An Ethnographic Assessment of COVID-19–Related Changes to the Risk Environment for People Who Use Drugs in Tijuana, Mexico

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Objectives. To characterize the effects of the onset of the COVID-19 pandemic on the risk environment of people who use drugs (PWUD) in Tijuana, Mexico.

Methods. We used intensive participant-observation ethnography among street-based PWUD and key informants, such as frontline physicians and harm reductionists.

Results. PWUD described an unprecedented cessation of police violence and extortion during the initial pandemic-related lockdown, though this quickly reversed and police violence worsened. Government-provided housing and medical treatment with methadone were temporarily provided to PWUD in a dedicated clinic, yet only for PWUD with COVID-19 symptoms. Concurrently, non–COVID-19–related hospital care became virtually inaccessible, and many PWUD died of untreated, chronic illnesses, such as hepatitis C, and soft-tissue infections. Border closures, decreases in social interaction, and reduced drug and sex tourism resulted in worsening food, income, and housing insecurity for many PWUD. By contrast, potent illicit drugs remained easily accessible in open-air drug markets.

Conclusions. The pandemic exacerbated health risks for PWUD but also offered profound glimpses of beneficial structural changes. Efforts are needed in Tijuana and elsewhere to institutionalize positive pandemic-related shifts and ameliorate novel harms for PWUD. (*Am J Public Health*. 2022;112(S2):S199–S205. https://doi.org/10.2105/AJPH.2022.306796)

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For people who use drugs (PWUD), the COVID-19 pandemic disrupted the risk environment, defined as the confluence of physical, economic, social, and political factors that interact to drive the harms stemming from substance use.[1] Early reports from numerous locations globally documented positive shifts in drug policy, including better access to medications for opioid use disorder (MOUD) and housing, and reductions in police contacts and incarceration for drug-related infractions.[2–4] For example, the United States saw increased access to methadone take-homes, the removal of restrictions on buprenorphine prescription, and loosening federal restrictions on harm reduction.[5–7]

Conversely, drug-related harms also reached newfound heights. Overdose deaths in the United States skyrocketed in 2020, with mortality during peak lockdown elevated by 60% compared with the previous year.[8] Furthermore, many potential benefits, such as reductions in incarceration for drug possession, were inconsistently applied.[2] In many locations, jail cycling continued even as longer-term incarceration rates declined, which contributed to COVID-19 transmission in overpoliced communities.[9]

Many aspects of the pandemic's effects on PWUD remain poorly characterized. For example, experts predicted that disruptions to drug supply chains would lead to widespread shortages of illicit drugs.[10] However, the effects of major world events on drug supply chains are notoriously difficult to predict.[11]

Tijuana, a large city on Mexico's northern border, was hard-hit by COVID-19, yet accurate and timely statistics

describing pandemic-related impacts were not systematically collected.[12,13] Data are especially scarce for stigmatized outcomes related to substance use disorders, such as overdose mortality or HIV infection rates.[13] Therefore, although important shifts in the risk environment for PWUD likely occurred in Tijuana, it is challenging to identify them through traditional administrative data sources. To fill this gap, we leveraged intensive participant observation ethnography among street-based PWUD, which can provide insight into evolving public health dynamics in data-sparse environments.

METHODS

The ethnographic data used in this article were drawn primarily from more than 30 months of fieldwork, spanning 2018 to 2021, conducted in Tijuana, Mexico, by 2 of us (J. F. and P. B.). Fieldwork was initially based at harm-reduction sites and expanded naturally through snowball sampling to significant locations frequented by participants, including residences, encampments, sex strolls, and open-air street markets. Ethnographers accompanied PWUD in their daily activities with permission, enabling documentation of stigmatized or illegal practices that can be otherwise difficult to measure reliably because of desirability or recall bias, such as injection practices and syringe-sharing dynamics, income-generation tactics, and interactions with law enforcement and health care providers. By building long-term and iterative relationships with participants, we were able to minimize biases and access "common-sense" knowledge held by PWUD about survival strategies, drug consumption, and other dynamics.

We interviewed study participants in a conversational format, in English, Spanish, or "Spanglish" depending on participants' preferences. When participants consented and indicated it was safe, we also audio- or video-recorded and photographed events and conversations. We sought out key informants for more formal semistructured interviews (as well as conversational interviews) covering specific aspects of the PWUD risk environment sampling a range of knowledgeable and approachable physicians, harm reductionists, outreach workers, emergency medical technicians, law enforcement officers, substance use treatment center staff, etc.

