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Chapter

Assessment and Treatment of Addictions in Community Corrections

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Abstract

This chapter discusses the treatment of substance use disorders within community corrections populations. The history of substance abuse treatment within correctional populations is outlined to provide context for the current diversion and rehabilitation models currently in use. Common systems where treatment is provided such as mental health court, drug court, and TASC are described. Common forms of therapy including Cognitive Behavioral Therapy, Mindfulness, social skills training, pharmacotherapy, and smoking cessation are discussed. This chapter focuses on their effectiveness as well as how these forms of therapy differ in community corrections as compared to other populations. Finally, recommendations and future directions for research are provided.

Keywords: Community Corrections, Criminal Justice, TASC, Drug Court, Mental Health Court

1. Introduction

The United States (U.S.) incarcerates a higher proportion of its citizens than any other country in the world [1], approximately two-thirds of whom are supervised under community corrections [2]. In the substance abuse and mental health literatures, community corrections is a broadly inclusive term intended to categorize a variety of supervision models where individuals are subjected to legal supervision while being permitted to remain in the community. Both the BJS [3] and the National Institute of Justice [4] restrict definitions of community corrections to individuals under probation (i.e., being supervised in the community for a crime that does not warrant detainment in jail or prison) or parole (i.e., community supervision post detainment before one's sentence has expired). In the grey literature, this term is much more loosely defined, varies considerably across jurisdictions, and may be restricted to defining specific models that are not considered parole or probation. For the purposes of this chapter, community corrections will refer to any criminal offender being supervised in the community outside of jail or prison. Those supervised under community corrections tend to be low-risk offenders (i.e., drug offenders) and are often awaiting trial and sentencing. Individuals supervised under community corrections as well as the correctional population in general tend to have high rates of substance misuse [5], mental illness [6, 7],

traumatic brain injury [8], and suicidality [9]. These multiple comorbidities likely contribute to the high rates of recidivism (i.e., 45-65%) observed for correctional populations [10, 11]. Historically, the correctional system has not emphasized rehabilitation but has instead focused on longer and more severe sentencing in an effort to deter future crime. The increased incarceration rates and high recidivism rates are evidence that this approach has not worked. Over the past twenty years, the U.S. correctional system has shifted its focus toward a diversion rehabilitation model. The goals of this model are to identify the needs of low-risk offenders and provide treatment while diverting them from jail and prison into community supervision. Virtually all treatment models focus on addiction due to the high rates of substance misuse observed in these populations, but different treatment modalities also include psychotherapy, social skill training, vocational rehabilitation, and education, all of which have been shown to reduce crime and recidivism [12–14]. These efforts have been largely successful and have led to reductions in the recidivism rate for the first time in decades [2]. The goal of this chapter is to explain how treatment in corrections has evolved over time and what models and techniques are being used today. We will explain the more popular models of service delivery in community-based supervision (i.e., TASC, Drug Court, Mental Health Court) as well as different therapies utilized in community corrections which have been either popularly employed (Cognitive Behavioral Therapy, mindfulness, Social Skills training) or call for increased use (pharmacotherapy, smoking cessation).

2. History of substance abuse treatment in corrections

Historically, the U.S. government's approach to reducing illicit substance abuse has been to impose harsher sentencing while offering minimal treatment opportunities to the incarcerated. Harsher and more severe sentencing was enacted to deter future crime. More prominent examples of such legislation include Nixon's "war on drugs," the zero tolerance policies of the 1980s, and the three strikes laws of the 1990s. Collectively, these and similar laws led to higher conviction rates as well as longer and mandatory sentencing requirements for substance offenders [15]. Starting in the early 1990s, crime, especially violent crime, began to decrease [16]; however, the arrest and conviction rates for drug offenses continued to increase. These rates remained high for years and propped up a continually increasing incarceration rate that remains high to this day [17]. These steadily increasing incarceration rates for substance-related offenses indicate that these policies were not effective at deterring future crime; however, lawmakers repeatedly doubled down on these efforts to impose harsher laws. Conversely, as sentencing was increased for substance related offenders, minimal funding was provided for treatment efforts aimed at rehabilitating these offenders. Early treatment efforts such as Transcendental Meditation showed promise, but these efforts were poorly funded. A prominent review was published in 1974 examining the effectiveness of different treatment modalities on incarcerated populations, and the author famously concluded that "nothing works" [18]. The article was credited with debunking the idea that criminals could be rehabilitated and had a tremendous impact not just on the scientific literature, but on policy makers and the correctional system itself for the next 25 years [19]. Thus, individuals abusing substances were being arrested at higher and higher rates, no genuine efforts were made to rehabilitate these offenders during most of the 20th century.

