

Addiction and the implication of Covid-19 during and proceeding lockdown

Ms Emma Higginson, Researcher, Lancaster University

ABSTRACT

Governments have briskly enforced lockdown and national social distancing across many societies to varying degrees, internationally, due to the outbreak of the SARS-CoV-2 coronavirus disease 2019 (Covid-19) pandemic. This article addresses challenges and implications posed by addiction under the novel conditions at a time when the infectious disease currently has no cure. Although substance misuse is mentioned, alcohol issues are prominently emphasised due to the dearth of information available regarding substance misuse specifically at this stage of the pandemic.

INTRODUCTION

Since the beginning of the pandemic different reactions from around the world have faced localised problems. There is also evidence of some international trends and lessons to be learnt in consumption and healthcare practices within the specialist field of addiction. However debatable the concept of addiction is, the disorder is widely recognised and is predicted to be heavily affected by lockdown. Sales figures from March 2020 show that, unlike some countries where alcohol and tobacco sales were banned during lockdown, the United Kingdom allowed sales to continue and saw a significant rise in alcohol sales.¹

The consequences of addiction can be detrimental to health but the negative effects of alcohol use disorders (AUD) and substance abuse disorders (SUD), during and post-lockdown, are also likely to be enduringly harmful for many consumers. Issues relating to an increasing vulnerable population, who may not necessarily have presented as at-risk of addiction before the Covid-19 outbreak, are particularly pertinent to researching the long-term effects of the pandemic in this area. As will be shown, those at risk are situated within the category of already heavy drinkers or an AUD/SUD. Bansal *et al.* (2020)² advise of the unknown pervasiveness of mental illness and substance use among clinicians who do not seek help, as well as the encompassing pressure and stigma stemming from the specious belief that clinicians are immune from addiction. For this reason keyworkers are mentioned as they deserve special attention as a vulnerable group.

ALCOHOL USE

The 2016 UK Department of Health (DoH)³ guidelines suggest no more than 14 units of alcohol a week for men and women, which should be spread over at least three days to keep the risk of adverse effects low. The likelihood of developing illnesses increases as consumption increases so the fact that 19% of adult consumers (in England) drink above the recommended levels, and tend to drink at home (NHS Digital, 2018),⁴ is an alarming cultural trend. Alcohol and other substances can lead to disease and a wide range of illnesses, including cancers, strokes, heart

disease, liver disease, and damage to the brain and nervous system which compromise recovery from the coronavirus. Evidently, greater levels of consumption are concerning and implicate users to the damaging effects of addiction and Covid-19.

Alcohol Change UK⁵ commissioned new research to find out how drinking habits have changed since lockdown in the UK. The research aim was to discover whether people were stockpiling alcohol or if they were actually drinking more. An Opinion poll surveyed a representative sample of 2000 people, of which, 1500 had been drinking before lockdown and all 2000 had drunk alcohol at some point during the past.⁵ The results show that Covid-19 has affected drinking habits in two directions; 18% of responders are drinking more in terms of volume and frequency. This increase is thought to reflect 8.6 million adults. However, over a third of those surveyed have reduced their overall consumption and of those, 6% had stopped drinking entirely which equates to 2.4 million adults who have begun to abstain because of the pandemic. The data shows that those who drank more often before lockdown are now drinking more during lockdown. Comparatively, those who already drank the least often before lockdown are drinking less during lockdown.

Finlay and Gilmore (2020)⁶ recognise two at-risk groups. Firstly are those who are already struggling with dependence and secondly are those who are on the brink. The former group may be unable to access services despite an effort for many to move online or remotely. India imposed lockdown which closed hospitals except to emergencies but in contrast to the UK, India banned the sale of alcohol and tobacco. Ganesh *et al.* (2020)⁷ report that the Centre of Addiction Medicine initiated an E-Consultation portal to aid a quick response between healthcare workers and addiction specialists to ensure prescribing was managed with no reduced effects on patients and prevent situations of withdrawal.

