

# Strategies Adopted during the Coronavirus Pandemic

Subjects: **Substance Abuse**

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The COVID-19 generate several psychological repercussions, such as: depression, anxiety, suicide, self-mutilation and increased consumption of alcohol and other drugs, as well as in socioeconomic and political aspects that were aggravated by structural inequalities and inequities in the countries, increasing poverty, misery, unemployment and hunger. These factors become more serious and complex for people who struggle with substance use disorders (SUD) not only because they increase the risk of COVID-19, but also because of the accentuation of the condition of vulnerability.

Although actions as social distancing was the only way to mitigate the COVID-19 pandemic, these strategies limited access and continuity of monitoring in the intra- and inter-sectoral network. Because of that during the pandemic period, several services reduced or stopped functioning, varying according to the program areas. As stated by PAHO (2021) Mental health services in the Americas had a 77% reduction of health care compared to other services and programs. Due this context, the present study developed a scoping review to map strategies and actions adopted in SUD treatment facilities.

The strategies were: 1) Telehealth/telemedicine support (64%); 2) Adequacy of prescription and distribution of medications (46%); 3) Reorganization of face-to-face healthcare services (39%); 4) Approaches related to the prevention of COVID-19 among patients (29%) and 5) Other strategies in the routine of health care (21%).

telemedicine

COVID-19

Substance Use Disorders

## 1. Strategies to Support the Care Offer Maintenance

### 1.1. Telehealth/Telemedicine Support

Mandatory physical distancing due to COVID-19 impacted the offer of specialized health services which favored the implementation and use of telehealth worldwide <sup>[1][2][3]</sup>. Other care activities used this technology, such as counseling/screening, group therapy, and support, and the use of a 24-h telephone line, the adaptation of electronic health records, webinars, and the provision of a telephone device to users were used as part of these strategies <sup>[4][5][6][7][8][9][10][11][12][13][14][15][16][17][18][19][20][21]</sup>. The range of this technology is wide and diverse, favoring the maintenance of care for people who live in residential facilities/residential community <sup>[4][5][18][20][21]</sup>, homeless people/room occupancy <sup>[5][6][9]</sup>, and rural population <sup>[14][17][18][20]</sup>. Before the COVID-19 pandemic, the telehealth tool was used by professionals for clinical meetings, but its use for care had not been widely adopted <sup>[6][1]</sup>. Uscher-Pines <sup>[3]</sup> indicated that in some specific cases, this technology was used by professionals on trips, when moving to another city, and in other specific health situations. Studies uncovered in this review <sup>[6][7][16]</sup> found that

telemedicine consultations and counseling were important for accessing and maintaining treatment, especially for individuals living in remote locations, [3][22] such as rural populations [14][17][18][20]. This resource is also favorable for healthcare providers, allowing them to have a better perception of the environment in which the individual lives [16], and in collaboration with the implementation of comprehensive care for individuals with other health conditions or comorbidities [23]. The evidence suggests that the adoption of telehealth and telemedicine may help to strengthen the bond and identify patients' support networks, thus strengthening the potential for using this strategy in SUD treatment facilities.

For these benefits to be effective, it is necessary for specialized health services to offer different types of care, so that users can choose the option with which they feel most comfortable. Three selected studies reported that telephone care was well accepted among psychiatric patients [3], people who lived in residential facilities or residential communities, homeless people/room occupancy [5][6], and those with SUD [7]. Mahoney [24] found that the video call technology was preferred among individuals who use tobacco. Despite the use of the telephone as a tool considered to be of low cost, many individuals do not have a device or Internet access [25]. To help users access telehealth treatment, some specialized services provide a telephone device to patients [13][19]. Another viable option for addressing this situation is the distribution of prepaid cards and devices with prepaid services for patients who did not have such resources [26]. Thus, individuals could use the telephone lines for some specialized services made available 24 h a day, providing psychological support, counseling [12], and initial assessment until the substitution prescription for those with an opioid use disorder [7].

As barriers to this service, professionals identified the absence of physical contact for feedback during counseling and physical examination [1], lack of equipment, limited Internet access, and limited handling skills identified by health professionals among some clients, rural population, and people who live in residential facilities/residential community [18]. These same difficulties were also reported by users [16], including a lack of familiarity with using this new resource [1]; however, it was noticed that even individuals who lived in precarious or rural housing had a smartphone [18]. Other authors also found the same difficulties among professionals and users [23][3][22], which reflects the lack of bonding and support for achieving goals proposed during treatment [24]. To minimize the users' barriers in telehealth access, Harris [9] highlighted that the collaboration of care entities (religious institutions) and general health services can be an essential facilitator for individuals vulnerable socioeconomically, without an access to the necessary technology. In addition to service offers, it is important for the team to be sensitive when identifying these barriers, as these details could be determinants of the occurrence of relapses, moving users away from starting treatment, or maintaining treatment during the absence period.

