



## EDITORIAL

# The COVID-19 pandemic and mental health impacts

The newly identified novel coronavirus, COVID-19, was first reported in Wuhan, China, in late 2019. The COVID-19 virus is now known to belong to the same family as SARS and Middle East respiratory syndrome coronavirus (MERS-CoV), which are zoonotic infections thought to have originated from snakes, bats, and pangolins at the Wuhan wet markets (Ji *et al.* 2020). The virus has rapidly spread across the globe leading to many infected people and multiple deaths (Wang *et al.* 2020); especially of the elderly and vulnerable (Centers for Disease Control and Prevention 2020). While efforts to control and limit the spread of the pandemic in the community are quite straight forward to follow, it seems that prejudice and fear have jeopardized the response efforts (Ren *et al.* 2020). In fact, the COVID-19 pandemic has already unleashed panic, as evidenced by the empty toilet paper shelves in stores, resulted in accusations against people of Asian races (Malta *et al.* 2020), and impacted people's decisions to seek help when early symptoms arise (Ren *et al.* 2020). In this editorial, we discuss the issues related to the occurrence of fear, panic, and discrimination, analyse the causes of these phenomena, and identify practical solutions for addressing mental health issues related to this pandemic for both public and healthcare professionals.

People tend to feel anxious and unsafe when the environment changes. In the case of infectious disease outbreaks, when the cause or progression of the disease and outcomes are unclear, rumours grow and close-minded attitudes eventuate (Ren *et al.* 2020). We know that the level of anxiety rose significantly when the SARS outbreak occurred. For example, in Hong Kong, about 70% of people expressed anxiety about getting SARS and people reported they believed they were more likely to contract SARS than the common cold (Cheng & Cheung 2005). Anxiety and fear related to infection can lead to acts of discrimination. People from Wuhan were targeted and blamed for the COVID-19 outbreak by other Chinese people and Chinese people have since been stigmatized internationally, for example, use of the term 'China virus' and the use of terms such as 'Wuhan virus' and the 'New Yellow Peril' by the media (Ren *et al.* 2020).

Fear is a known (for centuries and in response to previous infectious outbreaks such as the plague), yet common response to infectious outbreaks and people react in many and individualized ways towards the perceived threat. Hypervigilance, for example, can arise because of fear and anxiety and, in severe cases, result in post-traumatic stress disorder (PTSD) and/or depression (Perrin *et al.* 2009). Fear of the unknown, in this case, the spread of the disease and the impact on people, health, hospitals, and economies, for example, raises anxiety in healthy individuals as well as those with pre-existing mental health conditions (Rubin & Wessely 2020). Individuals, families, and communities experience feelings of hopelessness, despair, grief, bereavement, and a profound loss of purpose because of pandemics (Levin 2019). Feelings of loss of control drive fear and uncertainty as the trajectory of the pandemics is constantly evolving; so is the advice on the action to take to stop the spread of a pandemic. Perceived mixed messaging from government or health officials can also lead to public confusion, uncertainty, and fear (Han, Zikmund-Fisher *et al.* 2018).

People's responses to fear and intolerance of uncertainty lead to negative societal behaviours (Rubin & Wessely 2020). Uncertainty increases feelings of alarm resulting in behaviours targeted at reducing uncontrollable situations which people fear. For example, we have seen people clearing shelves of supermarkets resulting in global shortages of food and essentials such as toilet paper (El-Terk 2020). This behaviour is purported to occur for two reasons: one because the threat of COVID-19 is perceived as a 'real' threat and expected to last for some time and second as a means to regain control (El-Terk 2020).

While outright panic as a result of this pandemic is unlikely, it can occur as a consequence of mass quarantine (Rubin & Wessely 2020). The current state of the COVID-19 illness already paints a picture of inevitable and large-scale quarantine – some of which are already occurring. In the case of mass quarantine, experiencing social isolation and an inability to tolerate distress escalate anxiety and fear of being trapped and loss of control, and the spread of rumours (Rubin & Wessely

2020). Rumours fuel feelings of uncertainty and are extricably linked to issues such as panic buying and hoarding behaviour. Anxiety related to this pandemic is also compounded by people being reminded of their own mortality that can lead to an 'urge to splurge', that is an increase in spending as a means to curb fear and regain control (Arndt *et al.* 2004).

