Creating a More Equitable World in Addiction Treatment

Nikki Beavers

Metropolitan State University of Denver: Honors Program & Department of Social Work

Professor P. Corvino, LCSW, MA, LAC, ABD, & Dr. M. Hughes

05/13/2023

Abstract

Substance use disorder (SUD) is a disease in which a person's ability to function at work, home, or in their social life becomes impaired because of their reliance on a substance such as alcohol or prescription painkillers. There are a number of evidence-based interventions for substance use disorders, each with a varying level of effectiveness. Although these interventions can lead to significant and meaningful changes, clients may not be as aware of certain interventions as they are of others. Additionally, each intervention has a financial cost. In this paper, I performed a review of the literature discussing different types of substance use disorder interventions and how financial cost acts as a barrier to accessing treatment. Then, I examined the levels of awareness among the general public and how financial costs affect a person's ability to receive effective help across Colorado through a survey. The survey showed that many people who have struggled with addiction did not receive treatment because they could not afford it or because they did not know how to access it.

Creating a More Equitable World in Addiction Treatment

Throughout time and across cultures, there have been many different views of substance use – regarding how and when to use the substance, how much to use, and how to act when under the influence. Therefore, substance use disorder (SUD) may look completely different in one community than it does in another (Room, 2020). Consider a spectrum of use: banalized, intermittent, and dependency. Banalized use refers to when a substance is freely available in a consumer market and its use is considered normal (Room, 2020). Intermittent use refers to a substance being less frequently used, which limits a person's risk of developing a tolerance (Room, 2020). Dependency refers to a person using large doses of a substance regularly, no longer involving a social pattern (Room, 2020). The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) defines SUD as the continued use of a substance despite problematic consequences leading to a development of symptom patterns (Hartney, 2022). Addiction is slightly different in definition: "a treatable, chronic medical disease involving complex interactions among brain circuits, genetics, the environment, and an individual's life experiences," (ASAM, 2019, para. 1). When a person is suffering from addiction, they may look past the harmful consequences of their actions and continue to use the substance(s) either by choice or an inability to stop (ASAM, 2019). In this paper, the terms SUD and addiction will be used interchangeably because they are so similar.

Bacon describes the eight defining characteristics of addiction as: (1) a chronic disease, (2) a person may be unable to consistently abstain from the substance, (3) a person's behavioral control is impaired, (4) a person may be unable to recognize the problems that are being caused by the substance use, (5) a person may be unable to regulate their emotional responses, (6) a person experiences cycles of recovery and relapse, (7) a person develops a tolerance for the

substance and experiences withdrawal symptoms when not using, and (8) the disease may progress and result in a premature death (2019). Substance use typically begins in adolescence, but that is not always the case (Rehm et al., 2020). Certain economic, cultural, and biological factors may also contribute to the development of SUD (Rehm et al., 2020). The availability and advertising of a particular substance, a person's social network, and their home environment may influence when and what substance a person uses (Rehm et al., 2020). Early onset casual substance use increases a person's likelihood of developing hazardous using patterns across substances later in life (Rehm et al. 2020). Additionally, higher rates of SUDs have been found in people with pre-existing anxiety, mood, and/or personality disorders (Rehm et al., 2020).

In this paper, I will first present the literature on the wide range impacts of substance use disorder, the history of addiction treatment in the U.S., the current types of interventions available, and how the financial cost of those interventions inhibits access. Then, I will present my results from a survey I conducted among Colorado residents to determine how much the general population knows about different interventions and how financial cost directly impacts people's ability to participate in them. Lastly, I will discuss why these results are important and what changes need to be made.

Personal Background

I am an undergraduate social work student who has been learning a lot about the profession and is working toward becoming an effective practitioner. I have several family members who have struggled with SUD and who have sought varying degrees of treatment. This has inspired me to think more about the people who are not involved in mental health fields and may be unaware of their options or simply may not be able to afford the help they need. I also do not know exactly how many people in the Denver area are aware of their treatment options and

how many people are facing cost barriers. I have gathered relevant data from the social work literature about the types of available, evidence-based substance abuse treatments and how low-income people may not be able to access these treatments. To augment the social work literature, I conducted a survey that will provide a significant contribution to the existing knowledge of cost and awareness barriers to substance abuse treatment by focusing specifically on people in the Denver-metro area. I hope that my research may inspire local organizations to expand their treatment educational initiatives and lower their costs. I have completed the required CITI trainings and I have experience conducting informal, non-research related surveys through social media. My first and only fluent language is English, and I am familiar with drug culture in the United States.

Literature Review

In this section, I will be reviewing the literature on the wide range impacts of substance use disorder. Then, I will provide a basic overview of different treatment and intervention types. Finally, I will explore how the financial costs of intervention impedes clients' ability to access it. This section is supported by peer-reviewed literature and government organizations.

Wide Range Impacts of Substance Misuse

In addition to the negative impacts SUD has on the person who is struggling, addiction can also have overwhelming negative effects on the individual's loved ones and society. The Global Burden of Disease Study (2017) estimated 71.2 million people living with a drug use disorder and over 107 million people with an alcohol use disorder around the world (Rehm et al., 2020). These numbers also underestimate the number of people who are truly affected by addiction because not everyone who struggles reports it (Rehm et al., 2020).

When a person is suffering from SUD, their immediate family must face a myriad of problems and is flooded with challenges. Relationship stress and substance abuse often influence one another, creating a cycle of distress that is difficult to break (Klostermann & O'Farrell, 2020). Having a partner in active addiction can be the cause of sexual dissatisfaction, psychological distress, conflict, and instability (Klostermann & O'Farrell, 2020). Having a parent with a SUD increases the likelihood of developing substance abuse during adolescence and may increase stress levels which are dangerous to a child's healthy development (Klostermann & O'Farrell, 2020). Addiction in the family can also create co-dependency, where any given family member may become intertwined with their loved one's addiction and begin exhibiting behaviors that help sustain the addiction (Klostermann & O'Farrell, 2020). Because of the extensive impact of an individual's addiction on their loved ones, countless families know the struggle of watching someone close suffer from addiction. Communities and families also lose productivity and miss the potential of a person's lifetime earnings and contributions when they lose their life prematurely to addiction (Kuehn, 2021). However, the wider societal impacts may be more difficult to observe.

Disability adjusted life years (DALYs) measure the numbers of years of life lost due to a disease (Rehm et al., 2020). In the same previously mentioned 2017 GBD study, 17,463,000 DALYs were lost to alcohol and 27,187,000 lost to drugs globally; the United States had the largest burden of drug use disorders with an estimated 1,696 DALY's lost per 100,000 people (Rehm et al., 2020). Additionally, the U.S. life expectancy declined in 2013, solely because of the rising number of overdose deaths (Corredor-Waldron & Currie, 2022). Losing this many years of life to SUD creates a reduced quality of the life that remains. This reduced quality of life starts with the individual and spreads to the community.

When a person suffers from addiction or dies from an overdose, their communities suffer immense financial losses. In the US alone, estimates indicate that the opioid epidemic costs over $1 trillion due to job losses and medical treatment, and those costs continue to increase (Kuehn, 2021). Preventing overdose can greatly reduce the personal loss and financial cost associated with addiction. Naloxone is an emergency response medication that works to temporarily reverse the effects of an opioid overdose (Abdelal et al., 2022). While there was a 53.7% increase in the number of patients who needed multiple Naloxone administrations from 2019 to 2020 (Abdelal et al., 2022), keeping people alive affords them the opportunity to seek treatment. Conversely, reducing overdoses has increased the workload for first responders and emergency room personnel, putting a strain on the healthcare system (Abdelal et al., 2022). Chronic substance use increases a patient's emergency room use by roughly a third, subsequently increasing the number of resources being utilized in emergency response settings (Corredor-Waldron & Currie, 2022). Criminal justice expenses increase when a person is arrested for manufacturing, distributing, or possessing substances, which is directly related to their SUD (Kuehn, 2021).

In addition to these financial impacts, communities lose valuable relationships and sources of social support. Each time a person dies, they leave behind an average of five people grieving the loss (Krull, 2022). There were 106,699 who died from drug-involved overdose deaths in 2021, which would mean there were roughly 533,495 experiencing grief that year (NIDA, 2022). Grief symptoms typically last between one to two months, but roughly 10-20% of grievers experience complicated grief: extensive feelings of loss and depression that seem to have no end (Krull, 2022). Experiencing grief affects the workplace: there is a documented increase in compromised decision making potentially leading to an increase in personal injury (Krull, 2022). The effects of grief may cause an increase in the number of negative interactions a

person has with friends, family, and society in general. which can invoke widespread feelings of upset throughout the community.

