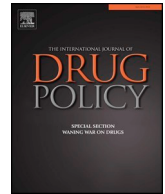




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Viewpoint

Isolating the isolated: Implications of COVID-19 quarantine measures on in-patient detoxification treatment for substance use disorders

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The spread of the novel SARS-CoV-2 virus and its resultant COVID-19 pandemic represents an ongoing medical emergency, with rapid and high rates of transmission and global mortality (Sun et al., 2020). In many countries, local and national authorities applied contingency and ad-hoc measures with the aim of mitigating the spread of the virus among staff and patients of Substance Use Disorder (SUD) treatment services. In the city of Barcelona, for example, authorities limited patient's admittances, alternated the shifts of staff to avoid overlap, established dedicated isolation rooms, and temporarily cancelled family visits (Torrens, 2020). Similarly, in the United Kingdom, official guidelines recommended that detoxification be deferred and that patients should strive to maintain stability (Department of Health and Social Care & Public Health England, 2020). Some private in-patient and residential detoxification services instructed staff to defer all travel plans abroad (UK Addiction Treatment Centres, 2020). While helping to curtail the spread of COVID-19 infection among patients and staff, -measures could also have a negative, disruptive effect on SUD services (European Monitoring Centre for Drug and Drug Addiction, 2020).

In Israel, a 14-day quarantine period was mandated for all travelers, arriving from all countries since March 10. A general lockdown of business, and stay at home orders were also applied by March 14 (People's Health Decree, 2020). During the lockdown, state funded SUD treatment services in Israel instituted a number of measures to limit patient and staff contact. Opioid Maintenance treatment (OMT) centers were allowed to dispense take-home doses of methadone for up to three weeks, and buprenorphine (SUBOXONE®) on the discretion of the centers' physician. Once-month extended release buprenorphine injections (SUBLOCADE®) were also introduced. Urine drug tests were reduced to once-a-month.

In-patient centres represent another type of treatment services affected by government regulations to curtail COVID-19 transmission. In-patient centres are a particularly high-risk setting for the spread of viral infections as patients and staff are in close contact with one another in shared spaces 24/7. In Israel, there are 12 public in-patient drug detoxification services (185 beds) and eight private residential detoxification centres (110 beds). Patients attending public in-patient

detoxification services sleep in shared sex-segregated rooms with a maximum of 4 beds per room. Services mainly consist of pharmacological treatment for alleviating withdrawal symptoms and group meetings addressing the themes of relapse prevention, identification of stressors and potential triggers to renewed drug use, introduction to the 12-step program, joint family and patient meetings to help in family reconciliation and re-integration, and preparation for transition into therapeutic communities. Patients are commonly retained for 21 days, after which they are released and referred to out-patient treatment, OMT, or to a therapeutic community for continued treatment and rehabilitation. In 2019, 2,200 individuals were admitted to in-patient and residential detoxification centres.

We present here a case vignette of the impact of quarantine orders following patient and staff contact with a COVID-19 infected employee in an in-patient centre in the town of Eilaboon in northern Israel. The centre houses 25 beds and provides detoxification services to Jewish and Arab adults (age 18+).

On February 22, 2020, one of the centre's administrative employees, a 53-year-old male, returned from Italy with a mild cough and sore throat, but reported no other symptoms. Since the directive of the 14-day quarantine for all persons arriving from Italy was only mandated five days later, the employee returned to his workplace on February 26 after being told by his physician to wait an additional two days before returning to work. After returning to work, the employee requested to be tested for COVID-19 infection, as his symptoms did not entirely subside. Results of a polymerase chain reaction (PCR) test for SARS-COVID-2 infection carried-out on February 28 revealed that the employee was positive for COVID-19 and he was promptly hospitalized.

At the time of his hospitalization, there were 22 patients (19 males and 3 females) in the in-patient centre. All patients and nine staff members reported last contact with the employee (lasting more than 15 minutes and at a distance of less than two meters) on February 27. All 22 patients and nine staff members were ordered to immediately enter quarantine. The nine staff members included three of the centre's four instructors, two of the seven infirmary staff members, one physician, one social worker, and two administrative staff members including the

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centre's administrator. All staff members were quarantined in their private homes. The centre's administration proceeded to recruit unquarantined staff from nearby centres, and decrease the number of patients then residing at the centre. On February 29, ten stable patients in their second and third week of treatment were released after declaring that they had the means to meet quarantine instructions in their homes. Twelve patients (9 males and 3 females) were deemed too unstable to be released and therefore remained in the centre to complete quarantine. The twelve patients were all confined to dormitories which previously housed two patients, but were now cleared to accommodate one patient only.