Throughout history, people have sought to allocate blame to someone in order to calm their fear of disease outbreaks (McCauley *et al.* 2013). This fear and othering is often present with pandemics. For example, the 2014 Ebola outbreak was considered an African problem resulting in discrimination against those of African descent (Monson 2013), while the 2009 H1N1 flu outbreak in the USA saw Mexican and migrant workers targeted for discrimination (McCauley *et al.* 2013). In the past century, a number of serious outbreaks of influenza have developed in Southeast Asia, for example *Avian H7N9 Influenza, 2013; H2N2 Pandemic, 1957-1958; H1N1 Pandemic, 1918* (Sugalski & Ullo 2018). The 'blame' for avian influenza has centred on Asian countries, and we see some world leaders dubbing COVID-19 the 'Chinese virus' (Chui 2020). Since January 2020, The UK and the USA have reported increased reports of violence and hate crimes towards people of Asian descent (Russell 2020) and an overall rise in Anti-Chinese sentiment (Rich 2020) as a result of the spread of COVID-19. Misinformation, public anxiety, and rumours must be addressed by Government and Health officials (Madhav *et al.* 2017), that help mitigate the adverse effects of stigmatization and help provide protection of vulnerable populations (DeBruin *et al.* 2012). Ultimately, to apportion blame in any circumstance can damage everyone involved and can reduce individual and community resilience both in the short and long term (Murden *et al.* 2018). Fear and guilt can also occur as a result of being infected by the virus. Infected people, while also the target of discrimination, also experience self-blame or guilt. Unfortunately, this feeling culminated in the suicide death of a health worker recently who feared she had contaminated seriously ill people she cared for while infected by COVID-19 (Giuffrida & Tondo 2020).

Recovery from the negative impacts of this pandemic must include plans for addressing mental health issues for both public and healthcare professionals. Public health surveillance during and after this pandemic must include plans for mental health surveillance to allow for an adequate response to the anticipated mental health issues (Levin 2019). Fear and

isolation of those who are sick or quarantined, breakdown of social support structures, disruption of everyday life that we take for granted, and mental health impacts on health workers are real and anticipated outcomes of this pandemic. Following the SARS outbreak in 2003, Chong *et al.* (2004) found that 77.4% of health workers caring for patients during the outbreak had mental health issues ranging from anxiety, worry, depression, somatic symptoms, and sleep problems.

Despite the potential seriousness and impact on the mental health related to the pandemic in the infected patients and the community at large, most healthcare professionals have received relatively little training in the delivery of mental health care in the face of such pandemics (Xiang *et al.* 2020). Timely mental health care and mental healthcare training need to be developed and implemented as part of professional development activities (Xiang *et al.* 2020).

As with any infectious disease outbreak, it is necessary for the Governments to take steps to quell the epidemic of fear that eventuates (Malta *et al.* 2020). Rapid communication about disease control and prevention is essential. Education campaigns should be launched to promote public health messages that prevent the spread of the disease and encourage the public to take proactive actions, such as reporting signs of illness to health professionals (Wang *et al.* 2020).

Practical steps to manage our mental health during these difficult times include managing media consumption and accessing information which allows us to take practical steps to protect ourselves and our loved ones (World Health Organization 2020). Accessing non-official information can foster further, and often unnecessary, anxiety and panic (Johal 2009). Increasingly populations are being asked to stay in our homes for personal safety and the safety of others. Ensuring daily exercise activities, albeit for some of us in the confines of our home, have a positive impact on our mental health (Deslandes *et al.* 2009). As the physical distance from each other increases, finding ways to maintain our social connectedness is critical. Lack of interpersonal attachments is linked to poor physical, emotional, and mental health (Baumeister & Leary 1995). Setting up regular phone calls or video conferences with family, friends, and colleagues can bridge the gaps brought on by social distancing. As social beings, we need each other. As we are being asked to act in an increasingly unsocial way in order to overcome the challenges of this pandemic, we must remember that we are all in this together and act accordingly.

Kim Usher AM RN BA DipAppH (Nsg) MNSt PhD  
 FACMHN<sup>1</sup>, Joanne Durkin PgDip MA<sup>1</sup> and  
 Navjot Bhullar BA(Hons) MA MPhil PhD MAPS<sup>2</sup>  
<sup>1</sup>*School of Health, University of New England, and*  
<sup>2</sup>*School of Psychology, University of New England,*  
*Armidale, New South Wales, Australia*