Analysis shows that 90% of communication was rapid, documented and executed using a smartphone device for ease and efficiency. Raney (2017)⁸ also highlights how healthcare can become more efficient and can suit busy working schedules by utilising more innovative methods. More recently, Knopf (2020)⁹ also recommends that teletherapy should be exploited to cover a vast array of healthcare purposes, including but not limited to addiction therapies which, should be implemented immediately in the era of the Covid-19 pandemic. Knopf⁹ asserts that face-to-face appointments ought not to be considered more therapeutic than remote access after teletherapy “exploded” (p. 5) since March 23rd 2020. Furthermore, Knopf⁹ endorses that teletherapy should be the norm although some people do prefer in-person consultations. However, under the circumstances of the pandemic, this has not been an option in many conditions and teletherapy that includes video and audio has proved a valuable and worthwhile, even economical, asset.

The second group of significant concern mentioned by Finlay and Gilmore⁶ are those whom may be triggered further into dependence due to direct effects of the virus on bereavement, job and financial insecurity or troubled

relationships. Marsden *et al.* (2020)¹⁰ expound “that uncertainty about the future, loneliness, depression or even suicidality induced by social distancing; and stress and grief from the illness or death of loved ones ... are likely to place us at increased risk of a range of unhealthy behaviours and coping strategies, including substance use” (p. 2-3). Finlay and Gilmore⁶ assert that only 20% of dependent drinkers got the help they required before lockdown and predict that the proportion will be even lower after the lockdown is lifted. They also predict that presentations of alcoholic liver disease, which were already increasing before the covid-19 crisis, will rise further (p. 1). The authors anticipate the need for alcohol treatment services – which is typically one of the first areas to suffer budget cuts when budgets are strained – will surge. This view is similarly shared by Clay and Parker (2020);¹¹ whose reports signal that this group could find themselves more vulnerable and could, as a result, be thrust into a position where they causally become further marginalised should cuts or inaccessibility persists.

Clay and Parker¹¹ postulate this period of isolation during lockdown may lead to a spike in alcohol misuse, relapse, and potentially, development of AUD in at-risk individuals across the general population (p. 259). On the other hand, keyworkers in healthcare who cannot socially distance face distinctive stressors, risk of infection and negative effects on personal well-being as they must be more vulnerable¹² and Bansal *et al.*² pay particular attention to clinicians whom could be negatively impacted by increased stress and burnout caused by the virus. Adams and Wells¹² entreaty managers to ensure the provision of food, rest breaks, down-time, and adequate time off to be considered just as important as the provision of protocols and protective equipment. The objective is to reduce stress and negative effects on mental health. Stress is found to be a significant factor which may lead to increased drug and alcohol consumption for some serving on the frontline of healthcare. This problem is emphasised by the higher levels of suicide amongst physicians, in comparison to the general public, with previously unknown mental health and addiction problems¹³ which places them in the second category of vulnerable users specified above.

To alleviate harms caused by the effects of lockdown and consumption Clay and Parker¹¹ advocate for the government to issue public health warnings to protect vulnerable individuals and report the risk factors of alcohol, stress and isolation. Many studies indicate towards the effect of isolation on animals though none are available to study the effects of lockdown on the general human population, in terms of health and well-being, because the situation is unprecedented. However, Harlow *et al.*¹⁴ carried out research on rhesus monkeys which may have some application to the current situation. Young rhesus monkeys kept in isolation were found to exhibit signs of distress at social deprivation which were held to be “dramatic but reversible” (p. 92). The study has some obvious criticisms in that the monkeys were raised in total isolation and are also intrinsically different to humans. Nevertheless, the authors were convinced by research which found the behaviour of humans and monkeys to have some parallels and comparable enough to provide fascinating insights.

SUBSTANCE USE

The severity and mortality from the Covid-19 infection increases with age and also for those with underlying health conditions, such as diabetes, which compromise the immune system. Covid-19 attacks the respiratory system so the population of smokers and those with other SUD appear to be acutely susceptible to the hazards posed directly by the virus. The indirect effects of the virus are more obscure but, for those with SUD, health is likely to be implicated by factors such as difficulty accessing therapeutic medications, needle exchanges and other recovery services, and an increased reliance upon substances.