The ethnographic database for this study entailed text from 77 transcribed interviews, more than 300 pages of fieldnotes, dozens of videos, and more than 500 photographs providing evidence of events unfolding in real time. We used NVivo version 12 (QSR International, Melbourne, Australia) to analyze data, and we assessed emergent themes iteratively. We selected representative passages from ethnographic notes and photographs and combined them into photo-ethnographic vignettes to illustrate consensus views, structural forces, and routinized daily interactions. Pseudonyms were used to protect participant confidentiality, and demographic and other details were changed in minor ways when altering was not relevant to dynamics being assessed.

RESULTS

Photo-ethnographic-vignette 1 in the Appendix (available as a supplement to the online version of this article at http://www.ajph.org) details an encounter between police and Johnny, a charismatic and gregarious man who grew up in California and was deported to Tijuana for his involvement with drugs. He lives on the street, where he injects heroin and methamphetamine regularly. This kind of encounter with police is a near-daily occurrence for him and for a broad swath of marginalized people in Tijuana's impoverished *Zona Norte* neighborhood. Walking distance from the US border, *Zona Norte* concentrates a dizzying array of retail drug sales points, brothels and independent sex workers, US tourists, shelters for migrant families and other marginally housed individuals, government offices, religious and secular nongovernmental organizations, formal businesses, small-scale gambling operations, middle-class Mexican families, and informal street marketplaces in a relatively small, 4- by 6-block area. It also has a major police base, and police- and military-branded pickup trucks, paddy wagons, vans, motorcycles, and armored vehicles circulate constantly, directly patrolling the neighborhood, and passing by on their way to the base. This gives the neighborhood a remarkably surveilled feel, and, at times, when one is standing on a street corner, it feels as if a police vehicle passes every minute.

For PWUD in Tijuana, interactions with the police are a daily source of anxiety and uncertainty. Especially for individuals like Johnny, who are often unable to pay 100 to 200 pesos (US $5–$10) for a cheap hotel and consequently sleep on the street, confrontations with law enforcement are unavoidable, day and night. At a moment's notice, he would routinely be surrounded by heavily armored police and soldiers, held at gunpoint, searched, often beaten and mocked, and ultimately tossed into the back of a paddy wagon. There he would wait for hours, as the van was slowly crammed full with up to 30 human beings over the course of several hours.[14]

It is common sense among PWUD that the presence of people perceived

by police to be of higher socioeconomic status (such as nongovernmental organization staff, politicians, researchers, or well-meaning "gringo" volunteers) reduces the immediate risk of police violence. In photo-ethnographic-vignette 1, Johnny was pleased that the police did not "confiscate" for resale the expensive-looking, albeit broken, plasma TV that he had found in the trash and was hoping would fund his next dose of heroin and methamphetamine. They also did not take him to jail, beat him, or even verbally abuse him to any significant degree. All in all, this was a best-case encounter, likely related to their eventual reading of J. F.'s positionality as a US-based professional. In front of a clinic doctor, for example, police may carefully search an unhoused person and release them if no drugs or syringes are found, whereas normally they would be unceremoniously thrown into the back of police vans, their possessions left unsearched, strewn on the street.[15]

Police violence also contributes to rapidly declining physical and mental health among PWUD. A constant string of police-inflicted wounds—such as baton-shaped bruises, broken fingers, fractured joints and appendages, and bloodied faces—stream into harm-reduction clinics in *Zona Norte* daily. Female PWUD report frequent rape and sexual assault by police officers, as well as pressure to perform sexual acts in lieu of incarceration.[16]

The detainment procedures frequently imposed on PWUD are orchestrated to maximize opportunities for them to "buy their way out" at distinct prices. They include (1) driving arrestees around in vans for hours, (2) detouring to short-term holding cells in the *fuerzas especiales* (special forces) police base in *Zona Norte* to see a judge for several more hours delay before adjudication, (3) being driven across the city to the *la 20* jail and serving a standard "drug nuisance" sentence of 12 to 36 hours. In each stage, police and corrections officers eagerly accept progressively smaller bribes to release the PWUD from the rest of the artificially prolonged cycle. Informants also report "early release" for volunteering to clean jail facilities or wash police vehicles. Driving past the *Zona Norte* police base, we often saw a dozen police cruisers being washed by unhoused individuals, "earning their freedom."

