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Role of Peer Coaches in Digital Interventions for MOUD Initiation and Maintenance

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Abstract

Millions of Americans suffer from opioid use disorder (OUD) in the United States, resulting in thousands of deaths. The ongoing opioid crisis necessitates novel approaches to reduce the morbidity and mortality associated with misusing opioids. Studies using peer support models show success in engaging persons living with OUD in initiating treatment and decreasing relapse. Although most studies have focused on patients in clinical settings, community studies integrating peer community leaders also show promise. This viewpoint paper explores the use of peer coaches in online interventions in the community setting.

Keywords

intervention; medications for opioid use disorder; online; opioid; peer coaches; technology

Background

The opioid crisis in the United States (US) resulted in more than 75,000 deaths from 2020-2021.[1] Approximately 21% to 29% of adult patients suffering from chronic pain recently misused opioids and 8% to 12% developed OUD.[2] Among youth, initiation began with non-prescription opioid followed by heroin use, and heroin injection, with first overdose occurring within a year of using heroin.[3] Treatment for OUD is available and effectively reduces opioid use.[4,5] Investigators reviewed studies examining the effects of medication for OUD (MOUD) and found that risk for mortality and overdose were highest among untreated participants compared to those who stopped MOUD or currently

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Author contribution

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Conflicts of Interest

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Declaration of interest

The authors declare no competing interests.

enrolled in a program. Additionally, long-term maintenance of over one year was associated with a decreased risk of mortality compared to maintenance under one year.[6] Those in different phases of recovery showed a penchant for different treatment services, with those in early recovery (less than 1 year) utilizing outpatient treatment and recovery community centers and those in mid recovery (between 1-5 years) using inpatient treatment and state/local recovery organizations.[7] However, both groups participated in mutual help groups, such as Narcotics Anonymous (NA) and also received buprenorphine-naloxone.[7] Although medication is available, overall use is low, even among individuals who had an episode of non-fatal overdose.[8,9]

Low rates of treatment stem from a variety of reasons. Limited number of treatment facilities offering at least one medication for OUD creates challenges for access to treatment for patients.[10] Other provider barriers include inadequate staff training, limited access to counseling and addiction experts, pain management concerns, apprehension to efficacy of treatment, and worry about reimbursement.[11] For those who misuse opioids, barriers to treatment initiation include low readiness,[9] drug court jurisdiction,[12] lack of insurance or program eligibility,[13] and misinformation and stigma.[14,15] Challenges retaining in treatment programs range from personal experience to provider action. Patients who felt stigmatized, experienced discrimination, and feared potential violations of privacy and confidentiality tended to discontinue their treatment.[16] Other challenges include logistics such as adequate childcare[17] and lack of transportation.[18] Provider concern for patient and employee safety, continued substance use, inability to pay for treatment, and incarceration also pose as barriers for program retention.[19]

Clinicians, researcher scientists, public health agencies, and communities have developed programs to mitigate the crisis to reduce the morbidity and mortality associated with opioid misuse. The use of peers, individuals who are in recovery, has showed promise in engaging those currently misusing opioids in their recovery effort. Peer support models utilize the life experience of individuals in recovery to support participants in their effort to recovery and minimize relapse through respect, understanding, and mutual empowerment.[20] Studies using peers to assist participants navigate recovery have been effective in initiating treatment for substance use disorder and maintenance.[21-23] Systematic reviews and meta-analyses have demonstrated efficacy in using peer support to link those living with OUD to recovery services. While most peer support studies have focused on bridging patients to treatment programs, this paper examines the use of online technologies in assisting peer models in the community setting.

Types of digital tools used in MOUD studies

Though sparse, previous investigators have utilized digital tools in opioid treatment research. A pilot study using smartphone technology to deliver information about MOUD to increase uptake showed increase interest in participants after the study compared to baseline.[24] Similarly, ecological momentary assessment (EMA) was used to provide participants diagnosed with OUD and chronic pain with behavioral therapies focusing on mindfulness. Findings showed that participants in the intervention arm had greater self-control over cravings than control participants.[25] A study conducted on chronic pain patients on opioid

therapy found that participants openly discussed opioid and addiction-related topics on social media, suggesting social media as a forum for behavioral intervention.[26]

Peer models used in intervention studies to initiate MOUD

In following interventions for alcohol use disorder, investigators examined the efficacy of peer support in MOUD initiation among those who misuse opioids in various settings. In primary care, trained peer recovery specialists (PRS) have provided a wide range of services to patients such as facilitating support groups, individualized personal support, and navigating services. Study results showed that, though not significant, participants had a slight increase in attendance in outpatient substance use treatment and mutual help groups (MHG) like Narcotics Anonymous (NA) or Alcoholics Anonymous (AA), as well as inpatient/residential use.[27] Investigators also examined the peer support model among individuals using emergency care. Peer coaches provided non-clinical recovery support and guidance to participants navigating the initial stages of recovery. Study findings showed a high proportion of participants enrolled in treatment after 30 days but decreased after 90 days.[9] Another study conducted in the Emergency Department (ED) used a three-arm trial: usual care, naloxone alone, and naloxone and peer recovery coach. Participants who received naloxone and a recovery coach had shorter time to initiate treatment compared to usual care.[28] The capacity of PRS to initiate treatment uptake or seek MHG for ED patients were replicated in rural settings.[29] In the community, investigators used peer outreach to recruit participants into a study in high risk settings. Participants initiated treatment and remained after 30 days.[27,30]

