Reports of rising use of fentanyl in contemporary Brazil is of concern, but a US-like crisis may still be averted

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The 2015 National Survey on Substance Use made evident the non-trivial prevalence of non-medical use of opioid analgesics among a large, probability sample in Brazil. Rates neared those of non-medical use in USA in the early 2000s,[1] and often occurred in combination with alcohol and benzodiazepines.[2] It followed a ~500% increase in opioid pharmacy sales from 2009 to 2015, as documented by ANVISA (Brazil's regulatory agency). This rise in opioid sales was not driven by fentanyl, but rather by codeine and a fast growth in oxycodone prescriptions (nearly absent before 2010).[3]

Brazil was one of the hardest-hit countries by the COVID pandemic, with 700,000 deaths as of April 2022. Worsened by delays in vaccine availability,[4] high rates of hospitalisation and ventilation for severe cases led to a high demand for fentanyl, used as a sedative during intubation, as documented by Anvisa[5] and from Brazilian private hospital systems.[6] The impact of fentanyl use on continued opioid use or dependence remains unknown.

The US opioid crisis has two main supply sources: 1) the heavy marketing, overprescribing, and diversion of opioids from medical sources, 2) the growing heroin and later illicit fentanyl markets, driven by the high rates of dependence and demand among the US population.[7] Illicit markets of opioids appeared absent in Brazil up until a seizure of street fentanyl was reported in a mid-sized city in the southeastern state of Espírito Santo in 2023.[8] Indeed, previous data found use of heroin to be essentially null.

The unfolding of this first seizure of illicit fentanyl is unknown, but its risks should be interpreted in the context of important distinguishing factors from the US landscape. The sociodemographic profile of Brazilians who use opioids is different from the U.S.: In the 2015 survey, women were more likely to use opioids non-medically, while the opposite is true in the U.S[1]. Brazilians' purchasing power pales in comparison with the US market respecting any commodity, including recreational drugs. While cocaine is a cheap and available commodity in Brazil whereas heroin and other illicit opioids are expensive considering Brazil's low GDP per capita and its weak currency. Second, while the US is a key destination of trafficking routes from Mexico and Central and South America, Brazil has historically been a key route and market for cocaine over the years, but not for illicit opioids. So, while the US market for different opioids has been established for decades, Brazil illicit opioid market has yet to be implemented by drug cartels.

The example of the US should therefore function as a warning to Brazil, without ensuing panic. Illicit markets by their very nature are unpredictable and the possible mixture of fentanyl in the cocaine supply in Brazil - a growing problem in the U.S[9] – is indeed concerning. For this reason, in a recent decision ANVISA imposed restriction on fentanyl precursors, with the adoption of UNODC norms.[10] Whether this initiative will function or backfire with evasive manoeuvres (e.g. alternative trafficking routes and/or new precursors) has to be seen over time.

Brazil has the opportunity to look back on what happened in the US and adopt proactive actions to: a) invest in continued surveillance and research to understand changing patterns of substance use and misuse across the Brazilian population; b) integrate seizures with careful toxicological analyses, aiming to identify fentanyl, its precursors and different mixtures of fentanyl with different substances which are already prevalent in the country such as cocaine; c) improve surveillance of medical fentanyl and other opioids, allowing patients to access them during artificial ventilation and the management of severe pain, but avoiding false marketing and potential diversion and misuse, especially in outpatient settings; d) train and distribute naloxone to emergency medical and other health professionals to handle overdose both the public (SUS) and private health systems (currently only medical doctors have the legal right to prescribe and administer naloxone); and – if surveillance identifies continued exposure to illicit opioids - to lay people duly trained and protected by law from any untoward effect of police harassment and law enforcement.

Up to now, the emerging threat of a potential public health crisis driven by fentanyl spread has been basically handled by a proactive media, scant research groups, and the prompt responses by ANVISA. A commitment of the civil society, the scientific community and the government at all levels is sorely needed. To look back at lessons learned from other countries is key, but every major problem affecting societies have global and local dimensions. There is no time to stand and stare.

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Both authors contributed equally to this comment, putting together their expertise and first-hand experiences from Brazil and USA, respectively.

Declaration of interests

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