Today diversion and rehabilitation models, which divert individuals from jail and prison and provide a variety of therapies, are reducing recidivism for the first time in decades. The most influential and prominent of which is the

Risk-Need-Responsivity (RNR) model [12]. The RNR model was developed in Canada, but due to its success it was quickly adapted across the U.S. and has become the dominant model used in community corrections to reduce recidivism. The RNR model has three main components: identifying individuals who could benefit from services, identifying the needs of the offender, and tailoring treatment to meet those needs. The model assesses eight factors, which have been strongly linked to criminal behavior and recidivism (i.e., antisocial behavior, antisocial personality patterns, procriminal condition, antisocial associates, substance abuse, family/ marital relationships, school/work, and lack of prosocial recreational activities), then diverts individuals to the appropriate level of community-based supervision and prescribes treatment recommendations based on these factors. The treatment recommendations provided by the model vary from program to program, but therapy tends to be far more comprehensive than typical psychotherapies due largely to the severity of symptoms and multiple comorbidities typically observed in criminal justice populations. These needs are assessed through the Level of Service Inventory–Revised (LSI-R; [20]), a standardized measure which provides specific recommendations. The RNR model has grown in popularity since its inception and remains the most popular and influential diversion rehabilitation model today.

3. Models of Treatment Delivery

The TASC program, originally known as "Treatment alternatives to street crime," was developed in 1972 by the federal government to address the connection between drug abuse and criminal activity [21]. Today, the acronym represents a variety of different programs. The original goals of TASC were to decrease the possession, manufacturing, and distribution of illegal drugs and to derail the cycle of drug dependent individuals committing "street crimes" by diverting offenders with substance use issues to the appropriate community-based treatment programs [21]. Today TASC programs, known by several names including Treatment Accountability for Safer Communities and Treatment Alternatives for Safe Communities, represent a variety of diverse and tailored services based on the needs of client populations and surrounding communities, but each maintains the same overarching goals. TASC is not a direct treatment provider but instead acts as a link between the criminal justice system and community-based treatment programs. This separation of corrections and treatment maintains the confidentiality of the client and is a key component in promoting honesty, trust, and recovery. TASC's common objectives are to assess offenders' need for substance abuse treatment (regardless of their crime), direct qualifying individuals to the appropriate treatment programs and ancillary services, and to monitor offenders' progress throughout the program. In addition to substance abuse treatment, offenders in the TASC program may be referred to programs that aid in providing mental health treatment, medical treatment, housing assistance, education, and vocational skills training [22]. Federal funding for TASC programs was largely reduced in the 1980s due to the rising popularity of substances, such as cocaine, for which there were few treatment programs at the time [13]. Currently, most programs rely on local funds, grants, fees, and donations.

Evaluations of the TASC program have shown it to be a cost-effective alternative to incarceration [13] and largely successful in effectively identifying offenders in need of substance abuse treatment and making appropriate referrals. Offenders enrolled in TASC programs are more likely to complete substance abuse treatment compared to those with no legal involvement [23] and remain in the community longer without rearrest compared to offenders who drop out [22, 24]. Successful

completion of TASC may require completion of ancillary service programs unique to each offender (e.g., GED, vocational rehabilitation, mental health treatment) in addition to substance abuse treatment. TASC has been influential in the development of similar programs for offenders throughout the U.S. [23, 25], with numerous adapted programs, as well as distinct programs that provide comparable services, such as "Breaking the Cycle" (BTC), "Drug Treatment Alternatives to Prison" (DTAP), and California's "Proposition 36" [26].

Although TASC has been successful in linking offenders with appropriate interventions and overall reducing recidivism, there remain populations of offenders with substance abuse issues for which TASC has been less successful. Individuals who experience more instability in their living conditions and employment, as well as marital instability at the beginning of treatment tend to fail in TASC programs more rapidly, as do those who were arrested for non-drug related crimes [9]. Drug of choice is also impactful, in that offenders who abuse more addictive substances such as crack/cocaine and opioids tend to fail the TASC program more quickly, and those who do complete the program are quicker to be rearrested [9, 26]. Although TASC is available to offenders arrested for a variety of offenses, it might be most valuable for offenders arrested for drug crimes. Additionally, given that instability and preferred substances also impact the likelihood of success, TASC programs might consider implementing aftercare, which has shown to reduce the likelihood of substance use, relapse, and rearrest beyond treatment [27].

Drug court is a term typically used to refer to courtrooms dedicated solely to providing judicially-monitored and enforced drug treatment, testing, and services for non-violent drug offenders. The first drug court was established in 1989, in Miami, Florida, to address the high rates of substance abuse related recidivism observed by judges in Dade County. By 1997, there were approximately 275 jurisdictions across the country with operating drug courts [28]. By the late 1990's university and government researchers began publishing the first efficacy and effectiveness studies on the drug court model more broadly [29–32]. In one such critical review, Dr. Belenko summarized research on the model as follows:

"The study found drug courts provide closer, more comprehensive supervision and much more frequent drug testing and monitoring during the program, than other forms of community supervision. More importantly, drug use and criminal behavior are substantially reduced while offenders are participating in drug court ([8], p. 2)."

