



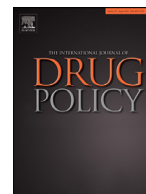
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Viewpoint

COVID-19 risks among people who inject drugs in Puerto Rico

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The novel coronavirus (COVID-19) represents a serious challenge to people who inject drugs (PWID). Members of this population present unique vulnerabilities that expose them to disproportionately high risks. While the novelty of this coronavirus raises many questions, what is known suggests that preexisting conditions such as diabetes, cardiovascular problems, respiratory issues, or compromised immune systems raise the risk of mortality. Many of these risk factors are particularly present among PWID. The prevalence of HIV/HCV in this population weakens their immune systems, and lungs can be compromised by drug smoking. In turn, “hustling” for drug money, the joint acquisition and use of drugs within tight social networks, and decreased access to or availability of syringe exchange programs (SEP) or medically assisted treatment (MAT) make the adoption of protective social-distancing measures difficult or even impossible to implement. In addition, these vulnerabilities are compounded by a protracted war on drugs that resulted in a disproportionate level of incarceration, usually for nonviolent crimes, exposing PWID to COVID-19 in overpopulated jails (Abadie et al., 2017). PWID in rural locations face the additional burden of a substandard health care infrastructure that might be stretched beyond the breaking point during a pandemic; geographical distances and limited transportation infrastructures might constitute additional barriers.

Nowhere are these problems more acute than in rural Puerto Rico, a US territory subjected to a colonial status, facing a protracted economic crisis and an insufficient health infrastructure still recovering from the devastating effects of Hurricane Maria in 2017 (Gelpi-Acosta, Rodríguez-Díaz, Aponte-Meléndez, & Abadie, 2020). In response to the emergence of COVID-19 on the island, the governor established a “stay safe at home” policy that at the time of this writing is still ongoing. While it might be too early to fully assess the effects of COVID-19 on the rural population of PWID, some preliminary evidence suggests that the impact is severe.

Some have speculated that COVID-19 has significantly affected the global production of fentanyl (a powerful synthetic opioid) (Hamilton, 2020). This seems to be the case in rural Puerto Rico. A number of *puntos*, drug-selling spots, report having their operations disrupted. While drug pricing has not changed at the moment, availability has become erratic. In addition, amid the rigorous stay-safe-at-home

measures and the subsequent depression of economic activity, PWID are struggling to secure the funds to support their drug habits, usually “speedball” (the mix of cocaine/heroin). Furthermore, with less disposable income, PWID are now more often resorting to jointly acquiring and sharing drugs. This practice, which was extensive in Puerto Rico prior to COVID-19, is now exacerbated by the pandemic. This sets the stage for heightened COVID-19 risks due to unavoidable close proximity between two or more PWID in the drug preparation process.

While “social distancing” has proved effective in limiting the spread of viral transmission in the general population, it raises serious challenges for PWID. The distancing requirement complicates the work of SEP. Despite being recognized as an essential service during the quarantine in Puerto Rico, the only SEP to serve the rural population, “El Punto en la Montaña,” initially interrupted their services until a plan to ensure compliance with social-distancing requirements could be established. Although this SEP has reinitiated service at the time of this writing, without a reliable supply, PWID resort to reusing syringes, acquiring them from drug dealers, or sharing them with others, increasing the risk of COVID-19 and HIV/HCV.

In addition, social distancing compounds existing barriers to accessing MAT. Before COVID-19, buprenorphine and methadone treatment on the island were only available to 7% of those that require it (Echautegui, Segarra, & Cordero, 2016). This deficit has always been steeper in rural Puerto Rico, where the long distances to treatment centers and lack of public transportation infrastructure combine to erect additional barriers. During COVID-19, MAT has also been declared an “essential service,” but the social-distancing measures have resulted in significant disruptions. For instance, those patients already enrolled have to wait for extended periods of time, while staff members control the patients’ flow to comply with the new prevention measures. For prospective patients, before COVID-19 they had to wait for months to get an appointment. Now, we have reason to believe that COVID-19 is further delaying their admission to treatment. Failing to enroll or quitting MAT presents serious risks for PWID. In addition to losing the protective effects such as lower risk of HIV/HCV transmission, abandoning MAT forces patients to buy drugs on the streets to avoid the painful effects of heroin and/or methadone withdrawals. In fact, MAT interruption has been found to correlate with an increase of overdose episodes

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and deaths (Clausen, Anchersen, & Hegel, 2008). Overdose risk is compounded by fentanyl, which has ravaged rural areas in the United States, including Puerto Rico (Wagner et al., 2019). To help decrease opioid overdose episodes, MAT should loosen overly strict guidelines to extend take-home dosage and prevent nonconsensual administrative discharges (“Vast Coalition”, 2020).

