Opioid use disorder (OUD) is an unprecedented medical and public health issue both in Puerto Rico (PR) and the greater US with an increase incidence of opioid use every year. Unprecedented and compounded emergencies in PR such as those caused by hurricanes, earthquakes, and the COVID-19 pandemic coupled with limited national and local governmental support, has forced most clinics in PR to take action to be able to continue providing care. This commentary summarizes the leadership and clinical initiatives of 3 community organizations in PR to maintain services for people with OUD during the COVID-19 pandemic. Local legislation that supported the continuity of OUD care is summarized, along with unique experiences specific to each organization. In addition, the vulnerability of economically disadvantaged people or experiencing homelessness as well as those affected by these compounded events in PR is discussed, with an emphasis on how some challenges were addressed and future directions for continuity of care as our country adjusts to new demands caused by the COVID-19 pandemic.

Opioid use disorder (OUD) is an unprecedented medical and public health issue both in Puerto Rico (PR) and the greater US with an increase in the number of opioid use every year.1–3 The percentage of government health care beneficiaries in PR treated for mental health who reported using opioids significantly increased in the last decade (from 8.3% (female) and 13.8% (male) in 2007, to 41.4% (female) and 36.7% (male) in 2011).2,3 Medications for OUD in PR are accessible through federal licensed facilities (methadone) or regular outpatient prescriptions filled in a retail pharmacy (buprenorphine). In 2015, around 5000 patients were treated with methadone in PR.4 Whereas a preliminary report provided by the Puerto Rico Health Services Administration (ASES by its acronym in Spanish) estimated 10,000 patients were treated with buprenorphine in 2017 in PR.5 The impact of the hurricanes Irma and Maria in 2017 exacerbated the use of opioids in PR, and that fentanyl-laced heroin and cocaine led to the dramatic increase in overdoses that were witnessed during this period.6–8 In response to these increased overdoses, the governor of PR, signed an executive order for the creation of a special task force for the prevention of opioid overdoses.9,10 However, to date it remains difficult to estimate the true scale of the opioid crisis in PR due to the lack of local governmental overdose surveillance. Local advocacy groups and researchers agree that additional surveillance and monitoring efforts are needed to better address the opioid emergency in PR, especially when unprecedented emergencies occur.

The recent hurricanes, earthquakes, and the COVID-19 pandemic have only intensified the opioid crisis in PR. These unprecedented and compounded events coupled with limited national and local governmental support during these emergencies has pushed most clinics in PR to take action to be able to continue providing care. The most recent COVID-19 has exacerbated the underlying vulnerabilities of the local health-care system, specially the mental health sector. By the time this commentary was developed in May 2020 (2 months after
the shelter in place orders in PR began), the number of positive cases reported by the Puerto Rican government for COVID-19 had not yet passed 4000.\textsuperscript{11} Given the significant level of uncertainty of the COVID-19 emergency that resulted from limited governmental leadership regarding maintaining the continuity of OUD care in PR, strict safety measures were implemented by some buprenorphine OUD clinics. This commentary summarizes the leadership and clinical initiatives of 3 community organizations in PR to maintain services for people with OUD during the early months of the COVID-19 pandemic. Local legislation that affected the continuity of OUD care is summarized, along with unique experiences specific to each organization. In addition, the vulnerability of economically disadvantaged people or experiencing homelessness and those affected by these compounded events in PR is discussed, with an emphasis on how some challenges were addressed and future directions for continuity of care as our country adjusts to new healthcare demands caused by the COVID-19 pandemic. It is important to highlight that this commentary is intended to describe the experiences of three buprenorphine OUD clinics in PR that maintain a combined number of \textasciitilde{}300 OUD patients, and may not be representative of the entire OUD services sector in PR. Experiences from patient advocacy groups and academic researchers that currently collaborate towards increasing the outcomes of OUD treatments in Puerto Rico are also described. Information for this commentary was confirmed through communications established with community partners and stakeholders.