Drug offenders are selected for participation in a drug court program by prosecutors based upon their eligibility (i.e., severity and nature of their crime) and typically participate for between 12 and 18 months. The drug court model emphasizes collaboration between the varying components of the criminal justice system (i.e., judge, prosecutor, defense attorney, probation official, etc.) and the substance abuse treatment system (i.e., mental healthcare providers, medical providers, social services, etc.) in order to promote prosocial and treatment seeking behavior and reduce recidivism [33]. The successes of the first drug court program led to the proliferation of drug courts in the United States. In 1999, there were over 425 in operation across the country [34]. In 2020, the U.S. Department of Justice places the approximate number of drug courts in the United States at over 3000 (See [35]).

Like modern TASC programs, drug court programs are united by a key set of goals. There is a high degree of heterogeneity in drug court components and practices, as their operation is not only subject to differences in state laws and state funding, but also the preferences of the individual judges presiding over each drug

court. In 1997, a report on drug courts compiled by the U.S. General Accounting Office concluded that, in addition to the huge variability observed among bona fide drug courts, some programs were observed to be drug courts only by name, displaying no emphasis on judicial oversight of treatment delivery observed in the traditional drug courts described in this chapter. The variance in adherence to the drug court model represents a major limitation in the current drug court literature [36, 37].

In 1997, the Drug Court Standards Committee, part of the National Association of Drug Court Professionals, published a document detailing the ten key components of drug court. These key components concern early identification of eligible participants, referral to treatment and community services, ongoing participation in drug court status hearings, required completion of substance abuse treatment, regular random drug screening, positive reinforcement for continued compliance, rapid sanctions for noncompliance, and typically dismissal of charges upon completion of the program [38]. Due to differences in court structure, community context, and availability of local resources, drug courts differ in their adherence to these key components [39].

The literature has demonstrated drug courts to be significantly more effective at breaking the cycle of recidivism seen in substance abuse populations than traditional courts, with an average effect of reducing recidivism ranging from 50% to 38% [40, 41]. However, the literature has also demonstrated that not all drug courts exhibit the same levels of success. The results of studies examining the effectiveness of DWI courts and juvenile courts have been mixed, and structural components of drug court procedure, such as how participants are admitted to the court, have also shown to have an impact. There is also evidence suggesting the drug court model is more effective for participants with certain individual characteristics, such as being older and more educated [42]. Current research focuses on examining drug court outcomes utilizing disparate models in service of differing populations in order to identify which components of the drug court model are responsible for successful outcomes and how individual characteristics may impact successful completion of the program [39].

In addition to TASC programs and drug courts, mental health courts also serve as a system where offenders within community corrections with substance use issues may receive services. Popularized in the 1990s, mental health courts are part of the court system that intends to divert people with mental illness from prisons and jails by using a model that is problem-solving oriented as opposed to punishment oriented. Beginning in the 1960s, state hospitals began closing due to poor treatment within facilities. Government budget cuts of community-based mental health care resulted in numerous individuals with mental illness not receiving necessary treatment and instead being retained in prisons and jails. Mental health courts are, in part, a response to the overrepresentation of offenders with mental illness within correctional facilities. There is significant comorbidity between externalizing disorders (e.g., drug use disorders), internalizing disorders (e.g., bipolar disorder), and criminal behavior within community corrections populations. Offenders with comorbid substance use and internalizing disorders are also at higher risk of reoffending should they remain untreated, further indicating a need for treatment options within the community. The amount of mental health courts in the U.S. has grown rapidly in the past few decades. Currently, there are more than 300 mental health courts for both juvenile and adult offenders with various levels of enrollment size and approved target participants (e.g., severely mentally ill, misdemeanor) [43]. Mental health courts divert offenders with mental illness to various be behavioral health services based on individual needs including individual therapy, group therapy, psychopharmacology, and assessment [44].

Mental health courts vary in how they are structured, as there is not a national standardized protocol [45], and offenders are usually given the choice of whether to participate. Mental health courts consist of a collaborative team made up of a judge, prosecution and defense attorneys, and a mental health professional. These courts may have incentives, such as a decreased sentence for compliance (e.g., adhering to the recommended mental health and addiction treatment, not recidivating). Compliance is rewarded and noncompliance is punished with jail time, reprimand by the judge, or other sanctions [45]. Court participants are most often monitored within the community by probation officers and mental health professionals who confirm attendance of appointments, while maintaining confidentiality of topics discussed within the mental health setting [45]. The mental health court protocol, though variable based on location, allows for a collaborative effort between the court and mental health professionals to create a treatment plan for offenders.

Mental health courts have been moderately effective in reducing recidivism rates and sentence lengths for offenders [46, 47]. There is some evidence that the mental health treatment through the courts is successful in symptom reduction and improvement of quality of life [46, 48, 49]. Graduation from mental health courts (i.e., receiving the full intervention) leads to more successful results (i.e., lower recidivism) compared to individuals who drop out early [46]. Overall, mental health courts have been successful in reducing symptoms and reducing recidivism rates for offenders who participate.