In the worst case, the full cycle takes up to 48 hours to complete (the Mexican legal infrastructure prevents short-term incarceration longer than 36 hours without a more elaborate trial). Yet, this time is sufficient to incite excruciating withdrawal symptoms among opioid-using PWUD, a syndrome often referred to colloquially as *malilla*.[17] Once released, with no money and many miles from where they were picked up, the hustle begins again to find 50 pesos (~US $2.50), score heroin at the sales point immediately outside of the jail to "get well," and travel by foot or public transport to *Zona Norte* to begin the cycle over again.

This tedious dance of evasion, capture, extortion, and violence exacts a punishing toll on PWUD, disrupting their efforts to achieve day-to-day stability, save money, pay rent, or find employment. For many, it is ever-present. In a recent study of people experiencing homelessness in Tijuana, 93.5% reported having ever been detained by police, and 70% were detained at least once per week.[18] For Johnny, it would not be uncommon to repeat the entire ordeal 2 or 3 times in a week. Notably, recent incarceration has also been associated with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.[13]

This cycle of police harassment, violence, detention, and short-term incarceration disproportionately affects more vulnerable PWUD (e.g., those who "look homeless"). Johnny fit a profile that made him an especially frequent target, as he was tall, confident, and gregarious—rendering him more salient—and covered in tattoos, having grown up rough in Southern California.

A Temporary Cessation of Routinized Police Violence

During April–May 2020—the first peak COVID-19 mortality window in Tijuana—police remarkably ceased detaining PWUD almost entirely. The front door of the *Zona Norte* police base was boarded up, and the steady stream of police vehicles slowed to a trickle. Most PWUD reported that it had been months since their last incarceration. As income-generation opportunities dramatically diminished during lockdowns, Johnny quipped, "The cops know we don't have 2 pesos left to steal, so they'd rather stay home and watch TV!" Others surmised that police were afraid of dying from COVID-19. Several high-profile COVID-19 deaths among police in Baja California generated press outcry over lack of personal protective equipment for frontline workers. Whatever the causes, for a short period, abusive police interactions miraculously ceased for PWUD.

By June–July 2020, police returned to patrolling with renewed aggression. Reports of beatings, solicitation of bribes, incarceration, and informal, forced abstinence–based addiction treatment quickly followed. Local government announced new plans to raze homeless encampments. As the pandemic drew on, most PWUD concluded that police violence had ultimately worsened compared with before the pandemic. Nevertheless,

April–May 2020 was the first time Johnny could ever remember going a full month without being jailed or beaten by police, a remarkable shift that eased his struggle to survive.

Access to Health Care

In photo-ethnographic-vignette 2 in the Appendix, Johnny is denied hospital-based health care despite symptoms indicating a potentially life-threatening condition (before COVID-19). Johnny's access to hospital care was structurally limited by intersecting factors of stigma against PWUD, lack of opioids (and other medications) in the hospital system, distrust of doctors, and extremely underfunded public hospitals.[15] In Tijuana, PWUD are routinely turned away from hospital care, even with life-threatening conditions, by untrained security guards or overworked interns who are struggling to treat a huge volume of critical patients. On numerous occasions, J. F. or other volunteer health workers managed to insist that PWUD with grievous injuries be allowed past the front door. Yet, even then, numerous factors still impeded treatment.

The Tijuana General hospital often relies on having family members stand by 24/7 and purchase medications in nearby private pharmacies. Socially isolated, deported, broke, and covered in stigmatizing tattoos and injection scars, Johnny simply did not fit the profile of a "deserving patient." Furthermore, even if admitted, Johnny would never receive sufficient opioid medications to prevent withdrawal symptoms. In practice, PWUD only received effective health care in hospitals in Tijuana when (1) family members in the United States paid for expensive care in a private facility for their deported relatives or (2) local harm reduction–activist doctors spent an enormous amount of time, social capital, and personal resources calling in favors to get a patient admitted, hand deliver methadone daily, and advocate for them at each step of treatment. As a consequence, many PWUD with treatable conditions unnecessarily die on the streets. In response to mistreatment and rejection, most PWUD distrust the hospital system, and believe that "*Los medicos matan a los tecatos*" (doctors kill junkies).