Using peer coaches for digital intervention studies in community settings

Research design

Due to their lived experience, peer coaches would be able to provide knowledge and insight into the barriers and facilitators of treatment uptake among persons living with OUD. They can be utilized as consultants during the design phase of the intervention and provide ideas and feedback about program features that may or may not have worked for them or friends, recruitment methods and study promotional materials, and types of compensation that would appeal to potential participants. Through their unique lens, peer coaches can guide researchers to better tailor existing programs to best suit their potential participants.

Recruitment

Investigators have used social media to recruit participants in many fields, but typically recruitment has been conducted by study staff. Peer coaches might be helpful in study recruitment as they may be able to better connect with potential participants on social media. Subreddits, content-specific subgroups within Reddit, about opioids discuss a variety of topics including themes of opioid abuse, withdrawal, and social support.[31] These and other online forums may be a venue for peer coaches to promote research studies to reach individuals with OUD or family/friends of those living with OUD. Peer coaches can use their lived experience to engage with other redditors and online forum users. Similarly, Facebook has closed groups specific for opioids. Peer coaches can send a message to

the group's administrators asking for a platform on their group to promote the study and answer any questions group members may have about participation and involvement. Prior to promoting a study in a group, it would behoove peer coaches to communicate with and get feedback from online moderators to get buy-in from participants.[32]

Intervention

Smartphone ownership continues to rise in the US.[33] Peer coaches can provide individual engagement using smartphones to call, text, or participate in a Zoom call with study participants. One-on-one interactions offer a more intimate and personalized connection to participants and trained peer coaches which some participants may gravitate towards. A less time-consuming study would use EMA to dispense information to participants about MOUD. A more automated, less personal approach for information dissemination may appeal to some potential participants.

Similar to individual engagement with peer coaches, peer support groups showed potential in assisting with initiating treatment, program maintenance, and diminished relapse rates.[34] Previous investigators examined a subreddit for persons in recovery and found that redditors discussed a variety of topics including: relapse concern, seeking help from medical professional, physical and mental effects of opioid use, polydrug use, as well as sought and proffered advice.[35] A study on Facebook private groups found that patients experiencing chronic pain discussed opioid and addiction-related topics openly, and that the peer-led intervention led to decreased anxiety and risk factors for opioid use disorder.[26,36] Peer coaches can moderate online interventions to guide discussions around MOUD, myths, experiences with MOUD, cost and insurance, and stigma, as well as keep the group a safe place for members to engage without fear.

In peer support model studies, participant attendance in MHG resulted in long-term retention. An intervention study to maintain treatment could potentially leverage these findings to focus on encouraging peer navigators to connect participants with virtual sessions of NA or virtually attend with participants in open meetings. Attendance in MHGs was independently associated with long-term opioid abstinence.[7,37] Attendance in mutual help groups not only leads to increased abstinence rates but may provide cost-savings benefits to patients.[38]

Online forums that serve as an alternative to NA specifically for individuals currently enrolled in an MOUD program may attract potential participants not interested in NA. Stigma or strong negative opinion amongst NA attendees who believe that taking opioid agonist as not true abstinence[27,39] may deter potential participants from enrolling or engaging. Although attendance in 12-Step groups (TSG) are effective in increasing abstinence and reducing substance use, those who were not religious or spiritual attended fewer meetings compared to those with spiritual tendencies.[40] Other aspects of the TSG also caused member disillusionment and frustration leading to disengagement.[41] Alternatives to TSG were as effective in the recovery process[42] and may provide benefits to members frustrated with TSG. Online forums create a sense of community where members feel supported in exchanging ideas and information, resisted stigma and negotiated drug-using identities, and created empowerment among participants.[43] The lived experience of peer

coaches afford them trust in discussing treatment modalities and behaviors not bestowed to physicians or pharmacists.[44] A benefit of online communities via forums, social media, or mutual help groups is anonymity. It is a space where members can participate anonymously without fear of reprisal or punishment if discovered.

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Implications for Behavioral Health

Research using peer models has shown promise in increasing treatment uptake among individuals who misuse opioids and remain in treatment programs. Lived experience of peer coaches afford them insight into potential research participants which may be beneficial to researchers in various stages of study development and progress. The ability of peer coaches to form authentic connections with participants online may assist in building trust to facilitate openness among participants to treatment recommendations. Expanding studies of and use of peer models may have significant potential impact for behavioral and public health.