Avoiding addressing the addiction crisis in the United States is costing everyone far more than they would have to pay to implement affordable, accessible interventions, and it is causing unnecessary emotional devastation to individuals, families, and communities. For every $10,000 spent on addiction assistance, societal costs of SUD decrease (including added healthcare expenses, workplace injuries, job losses, and crime), providing a measurable benefit ranging from $25,000 to $97,000 (Bacon, 2019). These numbers suggest that it is misguided to ignore those who need help and let them suffer. Instead, we could implement cost-effective ways to provide the support people need before their addiction becomes an emergency. Given the financial and emotional toll addiction can take on society, it is important to find ways to effectively address the problem.

Treatment Overview

A 2012 study showed that 23.1 million people over the age of 12 in the US needed addiction intervention, but only 10% actually received it, and it was more likely for people to receive help for drug addiction than for alcoholism (Bacon, 2019). However, 40% of people in that study also reported that they were not ready and did not want to stop using (Bacon, 2019). Furthermore, 59% of people admitted to formal addiction treatment programs have already had at least one other treatment experience (Bacon, 2019). Variables such as the length of time a person has been struggling with addiction, the person’s age, the timing of beginning an intervention, and the length and intensity of the intervention can all impact how successful a person’s experience is (Bacon, 2019).

It is also important to consider that addiction intervention is not a one-size-fits-all solution; different types of interventions work for different people, and a client's preferences should always be considered (Bacon, 2019). A client may not commit to their intervention if they are not ready (Kim et al., 2022). Nearly 50% of people who ended their intervention early said they had no good reason to discontinue their substance use (Kim et al., 2022). When a person decides they are ready for intervention, they will be more likely to participate. Illness awareness is defined as a person's knowledge that their substance use is a problem that is causing their symptoms and negative consequences, and the awareness and acceptance that there is a need for help (Kim et al., 2022). People with a higher level of illness awareness have better engagement and adherence to their intervention plans (Kim et al., 2022). Before diving into the types of interventions that are available today for addiction, it is important to understand the roots of treatment in the United States.

History of Treatment

The first official addiction treatment center in the United States had a focus on alcoholism and was established in New York in 1864 (Bacon, 2019). By 1909, nine alcohol treatment facilities were operating across the U.S., each providing some or all of the following: isolation from the triggers of a client's normal life, social support, religious/spiritual practices, music therapy, detoxification, work, self-reflection, recreation opportunities, and acts of service (Bacon, 2019). The first outpatient clinic to offer psychological counseling as the primary treatment was The Emmanuel Clinic, founded in Boston in 1906, which set the groundwork for today's most common treatments (Bacon, 2019). Although treatments were established, they were primarily focused on treating men with alcoholism. Women alcoholics were steadily

ignored (Bacon, 2019). The same patriarchal attitudes are still lingering in the treatment world now (Bacon, 2019).

Visualization, self-hypnosis, and relaxation techniques were developed as treatment options by Richard Peabody and remained the standard approach across the country until the late 1950's (Bacon, 2019). By the 1960's, the Minnesota Model of treatment was developed to incorporate aspects of 12-step programs with aspects of residential care and education (Bacon, 2019). There are nine general criteria that programs must follow when implementing the Minnesota Model: (1) alcoholism is a progressive disease that can be treated, but not cured, (2) treatment outcomes cannot be predicted by the motivation of the client at the start of treatment, (3) the physical, spiritual, and social components of treatment are all equally important, (4) it is essential to treat clients with respect and dignity, (5) clients are typically susceptible to a wide range of substances, and should be classified as having a chemical dependency, (6) multidisciplinary teams are required to form an individualized treatment plan for each client with a chemical dependency, (7) every client will be assigned an individual counselor, and they tend to be in recovery themselves, (8) working the 12-steps of AA is included in all of the best treatment programs, and (9) psychoeducation, and group and individual counseling must all be incorporated into treatment (Bacon, 2019).2

In 1962, the Supreme Court issued a ruling stating that addiction is a disease and declaring it unconstitutional to punish someone simply for suffering from it (Bacon, 2019). Insurance companies began accepting the medical model of addiction after the Comprehensive Alcoholism Prevention and Treatment Act of 1970 passed and the National Institute on Alcohol Abuse and Alcoholism and the National Institute of Drug Abuse were established (Bacon, 2019). Embracing alcoholism and addiction as disease allowed treatment programs to become far more

widespread and accessible, although many counselors at these treatment facilities were newly sober themselves and did not have any formal training (Bacon, 2019). When the National Association of Alcoholism Counselors and Trainers (NAACT), the National Association of Alcoholism Counselors (NAAC), and the National Association of Alcoholism and Drug Abuse Counselors (NAADAC) were created, the facilities' counselors finally received proper training and were able to improve the care they provided. Around this same time, addiction medicine emerged and created the American Society on Alcoholism and Other Drug Dependencies (ASAM) (Bacon, 2019).

With the help of these organizations and society's increasing acceptance of addiction as a disease, treatment programs became more detailed and effective (Bacon, 2019). Medical detox, group and individual counseling, physical fitness, and Alcoholics Anonymous (AA) grouped together became the standard treatment regimen, typically including 28 days at an inpatient program and a brief outpatient aftercare program upon release (Bacon, 2019). This regimen is influenced heavily by the Minnesota Model which remains the prominent treatment philosophy.

Treatments and Interventions Today

According to the Substance Abuse and Mental Health Services Administration (SAMSHA), substance abuse treatment can include any combination of the following: individual counseling; group counseling; residential treatment; partial hospital programs; intensive outpatient treatment; case management; medication assistance; recovery support; and a 12-step program (Bacon, 2019). There are a variety of different philosophies that influence addiction treatment as a profession, including the following: a physician uses a medical model; addiction is seen as self-medication through a psychiatric model; addiction is seen as maladaptive learning through the lens of a psychological model; a sociocultural model looks at addiction as a

consequence of peer influence or family dysfunction; and a spiritual model that views addiction as the failure of a person to find meaning and purpose elsewhere (Bacon, 2019). As of 2012, the United States was home to over 16,000 drug and alcohol treatment programs that incorporated these components (Bacon, 2019). Although some treatments may be more widely available than others, the length and type of treatment that a person can receive is dependent on the severity of their substance use, the presence or lack of a third-party payer, and a person's own resources (Bacon, 2019). There are also interventions available that may not be qualified as treatment but can provide equally beneficial assistance.

Below is a brief overview of some of the different types of treatments and interventions that are available for substance use disorders. This overview provides a glimpse into the many options a person could have if they knew what was out there and had the resources to access it.

Family Therapy.

When families become involved in a person's addiction journey, they can help encourage the individual to seek treatment, they can participate in treatment directly with the individual, or they can receive their own treatment to deal with the consequences of their loved one's addiction (Kourgiantakis & Ashcroft, 2018). It is more likely that family members will see a reduction in the harm that is being inflicted upon them by the person struggling with addiction when they are able to be involved in treatment and receive help for their own struggles (Kourgiantakis & Ashcroft, 2018). Family involvement also makes it more likely for a person to enter treatment in the first place (Kourgiantakis & Ashcroft, 2018). There are several methods that can be used to incorporate the family into an individual's treatment for substance use disorder.

Family Focused Prevention Interventions – such as the Focus on Families Project, Preparing for the Drug Free Years, Family Effectiveness Training, and the Strengthening Families Program – focus on the positive development of children living in a home with substance abuse to try and decrease the potential for them to use in the future (Klostermann & O'Farrell, 2020). Community Reinforcement Training (CRT) is a method that introduces clients to new types of social reinforcements that help a client recognize abstinence as being more rewarding than continued substance use (Klostermann & O'Farrell, 2020). Community Reinforcement and Family Training (CRAFT) is a subset of CRT where the client's family members are taught how to improve their communication skills, how to remain safe in potentially dangerous or triggering situations, and how to help the individual identify ways to improve their motivation for change (Klostermann & O'Farrell, 2020).

Unilateral Family Therapy helps an individual's family create an environment that supports abstinence (Klostermann & O'Farrell, 2020). Family members are first taught are given a set of formal steps to work through to help improve their overall family functioning and strengthen their coping skills (Klostermann & O'Farrell, 2020). Then, family members are encouraged to confront the person who is experiencing problematic substance use and encourage them to seek formal treatment (Klostermann & O'Farrell, 2020). Multisystemic Family Therapy (MFT) is a form of treatment where the therapist helps the entire family identify their strengths individually and as a whole (Klostermann & O'Farrell, 2020). MFT helps the family find ways to improve their structure and cohesiveness around a person's substance use (Klostermann & O'Farrell, 2020). Finally, Network Therapy is a treatment method that enlists the help of a client's friends and family to act as a strong support network that guides the client through difficult times (Klostermann & O'Farrell, 2020). This form of therapy believes that a majority of

a client's change takes place in between sessions, rather than during them (Klostermann & O'Farrell, 2020).

