at-home

order were put in place.¹⁵ The combined impact of both financial and psychological destabilization, especially for low-income families or those whose households consist of individuals diagnosed with a mental disorder, will likely persist beyond the resolution of the coronavirus pandemic. These factors only serve to increase the relative risk of being diagnosed with a mental disorder such as depression or anxiety. Roughly 40% of U.S. adults have said that someone within their household has lost a job and 30% of reported having barriers to afford basic needs.¹⁵ In May 2020, the U.S. experienced a 13.3% unemployment rate, with approximately 30 million workers collecting some form of unemployment benefits.¹⁶

Due to an explosion of mental health crises, health leaders are finding an increase in risky behavior to help with coping. These issues create a concomitant rise in substance abuse, ranging from increased alcohol consumption to a dramatic rise in overdose of "hard" drugs like heroin and cocaine. Stay-at-home orders, unemployment, social isolation, and multiple other stressors can contribute to the temptation for substance users and even addicts in treatment. It was reported that alcohol sales have risen 55% since the COVID-19 lockdown began and 33% of adults were drinking while working from home. Also, there has been a 30% increase in vaping and marijuana sales since the COVID-19 lockdown.¹⁷ These behaviors generate serious risk because studies have shown that smoking, regardless of substance, significantly increases the risk of acquiring COVID-19 and reduces overall health outcomes both from COVID-19 and other diseases. This problem can be amplified in the homeless, a particularly vulnerable group. Approximately 500,000 people in the last decade were estimated to be homeless, living in either a formal shelter-type facility or abandoned buildings and informal encampments.¹⁸ There is up to a 50% increase in family violence since COVID-19 began because some individuals are coping with their frustration and stress by engaging in violent acts. 19 Between financial difficulty, household stress, and worsening of risky coping behaviors, the mental health community has experienced a significant growth in patient population. The advantage of public health is that it draws upon the expertise of multiple healthcare disciplines and uses them to produce comprehensive recommendations that create the most benefit for communities. Dispersing recommendations across multiple modalities from health experts and ensuring their accessibility will be a major driving force in combatting these negative activities.

The U.S. mental health crisis, as well as an increase in risky behavior, will leave both economic and social consequences for the foreseeable future. This highlights the importance of the interdisciplinary and collaborative efforts of the public health workforce, prevention, and education. As public health professionals, we must be ever-vigilant about new obstacles to achieving community-wide health goals. It is difficult to imagine, but for a significant proportion of our population, access to resources like food and medication, education, and psychosocial needs are increasingly unavailable. This is partially due to excessive "hoarding" of essential household supplies.²⁰

It is the responsibility of health experts and public health leaders to advocate for preventative policies and practice anticipating these fear-driven reactions. Tangible consequences such as rampant unemployment and poverty have destabilized normal life for many people, creating desperation and fear. Many households are already primed for this change, such as those who suffer from physical or emotional abuse, the elderly, and even young children and adolescents who cannot make sense of this dramatic social upset. Teenagers unable to attend their graduation and children unable to see their friends and engage in normal playground socialization are facing higher levels of anxiety and depression. Among our nation's youth, particularly those who are

confronted with challenges to their emotional and physical safety, the disparities in health care access, education, and learning opportunities are only further exacerbated.²¹ A sample of over 1200 adults indicates that, regardless of age group, at least 33% of adults felt lonelier and more isolated than before the pandemic and men were more likely to indicate loneliness than women.²² The Substance Abuse and Mental Health Services Administration's National Helpline for people in emotional distress has received a 1,000% increase in the volume of calls during April 2020 compared to April 2019.²³ While the nation's priority is undoubtedly the wellbeing of its citizens, there is no denying the widespread uncertainty and distress associated with the sudden change in lifestyle that many are experiencing. The threat caused by this novel virus is not constricted to physical effects but extends to the social and psychological sphere as well. Although this is not the first outbreak of serious disease, the advances in social media and technology in general have contributed to the intensification of feeling "distanced" from our friends, family, and peers.²⁴ Some groups are more at risk than others. It is clear that not only the financial stability of millions of families is jeopardized, but those who suffer from chronic disease, are afflicted with poverty, and even the geriatric age groups are all at greater risk from the secondary consequences of isolation. Many of the elderly are at higher risk for certain health problems like stroke and coronary artery disease, and the social isolation is associated with increased visits to the emergency department and more hospitalizations for non-COVID-19 related problems.²⁵

Coordination of mental health professionals, including social workers, therapists, and psychiatrists can be used to directly interact with those affected most severely. While public health specialists in epidemiology, social science, and policy have contributed immense knowledge and analysis regarding COVID-19, there needs to be collaborative and interdisciplinary effort to identify and address the difficulties facing the population as a consequence of the disease. Although some groups may be more susceptible to the psychological changes that result from a pandemic, it is important to remember that no one is immune. Everyone has the risk of constant threat to social, economic, and physical and mental wellbeing.

