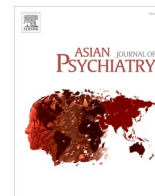




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Letter to the Editor



Opioid agonist treatment during SARS-CoV2 & extended lockdown: Adaptations & challenges in the Indian context

India went into a lockdown on the 24th of March 2020 to contain the spread of SARS-CoV2 and augment healthcare infrastructure. The lockdown imposed restrictions on both human and vehicular movement and curbed the availability of out-patient based medical services in both public and private sectors. The pandemic, inflicting more than 200 countries, has exposed weaknesses in our public health preparedness and structure of our healthcare systems. However, it has also given an opportunity to learn from each other's experience (Tandon, 2020).

The impact of restriction of access to treatment is likely to be disproportionate for patients with substance use disorders (SUD). According to the World Mental Health survey, only 39 % patients with SUD recognized a treatment need and 7% received minimally adequate treatment (Degenhardt et al., 2017). A nation-wide survey, published last year, revealed a treatment-gap of 75–80 % for patients with drug use disorders (MSJE, 2019). An extended lockdown is likely to widen the treatment-gap further.

1. Existing opioid agonist treatment (OAT) programs in India

As per a recent survey, in India there are around 7.7 million people with opioid use disorders and only 25 % of those 'motivated to quit' received 'any help,' which included care in the informal sector, by self-help groups, and other alternative care of medicine (MSJE, 2019). Treatment options for opioid dependence have mainly focussed on abstinence-based strategies. Opioid agonist treatment (OAT) is a relatively recent development in India, the impetus for which was initially provided by the HIV epidemic which was fuelled by the intravenous consumption of heroin. However, the access to opioid agonist treatment (OAT) remains limited. The latest systematic review reported out of 100, only 2–5 individuals who inject drugs receive opioid substitution therapy in India (Larney et al., 2017). There are four sources of OAT in the national healthcare system- a) National AIDS Control Organization (NACO), which was first to initiate large-scale nationwide OAT programs. NACO run OAT program uses plain buprenorphine as directly observed treatment. The number of buprenorphine-based OAT centres run by NACO is 224. NACO has started methadone maintenance clinics as well; b) Drug Treatment Clinics (DTC), started as an initiative of the Drug De-addiction Program (DDAP) under the Ministry of Health; DTCs are physically located in the publicly funded district or general hospitals and are manned by a nurse and a doctor, appointed on contract basis. DTCs have provisions of both buprenorphine and methadone-based treatment. Plain buprenorphine is more commonly used because of its low cost. DTCs follow a daily observed dispensing protocol (Drug De-Addiction Programme, 2018). Presently, there are 22 DTCs; c) Stand-alone, publicly funded addiction psychiatry centres under the Ministry of Health; our centre falls in this category. We have more than 500 registered

individuals in our OAT clinic. Take home dosage of buprenorphine-naloxone is dispensed for a period of 1–2 weeks, depending on the stage of maintenance treatment. We encourage take-aways under the supervision (Basu et al., 2020); d) OAT clinics run by the State governments; presently, only the state of Punjab has a buprenorphine-naloxone based Out-patient Opioid Agonist Treatment (OOAT) program, functioning for the last two years. From all the above-mentioned sources, OAT is available free-of-cost. Finally, there are privately funded 'de-addiction centres,' which too deliver OAT but the number of such centres are not known and the treatment is expensive.

2. SARS-CoV2 outbreak: adaptations in OAT programs of India

Several countries have proposed and implemented modifications in their existing OAT programs in the wake of the SARS-CoV2 emergency. The Substance Abuse and Mental Health Administrations (SAMHSA) of the US has permitted initiation of buprenorphine-based treatment without the need for physical examination, 2–4 weeks of takeaway doses, tele-prescription of agonist medications, and door-step delivery for patients, who are quarantined (SAMHSA, 2020). The Advisory Council on the Misuse of Drugs (ACMD) of the UK has recommended registered pharmacies be enabled to dispense agonist medications, or providing alternative medications (if the prescribed drug has a short-supply), and to give greater number of doses/ takeaway (ACMD, 2020). Changes on the similar lines have been observed in the national guidelines from Norway and Australia.

