Substance Use Disorder Treatment via Telemedicine During Coronavirus Disease 2019

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A B S T R A C T

Telemedicine has been effective at bridging the gap among patients, providers, and health systems. Authors from a large academic medical center in Baltimore, MD, anecdotally found that digital tools were beneficial in supporting substance use disorder recovery during a global pandemic. Audiovisual tools like Zoom (Zoom Video Communications, Inc, San Jose, CA) and Doximity (Doximity, Inc, San Francisco, CA), as well as increased frequency of communication with patients, have been most helpful to supporting recovery. The barriers noted were related to patient privacy and increased tendency of patients to avoid treatment, similar barriers as when treatment is provided in the clinic. The intent of this narrative is to discuss provider perspectives of benefits and barriers to telemedicine for substance use disorder treatment during the coronavirus disease 2019 pandemic.

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In the United States, 1 in 12 (18.7 million) adults suffer with a substance use disorder (SUD).[1] As of 2018, only 11% of those individuals received needed treatment. During the coronavirus disease 2019 (COVID-19) pandemic, as a means to enforce social distancing and protect the population, the Coronavirus Preparedness and Response Supplemental Appropriations Act has broadened patient access to a wider range of services, specifically telecommunications and virtual delivery of health care, which allows patients to see providers without traveling to a health care facility.[2]

Interestingly, Web-based computer- and mobile device–delivered treatment has demonstrated superior outcomes to traditional care.[3] Similarly, treatment delivered through video-conferencing has resulted in similar treatment outcomes and patient satisfaction compared with traditional face-to-face care for those with SUD.[3]

Maintaining personalized, evidence-based clinical care while limiting the spread of COVID-19 has required swift adaptation from health care providers. Telemedicine has been effective at bridging the gap among patients, providers, and health systems.[4] Authors from a large academic medical center in Baltimore, MD, anecdotally found that digital tools were beneficial in supporting SUD recovery during a global pandemic. Audiovisual tools like Zoom (Zoom Video Communications, Inc, San Jose, CA) and Doximity (Doximity, Inc, San Francisco, CA), as well as increased frequency of communication with patients, have been most helpful to supporting recovery. The barriers noted were related to patient privacy and increased tendency of patients to avoid treatment, similar barriers as when treatment is provided in the clinic. The intent of this narrative is to

discuss provider perspectives regarding benefits and barriers to telemedicine for SUD treatment during the COVID-19 pandemic.

Social Support Considerations

During the COVID-19 pandemic, telemedicine has been used in a variety of ways, making a positive contribution to SUD treatment. Virtual platforms like Zoom and Doximity have allowed protection from COVID-19 for patients and staff, continued access to care, lessened logistical burdens, and facilitated peer support groups and provider check-ins.[5]

Support from peers and allies is a well-known tenet of the recovery process. Research shows that increasing social investments, specifically sense of community, increases an individual's sense of overall social support.[6] In the authors' experience, maintenance of community partnerships, particularly those that provide housing, medication management, and peer support, has been most beneficial during the pandemic. These services offered by community partners continued to be offered in person, not virtually. It was found that continuing these services in person allowed patients to continue to be successful in their recovery processes. Patients were also provided the opportunity to participate in virtual group sessions with their peers if they were living independently. These virtual group sessions limited the risk of exposure to COVID-19 for patients and staff. However, if patients did not have access to the technology or were unable to operate it, they were permitted to come into the clinic where the medical assistant would set up the

technology. Patients and their counselors described these virtual group sessions as equally effective as in-person groups.

In the same way, when clinic operations are in person, the patient will often see his or her counselor and then have an appointment with the clinic provider. After the switch to telemedicine, counselors and providers did not see the same patient on the same day. In fact, all patient interactions with providers took place virtually. The team observed that patients felt more supported by the calls he or she received on differing days from multiple clinic team members, rather than seeing all team members on the same day. From a provider perspective, daily team Zoom meetings allowed for teamwork and collaboration to continue. Daily team Zoom meetings also gave providers a chance to discuss patient issues with counselors because the counselors interact on a more regular basis with patients. For example, 1 patient had recently been dismissed from the group home as a result of illicit drug use. This message was relayed to the provider in the team meeting, which resulted in the discontinuation of medication-assisted treatment because the patient was no longer in the program.

Patients with SUD often experience logistical difficulties when accessing care.[7] Examples may include navigating public transportation, time off from work, or childcare. Our team has found that the COVID-19 pandemic lessened the burden of some logistical difficulties. For example, some patients rely on public transportation or are the primary caregivers of children or family members, making it more difficult to attend appointments in person. It was also noted that using telemedicine can decrease the time those patients who work are off the job. For example, 1 patient worked in construction and often had to be at the job site early in the morning until the late afternoon. He was unable to take time off and navigate across town for an appointment. In this case, the patient was only responsible for answering a phone or video call, rather than navigating stressful logistical barriers to attend his appointment.

