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Impact on and adaptations by the National Addictions Management Service in response to the COVID-19 pandemic

Melvyn WB Zhang^{1,2}, MBBS, MRCPsych, Song Guo¹, MBBS, PhD,
G Kandasami¹, MBBS, MRCPsych, Cheng Lee¹, MBBS, MMed

¹National Addiction Management Service, Institute of Mental Health, ²Family Medicine and Primary Care, Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore

Correspondence: Dr Melvyn WB Zhang, Consultant, National Addiction Management Service, Institute of Mental Health, 10 Buangkok Green Medical Park Block 9, Singapore 539747. melvyn_wb_zhang@imh.com.sg

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Dear Sir,

On 31 December 2019, a case of pneumonia of unknown cause was reported to the World Health Organization (WHO).⁽¹⁾ On 30 January 2020, the outbreak was declared by the WHO as a public health emergency of international concern, as it had afflicted 34 separate regions in China.⁽¹⁾ Given the rapid spread, the WHO designated the coronavirus disease as a pandemic on 11 March 2020.⁽¹⁾ As of 25 March 2020, 372,757 individuals had been infected globally, with a death toll of 16,231.⁽¹⁾ The high prevalence rate prompted countries to adopt various measures, including that of a lockdown (in China and Italy) and movement control orders (in Malaysia) to curb the spread of infection. In Singapore, measures such as safe distancing and ‘circuit breaker’ measures were implemented. The onset of the pandemic, along with the measures implemented by the various governments, created much fear and anxiety among the public.

Since the COVID-19 outbreak, there has been a proliferation of related research involving basic sciences and genomics, and publications pertaining to the psychological health of individuals. Rajkumar et al,⁽²⁾ in their literature review, reported heightened anxiety, depression and self-reported stress among individuals. While the prior literature review focused mainly on the mental health status of healthcare workers and the general population, other researchers have highlighted the impact of COVID-19 on vulnerable populations, such as individuals who were living with an addictive disorder. Kar et al,⁽³⁾ in their editorial, reported the difficulties faced by individuals with opioid-use disorders in securing their regular medications. Jiang et al⁽⁴⁾ also highlighted the challenges faced by methadone-maintained patients in China in accessing methadone services. Sun et al⁽⁵⁾ opined that the lack of availability of methadone treatment might result in a relapse, leading individuals to seek out other opioid alternatives. With regard to alcohol use disorders, Kar et al⁽³⁾ and Arya et al⁽⁶⁾

highlighted how alcohol-dependent individuals might turn to home-made spirits instead. With regard to behavioural addictions, Kar et al⁽³⁾ warned of the potential increase in behavioural addictions among adolescents, as the lockdowns and movement curbs result in individuals spending time indoors and, possibly, on the Internet. Thus, these studies have indicated the difficulties in the provision of appropriate services for addiction in these challenging times of COVID-19. While much has already been discussed, we would like to highlight the impact of COVID-19 and the challenges encountered by individuals living with addictive disorders in Singapore at a primary treatment centre (i.e. the National Addictions Management Service [NAMS]). At NAMS, we provide therapeutic services for addiction disorders. The fact that treatment policies for opioid use disorder are different in Singapore implies other difficulties that we face locally at our national centre.

Firstly, the fact that COVID-19 results in heightened anxiety and depressive symptoms has substantial implications for our cohort of patients. It is not uncommon for individuals with addictive disorders to have concomitant psychiatric disorders such as affective disorders and psychotic disorders. The immediate impact of COVID-19 could worsen these comorbid conditions. Some individuals may have primarily sought out substance use to self-medicate and to help them cope with these concomitant psychiatric disorders. As such, there is a fear that these individuals would not only experience worsening of their affective or anxiety disorders but a potential relapse back into their substance use. This has had several clinical implications. Psychiatrists ought to assess not only the current substance use but also the underlying concomitant psychiatric disorders when a patient presents to their clinic. Pharmacological treatment should be considered and initiated if the symptoms are severe. The addiction counsellor would need to check with patients regarding their substance use and render supportive therapies for these other mental health conditions.