As such, there are several recommendations we can make for those whose mental health has been impacted by this crisis and can have positive effects even in healthy individuals:

- 1. Take breaks from watching, reading, or listening to news about COVID-19.5
- 2. Take care of your body⁵:
 - a. Eat healthy and well-balanced meals.
 - b. Exercise regularly. Although gyms have not opened, many states are opening parks, beaches, and trails.
 - c. Get plenty of sleep. This may require adjusting schedules to make the time to unwind and find the best ways to relax for you such as mediation or reading a book.
- 3. Talk to someone whether that be a professional or a confidant. Find someone you trust and talk about how you feel.⁵
- 4. Connect with others. Although social distancing protocols are in place, there are a number of ways to connect with others: telephone, video-platforms, and email.²⁶

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- 5. Reduce caffeine, alcohol, and substance use.⁵ All these things have been shown to cause more depression and anxiety.²⁷
- 6. Learn how to set boundaries for yourself by saying no, pausing, and taking breaks. Understand that taking care of yourself and your mental health needs is a priority.⁵

Resources for COVID -19

- 1. Substance Abuse and Mental Health Services Administration Emergency Helpline. Services for emotional distress, substance abuse and addiction.²⁸
 - a. Text or Call: 1-800- 662- HELP (4357). Available 24 hours/ 7 days a week/ 365 days a year.
- 2. National Domestic Violence Hotline.²⁹
 - a. Call: 1-800- 799-7233 or text "loveis" to 1866-331-9474. Available 24 hours/ 7 days a week/ 365 days a year.
- 3. Contact your local health department for community support.
 - a. Many health departments have social service support programs that are being funded to help relieve stress due to COVID-19.⁵

References

- 1. World Health Organization. (2020). *Naming the coronavirus disease (COVID-19) and the virus that causes it*. Retrieved from World Health Organization: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(covid-2019)-and-the-virus-that-causes-it
- 2. Dong, E., Du, H., & Gardner, L. (2020, May). An interactive web-based dashboard to track COVID-19 in real time. *The Lancet. Infectious Diseases*, 20(5), 533–534. PubMed https://doi.org/10.1016/S1473-3099(20)30120-1
- 3. Johns Hopkins University & Medicine. (2020). COVID-19 dashboard by the center for systems science and engineering (CSSE) at Johns Hopkins. Retrieved from https://coronavirus.jhu.edu/map.html
- 4. The New York Times. (2020, February 29). *Here comes the coronavirus pandemic*. Retrieved from https://www.nytimes.com/2020/02/29/opinion/sunday/corona-virus-usa.html
- 5. Centers for Disease Control and Prevention. (2020, April 30). *Coronavirus disease 2019: Coping with stress*. Retrieved from: https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/managing-stress-anxiety.html
- 6. American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing. doi:https://doi.org/10.1176/appi.books.9780890425596
- 7. National Institute of Mental Health. (2019). *Major depressive disorder*. Retrieved from https://www.nimh.nih.gov/health/statistics/major-depression.shtml