## REFERENCES

- Arndt, J., Solomon, S., Kasser, T. & Sheldon, K. M. (2004). The urge to splurge: A terror management account of materialism and consumer behavior. *Journal of Consumer Psychology, 14*, 198–212.
- Baumeister, R. F. & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497–529.
- Centers for Disease Control and Prevention. (2020). Coronavirus Disease 2019 (COVID-19): People who are at higher risk for severe illness. [Cited 6 April 2020]. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/specific-groups/high-risk-complications.html>
- Cheng, C. & Cheung, M. W. (2005). Psychological responses to outbreak of severe acute respiratory syndrome: A prospective, multiple time-point study. *Journal of Personality, 73* (1), 261–285.
- Chong, M.-Y., Wang, W.-C., Hsieh, W.-C. *et al.* (2004). Psychological impact of severe acute respiratory syndrome on health workers in a tertiary hospital. *The British Journal of Psychiatry, 185*, 127–133.
- Chui, A. (2020). Trump has no qualms about calling coronavirus the 'Chinese Virus'. That's a dangerous attitude, experts say. The Washington Post. Available from: URL:<https://www.washingtonpost.com/nation/2020/03/20/coronavirus-trump-chinese-virus/>
- DeBruin, D., Liaschenko, J. & Marshall, M. F. (2012). Social justice in pandemic preparedness. *American Journal of Public Health, 102*, 586–591.
- Deslandes, A., Moraes, H., Ferreira, C. *et al.* (2009). Exercise and mental health: many reasons to move. *Neuropsychobiology, 59*, 191–198.
- El-Terk, N. (2020). Toilet paper, canned food: What explains coronavirus panic buying. Aljazeera. Available from: URL: <https://www.aljazeera.com/news/2020/03/toilet-paper-canned-food-explains-coronavirus-panic-buying-200313083341035.html>
- Giuffrida, A. & Tondo, L. (2020). As if a storm hit: more than 40 Italian health workers have died since crisis began. The Guardian. Available from: URL: <https://www.theguardian.com/world/2020/mar/26/as-if-a-storm-hit-33-italian-health-workers-have-died-since-crisis-began>
- Han, P. K., Zikmund-Fisher, B. J., Duarte, C. W. *et al.* (2018). Communication of scientific uncertainty about a novel pandemic health threat: ambiguity aversion and its mechanisms. *Journal of Health Communication, 23*, 435–444.
- Ji, W., Wang, W., Zhao, X., Zai, J., & Li, X. (2020). Cross-species transmission of the newly identified coronavirus 2019-nCoV. *Journal of Medical Virology, 92*(4), 433–440.
- Johal, S. S. (2009). Psychosocial impacts of quarantine during disease outbreaks and interventions that may help to relieve strain. *The New Zealand Medical Journal, 122* (1296), 47–52.
- Levin, J. (2019). Mental health care for survivors and healthcare workers in the aftermath of an outbreak. In: D. Huremović (Ed). *Psychiatry of Pandemics* (pp. 127–141). Cham, Switzerland: Springer.
- Madhav, N., Oppenheim, B., Gallivan, M., Mulembakani, P., Rubin, E. & Wolfe, N. (2017). Pandemics: risks, impacts, and mitigation. In: Jamison, D.T, Gelband, H., Horton S., Jha, P., Laxminarayan, R., Mock, C.N. & \* Nugent, R. (Eds). *Disease Control Priorities: Improving Health and Reducing Poverty*, 3rd edn. Washington, D.C.: The International Bank for Reconstruction and Development/ The World Bank.
- Malta, M., Rimoin, A. W. & Strathdee, S. A. (2020). The coronavirus 2019-nCoV epidemic: Is hindsight 20/20? *EClinical Medicine, 20*, 100289.
- McCauley, M., Minsky, S. & Viswanath, K. (2013). The H1N1 pandemic: Media frames, stigmatization and coping. *BMC Public Health, 13*, 1116.
- Monson, S. (2017). Ebola as African: American media discourses of panic and otherization. *Africa Today, 63* (3), 3–27. <https://doi.org/10.2979/africatoday.63.3.02>
- Murden, F., Bailey, D., Mackenzie, F., Oeppen, R. S. & Brennan, P. A. (2018). The impact and effect of emotional resilience on performance: an overview for surgeons and other healthcare professionals. *British Journal of Oral and Maxillofacial Surgery, 56*, 786–790.
- Perrin, P. C., McCabe, O. L., Everly, G. S. & Links, J. M. (2009). Preparing for an influenza pandemic: Mental health considerations. *Prehospital and Disaster Medicine, 24* (3), 223–230.
- Ren, S.-Y., Gao, R.-D. & Chen, Y.-L. (2020). Fear can be more harmful than the severe acute respiratory syndrome coronavirus 2 in controlling the corona virus disease 2019 epidemic. *World Journal of Clinical Cases, 8* (4), 652–657.
- Rich, M. (2020). As Coronavirus Spreads, So Does Anti-Chinese Sentiment. The New York Times. Available from: URL: <https://www.nytimes.com/2020/01/30/world/asia/coronavirus-chinese-racism.html>
- Rubin, G. J. & Wessely, S. (2020). The psychological effects of quarantining a city. *British Medical Journal, 368*, m313. <https://doi.org/10.1136/bmj.m313>
- Russell, A. (2020). The Rise of Coronavirus Hate Crimes. The New Yorker. Available from: URL:<https://www.newyorker.com/news/letter-from-the-uk/the-rise-of-coronavirus-hate-crimes>
- Sugalski, G. & Ullo, M. (2018). The influenza virus: Winter is coming. *Emergency Medicine Reports, 39*(23). [Cited 6 April 2020]. Available from: <https://www.reliasmedia.com/articles/143653-the-influenza-virus-winter-is-coming>

- Wang, W., Tang, T. & Wei, F. (2020). Updated understanding of the outbreak of 2019 novel coronavirus (2019-nCoV) in Wuhan, China. *Journal of Medical Virology*, 92 (4), 441–447.
- World Health Organization. (2020). Mental health and psychosocial considerations during the COVID-19 outbreak, 18 March 2020 (No. WHO/2019-nCoV/MentalHealth/2020.1). Geneva, Switzerland: World Health Organization.
- Xiang, Y.-T., Yang, Y., Li, W., Zhang, L., Zhang, Q., Cheung, T. & Ng, C. H. (2020). Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. *The Lancet Psychiatry*, 7 (3), 228–229.