Couples Therapy.

Behavioral Couples Therapy (BCT) is a form of treatment that involves a person who is struggling with substance abuse as well as their romantic partner (Klostermann & O'Farrell, 2020). BCT typically consists of 12-20 sessions across 4-6 months where both partners are present and learn how to decrease substance use while improving relationship functioning (Klostermann & O'Farrell, 2020). BCT assumes that the interactions between a person struggling with addiction and their partner can either help maintain or disrupt the problematic substance use behavior (Klostermann & O'Farrell, 2020). During BCT sessions, each partner is taught individual coping skills as well as how to reshape unhealthy interactions they may have with one another that could be contributing to the substance use (Klostermann & O'Farrell, 2020). Clients are shown skills in communication and conflict resolution and develop a continuing recovery plan. Couples that have participated in BCT have been shown to experience fewer substance-related problems, have happier relationships, and experience a lower rate of divorce/separation compared to those who participated in individual treatment instead (Klostermann & O'Farrell, 2020).

12-Step Programs.

There are a variety of Twelve Step Facilitation (TSF) programs that exist with a narrow focus on a specific substance – for example, Alcoholics Anonymous, Narcotics Anonymous, Cocaine Anonymous, etc. – however, the overall objective of every TSF program is to attain complete abstinence (Bog et al., 2017). Each TSF program accepts new members under the idea

that they have lost control of their substance use (Bog et al., 2017). Members must agree to identify as an addict, they must accept the disease model of addiction, and they must strive to achieve abstinence (Bog et al., 2017). This intervention method attempts to provide members with a new way of living that replaces the need for a substance by guiding them through a list of 12 specific steps they must follow (Bog et al., 2017). As the oldest and most popular 12-step program with over 2 million members, the steps of Alcoholics Anonymous (AA) serve as an outline for all the other programs (Bog et al., 2017).

AA's steps are: "(1) We admitted we were powerless over alcohol – that our lives had become unmanageable, (2) came to believe that a Power greater than ourselves could restore us to sanity, (3) made a decision to turn our will and our lives over to the care of God as we understood Him, (4) made a searching and fearless moral inventory of ourselves, (5) admitted to God, to ourselves, and to another human being the exact nature of our wrongs, (6) were entirely ready to have God remove all these defects of character, (7) humbly asked Him to remove our shortcomings, (8) made a list of all persons we had harmed, and became willing to make amends to them all, (9) made direct amends to such people wherever possible, except when to do so would injure them or others, (10) continued to take personal inventory and when we were wrong promptly admitted it, (11) sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out, and (12) having had a spiritual awakening as the result of these Steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs," (AA, 2023).

Although TSF programs generally produce higher rates of abstinence than other intervention types, they do not seem to be any more or less effective at reducing the overall

severity of addiction and the consequences of substance use (Kelly et al., 2020). However, because there are no dues or fees for AA membership, TSF programs have significant cost-saving benefits (Kelly et al., 2020). These programs also make long-term abstinence – up to three years – more likely, provided a member remains in the program even after completing the Steps (Kelly et al., 2020).

Cognitive Behavioral Therapies.

Cognitive Behavioral Therapy (CBT) is an umbrella term that can be used to describe an expansive group of therapies that all focus on a person's thoughts and beliefs as being the solution to emotional regulation (Lee et al., 2020). CBTs are goal-oriented and focus on how to resolve the problem a person is experiencing (Lee et al., 2020). An essential aspect of CBT is having a positive therapeutic alliance, although this is not sufficient on its own, and a client will only have a positive outlook on the therapeutic alliance if they have a positive outlook on treatment (Lee et al., 2020). CBT usually lasts between 12-16 sessions with a structured, flexible plan in place to ensure goals are being achieved (Lee et al., 2020). These sessions are used to help clients develop skills and the practitioner uses guided discovery to promote reflection and thinking that will lead clients to the solutions to their problems (Lee et al., 2020). CBT is particularly helpful for addiction because it helps clients analyze, challenge, and accept substance-related thoughts and beliefs while also allowing them to focus on resolving current issues before looking to the past, unlike some other therapies and interventions (Lee et al., 2020). There are several types of CBT that can be more specifically tailored to clients struggling with addiction: relapse prevention, cognitive therapy, coping skills therapy, mindfulness interventions, brief cognitive therapies, and low-intensity CBT (Lee et al., 2020).

Relapse Prevention.

Relapse prevention is designed to be a program based on self-control to establish and maintain desired behavioral changes (Ekendahl & Karlsson, 2021). This intervention uses cognitive-behavioral principles to help people identify, anticipate, and cope with high-risk situations (Ekendahl & Karlsson, 2021). This method has a 39% rate of abstinence post-treatment, which is the highest of any CBT practices, but it also has a 57% dropout rate (Lee et al., 2020).

Cognitive Therapy.

Basic cognitive therapy sessions focus on behavioural, emotional, cognitive, and physiological factors that may be immediate triggers for substance use (Lee et al., 2020). It also looks at background factors, including personal history and personality traits that might provide context for how and why a person started/continues using substances (Lee et al., 2020).

Coping Skills Therapy.

This type of therapy trains clients on how to prevent relapse, as well as how to develop positive social skills, how to cope with cravings and urges, and how to help manage their mood (Lee et al., 2020). Coping Skills Therapy has been found to be just as effective as Motivational Interviewing and 12-step programs (Lee et al., 2020).

Mindfulness Interventions.

Mindfulness is a form of awareness characterized by curiosity, non-judgement, and a focus on the present moment (McClintock & Marcus, 2020). Mindfulness-based interventions (MBIs) help clients intentionally disengage from substance-based stimuli and they work to try and change how clients relate to their thoughts, rather than trying to change the thoughts themselves (McClintock & Marcus, 2020). By teaching clients to act with awareness and

acceptance, practitioners help ease withdrawal and craving symptoms (Lee et al., 2020). There are two types of MBIs that specifically target substance use disorders: mindfulness-based relapse prevention (MBRP), and mindfulness-oriented recovery enhancement (McClintock & Marcus, 2020). MBRP is typically administered in 2-hour group sessions over 8 weeks and clients are taught to practice SOBER: stop, observe, breath, expand awareness, and respond mindfully when they are facing addiction triggers (McClintock & Marcus, 2020). Mindfulness-oriented recovery enhancement uses mindfulness, psychoeducation, and experiential exercises to help clients become more aware of addiction-related cues in their lives and learn how to process pain and cravings in a healthy way, while finding a greater appreciation for naturally rewarding experiences (McClintock & Marcus, 2020).

Brief Cognitive Therapies.

Brief CBT consists of 1-6 sessions of typical cognitive therapy techniques (Lee et al., 2020). This method is effective for people with moderate- to high-risk substance use who need assistance but are not ready for more intensive interventions (Lee et al., 2020).

Low-intensity CBT.

Lastly, low-intensity CBT utilizes a lot of self-directed technologies and consists of psychoeducational groups and advice clinics that are facilitated by non-professionals (Lee et al., 2020). While this method is less regulated, it may also be more accessible and flexible for those who need it (Lee et al., 2020).

Group Therapy.

As in individual therapy, group therapy sessions may differ in the perspectives and methods being utilized, although it is most often talk therapy where the facilitator encourages

participants to share their stories and provides advice and support along the way (McHough et al., 2020). Of all the psychosocial treatment approaches, group therapy has the lowest cost, and maintains the best cost-effectiveness ratio (McHough et al., 2020). Because of this, more than 94% of inpatient substance use disorder treatment programs offer group therapy, and many have it as their primary focus (McHough et al., 2020). Group therapy has a slightly higher retention rate than individual therapy, it has high ratings of treatment satisfaction after completion, and it is typically the preferred method by both clients and practitioners (McHough et al., 2020).

Contingency Management.