## 1.2. Adequacy of Prescription and Distribution of Medications

One of the strategies adopted was the adequacy of prescription and distribution of medications during the COVID-19 pandemic, such as electronic prescriptions, increased methadone/naloxone dispensing, restricting the amount of medication dispensed/day, support of primary care in dispensing medicine, increasing the supply of training for medicine distribution, decentralization of medicine dispensing, and home delivery [5][7][27][28][11][12][29][14][30][31][18][32]. This change occurred due to adjustments in guidelines in some countries, such as the United Kingdom and the

United States. In the United Kingdom, until July 2021, a person could take a 14-day supply for self-administration or appoint someone to collect the medication dispensed on his or her behalf [33], and in the United States, the Substance Abuse and Mental Health Services Administration (SAMHSA) made more flexible regulations about the supply of opioids and specialized health services were encouraged to keep patients on self-administered doses (methadone/naloxone), thus facilitating the implementation of physical distancing [34][35][36]. That provided that individuals in different places of residence continued the use of medication essential to maintain the treatment in different types of care to people living in residential facilities/residential community [5][18], homeless people/room occupancy [5][27][32], and rural populations [14][31][18]. Prescriptions via telemedicine or teleconference were also allowed to have increased drug distribution limits, without the need for a face-to-face visit during the contingency plan [7][11], facilitating the maintenance of treatment for communities with difficult access, such as rural populations [14][18]. The possibility of assistance through telehealth platforms, telephone, and other sources allowed to mitigate the impact of COVID-19 on public health, corroborating the results found in the present review [36].

The dispensing of methadone/naloxone was facilitated, increasing both the number of doses available and the number of individuals benefiting, as well as reducing harm in relation to overdoses [12][29][30], to individuals who live in rural communities and in residential facilities/residential communities [31][32]. Previously, the unsupervised use of methadone was allowed, as long as these individuals showed stability in their condition, such as the absence of recent drug abuse, stability in social relationships, absence of serious behavioral problems in the clinic, or involvement in criminality, such as drug trafficking, and capacity to safely store medicines for opioid use [37]. These changes can cause concerns, such as the lack of professionals available to administer medications to reverse opioid overdose conditions in a timely manner [38] and over the sharing or selling of dispensed medications. The studies analyzed in this review [12] did not report cases of overdose or death; in rural communities, this positive effect was attributed to the ease and proximity of medication in more remote areas [31], and only 6% ( $n = 87$ ) of cases of medication sharing were observed [30]. Strengthening precautions, health institutions increased the offer of training for the distribution of drugs that prevent overdose [31], and training was offered online; thus, reference individuals in the community and/or family members were also able to use the Take-Home Naloxone kit in overdose cases [39]. These data open the possibility for fostering discussion on the development of new policies and recommendations from regulatory bodies that meet the real needs of individuals, such as harm reduction and encouragement of accountability with the proposed treatment.

To reduce agglomeration in drug distribution sites, a restriction on the number of medication dispensing/day was observed [5]. This change can represent a barrier to access to medication, affecting the continuity of treatment and putting individuals at risk [26]. An alternative could be the dispensing of electronic medicine boxes, facilitating the delivery of larger quantities of medicine in a supervised manner and allowing the health team to identify the need for guidance regarding use [40].

Among the actions/interventions adopted was medication delivery at home [12], which offers the convenience of eliminating the expense of traveling and reducing stigma in relation to the demand for specialized services for medication withdrawal [6]; the act of taking the treatment to the user helps to maintain objectivity, increases acceptance and adherence to treatment [41], and reduces the risks of coronavirus contamination. Decentralization

in drug dispensing and primary care support [5][27][28] even favored the most vulnerable individuals, such as homeless people/room occupancy [5], strengthening strategies to keep individuals in treatment and the bond with the community. Primary health care is the gateway to the treatment of chronic diseases, and with prescription assembly solutions (PAS) with proper support, it can effectively treat these individuals [42]. However, Lagisetty [43] pointed out that it is still necessary to formulate health policies so that care is coordinated between specialized and primary healthcare services.

The strategies were adopted to facilitate access to medication and treatment for disorders related to the use of psychoactive substances, especially for keeping these individuals protected against COVID-19. Health institutions increased the offer of training for the distribution of medications that prevent overdose, and this training for new dispensers or recycling of working professionals is carried out online. What made training and viability possible in rural areas? It was feasible to observe that the increase in the amount of dispensed drugs to Take-Home did not cause serious complications. This fact brings new perspectives on how to establish treatment with longer follow-up in certain cases that may lead to new policies and recommendations for prescribing and dispensing drugs for opioid substitution therapy (OST). These individuals may benefit from the maintenance of treatment as a decrease in stigma. However, studies with high-quality evidence to evaluate the efficiency of this new method of prescribing and dispensing OST medications are necessary.