Smoking affects respiratory health and can also cause cancer and a host of other diseases which affect the heart and body. Opiate use also compromises health and can specifically affect breathing¹⁵ and emphasises the specific risk Covid-19 presents to substance users. The comorbidity of conditions common among chronic smokers and persons with other SUDs (such as chronic obstructive pulmonary disease, cardiovascular disease, and other respiratory diseases) have been shown to negatively affect the prognosis in earlier presentations of coronaviruses.¹⁵ Comparably, investigations continue to assess the safety of vaping and the use of e-cigarette devices and the effect they may have on the lungs to evaluate the potential risk during the current pandemic. Controversially, research presented by Olds and Kabanni (2020)¹⁶ concludes that evidence of vaping and e-cigarettes on previous coronaviruses proves inconclusive. However, additional analyses by Volkow¹⁵ reveal a persuasive argument which convinces readers there is a conceivable risk of lung injury from vaping which could be reasonably expected to exacerbate the effects of Covid-19. Vaping nicotine and tetrahydrocannabinol – or even just flavourings, argues Volkow¹⁵ – has been linked to the damaging and irreversible disease of the lungs called bronchiolitis obliterans; known colloquially as ‘Popcorn Lung’. The effects of which may be a potential cause for concern amongst young people, who are seemingly less affected by the coronavirus than the older population, and ex-smokers who vape instead but whom may imprudently consider vaping safer than smoking.

The specialist treatment required to treat symptoms may be impeded by the unique challenges due to social distancing measures and the added strain on healthcare resources, as is true universally. Other factors which affect the survival of persons with SUD relate to reduced access to healthcare and recovery support services to help manage their addiction. Inherently, the group with SUD are vulnerable because the infection and transmission of the virus is severely affected by socio-economic status and demographic position. This population often reside in insecure or unstable housing, found in areas of social deprivation with high population densities and may also experience homelessness.¹⁷ These factors all contribute towards the view held by Marsden¹⁰ which predicts Covid-19 will predicate an increase in opioid use and fatalities. This expectation justifies the need for addiction management strategies to be established swiftly in response to the pandemic and lockdown conditions.¹⁶ Bansal *et al.*² also warn of the prevalence of opioid addiction among clinicians, and recommend learning how to detect and access safe and confidential treatment and resources

is vital for this group, to reduce stigma and promote recovery. Addicts tend to already be marginalised and stigmatised so Volkow's¹⁵ call for healthcare workers to act with compassion and dignity, without discrimination, is imperative to maximise positive outcomes for this disparaged and deprived group and should extend to their peers.

Issues pertaining to the hindrance and success of addiction management have been affected by many variables of health, age, socio-economic status, position and resource availability and accessibility. Presently, people who are already in recovery or trying to manage an addiction will find themselves challenged in unfamiliar ways due to lockdown, social distancing rules and measures imposed to restrict group gatherings. The pandemic can be expected to negatively affect well-being and sobriety because fear and anxiety can jeopardise efforts to manage the current situation rationally. But, so much is still unknown. Encouragingly, Marsden *et al.*¹⁰ highlight the emergence of examples of institutional review boards which are advancing research protocols to study the impact of Covid-19 on populations with addiction disorders (p. 2). The authors propose the need for dynamic qualitative and longitudinal research to cognise and approximate the effects of Covid-19 in this area, as well as in the area of treatment outcomes, engagement and effectiveness (*ibid*).

CONCLUSION

What is clear from the limited literature available is that substance use, addiction and mental health problems are likely to intensify for the most vulnerable, directly and indirectly due to Covid-19, and the scope of vulnerability is wide. The at-risk group will also include persons in recovery and those who face significant stress at work or in their personal lives. Expressly mentioned are healthcare workers as they risk contracting the disease whilst performing their duties and unfortunately, many healthcare workers have lost their lives due to the virus. The impact of which should not escape investigation as therein lies the potential to discover how to improve outcomes where AUD and SUD feature in this group.

More research is needed to better understand and aid those with AUD and SUD independently. Also, ensuring treatment is available without discrimination is one proposed way to mitigate the potentially negative outcomes of the vulnerable and fearful, with the objective of promoting access and up-take of services, in spite of the perception of stigma, for those who need it. As is proactively responding to the unprecedented conditions imposed by the Covid-19 lockdown, the subsequent 'new normal' and the pending post-lockdown phase due to the challenges to health care institutions and wider social structures in the short and long term.