When a person uses a substance, they receive signals of positive reinforcement in their mind (Roll et al., 2020). The goal of contingency management is to reduce the efficacy of the substance reinforcement by introducing alternative sources of positive reinforcement in the client's life (Roll et al., 2020). Some common alternative reinforcers include escape from the threat of legal trouble, money, access to employment and housing, and receiving assistance in the form of vouchers that can be exchanged for valuable goods and services (Roll et al., 2020). Contingency management also meets the client where they are and allows them to identify which patterns and behaviors may be contributing to their desire to use a substance (Roll et al., 2009). Once the behaviors are identified, this intervention then works with the client to develop ways to reduce them and establishes concrete steps to reach their goal (Roll et al., 2009). Contingency management has proven to be effective in reducing substance use by reinforcing an ideal vision of the future (Roll et al., 2009). This vision helps the client alter their day-to-day behavior and step back from their abused substance to reach that vision (Roll et al., 2009). Contingency management is most effective at treating addiction to substances such as cocaine and methamphetamine that do not have pharmaceutical alternatives (Roll et al., 2020).

Pharmacological Treatment.

Pharmaceuticals can either be used in abstinence-oriented treatments or medication-assisted treatments, both primarily focusing on opioid use disorders (Torrens et al., 2020).

Abstinence-Oriented Treatments.

In abstinence-oriented treatments, a patient is first seen in the acute phase of detoxification, where they are given another drug – typically methadone – to help ease their withdrawal symptoms (Torrens et al., 2020). Once the initial detox is complete, medical providers help taper the patient off the substitution drug until full withdrawal is complete, which usually takes 10-20 days (Torrens et al., 2020). After this process, the patient is then given a prescription of naltrexone to reduce cravings and help ensure abstinence from the problem substance (Torrens et al., 2020). However, this method has low retention rates and high rates of relapse, so it is not typically the preferred treatment (Torrens et al., 2020).

Medication-Assisted Treatment.

The overall objective of medication-assisted treatment (MAT) is to replace a short-term opioid with a long-acting opioid to help stabilize the client's neurochemistry (Torrens et al., 2020). Using this form of treatment blocks the sense of euphoria a person feels when taking their problem substance while also eliminating the dangers of total withdrawal (Torrens et al., 2020). There are two different types of medications that can be used in MAT: methadone and buprenorphine (Torrens et al., 2020). Methadone maintenance treatment (MMT) is when a patient receives a long-term prescription for methadone – a full opioid agonist – that helps reduce the risk of them self-administering other opioids (Torrens et al., 2020). MMT is more effective the longer the treatment lasts (Torrens et al., 2020). Buprenorphine is a partial opioid

agonist that can be used either alone or in combination with naloxone to decrease the risk of opioid abuse (Torrens et al., 2020). While MMT is generally more effective, buprenorphine has less respiratory and cardiac side effects and a lesser stigma than methadone, so it is more widely used (Torrens et al., 2020).

Inpatient Consultation.

Inpatient addiction consultation is a short-term intervention where hospital social workers check-in with a patient after they have been admitted to the emergency room for substance abuse to discuss future options (Weinstein et al., 2020). Receiving an inpatient consultation improves the chances of a person being willing to participate in medication-assisted treatment (Weinstein et al., 2020). Deciding to start or continue using MAT after this consultation results in a 31% decrease in the chances of needing to utilize 30-day acute care (Weinstein et al., 2020). Among patients admitted with any kind of substance use disorder, those diagnosed with opioid use disorder are more likely to receive an addiction consult, although the research does not yet have an answer for why this may be the case (Weinstein et al., 2020).

Harm Reduction.

Harm reduction is not a way to treat addiction, but rather it is a way to minimize the dangerous consequences of substance use. The goal of harm reduction is to reduce the harmful effects of certain behaviors without having to eliminate the behavior altogether (Taylor et al., 2021). Harm reduction has several principles it follows to ensure its efficacy (Taylor et al., 2021). Those principles are pragmatism, humanism, autonomy/individualism, accountability without discharge, and incrementalism (Taylor et al., 2021). This intervention allows for abstinence to no longer be the singular goal; it provides an alternative, safe space for people who

do not want or may not be ready to stop using (Taylor et al., 2021). The primary methods of harm reduction are to help prevent overdose, providing treatment and assistance on demand, taking a patient-centered approach and providing only the care they ask for, reducing the stigma around addiction, preventing and treating infection, providing safe supplies such as condoms, sterile syringes, fentanyl test strips, and alcohol swabs, and discussing safe injection techniques (Taylor et al., 2021).

Strengths-Based Interventions.

Strengths-based interventions help support clients' autonomy and ability throughout the recovery process (Harden et al., 2020). These interventions focus on things that the client has done successfully throughout their life and they highlight the ways they have overcome hardships in the past (Harden et al., 2020). By focusing on these achievements, practitioners are able to instill new confidence in their client (Harden et al., 2020). This confidence helps the client realize that they have the strength and tools they need to be able to defeat the obstacles in their path and achieve an improved quality of life (Harden et al., 2020).

Motivational Interviewing.

After established addiction treatment programs had consistently proven to be ineffective, motivational interviewing (MI) was developed in the 1980's (Kouimtsidis et al., 2020). MI was developed specifically for the treatment of substance abuse, and it works to help clients identify the strengths that they can tap into to create the change they want to see in their lives (Moyers et al., 2016). MI helps the client find the motivation to seek recovery by avoiding conflict and judgement and utilizing partnership, acceptance, and compassion (Kouimtsidis et al., 2020). At the beginning of the intervention, practitioners will work closely with the client to determine if

they are a good match, what the client wants to change and why, and what steps can be taken to bring those changes to life (Kouimtsidis et al., 2020). Practitioners will tailor their strategy to each individual client and work by listening for and amplifying change talk from the client (Kouimtsidis et al., 2020). MI has been viewed as a controversial treatment option, because the integrity of service delivery cannot always be ensured (Moyers et al., 2016). To try and combat these doubts, the Motivational Interviewing Treatment Integrity (MITI) coding system was created to ensure the fidelity of the practitioner (Moyers et al., 2016). Individual studies have shown that MI is effective in treating alcohol use disorder, but there is not enough evidence to support whether it is effective for other substances (Kouimtsidis et al., 2020).

Wrap-Up.

Each of the above interventions may be beneficial to some people, and not others. All the methods listed have their own successes and critiques. Appropriate interventions should be discussed and decided upon on a case-by-case basis depending on what method fits best with a particular client's goals and worldview. While there are many different types of treatments available that should be considered, the financial costs may also play a significant role in a person's ability to participate.

How Income Affects Access to Different Interventions

Low-income communities face significant barriers in accessing treatments, not only because of the general cost of healthcare in the United States, but also because of an inability to afford childcare, an inability to afford to take time off work to devote to treatment, an inability to travel to the treatment clinic, and a lack of access to a telephone or computer to schedule an appointment, among other things. It was a challenge to find sufficient peer-reviewed sources that

discussed the financial costs of addiction treatments in the United States. It was particularly difficult to find sources that discuss how these financial costs act as a barrier for many people. As a result, some of the sources used in this section (Correa, 2021; Juergens & Hampton, 2015; and Sauter, 2018) are not peer-reviewed. However, they provide an important look at the financial costs of treatment options in this country, and what those costs mean for certain people.

Financial Instability and Oppression

It is first important to know that roughly 42 million people were living below the poverty line in 2017, and those numbers have only grown since (Sauter, 2018). Approximately 23.6 million women – 592,588 of whom are single new mothers – live in poverty, making up 55.4% of the country's total poor population (Sauter, 2018). Another 9.6 million of the people living in poverty are individuals living with a disability (Sauter, 2018). Marginalized, minority groups face greater rates of poverty than others, therefore they are less likely to be able to afford addiction treatment (Sauter, 2018). In support of this claim, 63% of the people receiving Medication-Assisted Treatment (MAT) for Opioid Use Disorder (OUD) are men, and they are on average 7.3 years younger than the people who do not receive this treatment (Perry & Manjelievskaia, 2019).

Low-income individuals are more likely than those who are financially secure to succumb to substance abuse (Correa, 2021). Struggling with financial stability can impact a person's self-esteem, and people with addiction have been shown to have lower self-esteem than those without (Correa, 2021). The high cost of recurring substance purchases, as well as missed or lost work and potentially hefty legal and medical bills can contribute greatly to a person's financial stress (Correa, 2021). Feeling out of control of one's finances may serve as a trigger to continue using (Correa, 2021). Thus, addiction and struggling with finances frequently create a

negative loop, where the individual struggles continue to feed into and worsen each other. Rates of addiction are twice as high among those who are unemployed (Correa, 2021). It is oftentimes the stress of unemployment that may lead to substance abuse, but active addiction may also lead to unemployment (Correa, 2021).