## 2. Strategies That Limited Care Offer

### 2.1. Reorganization in the Face-to-Face Assistance of Specialized Services

The strategies were implemented with the purpose of mitigating the spread of COVID-19 and its consequences, maintaining assistance to users with greater vulnerability, and avoiding leaving them destitute. As seen before, health providers quickly adapted their services to online and telephone care [23][44], in addition to using other remote monitoring devices [45]. For face-to-face care, studies report the need for rapid adjustment in hours of care and visits, rules of conduct, reduction in the number of patients seen, and reduction in the supply of specialized services [4][46][8][28][12][29][13][14][20][47][21]. It was observed that this intervention category was the only one that did not present specific actions to homeless people or room occupancy. These determinations imposed by regulatory agencies may have pushed a considerable number of individuals from the SUD treatment routine [48]. Care interruption may represent setbacks in care planning by health professionals with the patient, as well as losing positive connections among the services, professionals, peers, and society, which are compromised due to substance use [49].

Regarding family visits to specialized service clinics, people living in residential facilities/residential communities [4][21] with social restrictions, general health guidance was published for health providers with recommendations to avoid meeting more than 10 people, trips for social visits, and for preferably staying inside the home, especially when one family member tested positive for COVID-19 [50][51]. Some residential treatment programs in residential facilities/residential communities restricted the personal visits of family members to only when the pandemic was in the worst phase, maintaining social distance, and the use of PPE during the meeting, which resulted in some

dropouts from the program [21]. Some recovery programs chose to adopt certain rules of conduct to improve the experience in the place, such as substance use [4]; Jason et al. showed that other rules can help to improve the living in recovery housing, as fulfilling the division of responsibilities among residents, motivating them to remain sober and, thus, avoiding the use of alcohol and other illicit drugs during the treatment period at home [52]. For those who received visits without authorization or violated institutional rules, quarantine and COVID-19 tests were performed for the safety of others [53].

Regarding visits by users to in-person treatment programs with opioids (OTPs), their frequency reduced with the availability of taking a certain dose of methadone home and ensuring treatment with medications for opioid use disorder [29]. Some regulations have been relaxed in the federal guidelines governing specialized health services, especially during the pandemic period, which were adopted to ensure that as few people as possible were kept within specialized health services and to ensure physical distancing [54][55].

Another change in specialized service providers was regarding adjustments in service hours [46][29][13][47], even among rural populations [15][20], which needed to adjust the period of operation of specialized services, and suffered a reduction in professional teams or adjustments in shifts and working hours [56][57]. Thus, it was possible to serve the demand of this vulnerable population and reduce the associated damages. There were also changes in the schedule of OTP visits due to travel by public transport at times that allowed greater physical distancing [29].

However, during the period of operation of specialized health services, the government's decision to restrict the hours of operation of community pharmacies may compromise the treatment of some users in the withdrawal of medication and, consequently, increase the risk of overdose due to the use of opioids, while others also described more hours of work with alternate working days [58]. Therefore, some supply distribution locations opted to maintain longer weekend opening hours, in addition to supporting access in regions with difficult access [39]. Finally, some of the harm reduction service providers had their capacity reduced, due to the illness of workers, in many cases due to poor working conditions and increased vulnerability to COVID-19, leading to more restricted hours of operation, due to the absence of currently available professionals [47][59].

The decrease in the number of health workers also affected the reduction in the number of patients seen [8][28][47], residential facilities/residential community services presented extensive financial losses and, as a consequence, dismissal of employees, which provoked an overload among those that remained [21]. The reduction was also due to social isolation restrictions, in which patients were restricted from seeing family members for a period, which led to the abandonment of some residential programs because of their restricted personal interactions [21][60]. With the closing of clinics and substance treatment use shelters, there was a lower provision of specialized services for these people and, thus, a lower number of users being assisted. All of this added to the precarious availability and access to effective treatments, prevention strategies, and the sociocultural context [10][61].

In residential program facilities, the problem is even greater, as the new public health guidelines not only limit the number of beds that can be filled, but also require that new patients be tested for COVID-19 before entering the residence [62]. Such strategies can become a barrier in the treatment process of this population because of the lack

of access to COVID-19 testing and the lack of sufficient programs that support all individuals in spaces with safe distancing, which may increase the risk of exposure [21].

The control measures adopted in specialized services resulted in a reduction in the supply of care [12][14], with fewer employee working hours, lower service capacity, reduced opening hours, fewer visits, fewer beds, reduced group treatments, and other services suspended to converge with measures to protect third parties present at the site and self-protection, while the COVID-19 pandemic persists, which, although necessary, can interfere with patient involvement in treatment [12][56][58][60][62].