Consequently, staff shifts at the centre were changed and re-scheduled. One unexposed instructor remained with the quarantined patients. Four unexposed infirmary staff worked 24-hour shifts. A physician met twice weekly with each quarantined patient while wearing full personal protection equipment (PPE). The center's physician also conducted daily meetings with quarantined patients using tele-conferencing applications. Overall, treatment was disrupted, as patients could not participate in face-to-face group sessions, and routine urine drug tests and check-ups with the centre's physician were decreased to a minimum.

Of the ten patients released to home-quarantine, two subsequently refused to comply with the quarantine orders and left their homes. After much deliberation regarding the appropriate measures for quarantine for non-complying individuals-they were issued an injunction and were sent, through forced hospitalization, to a quarantined ward at a general mental health hospital. Fortunately, no patients were found to be positive by the end of the 14-day quarantine period. The employee recovered from COVID-19 and returned to work on April 11 after two successive negative PCR tests (in accordance with national policy).

Following this case of in-patient service disruption, the Department for the Treatment of Substance Abuse at the Israel ministry of health published a set of guidelines to allow in-patient centres to continue providing treatment for persons with SUD (Department for the Treatment of Substance Abuse, Israel Ministry of health, 2020): (1) Residential and in-patient detoxification centres will limit admission to half their capacity by housing no more than ten patients at any time during the epidemic. (2) Staff work is to be "encapsulated" - the same staff members rotate together and treat only a designated group of patients, to minimize contact. (3) Centres should strive to make appointments with physicians and group treatment sessions using tele-conferencing, laptops, mobile devices and telephones. The Department for the Treatment of Substance Abuse offered a free online short-course on patient assessment and pharmacological treatment (Methadone and buprenorphine detoxification protocols) to physicians willing to volunteer to work in this field. (4) Appointments and treatment will be carried out by staff with full PPE. (5) In the event that quarantine is mandated following contact with an infected individual, patients in stable condition, are to be released for home-quarantine and maintain contact with social workers through telephone or other media. Patients assessed to be unstable, are to complete the quarantine at the centre, with the possibility of extending their stay until completion of their quarantine period. (6) Patients unwilling to follow quarantine regulations are to be quarantined, even forcibly, in a dedicated quarantined ward in mental health hospitals, where staff are more qualified to manage such patients and help them to stabilize their condition. This option should be implemented only as a last resort. Upon release from quarantine, these patients should return to their in-patient centre and complete their detoxification process and be subsequently referred to community rehabilitation services.

Further complications have risen from the limitations imposed by health authorities on patients' admission and treatment. Patient admissions were cut in half in the months of March and April, compared to previous months (Fig. 1), coinciding with the application of the new guidelines.

The case presented above provides a contemporary example of how detoxification in-patient services for SUD are disrupted when both patients and staff are placed under quarantine. This situation poses the need to curtail or even cancel some treatment elements (e.g., group sessions). At the same time, the COVID-19 emergency presents not just challenges, but also opportunities for expansion of some addictions treatment services.

The addition of rooms and beds could have bridged the gap between service demand and availability. Nevertheless, the expansion of SUD treatment services often depends on additional funds, not always available during crisis. A possible stop-gap measure used could be the temporary contract of private sector residential detoxification services for patients treated in the public health system, if these are available. These has been done in Israel, by temporary converting 12 vacant private in-patient beds for persons with alcohol use disorder, to in-patient beds for SUD patients. Temporary contract of private services could also help in mitigating some of the negative economic impact on private sector providers, when individuals choose to defer treatment and demand for private services plummets.

The COVID-19 health crisis also represents an opportunity for the creation of new services for highly marginalized sub-populations of individuals with SUD. Marginalized, and hard-to-access people who use drugs (such as the homeless, and sex-workers who use/inject drugs) are most vulnerable to the economic stress, violence and uncertainty often experienced during prolonged national crises (Petermen et al., 2020). During the ongoing COVID-19 epidemic in Israel, the demand for admission to detoxification centres, in underserved and marginalized neighborhoods increased dramatically (Lewinski clinic and District Health Office, 2020). This heightened demand may have stemmed from the diminished availability of street drugs due to lockdown, and the loss of income resulting from the closure of brothels. The sudden and urgent need for additional detoxification beds prompted the Department for the Treatment of Substance Abuse to request funding for the immediate addition of 20 in-patient beds. Two vacant in-patient services were identified, which complied with the Ministry's criteria for the treatment of women with SUD - a predominantly female staff and facilities completely segregated from male facilities.