Mental health courts can at times be ineffective dependent on various offender characteristics and choices. Failure to reduce symptoms, choosing not to participate, negative termination, and sanctions indicate non-fulfillment of the mental health court goals. History of drug crimes and racial minority status is associated with choosing not to participate in mental health courts [50]. Negative termination through failure to complete treatment is associated with multiple diagnoses and stealing crimes, while lack of negative termination is associated with offenders with drug crimes choosing to participate, as well as increased number of scheduled court appearances; however, some evidence suggests offenders with recent drug history or drug crimes are more likely to be sanctioned by mental health courts [50, 51]. Lack of successful treatment outcomes may also result from viewing the mental health courts as coercive in nature [52]. Overall, various factors impact the success of mental health courts including demographic factors, crimes committed, and how the court is viewed by offenders.

4. Therapeutic methods

There are multiple evidence-based therapeutic methods utilized in treating individuals in corrections populations (whether incarcerated or in community corrections). Due to the high levels of variability between individual TASC programs, drug courts, and mental health courts, there is no single therapeutic method which is consistently implemented across all treatment delivery systems. Further, the difficulty in assessing community corrections populations (lack of control group availability, barriers to data collection, concerns regarding treatment fidelity, etc.) limits the body of evidence supporting the use of evidence-based treatments for use specifically in community corrections. For these reasons, this section will focus on evidence-based treatments which are commonly utilized in corrections populations more broadly, and which address presenting problems believed to be relevant to community corrections. These include cognitive behavioral therapies, mindfulness therapies, integrative therapies, social skills training, psychopharmacology, and smoking cessation treatments.

4.1 Cognitive behavioral therapies

Cognitive Behavioral Therapy (CBT) is an umbrella term for diverse psychological treatments which share some common elements. CBT treatments have shown to be effective for treating a range of psychological disorders and presenting problems. At their core, treatments typically included under the term CBT operate under a theoretical model with roots in behaviorism (focusing on external behaviors), cognitive theory (emphasizing the importance of internal behaviors/thoughts), or both. Many CBT approaches acknowledge that thinking and behavior are interconnected and both play a role in the development of psychological problems. While there are various manualized treatments for different presenting problems, treatment packages rooted in CBT usually address learned patterns of maladaptive behavior as well as unhelpful or distorted thinking. Patients receiving CBT typically learn more adaptive ways of thinking and behaving, thereby improving their coping skills and resilience, which contributes to symptom reduction and improving the effectiveness of their behavior.

In settings where both criminological and psychological outcomes are targets of CBT treatment, this model has been adapted to address the patterns of thinking and behavior which are believed to contribute to criminal justice involvement. CBT treatments adapted for this purpose have shown to be highly effective in a variety of contexts. Barnes, Hyatt, and Sherman's [53] evaluation of a 14-week CBT intervention called "*Choosing to Think, Thinking to Choose*", designed specifically for individuals in community corrections settings at high risk of recidivism, demonstrated that participants with a history of nonviolent offending were significantly less likely to re-offend. A 16-week CBT program treating community corrections offenders with a repeated history of driving while intoxicated (DWI) was demonstrated to be significantly more effective than treatment-as-usual when recidivism was assessed during a three-year follow-up, thus providing evidence that CBT can be effective in reducing recidivism related to presenting problems which have historically been extremely challenging to treat [54].

A review of CBT's use in corrections populations, written by Milkman and Wanberg [55], identifies six treatments as being the most prominent for use with individuals in "correctional institutions, community corrections centers, and outpatient programs serving probation and parole clients" (p. xi): Aggression Replacement Training (ART), Criminal Conduct and Substance Abuse Treatment: Strategies for Self-Improvement and Change (SSC), Moral Reconation Therapy (MRT), Reasoning and Rehabilitation (R&R), Relapse Prevention Therapy (RPT), and Thinking for a Change (T4C). Milkman and Wanberg identify four primary goals that all of these therapies have in common: each attempts to assist individuals in (1) identifying the problems which contributed to their conflict with authorities, (2) identifying life goals, (3) identifying prosocial solutions to the problems conflicting with goals, and (4) putting these solutions into practice. **Table 1** provides a summary of these approaches:

CBT has accumulated significant empirical support for its effectiveness in criminal justice populations and is indicated for use with both juvenile and adult offenders. A meta-analysis of 69 research studies on the impact of CBT in a variety of criminal justice settings, including prison, jail, probation, and parole settings, from 1968 through 1996 found CBT treatment to be significantly more effective in reducing recidivism than solely behavioral treatments [61]. Another meta-analysis of 58 studies conducted between 1980 and 2004 found, on average, participants who received CBT treatment were over one and a half times as likely to remain rearrest and reincarceration free at 12-month follow-up than control participants [62]. Wilson, Bouffard, and MacKenzie [63] analyzed 20 studies conducted between

