



## Research Article

# Implementation of a Mindfulness Intervention in an Underserved Drug Abusing Population in the Community: A Brief Report

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### Abstract

In this article, we outline a neuroscience informed Mindfulness-Based Stress Reduction (MBSR) intervention that is currently being implemented in an underserved drug abusing population in the Newark, New Jersey community. MBSR has shown to improve mental and physical health, and decrease drug craving and relapse. We provided MBSR training to the clinicians at the four drug addiction treatment sites in Newark who are serving individuals with substance use disorder. Fifty clients with substance use and comorbid mental health disorders from three drug treatment sites are currently receiving MBSR once a week for an hour. We report several unforeseen barriers that we faced during the pre-implementation phase of the MBSR intervention. Finally, we outline techniques that can expedite mindfulness intervention implementation in drug addiction treatment sites in the community.

**Keywords:** Community; Implementation; Mental health; Mindfulness intervention; Substance use; Underserved

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### Introduction

In this article, we discuss about an evidence-based neuroscience informed Mindfulness-Based Stress Reduction (MBSR; [1,2]) behavioral intervention that is currently being implemented in a vulnerable and underserved population in the Newark, New Jersey community to improve mental and physical health and decrease substance use. MBSR has been demonstrated to decrease drug craving and relapse, stress, pain, depression, and anxiety and to improve emotional regulation, impulse control, memory, mood, and physical health [3-5]. The MBSR intervention is a mind-body complementary health approach that focuses on the relationships among mind, body, brain and behavior. Burnett-Zeigler [6] found evidence for the efficacy of mind-body approaches for several mental and physical health symptoms, and overall quality of life in disadvantaged racial/ethnic minorities, similar to those in the Newark community. Social support is crucial for persons trying to recover from substance use disorder, whereas social isolation is a risk factor for relapse. During the COVID-19 pandemic, those in recovery are facing additional stresses (social isolation, job loss, adverse family environment) and are experiencing heightened craving to use substances and are at an increased risk for relapse [7]. This risk may extend through the aftermath of COVID-19 [8]. Newark has the highest rates of substance use in New Jersey. MBSR is not currently used by providers in Newark that are dealing with vulnerable and underserved racial/ethnic minorities with substance use and mental health disorders, but would clearly stand to benefit from such an intervention. The MBSR intervention is urgently needed to reduce stress, anxiety and drug craving, use and relapse in minorities with substance use disorders in Newark who are currently engaging in drug addiction treatment.

### Methods

We initiated the MBSR project in the Newark Community in January 2021. One of the major strengths of this project has been our ability to provide MBSR training to the clinicians at the four drug addiction treatment sites in the Newark community who are serving individuals with substance use disorder. These clinicians were trained and certified to offer MBSR during the first four months of the project, from January to April 2021. They received training from a Certified MBSR teacher trained and certified at the Center for Mindfulness at UMass Medical School by Dr. Jon Kabat-Zinn, the founder of MBSR in the United States. The clinicians were trained once a week for 1 hour for 8 weeks. They were provided additional readings on MBSR and completed weekly homework. The clinicians reported mental health (for example, perceived stress) benefits from taking part in the training. The certified clinicians and the trainer then created two MBSR audio recordings that have been essential to provide the intervention effectively to the clients. The clinicians also provided feedback to the study team as well as to the MBSR trainer after each version of the MBSR audio recording was created, providing suggestions about language changes and topics to include to aid us in addressing the needs of their clients in Newark. Also, the clinicians and leadership of each treatment site, as well as the author of this article

met several times during the MBSR pre-implementation phase, that is during month 4 to month 8 of the project (April 2021 through August 2021) to address the barriers to successfully implement this behavioral intervention at the drug addiction treatment sites. From month 9 to the present time (September 2021 onwards), this intervention is currently being implemented in three treatment sites. The intervention is being offered remotely through zoom teleconferencing platform that has allowed the clients considerable flexibility in scheduling their intervention sessions with their clinicians. Fifty clients with substance use and comorbid mental health disorders from three treatment sites are currently receiving MBSR once a week for an hour for 6 weeks. Additionally, each client is required to practice MBSR at home using a MBSR audio recording for 15 minutes each day. The majority of these clients are African American (20-70 years; 40% women) and are from low socioeconomic background. We are collecting pre- and post-MBSR intervention data from each client to examine MBSR induced changes in physical health (heart rate, blood pressure), mental health (perceived stress [9], anxiety [10], difficulties in emotional regulation [11]) sleep [12], drug craving and drug use. These data are being collected online and on hard copies.