New ways of meeting treatment and recovery demands will be required to alleviate the threat to marginalised populations and those who find themselves addicted amidst the pandemic. The E-consult application implemented in India, the new and efficient research methods combined with the employment of other telemedicine services, may prove invaluable. What would also be intriguing to see going forwards would be research into changed drinking and substance use habits prompted by the pandemic in the aforementioned under-represented and vulnerable

groups, and how to overcome contemporaneous barriers to field work and sampling.

Correspondence to:
emmahigginson84@hotmail.co.uk

REFERENCES

1. Kantar (2020) Record grocery sales as shoppers prepare for lockdown. Available at: <https://www.kantarworldpanel.com/global/News/Record-grocery-sales-as-shoppers-prepare-for-lockdown> (accessed 8.6.2020).
2. Bansal P, Bingemann TA, Greenhawt M, Mosnaim G, Nanda A, Oppenheimer J. *et al.* Clinician wellness during the COVID-19 pandemic: extraordinary times and unusual challenges for the allergist/immunologist. *The Journal of Allergy and Clinical Immunology: In Practice* 2020;8(6):1781-1790.e3.
3. Department of Health. UK Chief Medical Officer's Alcohol Guidelines Review. 2016. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/489795/summary.pdf (accessed 28.5.2020).
4. National Health Service Digital. Health Survey for England National Statistics 2017.2018. Available at: <https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/2017> (accessed 13.6.2020).
5. Alcohol Change UK. New research reveals how UK drinking habits have changed during lockdown. 2020. Available at: <https://alcoholchange.org.uk/blog/2020/covid19-drinking-during-lockdown-headline-findings> (accessed 28.5.2020).
6. Finlay I, Gilmore I. Covid-19 and alcohol – a dangerous cocktail. *BMJ* 2020;369:m1987. Available at: <https://www.bmj.com/content/369/bmj.m1987> (accessed 12.6.2020).
7. Ganesh A, Sahu P, Nair S, Chand P. A smartphone based e-Consult in addiction medicine: an initiative in COVID lockdown. *Asian Journal of Psychiatry* 2020;51:102120.
8. Raney LE. Integrating primary care and behavioral health: the role of the psychiatrist in the collaborative care model. *American Journal of Psychiatry* 2015;172(8):721-8.
9. Knopf A. Addiction telemedicine comes into its own with COVID-19. *Alcoholism & Drug Abuse Weekly* 2020;32(13):5-6.
10. Marsden J, Darke S, Hall W, Hickman M, Holmes J, Humphreys K. *et al.* Mitigating and learning from the impact of COVID-19 infection on addictive disorders. *Addiction* 2020;115(6):1007-1010.
11. Clay JM, Parker MO. Alcohol use and misuse during the COVID-19 pandemic: a potential public health crisis? *The Lancet Public Health* 2020;5(5):e259.
12. Adams JG, Walls RM. Supporting the health care workforce during the COVID-19 global epidemic. *JAMA* 2020;323(15):1439-1440.
13. Gold KJ, Sen A, Schwenk TL. Details on suicide among US physicians: data from the National Violent Death Reporting System. *General Hospital Psychiatry* 2013;35(1):45-9.
14. Harlow HF, Dodsworth RO, Harlow MK. Total social isolation in monkeys. *Proceedings of the National Academy of Sciences of the United States of America* 1965;54(1):90.
15. Volkow ND. Collision of the COVID-19 and addiction epidemics. *Annals of Internal Medicine* 2020;M20-1212.
16. Olds JL, Kabbani N. Is nicotine exposure linked to cardiopulmonary vulnerability to COVID-19 in the general population? *The FEBS Journal*. 2020 Mar 18.
17. Marsden J, White M, Annand F, Burkinshaw P, Carville S, Eastwood B. *et al.* Medicines associated with dependence or withdrawal: a mixed-methods public health review and national database study in England. *The Lancet Psychiatry* 2019;6(11):935-50.