

How Substance Use Treatment Services in Iran Survived Despite a Dual Catastrophic Situation

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Iran has the highest rate of nonmedical opium use in the world and, for four decades, has been dealing with the negative impacts of the United States' and the United Nations' sanctions, which were scaled up in 2018. Iran was one of the first countries to report COVID-19 and has had five waves of the pandemic so far.

The sanctions and the pandemic have simultaneously exacerbated a severe economic crisis in Iran in the past year. Currently, a range of modalities of treatment and harm reduction services are available in Iran through thousands of outpatient treatment centers, medium-term residential centers, and drop-in centers.

We explain the possible reasons that these services have been able to continue operating despite the dual disaster.

Substance use is a major health problem in Iran. The prevalence of opium, residual opium juice (*shireh*), crystal methamphetamine, hashish, and heroin use in Iran is 150, 660, 590, 470, and 350 per 100 000 population, respectively.¹ Substance use disorder is ranked as one of the top four health

burdens in Iran.² Addressing this health crisis has required the legalization of a variety of treatments and harm reduction services, the domestic production of opioid medications, available and low-cost opioid medications, available opium tincture with its short induction period, using seized opium to produce opium tincture, online self-help groups, and coordination among government agencies, the private health care sector, and nongovernmental organizations.

DUAL DISASTER IN IRAN

Iran has been dealing with the sanctions the United States established after the 1979 Islamic Revolution. After the renewed and severely intensified round of sanctions in 2018, Iran's gross domestic product declined 4.8%, and the inflation rate increased from 9.6% to more than 30% in one year.³ This economic situation was followed by an increase in the prevalence of substance use disorders⁴ related to social determinants of health, such as low income and unemployment, and a lack of

personal coping skills. As we will discuss further, the COVID-19 pandemic and COVID-19 containment policies, including quarantine and social distancing, further compounded these problems, and Iranians have been consuming even more prescribed opioids and sedatives⁵ during the COVID-19 pandemic.

We describe the landscape of substance use and harm reduction services currently available in Iran and detail how they have been affected by a dual disaster: the COVID-19 pandemic and the impacts of the economic sanction.

HARM REDUCTION SERVICES IN IRAN

The largest number of patients are served in private outpatient clinics that offer opioid agonist treatment, although abstinence-based residential centers and therapeutic communities are available in the private sector and the government runs compulsory residential centers.⁶ In 2018, an estimated 60 000 persons were under methadone maintenance treatment (MMT) while in prison, about 720 000 community residents were receiving MMT, approximately 120 000 were receiving buprenorphine, and about 93 000 were receiving opium tinctures from 1 of 196 government-run outpatient clinics or one of 7029 private outpatient clinics.⁶

Harm reduction services and facilities such as drop-in centers and outreach programs provide needle and syringe programs, low-threshold methadone treatment, condom promotion, and safer sex education. Facilities for homeless or marginalized drug users and antiretroviral therapy for people living with HIV are available free of charge. Also, government-supported women-friendly facilities for sex workers and

other vulnerable women are available in all provinces and most large cities.

IMPACT OF COVID-19 ON SUBSTANCE USE SERVICES

At the beginning of the COVID-19 pandemic, residential addiction treatment facilities were closed, but they later reopened with new rules to reduce COVID-19 transmission, including social distancing, screening, and COVID-19 testing for clients. Personal protective equipment and COVID-19 educational pamphlets were quickly distributed to harm reduction centers in large cities.⁷ All 12-step anonymous groups and other self-help groups transitioned to virtual meetings. Finally, clinics were authorized to provide larger take-home supplies of methadone, buprenorphine, and opium tincture for their stable patients.⁸

Although patients did not experience any shortage of opioid maintenance medications, there were fewer psychological services available because of COVID-19 prevention policies and the lack of online services. The price of illicit drugs, including heroin and opium, increased during COVID-19 because of a reduction in supply as a result of border restrictions that affected smuggling.⁵ However, the reduction in the illicit drug supply was somewhat offset by the local, legal manufacture of opium tincture for maintenance treatment.

Individuals experiencing homelessness who engaged in substance use experienced the most difficulties during the acute phase of the COVID-19 pandemic, as all parks and public places were closed, thereby restricting access to safe water for drinking and sanitation. In addition, people who injected drugs (PWID) and were in state-mandated residential treatment were released by judicial order to prevent COVID-19 outbreaks in

residential care settings, adding to the homeless population. In response, a COVID-19 prevention and control working group, including harm reduction experts, nongovernmental organizations, charities, and government officials, was convened to identify approaches to coordinate services for individuals experiencing homelessness who engaged in substance use in large cities with a higher concentration of PWID.⁷

LESSONS LEARNED

Ultimately, Iran was able to maintain addiction treatment and harm reduction services through economic crisis and the COVID-19 pandemic by adopting the following key practices:

- *Providing a large network of service providers:* Iran has a large network of outpatient clinics, perhaps because there is a high demand for treatment services owing to the high prevalence of addiction combined with the large number of available general physicians and psychologists. This market also increased Iranian pharmaceutical companies' willingness to produce opioid maintenance medications domestically, including opium tincture from government-seized illegal opium supplies, which is much cheaper than imported medications.
- *Maintaining low costs for services:* Overall costs of health services in Iran are very low; in fact, Iran is ranked 130 out of 167 countries on the health care price index, with an index point of 35.59.⁹ Thus, the cost of health services for substance abuse treatment services in Iran is also low, making MMT much less expensive than the illegal use of heroin or opium. Methadone is also

much less expensive than buprenorphine, and there are seven times more methadone patients than buprenorphine patients in Iran.¹⁰ Moreover, local opium tincture manufacture uses seized opium,¹¹ which reduces production costs.¹²

- *Reducing the need for harm reduction:* Because of the availability of opioid maintenance medications, in past years the number of PWID decreased and the impact of this is seen in the reduced prevalence of HIV among PWID in Iran.¹³ This phenomenon has reduced the costs of harm reduction services because fewer harm reduction facilities are needed. Nevertheless, a high number of these PWID might have been individuals experiencing homelessness, so they need support for more essential needs.
- *Being flexible in take-home dose and opioid drug delivery:* Even before the onset of the COVID-19 pandemic in Iran, MMT patients were able to get their take-home dose from the clinics shortly after induction. After the pandemic began, health authorities allowed clinics to deliver larger supplies of opioid medications.

CONCLUSIONS

Iran's ability to meet substance use treatment and harm reduction needs despite COVID-19 and economic crisis may be instructive to other limited-resource countries. Contributing factors to successfully maintaining the operation of substance use treatment and harm reduction services during the COVID-19 pandemic include coordination among a number of public-, private- and nonprofit sector agencies. [AJPH](#)

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The authors contributed equally to this article.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

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