Several policy recommendations can be implemented in order to curb the impact of COVID-19 among PWID in rural settings. At the individual level, informing PWID of the transmission risks associated with sharing syringes and injection equipment or by injecting drugs in crowded environments may help change risk behaviors. Yet while desirable, information alone might not be enough to curb viral transmission. PWID are forced to make decisions in a risk environment they do not control, so even when users might have been given the correct information about how to prevent viral transmission, they might not be able to enact these changes. The shared use of cooker and cotton happens within drug-sharing arrangements and is embedded in particular injection social networks, challenging social-distancing recommendations. Furthermore, in some cases, adopting social distancing contradicts harm-reduction policies suggesting that PWID do not inject alone, policies put in place to decrease the risk of overdose deaths. Structural reforms eradicating draconian incarceration rates, defunding police departments and increasing the budget allocated to public health interventions such as MAT, SEP, and Naloxone distribution will go a long way toward curbing the effects of COVID-19 while setting the foundations for a public health infrastructure capable of coping with future pandemics.

More research to understand how vulnerable populations and, in particular, PWID in rural areas are affected by COVID-19 is needed in order to design effective public health interventions for this population. Epidemiological studies should be conducted to determine the prevalence of COVID-19 in this population and to document treatment outcomes. A sociological approach would shed light on the living conditions of PWID in rural areas and help determine how poverty, addiction, and dispossession shape participants’ responses to the pandemic. Short of enrolling PWID as research subjects, stakeholders should directly invite them to lead the formulation of policy recommendations, not only because PWID would be affected by them and are the most interested in

their outcomes but also because this population—which is invisibilized and regularly excluded from any decision-making processes—has a deep understanding of the challenges they face in a pandemic.

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Declarations of Interest

None.

References

- (2020). Vast coalition issues demands for far-reaching Mat Reform. *Filter*. Retrieved June 2, 2020 from <https://filtermag.org/buprenorphine-methadone-reform-coronavirus/>.
- Abadie, R., Gelpi-Acosta, C., Davila, C., Rivera, A., Welch-Lazoritz, M., & Dombrowski, K. (2017). “It ruined my life”: The effects of the war on drugs on people who inject drugs (PWID) in rural Puerto Rico. *International Journal of Drug Policy*, 10.1016/j.drugpo.2017.06.11.
- Clausen, T., Anchersen, K., & Hegel, W. (2008). Mortality prior to, during and after opioid maintenance treatment (OMT): A national prospective cross-registry study. *Drug and Alcohol Dependence*, 94(1–3), 151–157.
- Echautegui, M., Segarra, E., & Cordero, Y. (2016). *Evaluación de la administración de servicios de salud mental y contra la adicción de Puerto Rico*. Centro de Estudios Multidisciplinarios Sobre Gobierno y Asuntos Públicos Retrieved March 26 2020, from <http://sociales.uprrp.edu/cemgap/wp-content/uploads/sites/19/2016/12/Informe-ASSMCA-Final-2.pdf>.
- Gelpi-Acosta, C., Rodríguez-Díaz, C. E., Aponte-Meléndez, Y., & Abadie, R. (2020). Puerto Rican syndemics: Opiates, overdoses, HIV, and the hepatitis-C virus in a context of ongoing crisis. *American Journal of Public Health*, 110(2), 176–177.
- Hamilton, K. (2020). *Sinaloa cartel drug traffickers explain why coronavirus is very bad for their business*. Vice News Retrieved March 23, 2020 from https://www.vice.com/en_us/article/bvgazz/sinaloa-cartel-drug-traffickers-explain-why-covonavirus-is-very-bad-for-their-business.
- Wagner, J., Neitzke-Spruill, L., O’Connell, D., Highberger, J., Martin, S. S., Walker, R., et al. (2019). Understanding geographic and neighborhood variations in overdose death rates. *Journal of Community Health*, 44(2), 272–283.