In this sense, it is noticeable that the barriers imposed by the COVID-19 pandemic and the reduction in the availability of specialized services can produce long-term effects for individuals who already face poverty and physical and mental health problems [23][63], as they can provide a feeling of loneliness and can lead individuals to interrupt a treatment [18] that, for years, was the main form of therapy offered [25], in addition to the financial barriers that made several specialized services interrupt provision of care [18]. At this time, health professionals must be proactive and agile in assessing individual needs to establish the best care and management of SUD, even with the care offer reduction or care at a distance.

## 2.2. Care Aimed at Preventing Coronavirus and Harm Reduction

Several strategies to mitigate the virus have been adopted in the routine care of individuals who use psychoactive substances, such as quarantine, use of PPE, hand hygiene, social distancing, and screening/testing for COVID-19, assistance to homeless people, access to material for harm reduction, approaching other health networks, and drug testing suspension [4][5][64][8][27][28][13][15][18][19][20][21]. Providing effective care, regardless of the place of living, among the main measures adopted by programs, hand hygiene was prominent [28], while other measures included individual use of articles for substance consumption [27], spaces reserved for individual use, distance between people [65], and individual actions, whether through the use of alcohol gel for hand cleaning, respiratory labeling, or surface cleaning [66]. To ensure social distancing, with the objective of reducing community transmission of COVID-19 [65], one of the services that maintained care for the homeless people/room occupancy population [27] adopted a “phone booth” model applied in an isolated site to exchange syringes and hygiene care to each user, with professionals evaluating and offering medicines to treat dependence.

Even before the pandemic, people with SUD have been identified as a vulnerable population [67][68]. Despite these efforts, this care can be deficient and increase the risk of coronavirus infection in those who are homeless or live in precarious conditions, in crowded environments, and among those who share syringes and other materials to use drugs [34][69]. These factors are aggravated by pre-existing vulnerabilities, which deserve special attention, not only because they suffered from social marginalization and stigma, but also because they lacked even more access to specialized health services, contributing to the emergence of other diseases. To minimize these problems, both in relation to the substance and COVID-19 contamination, the Castile and León Treatment of Dependence Network in Spain implemented a program that offered care to these homeless individuals confined in a shelter due to coronavirus circulation restrictions [5]. For this reason, treatment programs must adopt a system of specialized



services that include strong policies with a wide range of well-structured resources, such as facilities and trained personnel, and effective, accessible, cheap, and integrated services; thus, they have been prepared not only for the current pandemic scenario, but for others that may arise [70]. The strengthening of health services must be encouraged. Harris [19] highlighted that the network care between primary care and hospitals was essential to provide therapeutic care in an integrated and shared way by both hospitals and primary services.

As indicated before, the pandemic mostly affects the most vulnerable groups [71], including drug addicts; thus, among the strategies aimed at this population should be testing for COVID-19 and quarantine for a minimum of 14 days for users who wish to enter residency services. To ensure the safety of everyone involved at the site, users, or workers, the importance of maintaining or implementing activities to treat addiction should be considered, as well as tackling the dissemination of the coronavirus with testing, which is one of the most efficient methods of control in combating the pandemic [53]. These interventions aimed to protect against the coronavirus may be an aggravating factor in the maintenance of SUD treatment. Many users and services had significant impacts on financial resources [4][6][10][1] such as, for instance, the 14 days of quarantine to patients and health professionals, which interrupted the treatment [8]. Service providers for the rural population indicated that stress due to the fear of contamination by COVID-19, isolation, and financial impact can exacerbate the use and relapse of individuals undergoing treatment [18]. These effects should be observed over time by team SUD treatment services and should be explored in future studies that can detail through surveys and appropriate instruments, the individuals who use the services.

It is noteworthy that even with the strategies adopted and detailed in this study, these individuals face years with a range of diseases related to SUD. Individuals who use psychoactive substances such as alcohol, tobacco, and cocaine presented alterations in immunologic, pulmonary, and cardiac systems [72][73][74] and have a higher chance of requiring mechanical ventilation when they develop pneumonia [75].

Reflecting mainly on lost lives or disabilities, it is estimated that in 2017, about 42 million years of healthy life were lost due to SUD [76]. The occurrence of COVID-19 and SUD in the United States and their consequences were detailed by Wang [77], who evaluated the risk of people with SUD (at life  $n = 1.880$ ) to contract COVID-19 when compared to people without SUD diagnosis; people who do opioids were at a higher risk (2.42%), followed by cocaine (1.57%), alcohol (1.42%), and tobacco users (1.33%). The mortality rate among these individuals was 9.57%. These data demonstrate the seriousness of the total or partial interruption of specialized services.

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