The issue of forced quarantine presented above remains contentious. As per Israeli law, enforcement of quarantine by the police allowed the forced commitment of persons refusing to enter home quarantine (People's Health Decree, 2020). Forced commitment of unstable SUD patients to psychiatric hospitals constitutes an imperfect, yet viable alternative to imprisonment. Perhaps a better option involves measures of "home detention" within in-patient centers. Such alternatives should be explored in the future.

Some lessons should be drawn from the case presented. Contingency plans for such occurrences of service disruption must be drawn up much earlier, and at the state level. Plans specifically drafted for such emergencies would allow for completion of existing patients' treatment during the epidemic, and bridge the gap between demand and curtailed services. Deferring in-patient detoxification for persons in need, will likely have deleterious consequences on patients' chances of recovery and subsequent rehabilitation.

Policy makers should take into account the economic consequences of continued limitation measures on private centres' ability to remain economically viable. Stringent public health measures which continue for more than three consecutive months could negatively economically impact the viability of in-patient treatment centres who are generally rather small, not exceeding 25 beds. Depending on the context, dedicated quarantined wards in mental health hospitals are a viable, but not an ideal solution. Staff, and clinicians needed for stabilization of SUD patients are not always available in mental health hospitals, nor are staff always well acquainted with specialized addiction treatment. There are also ethical and legal issues surrounding forced hospitalization, which do not permit the application of such measures in all

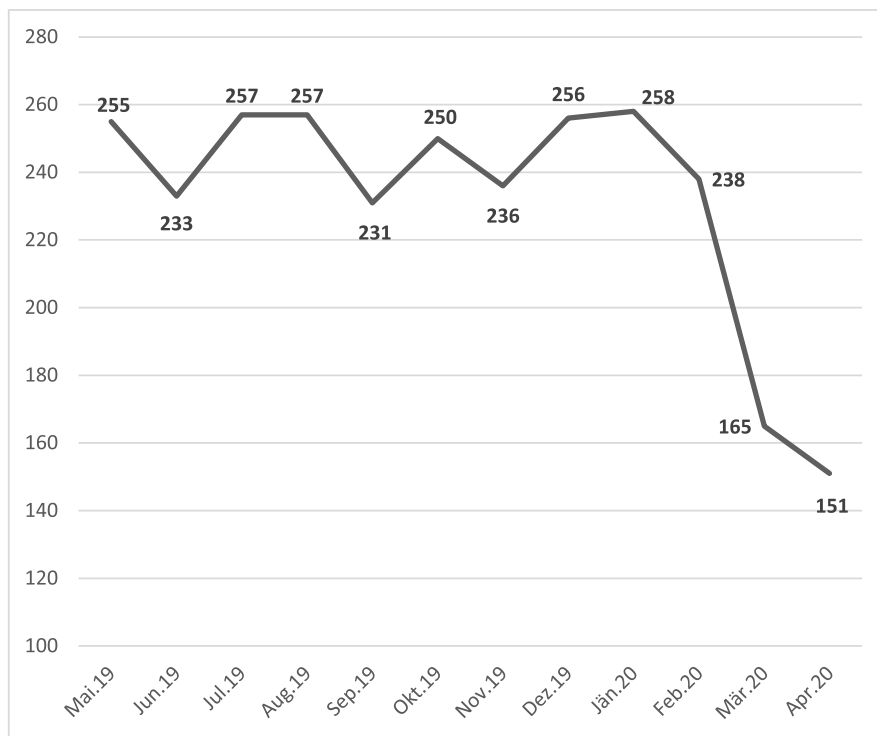


Fig. 1. Number of patients admitted to in-patient services in Israel in the past 12 months. Graph depicts the total number of patients admitted, by month, to seven state-funded public in-patients centers.

countries and jurisdictions On a more optimistic note, the emergency allows for creating new models and services for patient care and an opportunity to improve existing provisions of care for vulnerable SUD patients.

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Declaration of Competing Interest

None to declare.

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