The Indian OAT programs, too, have tried to adapt to the circumstances. The DTCs have permitted bi-weekly or alternate day dispensing for patients maintained on a daily dispensing regime of buprenorphine. Bi-weekly dispensing is allowed only to those patients accompanied by a family member for supervising and safe-keeping of medications. DTCs and NACO run OAT centres have also started takeaway methadone (for one day). The OOAT centres in Punjab have rescheduled the opening hours to 8 a.m., instead of the usual 10 a.m., thus increasing the hours of operation. Kapurthala, an administrative district of Punjab has rolled out a mobile registration and dispensing of agonist treatment under the OOAT program.

Our publicly funded centre has brought about several changes in the service delivery- a) increase in the number of doses of takeaway buprenorphine-naloxone (2–4 weeks) thus allowing for less frequent follow-ups; b) we have increased the days and hours of operation as well; c) we have initiated proxy dispensing of buprenorphine-naloxone to a responsible family member. An interim guideline proposed by the Indian Psychiatric Society for opioid substitution therapy during COVID-19 outbreak in India (Indian Psychiatric Society interim guideline, 2020; Basu et al., 2020).

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3. Challenges of OAT programs in India during SARS-CoV2 outbreak

Both the clients and treatment providers have met with several challenges.

3.1. Clients

The availability and access of both buprenorphine and methadone are severely limited because these drugs fall under the category of psychotropic substance and narcotic drugs, respectively, as per the Narcotic Drugs and Psychotropic Prevention Act of India. Although methadone has been brought under the ambit of essential narcotic drugs by an amendment buprenorphine has not figured in the list. Methadone can be stocked and dispensed by any publicly funded “recognized medical institution,” whereas buprenorphine has been approved “for supply to Deaddiction Centres only.” Therefore, neither of these agonist medications is available readily. Hence, clients have to come to the clinics. A large majority of our clients do not have their own conveyance and the public transport system is either non-functional or limited. The two possible alternatives are: tele prescription and door-step delivery. The recently drafted telemedicine guideline does not allow prescription of controlled substances through teleconsultation ([Telemedicine Practice Guideline, 2020](#)). The door-step delivery of controlled substances too is not approved by the law. Several clients have reported to us that they were intercepted by the police at the state borders. In all the cases they were required to show their out-patient records to prove the genuineness of their reason to travel during lockdown. This practice impinges upon the privacy and confidentiality of this vulnerable group.

3.2. Treatment providers

The movement restriction has unduly affected the staff mobility to the clinics. For our clinic, all the professional and support staff are provided with ‘special passes’ to ensure free movement within and outside the city. In spite of these measures, some staff have still faced questioning while crossing the state borders. The scarcity of personal protective equipment is another perpetual issue. Maintaining adequate physical distance among clients is an important consideration in crowded out-patient settings. Finally, short-supply of agonist medications, in view of non-functioning postal service is creating further challenges.

4. Lessons learnt about the OAT programs in India during SARS-CoV2 outbreak

4.1. Increasing availability

In India, there is a gross mismatch between the people in need for OAT and people receive it. There are a handful of centres and mechanisms to deliver OAT, which are geographically scattered, forcing clients to travel far and wide. The pandemic has unmasked this problem by superimposed travel restrictions. India needs more centers, more trained professionals, and investment from the government.

4.2. Increasing the access to treatment

It is essential to develop alternative and more accessible models of OAT delivery such as, the mobile dispensing, doorstep delivery, and postal delivery of medications. However, one should be cognizant of measures to minimize misuse and harms.

4.3. Improving the acceptability

The pandemic has shown us adaptation and flexibility are the keys to OAT program. Allowing take-away and dispensing medications for longer durations could improve the acceptability of the treatment. These measures should be tested systematically to examine its feasibility and effectiveness.