Intervention	Description
Aggression Replacement Therapy (ART)	ART was originally designed for use in juvenile justice but has since been expanded for use with adults. It is provided in three one-hour sessions per week (for 10 weeks) focusing on anger and violence reduction. ART has three components (social skills training, anger control training, and moral reasoning), alternating between components each week. It is designed to teach interpersonal skills, promote self-control competencies, and improve the moral reasoning and empathy of participants [56].
Criminal Conduct and Substance Abuse Treatment: Strategies for Self-Improvement and Change (SSC)	SSC is a long-term treatment, taking 9-12 months, for adult offenders with a history of substance-abuse. Participants progress through 12 modules separated equally into 3 phases of treatment: challenge to change, commitment to change, and ownership of change. The program is intended to assist offenders in finding the motivation to change, strengthen the basic skills they will need to make necessary changes in their life, and provide reinforcement during the stabilization and maintenance of their sobriety [55]
Moral Reconation Therapy (MRT)	MRT is highly variable in its delivery, ranging from 1 to 20 sessions per month Originally developed for criminal justice-based drug treatment, it has since expanded to include a variety of presenting problems where client resistance likely interferes in treatment (e.g., driving while intoxicated, domestic violence, sex offenses, antisocial behavior, etc.). It attempts to gradually assist patients in transitioning patterns of selfishness, dishonesty, and victimizing toward more prosocial patterns characterized by social consideration, ethical principles, and personal fulfillment [57].
Reasoning and Rehabilitation (R&R)	R&R consists of 35 sessions, conducted in groups of 6 to 8, over the course of 8 to 12 weeks. The program was developed for use in a diverse range of settings, including both institutional settings and community corrections. R&R focuses on promoting prosocial thinking and social perspective taking, as well as helping clients develop their interpersonal problem-solving and self-regulation skills [58].
Relapse Prevention Therapy (RPT)	RPT emerged from a maintenance program designed for use following the successful treatment of addictive behavior, gradually becoming a stand- alone treatment. Throughout treatment, emphasis is placed on promoting self-management. RPT focuses on traditional cognitive therapy, cognitive- behavioral coping skills training, and teaching lifestyle modification strategie to promote overall coping capacity [59].
Thinking for a Change (T4C)	T4C is a group intervention delivered across 22 lessons, ranging from 1-2 hour each, typically 2 lessons per week. The treatment is provided in sequential lessons, emphasizing maintaining treatment integrity and continuity of care between providers and patients. T4C aims to integrate social skills and problem-solving training with cognitive restructuring to increase offenders' awareness of their own thoughts and emotions, as well as those of others [60]

Table 1.

This table provides a summary of the most wildly used and emphatically supported Cognitive Behavioral Therapies used in corrections.

1988 and 1999 and found that CBT treatment groups experienced significantly less recidivism than control groups, resulting in an overall decrease in recidivism by 8-16 percentage points. In addition to the broad support for the effectiveness of CBT treatments, meta-analyses have also provided support for the following claims: (1) CBT treatment appears to be more effective at reducing rearrest and reincarceration for moderate to high-risk offenders than for low risk offenders [62, 64]; (2) both CBT treatments emphasizing cognitive skills/cognitive restructuring and approaches emphasizing moral teachings and reasoning significantly decreased recidivism [63]; (3) CBT programming quality and dosage (measured in hours of treatment delivered rather than amount of time between first and last session) increase the effect size of treatment [62, 65].

Multiple studies have reinforced the importance of increased treatment dosage when utilizing CBT in criminal justice populations. A meta-analysis of 200 studies conducted between 1950 and 1995 with criminal justice samples found that a minimum of 100 hours of treatment was needed to reduce recidivism for juvenile offenders and suggested many programs may utilize effective treatments and technology but fail to reduce recidivism due to a lack of resources needed to provide necessary treatment dosages [66]. Based upon this earlier work, Sperber et al. [67] conducted a study of 689 adult male offenders successfully discharged from a Community-Based Correctional Facility to investigate the impact of dosage on recidivism. The results of this study further support the importance of providing a higher level of treatment dosage to high-risk offenders: the difference in recidivism for high-risk offenders was 24 percentage points between medium dosage (100-199 hours of treatment) and high dosage (200+ hours of treatment). In a replication of the Sperber [67] study, Markarios et al. [68] found the observed relationship between dosage and recidivism to be moderated by risk. This re-emphasized the importance of providing high doses of treatment to high-risk offenders, but also introduced the first evidence that high doses of treatment may increase rates of recidivism for low-risk offenders [68]. This suggests that limited resources may be allocated differently depending upon the risk level of the individual, possibly improving outcomes for both high-risk and low-risk offenders.

4.2 Mindfulness

Although mindfulness has existed within religious and spiritual traditions which long predate the study of psychology, it is only relatively recently that mindfulness practices have been integrated into clinical psychological practice and subjected to empirical tests [69]. Cognitive behavioral therapies rooted in providing patients with psychoeducation and skills training related to contemplative practices (practices which broadly fall under the umbrella of mindfulness) have been growing in influence and popularity within clinical psychology since Jon Kabat-Zinn developed Mindfulness Based Stress Reduction (MBSR) in the late 1980s and early 1990s [70]. In 1990, Kabat-Zinn published Full Catastrophe Living, a book introducing his landmark approach to mindfulness-based treatment, in which he defined mindfulness as "Paying attention in a particular way: on purpose, in the present moment, nonjudgmentally" [71]. In the 30 years since, growing interest in mindfulness-based therapies led to the development of multiple therapies including Mindfulness-Based Cognitive Therapy (MBCT), Mindfulness-Based Relapse Prevention (MBRP), and Metacognitive Therapy (MCT). Further evidence-based treatments have emerged which, while not exclusively mindfulness-based, integrate mindfulness-based processes into the broader cognitive behavioral therapy model to promote positive behavioral changes. Two of the most well-known of these integrative approaches are Dialectical Behavior Therapy (DBT) and Acceptance and Commitment Therapy (ACT).