Local Legislation That Supported OUD Treatment

In an attempt to facilitate continuity of care while maintaining adequate social distancing, the Puerto Rican government had adapted local health regulations by way of emergency legislation and executive orders. Within days of the shelter-at-home order being enacted (March 2020), PR’s Telemedicine Act was amended to permit Puerto Rican providers to more easily provide care by telephone and other telemedicine platforms,\textsuperscript{12} a practice that was previously very limited in PR. Additionally, local regulations were amended to permit prescribers to send prescriptions to pharmacies electronically outside of government-approved e-prescribing platforms.\textsuperscript{13} This change was particularly crucial as in PR faxed and verbal telephone prescriptions are normally not permitted, and the uptake of approved e-prescribing platforms has been limited. The most important directive specific to the treatment of OUD in PR with buprenorphine was to allow for the prescription without urine toxicology results and insurance preauthorizations.\textsuperscript{14} This step, although only implemented over a month after the initial shelter-in-place order, was important as previously patients treated with buprenorphine were required to have regular toxicology screenings to be submitted at the time of each medication refill. Although this last order is a temporary change in the local healthcare system, clinics are advocating for permanent implementation as it may positively impact treatment adherence rates and care outcomes in PR. Overall, removing these requirements allowed Puerto Rican clinics that provided medication treatment with buprenorphine the flexibility to continue maintenance treatment for their patients with OUD through the above-mentioned telehealth and e-prescribing modalities. The experiences of 3 of these clinics that benefited from these local legislation changes are explained in the next section.

Clinics Individual Measures to Maintain OUD Care

Corporacion SANOS Clinic – Caguas Municipality

The Corporacion SANOS clinic is a Federally Qualified Health Center (FQHC) located in Caguas, a suburban part of the San Juan metropolitan area in PR. SANOS provides primary care, mental health, and substance use disorder services. Since shelter in place order in March 2020, strict safety measures were strategically implemented in SANOS by decisive leadership personnel in buprenorphine clinic. To control the total number of patients inside the clinic at any one time, appointments were rescheduled with telemedicine appointments as much as possible. The use of personal protection equipment such as masks, hand sanitizer, and gloves were quickly implemented with training for staff about proper use. Like most community organizations providing care for OUD in PR, many of the patients at SANOS clinic are economically disadvantaged, including people experiencing homelessness and the uninsured, with low access to technology (ie, computers, smartphones), internet, and other technologies or literacy required for telemedicine. For this reason, one way the SANOS clinic implemented telemedicine was by having the patient in one room in the clinic with a webcam and a microphone (set up by the clinic) and having the clinicians in a separate room providing the interactive care. Treatment naive patients and previously stabilized patients were successfully treated using this approach, which resulted in similar participant statistics (active and retained patients) during the months of March, April, and May of 2020. Initial assessments for treatment-naïve patients were modified from multilevel sequential interventions with social workers, psychologists, addictions counselors, nurses, and physicians, to a more focused and reduced 2-step intervention consisting of a baseline assessment by a social worker, psychologists, or counselor (eg, past drug use and practices, medications, and mental health history) followed by the physician evaluation and treatment.

This clinic developed specific harm reduction interventions to address the unsheltered population, which included individual and community interventions during the pandemic to decrease the risk of worsening mental and physical health of these individuals. These updated OUD-COVID outreach activities consisted of a COVID-19 educational intervention combined with OUD harm reduction strategies. Within 1 month of successful implementation, the Caguas municipality (Extended San Juan/Suburban area) reported 200 unsheltered people tested for COVID-19 (only 1 tested positive for SARS-CoV-2). These adjustments allowed for the continued success of outreach activities in the community to link untreated patients with care at the clinic during COVID-19.

Coalición de Coaliciones Clinic – Ponce Municipality

For providers in the south of Puerto Rico, the difficulties of the COVID-19 pandemic were immediately preceded by
challenges from a string of earthquakes beginning at the very end of 2019. For patients living in these areas, the emergency social distancing and shelter-in-place orders came even while some were still not able to return to their impacted and probably unsafe homes. Coalición de Coaliciones is a nonprofit organization that serves low income people and the unsheltered, by coordinating housing and services and providing care for the use of substances. As part of this work, it operates a specialized clinic that integrates primary care services, psychological services, medication treatments for substance use disorder, counseling, social work, support services, and shelter location. After almost 8 weeks of the COVID-19 emergency (May 2020), the south part of the island was hit again with a 5.4 magnitude earthquake, causing further damages and rattling nerves of previously stabilized and yet vulnerable OUD patients. In the Coalición de Coaliciones clinic located in the municipality of Ponce (southern Puerto Rico), a significant decrease of active and stable buprenorphine patients occurred after the earthquakes. Then, with the added challenges of the COVID-19 pandemic, the clinic was forced to limit the total number of patients they could attend to in a day. To compensate, the clinic increased the number of days that OUD care was provided to continue meeting the needs of the active patients that were still able to go to the clinic. In this clinic, patients continued to be treated during in-person appointments, facilitated by multiple safety precautions such as handwashing stations and hand sanitizing, gloves, and masks.