4.4. Limiting barriers to treatment

We witnessed legal and attitudinal barriers for OAT. Advocacy and frequent and multi-pronged public awareness campaigns could minimize these barriers.

4.5. Involvement of stakeholders

All stakeholders (clinicians, experts, policymakers, patients, and families) with a common goal of increasing the access, availability, affordability, and acceptability of OAT should come together and build up a consensual action plan to mitigate the challenges and frame a user-friendly OAT policy centred around public health.

The pandemic and resultant lockdown is a learning lesson for the policymakers. In spite of the challenges brought about by the unprecedented lockdown, the OAT programs in India are trying to adapt to the emergency by devising locally relevant and practical guidelines.

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Declaration of Competing Interest

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References

- ACMD, 2020. COVID-19: ACMD Advice on Proposed Legislative Changes to Enable Supply of Controlled Drugs During a Pandemic. London [Last Accessed on 10 May 2020]. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/878524/COVID19_ACMD_advice_on_proposed_legislative_changes_to_enable_supply_of_controlled_drugs_during_a_pandemic1.pdf.
- Basu, D., Ghosh, A., Subodh, B.N., Mattoo, S.K., 2020. Opioid substitution therapy with buprenorphine naloxone during COVID-19 outbreak in India: Sharing our experience and interim standard operating procedure. *Indian J. Psychiatry* 62 (3), 322–326.
- Degenhardt, L., Glantz, M., Evans-Lacko, S., Sadikova, E., Sampson, N., Thornicroft, G., et al., 2017. Estimating treatment coverage for people with substance use disorders: an analysis of data from the World Mental Health Surveys. *World Psychiatry* 16 (3), 299–307.
- Drug De-Addiction Programme, 2018. Strategy and Action Plan: Enhancing the Functioning of Drug De-addiction Centres Under DDAP [Last Accessed on 10 May 2020]. Available from: Drug De-Addiction Programme (DDAP) Ministry of Health and Family Welfare (MOH&FW), Government of India, New Delhi <http://dte-scheme.in/dte-scheme.aspx>.
- Indian Psychiatric Society interim guideline, 2020. Opioid Substitution Therapy (OST) During COVID-19 Outbreak in India: Interim Guidelines [Last Accessed on 10 May 2020]. Available from: Indian Psychiatric Society, New Delhi <https://indianpsychiatricsociety.org/ips-interim-guidelines-for-opioid-substitution-therapy-ost-during-covid-19-outbreak/>.
- Larney, S., Peacock, A., Leung, J., Colledge, S., Hickman, M., Vickerman, P., et al., 2017. Global, regional, and country-level coverage of interventions to prevent and manage

- HIV and hepatitis C among people who inject drugs: a systematic review. *Lancet Glob. Health* 5 (12), e1208–e1220.
- Ministry of Social Justice and Empowerment, 2019. Magnitude of Substance Use in India [Last Accessed on 10 May 2020]. Available from: MSJE, Government of India, New Delhi http://socialjustice.nic.in/writereaddata/UploadFile/Magnitude_Substance_Use_India_REPORT.pdf.
- SAMHSA, 2020. COVID-19 and Opioid Treatment Programs. Substance Abuse and Mental Health Administrations (SAMHSA) [Last Accessed on 10 May 2020]. Available from: <https://www.samhsa.gov/sites/default/files/faqs-for-oud-prescribing-and-dispensing.pdf>.
- Tandon, R., 2020. COVID-19 and mental health: preserving humanity, maintaining sanity, and promoting health. *Asian J. Psychiatr.* 2020 (June (20)) <https://doi.org/10.1016/j.ajp.2020.102256>.
- Telemedicine Practice Guidelines, 2020. Telemedicine Practice Guidelines [Last Accessed on 10 May 2020]. Available from: Ministry of Health & Family Welfare, New Delhi <https://www.mohfw.gov.in/pdf/Telemedicine.pdf>.

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