Inaccessible Healthcare

Access to preventative health care is also very limited for low-income Americans (Correa, 2021). Chronic illicit drug use increases a person's ER use by roughly 33%, and the average cost per ER visit for OUD in 2020 was $548 out of pocket (Corredor-Waldren & Currie, 2022). Roughly 45% of American adults are uninsured because of the high costs (Correa, 2021). This leads to an increase in untreated mental or physical illnesses, which may encourage people to self-medicate, eventually leading to a substance abuse problem (Correa, 2021). Once a low-income individual develops an addiction, it is harder for them to recover. In addition to the high financial costs of treatment programs, social support is a crucial part of the recovery process, and it is less common among low-income individuals (Correa, 2021).

Federal and Insurance Regulations

Opioid-agonist treatment (OAT), or MAT, has been shown to reduce deaths in opioid-dependent individuals by over 50%, reduce the risk of relapse, increase treatment retention, and decrease the risk of Hepatitis C and HIV (Davis & Carr, 2019). However, federal law has greater restrictions on the prescribing and distributing of OAT/MAT medications than any other prescription medication available (Davis & Carr, 2019). They require patients receiving methadone maintenance treatment (MMT) to have been addicted to an opioid for at least a year, to complete a full medical evaluation before being approved for treatment, and to attend

comprehensive counseling sessions during MMT (Davis & Carr, 2019). Opioid treatment programs (OTPs) can only provide methadone in oral form at a limited dose and patients must take it under supervision, but patients who have developed a high tolerance to illicit opioids may receive an insufficient dose, and MMT requires daily travel to a clinic for administration, which is not feasible for many people (Davis & Carr, 2019). Even if a patient is able to accommodate these rules and does have health insurance to cover the costs, many insurance companies have "fail first" policies that require alternative treatment options first and pre-authorization before covering OAT medications (Davis & Carr, 2019).

Inability to Travel

Overdosing on drugs – most frequently opioids – is the most common cause of death among people experiencing homelessness (Chatterjee et al., 2017). Office-based opioid treatment (OBOT) is an effective way to reduce these deaths, but receiving medical care in the United States does not come easily (Chatterjee et al., 2017). Roughly 36% of the homeless population in the country consists of families, who have additional barriers when attempting to access OBOT (Chatterjee et al., 2017). Families have to worry about how to afford childcare and the distance between the nearest OBOT clinic and the shelter they may be staying in (Chatterjee et al., 2017). Although these barriers remain evident, a study conducted in Massachusetts has shown that the expansion of Medicaid since 2006 has increased the ability for individuals experiencing homelessness to access treatment (Chatterjee et al., 2017). This has, in turn, led to a decrease in their illicit substance use, which has allowed many of these individuals to secure employment (Chatterjee et al., 2017).

The distance between a person's home-base and the nearest clinic offering treatment – particularly MAT – is a significant consideration and barrier for housed individuals as well

(Amiri et al., 2021). People aged 15-24 are most likely to struggle due to transportation barriers (Corredor-Waldron & Currie, 2022). Traveling greater distances to opioid treatment programs results in an increase in the number of missed methadone doses and overall treatment drop-out rates (Amiri et al., 2021). Many people cannot afford the time and gas it takes to travel for long periods of time for an appointment (Amiri et al., 2021). The average drive time to a federally approved Opioid-Treatment Program where patients can receive methadone ranges from 9.82 minutes in an average metropolitan city core, to 56.5 minutes in an average rural community, and the average drive time to an office-based buprenorphine treatment ranges from 4.1 minutes in an average metropolitan city core, to 24.59 minutes in an average rural community (Amiri et al., 2021). Additionally, travel to the nearest opioid treatment program is estimated to be over 60 minutes for 13,526,605 people and more than 90 minutes for 5,371,852 people (Amiri et al., 2021).

Inpatient Issues

Inpatient, residential programs tend to have their benefits largely overstated (Beetham et al., 2021). This results in more people being directed to these programs, even if they may be able to benefit from a different intervention method. More than 25% of national spending on substance use is dedicated to residential/rehab programs (Beetham et al., 2021). These programs also happen to be the most expensive form of addiction treatment, costing an average of $25,000 for a 28-day stay in 2011 (Bacon, 2019). There are both for-profit and non-profit residential treatment programs, and the for-profit programs are often lightly regulated and use predatory recruitment tactics (Beetham et al., 2021; Corredor-Waldron & Currie, 2022). People who do not know the difference may be more inclined to participate in a for-profit program, because 79% of these programs offered same- or next-day admission, compared to only 36% of non-profit

programs (Beetham et al., 2021). For-profit programs charge an average of $17,434 for 23 days, while non-profit programs charge an average of $5,712 for 16 days (Beetham et al., 2021). This means that people either have to spend significantly more money on a program that is less reputable, or they have to wait on extending wait lists for an affordable, more reputable program (Beetham et al., 2021).

Outpatient Costs

Outpatient programs are less common, and although they are slightly more affordable than inpatient programs, they are still out of reach of many people who need them (Juergens & Hampton, 2015). Outpatient detox typically ranges from $1,000-$1,500 and outpatient rehab programs cost an average of $3,000 for a 3-month program (Juergens & Hampton, 2015). Some rehab centers offer payment plans that vulnerable individuals may agree to without being able to adhere to the payments, resulting in increased debt and stress (Juergens & Hampton, 2015). Alternatively, the out-of-pocket costs for year-long methadone treatment is approximately $4,700 (Juergens & Hampton, 2015). The average cost for a 30-day prescription of buprenorphine for a person with a high-deductible health plan in 2015 was $335 (Roberts et al., 2018). Given the incredibly high financial costs and time commitments for the most widely available treatment plans, it is no wonder that so many individuals cannot afford to seek the support they need.

Substance Abuse Survey

For this portion of my research, I examined the general levels of awareness of treatments that are being utilized for substance use disorder as well as whether income was a barrier to accessing treatment across Colorado. I decided to conduct a survey of Colorado residents to

determine how many people have experienced substance abuse - whether their own or that of someone they care about -, what types of treatment people are generally aware of, and whether the financial cost of treatment affected a person's ability to access it. This survey was essential to my research because there is little to no literature that discusses treatments specifically across the state of Colorado. The purpose of this survey is to encourage further research into the awareness and financial accessibility of multiple addiction treatment options.

For the purpose of determining what people know about addiction/substance use disorder (SUD), a definition of addiction and SUD was not given to participants. However, I used the terms interchangeably with the understanding that they are both qualified as a disease that is defined by the continued use of a substance that results in problematic consequences and compulsive behaviors (ASAM, 2019; Hartney, 2022). There are a number of evidence-based treatments that can be implemented for those with substance use disorders, each with a varying level of awareness among people who may be seeking help. Methods like relapse prevention groups, medication assisted treatment, harm reduction, 12-step programs, and group or individual talk therapy are just a few of the treatment options available for individuals with SUD, although they are not all equally affordable or well-known across the general US population (Bacon, 2019). Low-income communities face significant barriers in accessing these treatments not only because of the cost of healthcare in the United States, but also because of an inability to afford childcare, take time off from work to devote to treatment, and travel to the treatment clinic (Chatterjee et al., 2017; Correa, 2021; Corredor-Waldren, & Currie, 2022).

Methods

I created a survey through Qualtrics with fifteen multiple choice questions and one open-ended question (see Appendix A). I emailed my fellow students in several of my courses through

our Canvas system. Then, I reached out to a randomly selected set of professors across different departments at MSU and asked them to send my survey to their students but did not receive a response from any of them. Lastly, I posted on my personal Instagram, Facebook, and Twitter accounts, asking any Denver-area residents for their participation. The survey took participants no more than 20 minutes to complete, and they have no further commitments or obligations to this study. The survey was available for participants to complete on their own time, on their private computers, and no identifying information was collected, with the exception of their status as a person living in Colorado and their MSU Denver email address through a separate survey if they wished to enter the raffle for a $20 gift card. I compiled the data collected from Qualtrics and then transferred those results into Canva, without using any sensitive or identifying information. The survey was exempt from IRB approval. This window was determined to ensure that my analysis and writing would be conducted before the project's initial due date of 04/07/2023.

Ethics

The primary risks to subjects of this study were mental and emotional distress by recalling a situation where they were impacted by substance abuse. Additionally, while virtual security options were employed through the mechanisms of Qualtrics and not collecting identifying information, the possibility remains of the survey results being compromised by an outside source. I included a disclosure in my recruitment emails, on the flyer, and at the beginning of the survey to notify participants of the sensitive subject matter, and I have kept all information on a personal password protected computer. Participants had the opportunity to share their email address through a second survey if they would like to be entered in a raffle to

win a $20 Amazon gift card as compensation for their participation, but there were no direct benefits for participation in the survey.