## Results

There were several unforeseen barriers that we faced before implementing the MBSR intervention in the community. First, after discussion with the four treatment sites, we originally decided that 71 clinicians from these four treatment sites in Newark were to be trained in MBSR. However, after training began in February 2021, we were only able to train and certify 28 clinicians (2 clinicians dropped out) due to scheduling constraints and lack of clinician time. One site identified 52 clinicians including resident physicians to be trained, but only 18 started the training. However, none of these clinicians had the time to dedicate to the project, and thus most of them could not meet the minimum requirement for MBSR certification due to lack of their attendance at training sessions. Three of them were certified, but none of them had adequate time to implement the intervention.

Second, the certified clinicians those who were ready to offer the intervention did not receive a very encouraging response from some of their clients to take part in the intervention and fill out the pre- and post-intervention questionnaires. To address this concern, we started a gift card payment incentive to get more clients interested in the project. Third, another barrier was limitation in technology accessibility as some of the treatment sites were operating virtually to follow the COVID-19 protocol. Some participants brought to our attention their inability to access email because of a lack of knowledge about these technologies or because of restrictions in their treatment setting that limited the use of technology. This resulted in a low number of survey responses after the surveys were distributed via the REDCap data collection software to their email. To address these barriers and avoid further participant attrition, we had to strategize with the clinicians and leadership from the treatment sites to provide clients with the opportunity for technology access, and to offer them the option for paper copies of all project materials.

Fourth, we originally outlined in our project that clinicians would meet with their clients twice a week to offer the intervention. However, not all clinicians were scheduled to meet with their clients twice a week in their regular treatment protocol. Thus, our MBSR protocol was modified that allowed the clinicians to meet with their clients once a week to deliver the intervention. Some clinicians had concern

that they would not be able to offer the intervention for 8 weeks as their clients' length of stay at the treatment site is less than 8 weeks. As a result, we shortened the MBSR protocol from 8 weeks to 6 weeks on consultation with the MBSR trainer. The clinicians were given a modified 6-week long MBSR intervention protocol after consultation with the MBSR trainer. In addition, creating two MBSR intervention related audio recordings with feedback from the clinicians from four sites was a time-consuming process. It took 3 months, spanning from May 2021 to July 2021.

Fifth, another unexpected barrier that we faced was that from each treatment site, some of the certified clinicians were not able to offer the intervention to their clients due to lack of their interest, not having enough contact time with their clients, and due to the fact that multiple clinicians resigned from their positions. Finally, while 26 clinicians were certified in MBSR, only six clinicians from the three treatment sites are currently implementing the intervention. Thus, fewer clients are participating in the project than we originally expected due to the fact that only six clinicians are offering the MBSR intervention. These six clinicians are highly motivated and they are currently offering MBSR to 50 individuals with substance use and comorbid mental health disorders. One important point to note here is that the initial response to MBSR from the clients has been very encouraging.

## Conclusion

One valuable lesson learned during the project has been that although clinicians were trained and are currently present at the treatment sites, some of them were not able to implement the intervention due to their inflexible work schedules. In addition, another lesson learned has been the flexibility that we needed to implement this intervention in a community as some of the clients are in a treatment facility that is short-term. As a result, we needed to adapt the MBSR intervention duration from 8 weeks to 6 weeks after consultation with the MBSR trainer. For future implementation sites, the clinicians should be informed by the leadership of the drug addiction treatment sites in advance that they would be required to implement the intervention at their respective sites if they would like to take the MBSR training and get certified. Clinicians should also be offered an extra incentive in order for them to offer the MBSR intervention to their clients as it requires extra work and time commitment. In addition, implementing an intervention at multiple drug addiction treatment sites with different treatment modalities (inpatient, outpatient, and halfway house) is very complicated and requires a lot of coordination and time commitment. To address this, the project team members should meet with the clinicians regularly during the pre-implementation phase to resolve issues and thus can expedite intervention implementation. Due to budgetary reasons, a single IRB approval for this multisite study could not be obtained. In the future, similar projects should obtain a single IRB approval that will allow the individual treatment sites to involve in research and collect data from the clients that will accelerate the project completion time.

## Declaration of Competing Interest

The author declares that she has no known competing financial interest or personal relationship that could have appeared to influence the work reported in this article.

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