Secondly, with the imposition of the circuit breaker, we hypothesise that there might potentially be an increase in the number of patients seeking medication-assisted detoxication. The restrictions imposed have an implication on the availability of illicit substances. It is anticipated that as the supply of illicit drugs dwindle, individuals might either turn to other substances or present for treatment. This is a positive change for individuals who were previously pre-contemplative about their addiction problems. Unfortunately, our hypothesis was not supported. From our observations, during the circuit breaker period (April–June 2020), we saw a total of 87 new patients, and between 37% and 42% of our existing patients also kept to their scheduled appointment. By the end of the circuit breaker period and in the first three months of Phase 2, we saw a total of 195 new patients, which approached the total number of 244 new patients we saw between the months of January through March 2020. In Phase 2, the adherence rate to appointments was between 34% and 39%, and it was between 36% and 39% in the preceding COVID-19 months of January through March 2020. Our statistics did not show a significant influx of new patients (for major substance disorders such as alcohol and substance addictions) in the months of the circuit breaker period, as much as we had anticipated, and no corresponding increase in adherence to planned appointments was observed. Nonetheless, the presence of new patients signified that there were individuals who had presented for treatment, possibly owing to difficulties in managing their withdrawal symptoms. Also, we saw more individuals presenting to NAMS seeking treatment for their opium use. By the end of Phase 2, we had a total of 44 individuals on methadone maintenance, and at least 7 (15.9% increase) more individuals had come forth, seeking treatment for their opium issues. The lack of significant increase in the number of new patients might be accounted for by the fact that some individuals might have managed to wait out their withdrawal symptoms, especially if their previous drug use was mild in nature. It might be also possible that these individuals had consulted other psychiatric services or other clinicians for assistance

with their withdrawal symptoms. Some individuals might also have turned to the abuse of other legal substances such as alcohol as a replacement, and hence, did not seek help.

The onset of the COVID-19 pandemic has also had an impact on our inpatient services. At NAMS, we have had a week-long medication-assisted detoxification programme and a week-long rehabilitation programme for individuals with addictive disorders. With the imposition of the circuit breaker measures, we had to modify the inpatient programme to retain the medication-assisted detoxification programme only, in order to cater to the acute needs of individuals who might present with severe withdrawal symptoms. All individuals had to be tested for COVID-19 by means of a swab test prior to admission, and they also had to undergo a repeat testing on Day 5 of admission. To minimise contacts and the risk of infections, all family sessions and interviews with halfway houses were conducted virtually, and outdoor activities were ceased. The rehabilitation phase of the programme was ceased and replaced with outpatient counselling services to avoid prolonged admission on the ward, which might increase the risk of individuals acquiring infections.

Thirdly, we anticipated that we had to adapt our methadone services, taking into consideration the impact of the pandemic on our group of elderly individuals who are maintained on methadone. Unlike China and other neighbouring Southeast Asian countries, in the Singapore context, opioid substitution therapy is not offered as the mainstay of treatment. This is, in part, owing to Singapore's policy of zero tolerance for drug use.⁽⁷⁾ Opioid substitution therapy is offered only to elderly patients (aged above 60 years) with a prior history of opium use;⁽⁷⁾ hence, we have a limited number of patients on methadone maintenance. Guo et al⁽⁸⁾ have previously highlighted the demographic profile of this group of elderly individuals who are maintained on methadone substitution therapy. With the current COVID-19 pandemic, there are several implications for individuals maintained on opioids in our service. As these individuals are elderly, they are susceptible to acquiring COVID-19 from the community

settings. Nonetheless, we also have had to balance the legality issues of constant monitoring of these patients, to prevent the problem of diversion and abuse of methadone. Given this, exemptions have been considered for some patients with strong social support, and to minimise the number of visits they have had to make to collect their regular dose of methadone. Traditionally, the prescription of methadone was possible only if individual patients presented for their routine appointment. In the difficult times of the pandemic, an exemption was made such that family members could present, on the patient's behalf, to collect a month's worth of methadone supply. However, the patient would still need to be seen once every two months.