The survey began with an informed consent page that every participant had to acknowledge in order to move forward. There was no direct contact between myself and the study participants, unless they reached out to me by email or phone directly with questions. Due to the nature of these questions involving addiction to potentially illegal substances, it was in the participants' best interests to not have to provide a signed consent form, so I submitted a waiver of written documentation of consent. This study has no more than minimal risks to the subjects and the only linkage between the participant to their survey would be the consent document, unless they choose to provide their email address.

I used Qualtrics to collect my data and any time I worked with the survey results, it was done on my private, password protected computer in a private space. All electronic data will be deleted and all paper notes shredded after the final project presentation on 05/05/2023. The identifiable data that was collected included if a person has been affected by substance abuse, and if they or the person with the substance abuse problem were living in Colorado at the time of the struggle. A separate Qualtrics form was added to the end of the survey where a student's email address will be obtained if they choose to submit their information for entry into the gift card raffle, but this information was not linked to their initial survey responses in any way. In the final presentation of this data, the pie charts (aggregated data) and relevant direct quotes will be shared, making it virtually impossible to identify the participants. No identifying information can be matched with direct quotes from the open-ended questions.

Results

There was a total of 82 surveys that were submitted. However, there were some questions where respondents either skipped answering them entirely, or selected multiple answers, so there are not 82 responses per question. The percentages listed in this section were rounded up or down to the nearest whole percentage for clarity. Many of the respondents (66%) have been impacted by a friend/family member/loved one's addiction, while 28% have personal experience, 4% have professional experience, and 2% didn't identify having any experience (Table 1). More than half of the respondents (59%) said that they or the person they know did seek treatment for their addiction, while 32% did not, and 9% were unsure (Table 2). As shown further in Table 2, the majority of people have heard of 12 step programs (94%), harm reduction (91%), individual talk therapy (95%), group talk therapy (99%), family talk therapy (89%), relapse prevention groups (75%) and strengths-based interventions (81%). The only intervention option listed in the survey that people were less familiar with was motivational interviewing, although there was still 62% of people who have heard of it (Table 2).

Table 3 shows that individual and group therapy were the two most accessed modalities among survey respondents, at 40% and 34%, respectively. Outpatient settings – including 12 step programs and virtual meetings – account for 45% of respondents' experiences, while 36% received residential/inpatient treatment, and 19% received treatment in a medical setting such as a hospital or doctor's office (Table 3). Table 3 also shows a wide variety of treatment methods accessed among respondents, but most participated in 12-step groups (36%), CBT (26%), or relapse prevention (25%). Almost half of the respondents (48%) indicated that if treatment was accessed, it was the person's preferred method (Table 3). Finally, Table 4 indicates that the most common reason for a person not seeking treatment (44% of responses) is because they did not

feel like they wanted or needed it. An additional 25% of respondents indicated that treatment was unaffordable (Table 4).

Discussion

In this section I discuss the implications of these results for social workers, those with addiction and their loved ones, and treatment organizations. Then, I discuss the strengths and limitations of my study.

Implications for Social Workers

It is important for social workers to know what population of clients they will be serving, and what specific problems that population is struggling with. These survey results show that there are a lot of people who have been impacted by a loved one's addiction, meaning social workers will be likely to eventually have a client who has experienced this. Therefore, social workers must make it a priority to have the resources and skills to help clients work through this kind of challenge. Some of these resources and skills may include knowing how to conduct family therapy, knowing what financial support programs exist in their area to help clients whose family has been impacted by a substance-related job loss, and knowing about family and friend support groups such as Al-Anon, The Phoenix, or JWB Recovery that they can refer clients out to if needed.

Understanding the gaps in services sought by clients is also a crucial part of any social worker's job. Although these results indicate that a wide variety of treatments have been accessed, it can also be assumed that social workers need to spread more awareness about the different types of treatment that are available. Social workers should also be sure to continue advocating for treatment affordability and accessibility across the board. This data also reflects

the importance of providing a client with their right to self-determination, particularly when that client does not feel they want or need help for their substance use (NASW, 2023). The perceived negative consequences of addiction may seem obvious to a social worker, but if that client does not agree that those consequences are significant enough to want or be ready to change, the social worker cannot force them to do so. Even if a social worker thinks they know what the best option is for the client's health and wellbeing, they must respect a client's ability to say they do not want or need intervention.

Implications for Those with Addiction and Their Loved Ones

In addition to implications for social workers, the data collected from this survey can offer guidance for those who are struggling with substance abuse, as well as their loved ones. One of the most notable responses received in this survey was that a person had to get themselves into legal trouble just to receive the government assistance they needed to access treatment. This lived experience illustrates how people with addictions are pushed to extreme lengths to get the help that they need. Those who are not willing or able to go to those lengths are stuck in their struggle without sufficient support. For those who can receive support or pay for treatment, they still must know what interventions exist to be able to access them. Many people will continue to be left in the dark about their options if they are not given the knowledge and resources they need. Given the number of responses that mentioned how a person did not seek treatment because they did not feel like they wanted or needed it, this data also exhibits that people must be in a position where they feel their substance use is a significant problem before treatment can be effective. If a person does not feel like they have a problem, they will not be receptive to receiving support.

Furthermore, as 66% of respondents have been impacted by a loved one's addiction, this data implies that there are many people out there who are not addicted to substances but are struggling with a loved one's addiction. This leaves the question of whether these people are seeking their own treatment to work through these challenges. Loved ones of those with addiction seem to be aware of their loved ones' problems. They may have the authority to have difficult conversations and offer resources to the person they know who is struggling, but they need skills, resources, and support for themselves before they can do so.

Implications for Treatment Organizations

There are also implications for treatment organizations in general from this survey. The most important implication for treatment organizations derived from this data is that they need to make their programs more accessible and affordable. In fact, 17% of respondents said received treatment was not preferred, but it was the only one that was affordable. Organizations must make a more conscious effort to accommodate more people who need their services. Treatment organizations need to find better ways to share their resources. There were 17% of respondents who wanted treatment but did not know what their options were or how they could be accessed. If organizations exercised transparency about what they offer and how to receive it, some of these barriers could be eliminated.

Strengths

This study has several strengths including format, time flexibility, region, and variety of perspectives. The biggest advantage to conducting a web survey is the ease and speed of response submission (Krysik, 2018). Participants were able to take the survey on their own time, in their own space, which may make them more likely to complete the survey honestly and

transparently (Krysik, 2018). Another strength of this survey is that it was taken from Colorado residents, to give a better perspective on the addiction crisis in this state specifically. Another strength is that there were a variety of participants' perspectives. We received data from people who have been affected by a loved one's addiction as well as those who have struggled with substance use disorder themselves. This allowed us to get an idea of the bigger picture of the world of addiction treatment and how it impacts everyone. This survey was also open for approximately three months, which gave participants plenty of time to learn about and respond to it, while not providing enough time for it to be forgotten entirely.

Limitations

This study also has several limitations, including respondent image, misremembered events, sample size, and misworded questions. Surveys in general face the limitation of social desirability (Krysik, 2018). Even when responses are anonymous, respondents may feel pressured to answer questions in a certain way based on how they think they should be presenting themselves (Krysik, 2018). In this study in particular, respondents may have been fearful of the stigma that surrounds addiction, leading them towards the inclination to answer dishonestly. Another limitation with survey research is that people's memories are not always accurate (Krysik, 2018). When questions ask for specific details or span over extended periods of time, it can be easy for respondents to unreliably recall the information (Krystik, 2018). For example, a respondent in this survey may have an inaccurate recollection of their treatment preference if they received it a long time ago.

The most prominent limitation to this specific study was a very small sample size. Between 2017 and 2018, 11.9% of people 18 and older in Colorado reported having a substance use disorder within the past year (CHAS, 2019). The population of Colorado at that time was

roughly 5.5 million, meaning approximately 654,500 people had SUDs (ODN, 2023). With only 82 responses to this survey, that means less than .01% of the population affected by addiction participated. Such low numbers cannot be generalized, thus reducing the impact of this study. Another limitation was the inability to send the survey to a large audience. Most of the professors I reached out to did not respond and likely did not send the request to their students, and I was unable to post flyers around campus. These were my two primary recruiting strategies when I first created this study, but I ended up receiving most responses from sharing with my own classmates and posting to social media.

