



COVID-19 restrictions and increased risk of overdose for street-based people with opioid dependence in South Africa

To the Editor: The placement of street-based people in temporary shelters as part of South Africa (SA)'s lockdown efforts to mitigate the COVID-19 epidemic increases the risk of overdose among people who are dependent on heroin. The number of street-based heroin-dependent people is unknown,^[1] but many of the country's estimated 75 000 people who inject drugs live on the street and inject heroin,^[2] and many more smoke it (known locally as nyaope, whoonga and unga).^[3]

People with opioid dependence develop tolerance after repeated use, and an increased dose is essential to maintain a required effect. Tolerance reverses within several days of abstinence, and the opioid system up-regulates and resensitises to pre-use levels.^[4] Failure to moderate dosing to accommodate reduced tolerance after periods of abstinence is a significant cause of overdose following release from prison or inpatient rehabilitation and after periods of drug supply interruption.^[5] Globally, opioid overdoses are the leading cause of drug-related deaths, inducing respiratory depression and hypoxia that can be fatal.^[6]

Opioid substitution therapy (OST), using methadone or buprenorphine at a correct dose as long-term maintenance, is the gold standard for managing opioid dependence.^[7] OST improves health and reduces overdose mortality. Overdose is also mitigated through community awareness and training, and wide distribution of naloxone.^[8]

Apart from efforts across Pretoria to provide access to OST as maintenance and one shelter in Durban providing methadone as part of managed withdrawal, the majority of the heroin-dependent population who remain in shelters will have an extended, involuntary period of abstinence.

Heroin is a potent physical and psychological analgesic and helps many people to endure the adverse conditions, hopelessness and stigma of living on the street.^[9] Furthermore, there is a strong relationship between heroin dependence and adverse childhood events and trauma.^[10] Without OST as maintenance, most heroin-dependent people are likely to re-initiate heroin use once they return to their communities.^[11]

After the lockdown in SA, the overdose risk will be elevated due to reduced tolerance and the concurrent use of other central nervous system depressants (e.g. alcohol and benzodiazepines).^[12] The trauma of leaving a 'formal' safe shelter and ongoing drug criminalisation further increase overdose vulnerability.^[13] The potential for poisoning from potent synthetic opioids, such as fentanyl and its analogues, in light of the changed drug market is unknown.^[14]

To mitigate the risk of overdose in the time of COVID-19, we recommend:

- That government funds the scaling up and access to OST at all shelters in locations where the capacity for OST initiation exists through partnership with civil society and academic institutions. People initiated onto OST during lockdown should be linked to ongoing maintenance therapy with access to psychosocial services once released.
- That government enables civil society and academic institutions to establish opioid overdose prevention programmes before

the lockdown period ends, that focus on education and skills-based training of people who use opioids. Additionally, increased community-based access to naloxone in health and substance use treatment centres and the provision of naloxone to OST clients, paired with appropriate administration training, is needed.

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