**Clinica Pitirre Iniciativa Comunitaria Clinic – Bayamon Municipality**

Administered by the nonprofit organization Iniciativa Comunitaria, Pitirre clinic offers physical and mental health services to persons who are actively using substances or are persons affected by the substance use disorder of a relative. Ordinarily, the clinic operates out of the Dr. Ramón Ruiz Arnau University Hospital in Bayamon, PR (part of the San Juan Metropolitan area). However, the mid-March announcement by the governor designating this hospital as the main facility in PR to receive COVID-19 critical cases disproportionately impacted the OUD services and other community-based outreach activities that Iniciativa Comunitaria offers in PR. An unintended consequence of designating this hospital to care for the critically impacted COVID-19 patients in the island was that it forced the entire Pitirre clinic to be temporarily relocated to a different municipality. The Pitirre comprehensive substance treatment and rehabilitation program, now in a different municipality, was mainly only able to provide care to their patients by phone. The clinic in this new site employed safety protocols to prevent the spread of the virus within the limited staff and clinicians that were permitted to be at this new smaller facility but was unable to attend to patients face-to-face in this temporary space. Given these limitations, a decrease in active and previously stabilized patients was noticeable, and an increase in decompensated patients was anecdotaly observed. Although the clinic is optimistic that they will soon be able to return to their normal clinic space, the uncertainty of the current emergency has undoubtedly had negative clinical effects on some of the patients it serves.

**OUD Group Counseling During COVID-19 Social Distancing**

Although necessary to reduce the spread of the virus, COVID-19 physical distancing measures put people at higher risk for drug use as a coping mechanism of isolation, particularly stabilized OUD patients. The suggested measures of minimum distancing of 6 feet, coupled with the prohibition of group gatherings and crowded places resulted in the discontinuation of OUD group counseling sessions in most of the community-based OUD clinics in PR (an important component of the rehabilitation of many OUD Latino/Hispanic patients). Local advocacy groups in PR fear that potential household instabilities and absence of a safe home environment, coupled with lack of support group accessibility for OUD due to imposed curfews and social distancing measures may hinder even more the treatment outcomes of OUD in PR. All 3 clinics described in the previous section have temporarily discontinued group counseling sessions, with no intention of resuming these in the immediate future. These clinics are, however, closely assessing patients for mental health deterioration during the COVID-19 epidemic that may result in new mental health disorders or relapse and drug use, due to insomnia, anxiety, or depression. Also, increases in alcohol and tobacco consumption are being closely monitored. Due to the social distancing measures during COVID-19, the local office of mental health administration “La Administración de Salud Mental y Contra la Adiccio´n (ASSMCA)” in PR encouraged patients to use their phone app that has chat capabilities, educational information, and contact information, in addition to its direct phone line for support (Linea Pas).

**CONCLUDING REMARKS**

In Puerto Rico during the early months of the COVID-19 pandemic (March–June 2020), some community organizations and clinics that provide care for OUD with buprenorphine have had to develop their own safety protocols to limit COVID-19 spread, while adjusting current treatment protocols to maintain services for patients. Although some governmental guidance and financial support (local and federal) was later available, this recent emergency elucidated again the underlying vulnerabilities of the local government and health care system in delayed responses to compounded natural disasters. Although a variety of systemic barriers to the continued provision of treatment of OUD still exist in PR, regulatory changes for teledmedicine and insurance preauthorization’s that occurred at the beginning of the COVID-19 pandemic have helped provide some flexibility for local providers to develop their own creative solutions to the challenges the COVID-19 pandemic presented. However, barriers related to the delayed implementation or absence of updated training related to current mental health problems faced by our patients may still be a systemic barrier for adequate provision of OUD care in PR. Further clinical and systemic assessments are needed to scientifically understand the magnitude of the impact of these compounded disasters in OUD care in PR and ways to mitigate them.
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