Additional limitations include the wording of and responses to certain questions. The variety of responses in the, "Other: fill in the blank," sections of questions 3, 4, and 5 show me that people often do not understand the difference between treatment modalities, settings, and methods. By not defining the differences for participants, these questions may have repetitive or incorrect answers. After data collection closed, we learned that the wording in questions 3, 4, and 5 was confusing. These questions provided the answer choice, "NA." This was meant to mean, "not applicable", however, there is also a 12-step group Narcotics Anonymous that is abbreviated "NA". This distinction was not made, so there is a possibility that some of the participants misinterpreted this answer choice. Due to this discrepancy, all, "NA," answers to these questions were not considered when analyzing the results. This removed a total of 32 responses from Q3, 28 from Q4, and 30 from Q5.

Future Research

This literature review and survey barely scratched the surface of what is out there. This data suggests that there is an imbalance in addiction treatment across the United States, and throughout the state of Colorado, but the extent has yet to be seen. More research must be done

to determine exactly how many people in Colorado are impacted by addiction, and how to solve the crisis. Researchers should focus on what barriers people face when seeking treatment addiction, and how to resolve those barriers.

Conclusion

Addiction is a very serious problem that continues to get worse each year. The United States is in the midst of an opioid epidemic and drug overdose deaths are at an all-time high. This is a significant issue for the field of social work because many of the clients that social workers serve will have been impacted by addiction in one way or another during their lifetime. There are a wide variety of treatment options available to those who are struggling with addiction, although many of these options are not accessible or affordable to many of the people that need them the most. People living in poverty are especially susceptible to inaccessible interventions. There are a number of factors that limit a person's ability to seek help, and these factors need to be mitigated as soon as possible to reduce the severe impacts of addiction this country continues to face.

References

Abdelal, R., Banerjee, A.R., Carlberg-Racich, S., Cebollero, C., Darwaza, N., & Kim, C. (2022). Real-world study of multiple naloxone administrations for opioid overdose reversal among emergency medical service providers. *Substance Abuse, 43*(1), 1075-1084. https://doi.org/10.1080/08897077.2022.2060433

Alcoholics Anonymous. (2023). *The Twelve Steps.* https://www.aa.org/the-twelve-steps

American Society of Addiction Medicine. (2019, September 15). *Definition of Addiction.* https://www.asam.org/quality-care/definition-of-addiction

Amiri, S., Hirchak, K., McDonell, M. G., Denney, J. T., Buchwald, D., & Amram, O. (2021). Access to medication-assisted treatment in the united states: Comparison of travel time to opioid treatment programs and office-based buprenorphine treatment. *Drug and Alcohol Dependence, 224*. https://doi.org/10.1016/j.drugalcdep.2021.108727

Bacon, M. (2019). *Family Therapy and the Treatment of Substance Use Disorders: The Family Matters Model* [1]. Routledge. https://doi-org.aurarialibrary.idm.oclc.org/10.4324/9781315192253

Beetham, T., Saloner, B., Gaye, M., Wakeman, S. E., Frank, R. G., & Barnett, M. L. (2021). Admission practices and cost of care for opioid use disorder at residential addiction treatment programs in the US. *Health Affairs, 40*(2), 317-14. http://dx.doi.org/10.1377/hlthaff.2020.00378

Bog, M., Filges, T., Brannstrom, L., Jorgensen, AM.K., & Fredrikksson, M.K. (2017).

12-step programs for reducing illicit drug use. https://doi.org/10.4073/csr.2017.2

Chatterjee, A., Obando, A., Strickland, E., Nestler, A., Harrington-Levey, R., Williams, T., & LaCoursiere-Zucchero, T. (2017). Shelter-Based Opioid Treatment: Increasing Access to Addiction Treatment in a Family Shelter. *American Journal of Public Health, 107*(7), 1092-1094. https://dx.doi.org/10.2105%2FAJPH.2017.303786

Colorado Health Access Survey. (2019). *Going Without: Many Coloradoans Not Getting Needed Treatment for Substance Use Disorder.* Colorado Health Institute. https://www.coloradohealthinstitute.org/sites/default/files/file_attachments/2019%20CHAS%20Substance%20Use%20Brief_1.pdf

Correa, G. (2021). "Addiction and Low-Income Americans." Addiction Center. https://www.addictioncenter.com/addiction/low-income-americans/

Corredor-Waldron, A., & Currie, J. (2022). Tackling the substance use disorder crisis: The role of access to treatment facilities. *Journal of Health Economics, 81*, 102579. https://doi.org/10.1016/j.jhealeco.2021.102579

Davis, C. S., & Carr, D. H. (2019). Legal and policy changes urgently needed to increase access to opioid agonist therapy in the united states. *The International Journal of Drug Policy, 73*, 42-48. https://doi.org/10.1016/j.drugpo.2019.07.006

Ekendahl, M., & Karlsson, P. (2021). Multiple Logics: How Staff in Relapse Prevention Interpellate People With Substance Use Problems. *Contemporary Drug Problems, 48*(2), 99-113. https://doi-org.aurarialibrary.idm.oclc.org/10.1177/0091450921998077

Harden, V., Romas, I., Romines, J., & Lewis, M. (2020). Interlocking theories and practice in treatment and recovery for women with opioid use disorders. *Journal of Social Work Practice in the Addictions, 22*(4), 274-286. https://doi-org.aurarialibrary.idm.oclc.org/10.1080/01634372.2021.1954398

Hartney, E. (2022, August 25). *DSM 5 Criteria for Substance Use Disorders.* Verywell Mind. https://www.verywellmind.com/dsm-5-criteria-for-substance-use-disorders-21926

Juergens, J., & Hampton, D. (2015, June 16). *Cost of Drug and Alcohol Rehab.* Addiction Center. https://www.addictioncenter.com/rehab-questions/cost-of-drug-and-alcohol-treatment/

Kelly, J.F., Humphreys, K., & Ferri, M. (2020). Alcoholics Anonymous and other 12-step programs for alcohol use disorder. *Cochrane Database of Systematic Reviews, 3.* DOI: 10.1002/14651858.CD012880.pub2

Kim, J., Kambari, Y., Taggar, A., Quilty, L. C., Selby, P., Caravaggio, F., Ueno, F., Torres, E., Song, J., Pollock, B. G., Graff-Guerrero, A., & Gerretsen, P. (2022). A measure of subjective substance use disorder awareness – substance use awareness and insight scale (SAS). *Drug and Alcohol Dependence*, *231*, 109129. https://doi.org/10.1016/j.drugalcdep.2021.109129

Klostermann, K., & O'Farrell, T.J. (2020). Couple and Family Therapy in Treatment of Alcoholism and Drug Abuse. *Textbook of Addiction Treatment, 2*(1), 447-458. https://doi-org.aurarialibrary.idm.oclc.org/10.1007/978-3-030-36391-8_31

Kouimtsidis, C., Salazar, C., & Houghton, B. (2020). Motivational Interviewing, Behaviour Change in Addiction Treatment. *Textbook of Addiction Treatment, 2*(1), 349-363. https://doi-org.aurarialibrary.idm.oclc.org/10.1007/978-3-030-36391-8_24

Kourgiantakis, T., & Ashcroft, R. (2018, January 13). *Family-focused practices in addictions: a scoping review protocol.* BMJ Open. https://bmjopen.bmj.com/content/8/1/e019433

Krull, E. (2022). *Grief By The Numbers: Facts and Statistics.* The Recovery Village. https://www.therecoveryvillage.com/mental-health/grief/grief-statistics/

Krysik, J.L. (2018). *Research for Effective Social Work Practice, 4e.* Routledge.