- 8. Anxiety and Depression Association of America. (2019). *Anxiety and depression: facts & statistics*. Retrieved from https://www.nimh.nih.gov/health/statistics/mental-illness.shtml
- 9. Greenberg, P. E., Fournier, A.-A., Sisitsky, T., Pike, C. T., & Kessler, R. C. (2015, February). The economic burden of adults with major depressive disorder in the United States (2005 and 2010). *The Journal of Clinical Psychiatry*, 76(2), 155–162. PubMed https://doi.org/10.4088/JCP.14m09298
- 10. Konnopka, A., & König, H. (2020, January). Economic burden of anxiety disorders: A systematic review and meta-analaysis. *PharmacoEconomics*, *38*(1), 25–37. PubMed https://doi.org/10.1007/s40273-019-00849-7
- 11. National Institute of Mental Health. (2019, February). *Mental illness*. Retrieved from https://www.nimh.nih.gov/health/statistics/mental-illness.shtml
- 12. Hamel, L., Kearney, A., Kirzinger, A., Lopes, L., Muñana, C., & Brodie, M. (2020). *KFF health tracking poll- May 2020*. Washington, D.C.: Kaiser Family Foundation. Retrieved from https://www.kff.org/coronavirus-covid-19/report/kff-health-tracking-poll-may-2020/
- 13. Pfefferbaum, B., & North, C. (2020). Mental health and the COVID-19 pandemic. *The New England Journal of Medicine*. doi: https://doi.org/10.1056/NEJMp2008017
- 14. Devakumar, D., Shannon, G., Bhopal, S. S., & Abubakar, I. (2020, April 11). Racism and discrimination in COVID-19 responses. *Lancet*, *395*(10231), 1194. PubMed https://doi.org/10.1016/S0140-6736(20)30792-3
- 15. Kirzinger, A., Hamel, L., Cailey Muñana, A. K., & Brodie, M. (2020). *KFF health tracking poll- late April 2020: Coronavirus, social distancing and contact tracing.* Washington, D.C.: Kaiser Family Foundation. Retrieved from https://www.kff.org/report-section/kff-health-tracking-poll-late-april-2020-economic-and-mental-health-impacts-of-coronavirus/
- 16. Department of Labor. U.S. Bureau of Labor Statistics. (2020, May). *The employment situation-May 2020*. Retrieved from https://www.bls.gov/news.release/empsit.nr0.htm
- 17. Hoffman, J. (2020). *Smokers and vapers may be at greater risk for COVID-19*. New York: The New York Times. Retrieved from https://www.nytimes.com/2020/04/09/health/coronavirus-smoking-vaping-risks.html
- 18. Executive Office Of The President. The Council of Economic Advisers. (2019). *The State of Homelessness in America*. Washington, D.C.: Executive Office Of The President. Retrieved from https://www.whitehouse.gov/wp-content/uploads/2019/09/The-State-of-Homelessness-in-America.pdf
- 19. Campbell, A. (2020). An increasking risk of family violence during the COVID-19 pandemic: strengthening community collaborations to save lives. *Forensic Science International: Reports*(2), 100089. doi:https://doi.org/10.1016/j.fsir.2020.100089
- 20. Oosterhoff, B., & Palmer, C. (2020). Psychological correlates of news monitoring, social distancing, disinfecting, and hoarding behaviors among U.S. adolescents during the COVID-19 pandemic. *PsyArXiv*. doi:https://doi.org/10.31234/osf.io/rpcy4
- 21. Klass, P. (2020, June 5). *What's scaring the pediatricians*. Retrieved from: https://www.nytimes.com/2020/05/04/well/family/coronavirus-pediatricians-worries-children.html

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- 22. SocialPro. (2020). *Report: Loneliness and anxiety during lockdown*. New York: SocialPro. Retrieved from https://socialpronow.com/loneliness-corona/
- 23. Wan, W. (2020). *The coronavirus pandemic is pushing America into a mental health crisis*. Washington, D.C.: The Washington Post. Retrieved from https://www.washingtonpost.com/health/2020/05/04/mental-health-coronavirus/
- 24. Banerjee, D., & Rai, M. (2020, September). Social isolation in Covid-19: The impact of loneliness. *The International Journal of Social Psychiatry*, 66(6), 525–527. https://doi.org/10.1177/0020764020922269 PubMed
- 25. Call, G. (2020). *COVID-19 and social isolation puts elderly at risk for loneliness*. Retrieved from: https://journal.ahima.org/covid-19-and-social-isolation-puts-elderly-at-risk-for-loneliness/
- 26. American Psychological Association. (2017). *Stress in America: coping with change*. Washington, D.C.: American Psychological Association. Retrieved from https://www.apa.org/news/press/releases/stress/2016/coping-with-change.pdf
- 27. Gorka, S. M., & Phan, K. L. (2017, August). Impact of anxiety symptoms and problematic alcohol use on error-related brain activity. *Int J Psychophysiol*, *118*(118), 32–39. PubMed https://doi.org/10.1016/j.ijpsycho.2017.05.011
- 28. Substance Abuse and Mental Health Services Administration. (2020, April 30). *National helpline: SAMHSA's national helpline*. Retrieved from: https://www.samhsa.gov/find-help/national-helpline
- 29. National Domestic Violence Hotline. (2020). *National domestic violence hotline: get help*. Retrieved from: https://www.thehotline.org/

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