Fourthly, we concur with Kar et al⁽³⁾ with regard to the potential increase in the number of individuals with behavioural addictions. In the first few months of 2020, we have had between 7% and 12% of new patients presenting with behavioural addiction issues. During the circuit breaker period, this proportion increased to 19%–20%. While the circuit breaker in Singapore has resulted in the closure of conventional gambling venues, such as the casinos and the local sports betting outlets, individuals might turn to other modalities of gambling such as online gambling. Zhang et al⁽⁹⁾ previously reported that a significant number of treatment-seeking individuals who went to NAMS for gambling addiction gambled online. Most of these individuals preferred doing so as online gambling is highly accessible, and virtual currency could be utilised. Chia et al,⁽¹⁰⁾ in their review of the prevalence of Internet addiction and Internet gaming disorders in Southeast Asia, reported 20.0% and 10.1% pooled prevalence rates of Internet addiction and gaming disorders, respectively. Home confinement without any social activities increases the tendency of individuals to seek out online activities, and possibly, to game. The early closure of schools and changes in the semester vacations would also provide more opportunities to spend time online. Thus, individuals who come forth for treatment should be carefully assessed for these behavioural addictions.

The COVID-19 pandemic has consequential impact on individuals with addictive disorders, as highlighted by previous editorials, and from our experiences at NAMS. The COVID-19 pandemic has an impact on the way we practise in an addictive service as well. Psychiatrists must adopt a more generalist approach in treating the patient, taking into consideration the addictive disorder and the potential comorbidities. With regard to the potential increase in the number of patients coming forth for treatment, the initial decision to retain only the inpatient detoxification programme on the ward has allowed more beds to be free and enabled more rapid cycling of patients who require inpatient observation and treatment. We must also be cognizant of the possibility that individuals with gambling disorders might turn to other modalities to gamble, and must screen for signs and symptoms suggestive of Internet addiction and gaming disorders early. Addiction counsellors would also need to adapt to this challenging climate. The modality of counselling might change from that of a conventional face to face psychotherapy to that of virtual psychotherapy. Given the increase in the number of cases of behavioural addictions, the counsellors must undertake more cases, as the primary modality for treatment of behavioural addictions is psychological work. Despite the challenges in these times of the COVID-19 pandemic, we are still actively reaching out to individuals who are keen to seek assistance for their addiction problems. We have a website that provides information to a helpline (operating 24 hours), and an online web-chat service. This would help at-risk individuals to seek immediate help. Moreover, the Singaporean government has also offered a National Care Hotline for at-risk individuals or individuals living with addictive disorders to seek help.

Yours sincerely,

Melvyn WB Zhang^{1,2}, Song Guo¹, G Kandasami¹, Cheng Lee¹

¹National Addiction Management Service, Institute of Mental Health, ²Family Medicine and Primary Care, Lee Kong Chian School of Medicine, Nanyang Technological University Singapore, Singapore. melvyn_wb_zhang@imh.com.sg

REFERENCES

1. World Health Organization. Coronavirus disease (COVID-19) pandemic. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>. Accessed March 26, 2020.
2. Rajkumar RP. COVID-19 and mental health: a review of the existing literature. *Asian J Psychiatr* 2020; 52:102066.
3. Kar SK, Arafat SMY, Sharma P, et al. COVID-19 pandemic and addiction: current problems and future concerns. *Asian J Psychiatr* 2020; 51:102064.
4. Jiang H, Su H, Zhang C, et al. Challenges of methadone maintenance treatment during the COVID-19 epidemic in China: policy and service recommendations. *Eur Neuropsychopharmacol* 2020; 35:136-7.
5. Sun Y, Bao Y, Kosten T, et al. Editorial: challenges to opioid use disorders during COVID-19. *Am J Addict* 2020; 29:174-5.
6. Arya S, Gupta R. COVID-19 outbreak: challenges for addiction services in India. *Asian J Psychiatr* 2020; 51:102086.
7. Guo S, Manning V, Yang Y, et al. Lofexidine versus diazepam for the treatment of opioid withdrawal syndrome: a double-blind randomized clinical trial in Singapore. *J Subst Abuse Treat* 2018; 91:1-11.

8. Guo S, Winslow M, Manning V, Thane KKW. Monthly take-home methadone maintenance regime for elderly opium-dependent users in Singapore. *Ann Acad Med Singap* 2010; 39:429-34.
9. Zhang M, Yang Y, Guo S, et al. Online gambling among treatment-seeking patients in Singapore: a cross-sectional study. *Int J Environ Res Public Health* 2018; 15:832.
10. Chia DXY, Ng CWL, Kandasami G, et al. Prevalence of internet addiction and gaming disorders in Southeast Asia: a meta-analysis. *Int J Environ Res Public Health* 2020; 17:2582.