Kuehn, B.M. (2021). Massive Costs of the US Opioid Epidemic in Lives and Dollars. *Journal of the American Medical Association, 325*(20), 2040. https://doi.org/10.1001/jama.2021.7464

Lee, N.K., Ross, P., & Cash, R. (2020). Cognitive Behavioural Therapies for Alcohol and Other Drug Use Problems. *Textbook of Addiction Treatment, 2*(1), 365-381. https://doi-org.aurarialibrary.idm.oclc.org/10.1007/978-3-030-36391-8_25

McClintock, A.S., & Marcus, M. (2020). Mindfulness-Based Approaches in Addiction Treatment. *Textbook of Addiction Treatment, 2*(1), 391-400. https://doi-org.aurarialibrary.idm.oclc.org/10.1007/978-3-030-36391-8_27

McHough, R.K., Kim, J., Perrins, S.P., & Weiss, R.D. (2020). Group Therapy for

Substance Use Disorders. *Textbook of Addiction Treatment, 2*(1), 433-446.
https://doi-org.aurarialibrary.idm.oclc.org/10.1007/978-3-030-36391-8_30

Moyers, T.B., Rowell, L.N., Manuel, J.K., Ernst, D., & Houck, J.M. (2016). The Motivational Interviewing Treatment Integrity Code (MITI 4): Rationale, Preliminary Reliability, and Validity. *Journal of Substance Abuse Treatment, 65*(1), 36-42. https://doi.org/10.1016/j.jsat.2016.01.001

National Association of Social Workers. (2023). *1. Social Workers' Ethical Responsibilities to Clients.* https://www.socialworkers.org/About/Ethics/Code-of-Ethics/Code-of-Ethics-English/Social-Workers-Ethical-Responsibilities-to-Clients

National Institute on Drug Abuse. (2022). *Drug Overdose Death Rates.* https://nida.nih.gov/research-topics/trends-statistics/overdose-death-rates

Open Data Network. (2023). *Demographics.* http://www.opendatanetwork.com/entity/0400000US08/Colorado/demographics.population.count?year=2018

Perry, A. & Manjelievskaia, J. (2019). TP3 Characterizing and Comparing US Commerically-Insured Patients with Opioid Use Disorder (OUD) By Receipt of Medication-Assisted Treatment (MAT). *Value in Health,* 22(3), S923. https://doi.org/10.1016/j.jval.2019.09.2742.

Rehm, J., Probst, C., Llamosas Falcon, L., & Shield, K.D. (2020). Burden of Disease:

The Epidemiological Aspects of Addiction. *Textbook of Addiction Treatment, 2*(1), 51-64. https://doi-org.aurarialibrary.idm.oclc.org/10.1007/978-3-030-36391-8_5

Roberts, A.W., Pharm, D., Saloner, B., & Dusetzina, S.B. (2018, May 8). Buprenorphine Use and Spending for Opioid Use Disorder Treatment: Trends from 2003-2015. *Psychiatric Services,* 69(7), 832-835. https://ps-psychiatryonline-org.aurarialibrary.idm.oclc.org/doi/10.1176/appi.ps.201700315

Roll, J.M., Madden, G.J., Rawson, R., & Petry, N.M. (2009). Facilitating the Adoption of Contingency Management for the Treatment of Substance Use Disorders. *Behavior Analysis in Practice, 2*(1), 4-13. https://doi.org/10.1007/BF03391732

Roll, J.M., McPherson, S.M., & McDonell, M.G. (2020). Contingency Management as a Behavioral Approach in Addiction Treatment. *Textbook of Addiction Treatment, 2*(1), 417-432. https://doi-org.aurarialibrary.idm.oclc.org/10.1007/978-3-030-36391-8_29

Room, R. (2020). Cultural Aspects and Responses to Addiction. *Textbook of Addiction Medicine, 2*(1), 65-71. https://doi-org.aurarialibrary.idm.oclc.org/10.1007/978-3-030-36391-8_6

Sauter, M.B. (2018). “Faces of poverty: What racial, social groups are more likely to experience it?” USAToday. https://www.usatoday.com/story/money/economy/2018/10/10/faces-poverty-social-racial-factors/37977173/

Taylor, J.L., Johnson, S., Cruz, R., Gray, J.R., Schiff, D., & Bagley, S.M. (2021).

Integrating Harm Reduction into Outpatient Opioid Use Disorder Treatment Settings. *Journal of General Internal Medicine, 36*(12), 3810-3819. doi: 10.1007/s11606-021-06904-4

Torrens, M., Fonseca, F., Dinamarca, F., Papaseit, E., & Farre, M. (2020). Opioid Addiction and Treatment. *Textbook of Addiction Treatment, 2*(1), 241-258. https://doi.org/10.1007/978-3-030-36391-8_18

Weinstein, Z.M., Cheng, D.M., D'Amico, M.J., Forman, L.S., Regan, D., Yurkovic, A. Samet, J.H., & Walley, A.Y. (2020). Inpatient addiction consultation and post-discharge 30-day acute care utilization. *Drug and Alcohol Dependence, 213*(1). https://doi.org/10.1016/j.drugalcdep.2020.108081

Tables

Table 1

Addiction Impacts

Question	Response	Percentage
Q1: In what ways have you been impacted by substance abuse/addiction?	A friend/family member/loved one has struggled	66%
	Personal experience	28%
	Professional experience	4%
	Didn't identify an experience	2%

Table 2

General Treatment/Intervention Knowledge

Question	Yes	No
Q8: Have you ever heard of 12 step programs? e.g.: AA	94%	6%
Q9: Have you ever heard of harm reduction? e.g.: needle exchange programs, medication assisted treatment (methodone, suboxone), etc.	91%	9%
Q10: Have you ever heard of individual talk therapy?	95%	5%
Q11: Have you ever heard of group talk therapy?	99%	1%
Q12: Have you ever heard of family talk therapy?	89%	11%
Q13: Have you ever heard of motivational interviewing (MI)?	62%	38%
Q14: Have you ever heard of relapse prevention groups?	75%	25%

Q15: Have you ever heard of strengths-based prevention/intervention?	81%	19%

Table 3

Treatment Modalities, Settings, Methods, and Preference

Question	Response	Percentage
Q3: If treatment was sought, what was the modality?	Individual therapy	40%
	Group therapy	34%
	Family therapy	12%
	Sober living/rehab	10%
	Hospitalization/detox	2%
	Jail	1%
	Peer support	1%
Q4: If treatment was sought, what was the treatment setting?	Outpatient – virtual, 12 step, etc.	45%
	Residential/inpatient	36%
	Medical – hospital, doctor's office, etc.	19%
Q5: If treatment was sought, what was the treatment method?	12-step group	36%
	Cognitive behavioral therapy	26%
	Relapse prevention	25%
	Medication assisted treatment	6%
	Peer support	3%
	Harm reduction	1%
	Mindfulness	1%

Question	Response	Percentage
	Dharma recovery	1%
	Unable to access substance	1%
Q6: If treatment was sought, was it the preferred method?	Yes	48%
	Yes, and it was mandated	20%
	No, it was the only affordable option	17%
	No, it was mandated	5%
	Both – there were multiple interventions and one was preferred while the other was mandated	5%
	Unsure/prefer not to answer	5%

Table 4

Treatment Not Accessed

Question	Response	Percentage
Q7: If treatment was not sought, why?	Didn't want/need it	44%
	Couldn't afford it	25%
	Didn't know options/how to access it	17%
	Uncomfortable with the social aspect/other people	4%
	Didn't think it would be helpful or a realistic option	4%
	Unsure/never asked the person	4%
	Didn't think sobriety was the best approach	1%
	Already in recovery	1%

Appendix A

Substance Abuse Treatment Survey

Q1: In what ways have you been impacted by substance abuse/addiction?

Personal Experience

A friend, family member, or loved one has struggled with it

Other: Fill in the blank

Q2: Did you or the person you know seek treatment for substance abuse/addiction?

Yes

No

Not sure

Q3: If yes, what was the treatment modality? Select all that apply.

Individual therapy

Family therapy

Group therapy

NA

Other: fill in the blank

Q4: If yes, what was the treatment setting? Select all that apply:

Residential

Medical – hospital, doctor's office, etc.

Outpatient

NA

Other: Fill in the blank

Q5: If yes, what was the treatment method? Select all that apply.

Cognitive behavioral therapy

Medication assisted treatment (methodone, suboxone)

12 step group

Relapse prevention

NA

Other: Fill in the blank

Q6: If yes, was this the preferred method of treatment?

Yes

Yes, and it was mandated

No, it was mandated

No, but it was the only affordable option

NA

Other: Fill in the blank

Prefer not to answer

Q7: If no, why not?

Didn't want/need it

Didn't know about the options or how to get it

Couldn't afford it

NA

Other: Fill in the blank

Prefer not to answer

Q8: Have you ever heard of 12 step programs? e.g.: AA

Yes

No

Prefer not to answer

Q9: Have you ever heard of harm reduction? e.g.: needle exchange programs, medication assisted treatment (methodone, suboxone), etc.

Yes

No

Prefer not to answer

Q10: Have you ever heard of individual talk therapy?

Yes

No

Prefer not to answer

Q11: Have you ever heard of group talk therapy?

Yes

No

Prefer not to answer

Q12: Have you ever heard of family talk therapy?

Yes

No

Prefer not to answer

Q13: Have you ever heard of motivational interviewing (MI)?

Yes

No

Prefer not to answer

Q14: Have you ever heard of relapse prevention groups?

Yes

No

Prefer not to answer

Q15: Have you ever heard of strengths based prevention/intervention?

Yes

No

Prefer not to answer

Q16: Is there anything else you would like to share? If no, type NA