Medical Treatment Considerations

A commonly cited barrier to virtual SUD treatment is regulatory requirements for waivered providers, often necessitating an in-person visit.[8] After the Health and Human Services Secretary's declaration of a public health emergency due to COVID-19[9] and beginning March 16th, 2020, the US Drug Enforcement Administration–registered practitioners were granted permission to issue prescriptions for all schedule II to V controlled substances without an in-person medical examination. The declaration further stipulates that prescriptions may be issued as long as 1) the prescription is for a legitimate medical purpose and in the usual course of professional practice and 2) telehealth communication was conducted with an audiovisual, real-time, 2-way interactive communication and in accordance with federal and state laws.[10]

Similarly, the team has been able to use telemedicine platforms to successfully enroll patients in medication-assisted therapy, typically using buprenorphine or naltrexone. Using a 2-way audiovisual platform, the team was able to consistently conduct admission assessments. The group has been able to reliably administer the Clinical Institute Narcotic Assessment Scale for withdrawal symptoms (eg, visualization of restlessness, tremors, lacrimation, and gooseflesh) using a video platform. In addition, the team has been able to continue methadone maintenance from another treatment program (eg, should the patient have a documented history and physical within 14 days or had previously established methadone dosing).[11] The team did not note an increase in patient treatment fallout, although formal studies were not conducted. These electronic platforms have allowed many of the day-to-day clinic activities to continue as usual without the risk of exposure to COVID-19.

For mediation-assisted therapy, daily visits to the dispensary are typically necessary for compliance and monitoring. However, the COVID-19 pandemic has necessitated limiting in-person interactions whenever possible. Patients demonstrated success using the Medminder (Needham, MA) electronic pill dispenser with a locking feature that allows users access to only the correct compartment at the correct dosage time. The medication dispenser contains 28 compartments and can be controlled remotely. The Medminder also keeps a log of all patient activities, including pill counts, which can be accessed electronically by providers. Although the Medminder was not provided by the clinic, the cost is $49.99 per month, and many patients and providers felt the benefits and convenience outweighed the risks of COVID-19 exposure. The dispenser can be purchased online at www.medminder.com. This technology has not only increased medication compliance but also decreased the risk of COVID-19 transmission.

Technology and telemedicine, although undoubtedly useful, are not without drawbacks. Given the sensitive nature of SUD, the protection of patient's privacy is of the utmost importance. Providers must use Health Insurance Portability and Accountability Act–compliant software and ensure visits are in a private location. Although consents and privacy agreements are acknowledged before each visit, 1 barrier discovered during this pandemic is the potential for a patient privacy violation. For instance, during an admission visit, a patient failed to disclose that his significant other was online, listening through their discreet (difficult to visualize) Bluetooth earbuds. This likely would have been realized earlier had the visit been in person because patients must give permission for someone else to attend the visit. Moreover, education could have been directed toward both parties. It is additionally important for treatment team members to ensure that they, as well as patients, are in a private, distraction-free location. Total privacy may be difficult to achieve with telemedicine. The team found that patients often answered phone calls while on public transportation or on a crowded job site. Moving forward, it will be imperative to maintain transparency with patients as rules and regulations regarding telemedicine change.

Aside from patient privacy, denial plays an important role in SUD. Psychological processes such as distraction, forgetfulness, and repression may serve as variations of denial.[12] Our team found when patients were scheduled for telemedicine visits, they were more likely to use techniques such as forgetfulness or distraction to avoid discussing their treatment. When in person, it is generally easier to keep the patient on task. For example, the group found some patients would not answer their scheduled telephone calls or would be distracted by talking to someone else during their visit. Although most patients were not likely to fall out of the treatment program entirely, they were more likely to occasionally miss scheduled visits. If the visits had been in person, this may not have been the scenario. Future research should be directed toward quantifying patient fallout from treatment.

As a whole, the COVID-19 pandemic caused a rapid transition to telemedicine for SUD treatment. Although the authors discovered drawbacks such as potential privacy violations and increased tendencies for denial, they noted that the benefits far outweighed the drawbacks. The team found patients were generally receptive to receiving care via virtual platforms because this reduced their concerns related to transportation, caregiver roles, and exposure to COVID-19 while still promoting recovery. The most effective technological platforms were Doximity and Zoom, whereas Medminder proved to be a promising electronic pill dispenser. In the time of a global pandemic, telemedicine, from a provider perspective, has been a promising option to effectively provide care for those grappling with SUD.

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