Within both mindfulness-based and integrative treatments, mindfulness is utilized as a teachable skill to improve an individual's awareness of the present moment. This increased awareness of the present is purported to increase the person's ability to recognize both the salient features of their environment and how they are reacting to that environment in the moment. Mindfulness as a component of therapeutic treatment has been demonstrated to improve behavioral regulation, decrease emotional reactivity as well as psychological symptoms, and lead to increases in subjective well-being [72]. In the context of relapse prevention or emotion regulation, mindfulness skills are meant to increase the likelihood that an individual will notice and attend to internal stimuli (thoughts, emotions, cravings, physical sensations) and external stimuli (environments contributing to or worsening the problem), signaling the need to deploy behavioral regulation and coping strategies. This is a particularly salient skill for individuals in community corrections, as promoting increased self-regulation is an important component of treatment focused on rehabilitation [73].

Both mindfulness-based approaches and integrative approaches have a broad base of support for diverse presenting problems, the scope of which is beyond this chapter. However, there are specific uses for these treatments which have a more direct bearing on the treatment of presenting problems relevant to community corrections populations. Mindfulness-based treatments more broadly defined have modest evidence supporting their use in the treatment of mood disorders, chronic pain, and substance use disorders [74, 75]. MBRP in particular appears promising for the treatment of substance use disorders; early evidence comparing the outcomes of cognitively-based RPT to MBRP at 12-month follow-up suggests MBRP may be more effective in the long-term, showing reduced drug use and heavy drinking [76, 77].

Marsha Linehan [78] developed DBT, originally published under the title *Cognitive Behavioral Treatment of Borderline Personality Disorder*, as a treatment modality for chronically suicidal adults. Since its publication, DBT has accumulated strong research support for the treatment of Borderline Personality Disorder [79–81], and it is used in a variety of contexts to provide psychoeducation and skills training to address many of the same presenting problems as the CBT treatments discussed earlier; modules include mindfulness, interpersonal effectiveness training, distress tolerance, and emotion regulation [82].

In a review of transdiagnostic applications for DBT treatment, Ritschel et al. [82] describe the overall goals of DBT-based substance abuse treatment as:

- 1. teach emotion regulation skills that reduce the need to engage in dysfunctional emotion regulation strategies,
- 2. reduce behaviors and obstacles that significantly interfere with quality of life and maintain drug-seeking behavior, and
- 3. promote more skillful behaviors that would allow individuals to function adaptively and create a life worth living (p. 115).

There appears to be a gap in the literature specifically linking the use of DBT with community corrections populations. For example, a review of literature supporting the use of DBT in forensic settings found only 2 out of the 19 studies sampled forensic outpatient populations; of these, one was a feasibility study not reporting outcome data [83]. DBT's effectiveness, however, has been demonstrated for clients in forensic settings more generally and with mental health problems relevant to community corrections populations such as depression, substance use disorders, aggression, and violence [80, 83–85].

Although ACT was originally developed under the moniker Comprehensive Distancing, it emerged in its current form in the late 1990s [86]. ACT emphasizes identifying both a clients' values (what gives their life meaning, purpose, and vitality), as well as how their behavior is either bringing them closer to or farther from their values. As an integrative treatment, ACT also has marked similarities to the CBT treatments discussed earlier, with an emphasis on helping clients notice and identify their own thoughts and emotions, as well as promoting overall coping skills and the workability of chosen behaviors.

Since its publication, ACT has accumulated a significant body of evidence supporting its use in the treatment of a variety of disorders relevant to corrections settings. The use of ACT to improve willingness of drug and alcohol counselors to learn and apply evidence-based pharmacotherapy has been indicated; this is an important intervention given the stigmatization of pharmacotherapy in corrections settings despite its effectiveness in treating presenting problems such as substance use, stress, smoking cessation, chronic pain, and depression [87–89]. Similar to the literature surrounding the use of DBT, there is currently a gap in the literature surrounding ACT's use specifically with community corrections populations. However, an overview of the approach's applications in incarcerated populations is available in *ACT for the Incarcerated*, within the *Forensic CBT: A Handbook for Clinical Practice* [90].

4.3 Social skills training

Social skills training is a form of behavioral training and is defined as improving social relationships by building both verbal and nonverbal interpersonal skills. Originally created in the 1970s, social skills training was designed to increase socially acceptable skills, improve interpersonal skills (e.g., cooperation, empathy), and decrease socially unacceptable and harmful behaviors (e.g., aggression, exploitation) [91]. Social skills training has been used for a wide variety of psychological disorders in the general population: it has been used with children, people with schizophrenia, people with social anxiety disorder, and people with autism (e.g., [91–94]). Overall, social skills training has been used widely to increase social competence across many populations. Presentation of this therapy does not differ substantially in correctional populations; however, in community corrections, the major targets of treatment include assertiveness training, active listening, and learning to read non-verbal communication cues. These skills are taught because deficits in these areas have been shown to be precursors to aggression and conflict in this population.