Health Care During the COVID-19 Pandemic

Photo-ethnographic-vignette 3 in the Appendix describes how Johnny's health—long precarious—suddenly worsened during the pandemic. In response to COVID-19, the Tijuana General hospital became designated as a COVID-19 center. As a consequence, patients without demonstrable COVID-19 infection had to travel to neighboring cities for medical care. Hospital care became virtually inaccessible during the pandemic in Tijuana for a wide swath of people dying of non–COVID-19–related conditions. Johnny died during the pandemic, yet not from COVID-19. He died on the street, from treatable complications of the curable hepatitis C virus, unable to access hospital care.

Although the pandemic further stressed an already saturated health care system, it also offered glimpses of positive structural shifts in the medical treatment of PWUD. Remarkably, a government-funded, dedicated shelter and medical treatment facility was opened for PWUD and unhoused individuals during the onset of the pandemic in recognition of their particular medical vulnerability. For the first time, MOUD was authorized by the governmental health care system during inpatient care for PWUD, albeit only for those who contracted SARS-CoV-2. In practice, methadone was never actually provided by the government; instead, it was funded and supplied by a nongovernmental organization. Yet, the simple fact that it was authorized and administered in a government-run inpatient facility represented a paradigm shift. The facility was integrated with nongovernmental organization–run harm-reduction services and served as a notable investment of public-sector resources in serving PWUD.

COVID-19 symptoms were a prerequisite to receive this governmental support, which limited the benefits to a specific subset of PWUD. Nevertheless, harm-reductionist activists were thrilled by the remarkable progress of specific unhoused people who received housing and medical care. Long-festering abscesses healed, gaunt patients gained weight, outlooks improved, and newfound stability was achieved.

Increased Difficulty of Basic Survival

As lockdowns were imposed over Tijuana, income-generation sources disappeared for PWUD reliant on face-to-face social interactions. Odd jobs dried up as businesses closed. Panhandling income plummeted in the absence of passersby on the street. With the border closed to Mexican nationals, many US citizens avoided crossing (although the Mexican government never restricted their travel). Thus "working the line" of cars trapped in traffic on the US border became less lucrative. One PWUD informant reported that "People don't even want to lower the car window now to give us money. If I'm lucky they'll crack the window a tiny bit and push the money out." Border closures and fear of travel

also limited drug and sex tourism from the United States, a major source of funds for PWUD in Tijuana. Drugs, on the other hand, were not generally reported to be more difficult to access in ethnographic interviews, nor was psychoactive potency majorly affected. Yet, the difficulty of daily struggle to fund the purchase of drugs increased, at least initially during lockdowns, making the process of "staying well" and finding food and shelter harder than before.

DISCUSSION

The COVID-19 pandemic arrived to an already fraught risk environment[1] for PWUD in Tijuana. We draw on ethnographic fieldwork to describe how the pandemic offered us glimpses of previously unthinkable structural shifts undertaken by government and civil society. Nevertheless, many of these measures quickly fell away, and basic survival generally became harder for many PWUD.

The coexistence of positive changes in policy alongside acute exacerbations of harms for PWUD has been noted in studies of pandemic-related shifts to drug policy.[19] Aronowitz et al. articulate this potential through the lens of punctuated equilibrium theory, which describes how rapid changes in policy can occur after extended periods of stagnation, prompted by crisis (e.g., a pandemic).[19] In their analysis of Philadelphia, Pennsylvania, they highlight a number of positive shifts, especially improvement in access to MOUD, general medical care, and harm-reduction services. However, they also note that basic survival grew more difficult for many PWUD. Alongside similar results from a host of cities, our findings from Tijuana reinforce the notion that times of crisis offer the potential for profound structural change on issues of drug policy as well as acute exacerbations of harms. In Tijuana, these dynamics were seen especially in shifts relating to policing, housing, and access to health care.

Several studies have noted reductions in police contact with PWUD during COVID-19, yet many have been applied inconsistently or briefly.[4,9,20] The pandemic has been highlighted as a moment of opportunity for reassessing the scope and goals of policing practices.[20] In cities across the United States, police virtually ended drug-related arrests during the pandemic.[19,20] Similarly, in Tijuana, the COVID-19 pandemic provided rare insight into what the world would look like without routine policing of PWUD. Notably, it occurred just as the abolition movement was surging in popularity and public recognition, calling for radical restructuring of spending on policing and carceral systems.[21] These discussions may be particularly relevant for a context such as Tijuana, where police violence and extortion is a highly disruptive force for PWUD, despite possession of all drugs being decriminalized (albeit within certain limitations) more than a decade before the pandemic arrived.[22] Yet, for 2 months during 2020, Tijuana saw life without routine policing of street scenes. No massive destabilizations resulted, highlighting that cycles of abusive policing are unnecessary for maintaining public safety. COVID-19 therefore put on display a de facto police abolition scenario in Tijuana and allowed the city to observe life without a regular police presence. Nevertheless, these gains were short-lived in Tijuana, as they have been elsewhere.