Due to the high rates of comorbidity in community corrections, social skills training is often used as a supplement to other therapies, such as cognitive-behavioral therapy, and is rarely used in isolation. Social skills training begins by identifying an individual's social skills deficits and working with the individual based on their personal goals and needs [95, 96]. After goals are set, people are given psychoeducation about the social skill that is being targeted, including why it is important to learn [95, 96]. The social skills are then modelled by the therapist and practiced though role-playing within sessions [95, 96]. Use and practice of the behavior is then reinforced and given corrective feedback by the therapist. Homework assignments are also used to help generalize the skills to the clients' other relationships. In summary, social skills training is a multi-step process to create effective social skills based off an individual's needs and is adjusted based off an individual's social growth.

Social skills training has been successfully used in corrections populations as a part of treatment protocols when working with offenders. Studies indicate there are deficiencies in offenders' social skills and competence, including a lack of empathy for others, poor interpretation of social cues, and deficits in interpersonal intimacy (particularly with sex offenders) [97–99]. These social skills deficits increase the likelihood of participation in antisocial behavior. Social skills training in offender populations often focuses on how to give positive feedback and negative feedback, as well as accepting negative feedback [100, 101]. Skills addressed also include social problem-solving, recognizing non-verbal cues in order to avoid misattribution of hostile intent, and improving one's ability to reject pressure from peers to use illicit drugs or commit crimes [100–102]. Overall, social skills training with offenders can have multiple learning goals dependent upon offender-specific needs.

Social skills deficits are especially notable in sex offenders, juvenile offenders, and offenders with severe mental illness or comorbid mental illnesses [97, 102]. These populations have been popular targets for social skills training due to empathetic deficits and low functioning upon re-entry from prison. It is important to target these low functioning offenders in order achieve adequate social support upon reentry into the community [102]. Targeting of these populations in research allows for therapists to understand what populations are most important to target with supplemental social skills training.

Research on the effectiveness of social skills training has provided mixed results for corrections populations. There are concerns as to whether social skills training, when presented in isolation, has any notable impact on recidivism levels and other criminogenic outcomes, with most studies finding social skills training to have similar recidivism levels to treatment as usual or control groups [61, 103]. Some findings indicate social skills training has been successful in improving self-esteem and social competence for both sex offenders and general population offenders [103, 104]. Participants in social skills training also indicate a self-reported reduction in social problems and improved responses on role playing measures [105, 106]. Overall, it appears social skills training alone has little impact upon criminogenic outcomes but likely creates personal successes for offenders.

4.4 Pharmacotherapy

When substance abuse interventions are supplemented by pharmacotherapy, it is typically referred to in the literature as medication assisted treatment (MAT). Many of the studies conducted on the effectiveness and utilization of MAT in criminal justice populations have focused on the treatment of opioid and alcohol use disorders, given the high prevalence of these disorders in the U.S. corrections and community corrections populations [107]. Typical pharmacological treatment of alcohol use disorder involves the use of drugs disulfiram and naltrexone, while opioid use disorder involves use of methadone, buprenorphine, and naltrexone [108, 109].

Disulfiram has been FDA approved for the treatment of alcohol dependence for nearly 70 years, although clinical trials examining its effectiveness have shown mixed results. When taking disulfiram, patients typically experience strong negative physical reactions to consuming alcohol, reducing alcohol consumption and prolonging remission, but the drug is easily discontinued and difficulties in maintaining medication adherence have historically limited its effectiveness [110, 111]. In 1994, naltrexone, an opioid antagonist, was approved by the FDA for treating patients with alcohol dependency. A review of 50 randomized clinical trials found that naltrexone treatment's effect on heavy drinking was moderate, on average reducing treatment groups' risk of continued heavy drinking to 83% of the risk observed in placebo groups [112]. Overall, naltrexone has been found to be a safe and effective treatment for promoting controlled drinking behavior and reducing the risk of heavy drinking, but its effectiveness is also limited by low treatment adherence [113, 114]. Although treatment adherence is low with both of these medications, it appears the effectiveness of their treatment can be significantly increased by integrating patient monitoring strategies and compliance measurements into the treatment process, especially in combination with CBT [110, 115].

Pharmacotherapy for opioid use disorder is an effective adjunct treatment which reduces the likelihood of continued substance use, overdose, and recidivism in both incarcerated and community corrections participants [116, 117]. Naltrexone for opioid use is more commonly delivered in an injectable delayed release form, which has been demonstrated to significantly decrease opioid use, relapse, and overdose at

6-month follow-up [118]. Methadone and buprenorphine maintenance treatments are both methods of treating opioid withdrawal and are used in MAT. Methadone appears to be more effective in MAT when introduced while incarcerated and continued on an outpatient basis in community corrections settings [119, 120]. Both medications appear to be roughly equally effective in their ability to significantly lower risk of continued use, relapse, re-arrest, or re-incarceration; however, buprenorphine patients were significantly less likely than methadone patients to voluntarily withdraw from treatment [121].