Access to health care—both general and opioid use disorder–specific—has also been a key axis of change for PWUD during the COVID-19 pandemic. In high-income settings, expanded access to MOUD via telehealth appointments and increased take-home doses have been widely lauded.[2,3] Nevertheless, studies have noted that other aspects of routine health care were disrupted during the pandemic, for the general population and for PWUD in particular.[12,23,24] In Tijuana, MOUD access is generally limited.[13,25] Some positive shifts were seen in increases in MOUD in clinical settings during the pandemic, but they were limited in scope and impact. Furthermore, in the context of very poor access to health care in Tijuana for PWUD at baseline, pandemic-related disruptions to care were especially acute. For many PWUD—such as Johnny—the pandemic proved fatal, not from direct COVID-19 mortality, but rather because of lack of access to treatment of hepatitis C, HIV, and other treatable conditions. COVID-19 highlighted general health system dysfunction and lack of access to basic care for many low-income *Tijuanenses* despite the promise of universal health care for the poor in Mexico.[26] For PWUD, these access gaps are further compounded by profound stigma and a near-universal lack of MOUD to facilitate medical stays.

The COVID-19 pandemic also demonstrated that local governments can effectively house PWUD experiencing homelessness given sufficient political will. In many cities, short-term improvements in housing have been reported.[27,28] Similarly, the pandemic led to a small example of a "housing-first" model to supporting unhoused PWUD in Tijuana. A small-but-notable number of PWUD received government-funded shelter with integrated medical services, including MOUD (albeit ultimately provided by the civil sector). Promising improvements in physical and mental health were noted for vulnerable individuals. Although the shelter stopped

receiving patients in the fall of 2020 (at the conclusion of the first peak of COVID-19 deaths, but long before the end of the pandemic), it offered insight into how larger-scale interventions could be developed in Tijuana to offer greater stability to PWUD.

Although early reports indicate evidence of disruptions to drug supply chains in other contexts, such as Canada, Norway, and crypto markets,[29–31] this was not reported by PWUD in Tijuana. This may be related to Tijuana's position as a major hub for storage and transport of drugs heading north. Border closures likely disrupted the transport of drugs into the United States and Canada but would not disrupt the supply in Tijuana.

The specifics of many of the trends described here are unique to PWUD in Tijuana. Nevertheless, many themes and findings presented here likely generalize to a wide swath of PWUD globally. For example, as we described previously, literature from other locations describe short-term shifts in policing, and increasing availability of MOUD and housing services, coexisting with overall increasing difficulty of basic survival and barriers to health care. Our results reinforce these tensions and opportunities and extend them to the context of a middle-income, Latin-American border city. Further study is warranted to better characterize the long-term public health implications of these shifts and how they may provide guidance for structural change in drug policy globally.

CONCLUSIONS

In sum, we traced how the pandemic provided remarkable insight into specific structural interventions that could improve the risk environment for PWUD in Tijuana. These include ending routine de-facto drug criminalization and providing government-funded shelter, health care, and MOUD. Nevertheless, without concerted efforts to institutionalize these measures, all signs indicate that high rates of preventable morbidity and mortality will continue for PWUD in Tijuana. AJPH

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CONTRIBUTORS

All authors conceptualized and designed the study. J. Friedman and P. Bourgois collected the ethnographic data used in the study. J. Friedman wrote the first draft of the article, and all authors critically revised the article.

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CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

HUMAN PARTICIPANT PROTECTION

This study received ethics approval from the institutional review boards at UCSD and UCLA in the United States, and Xochicalco University in Mexico.

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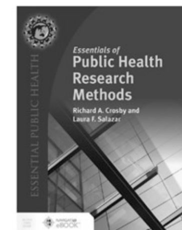

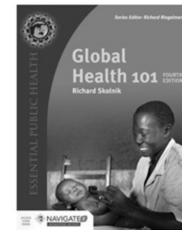

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