In spite of the evidence suggesting MAT's effectiveness in serving offenders with substance use disorders, it appears to be underutilized nationally. Robinson and Adinoff [122] point out that both patients and providers experience confusion surrounding the efficacy and effectiveness of pharmacotherapy for the treatment of people with substance use disorders. In the United States, in both adult and pediatric populations, it appears that misinformation and stigma contribute to underutilization by limiting the likelihood that providers will even prescribe pharmacotherapy for patients with substance use disorder [122–124]. A survey of 170 providers, working in diverse contexts, found that approximately 20% of providers never prescribed these medications [125].

A study reviewing policies and practices of 50 criminal justice agencies in the United States (across 14 states) found that 83% of prisons and jails surveyed reported offering MAT on a limited basis only (e.g., detoxification during withdrawal only, or for the maintenance of pregnant women experiencing withdrawal but not for offenders more broadly; [107]). A national survey of 103 drug courts found that approximately half of all drug courts responding to the survey had policies and procedures explicitly banning MAT [126]. Opposition to MAT (political, judicial, and administrative) for treating offenders with substance use disorders appears to play a significant role in the inconsistent use of MAT in corrections and community corrections settings, due to stigmatization and general lack of understanding [107, 127]. Traditional training has been found to be minimally effective in changing the attitudes of corrections staff and treatment providers opposed to MAT, and the development and deployment of targeted interventions addressing this issue is a recent focus of community corrections research [128, 129].

4.5 Smoking cessation

Although tobacco is not an illicit substance and its use is not typically associated with committing serious or violent criminal offenses, there is substantial evidence suggesting smoking cessation treatment may positively impact treatment outcomes for other addictions by reducing overall substance use and increasing the likelihood of maintaining sobriety [130]. For example, individuals who quit smoking report reduced cravings for other stimulant drugs [131] and are less likely to experience future incidence of substance use disorders [132]. Further, smoking cessation treatment completed in conjunction with treatment for other addictions has shown to increase the likelihood of maintaining long-term abstinence from illicit drugs by 25% [133]. It has been hypothesized that successfully quitting smoking may facilitate changing other addiction-related habits. Unfortunately, despite widespread evidence of positive effects and virtually no reliable evidence of negative effects [130], smoking cessation treatment for substance addicted individuals has largely been neglected.

Over the past several decades, the proportion of cigarette smokers in the United States has steadily decreased to less than 16% [134]. However, smoking prevalence among individuals involved with the criminal justice system has remained consistently high (70-80%) constituting roughly 12% of all smokers in the U.S. [135].

Even individuals in the juvenile justice system smoke at a rate 40% greater than their peers in the general population [136]. Smoking remains a leading cause of preventable death and disability in the U.S., and individuals in the criminal justice system are at much greater risk for experiencing severe health conditions associated with smoking, including cardiovascular disease, cancer, circulatory and respiratory problems, kidney and liver problems, and diabetes, all of which may lead to premature death. Although the average age of individuals in the criminal justice system is in the mid-30's, many already report experiencing smoking-related illnesses and diseases. Further, individuals in community corrections are less likely to receive consistent medical attention to address such illnesses due to poverty and limited healthcare access encountered upon release.

The majority of prisons and jails across the country have banned smoking; however, almost all inmates released into community correctional supervision from smoke-free facilities resume smoking [137]. Widespread smoking bans in jails and prisons also limit the availability of smoking cessation treatment. Even when some forms of treatment are available, such as nicotine replacement, they are often priced so high that many inmates do not have access. Although smoking bans in correctional facilities may be a legitimate effort to aid in smoking cessation, being forced to stop smoking is not synonymous with quitting smoking, which may explain the high number of individuals released to community corrections who return to the habit.

Consequently, efforts to reduce smoking in criminal justice populations are primarily focused on community corrections, although the efforts have not been vast. Generally, smoking cessation treatment does not target criminal justice populations despite the high prevalence and associated health issues which are of great cost to the individuals and their communities. The few studies that have explored smoking cessation in criminal justice individuals have determined that more research is needed to understand the nuances associated with tailoring smoking cessation treatment to this population and its subgroups [135]. There is also an increased likelihood that those in the criminal justice system experience comorbid substance abuse issues, mental health issues, and poverty, all of which must be considered in determining the appropriateness and accessibility of treatment.

The interventions that have been studied in this population have, in some cases, been modified from traditional smoking cessation treatments, which vary widely. Some such interventions have shown to work well in certain subsets of the general population and poorly in others [138], which may further complicate the process of tailoring these treatments to individuals in community corrections. A common smoking cessation pharmacotherapy is Nicotine Replacement Therapy (NRT), which is intended to be used in place of tobacco products to relieve withdrawal symptoms and craving. When used in criminal justice populations, NRT has been successful in initiating smoking reduction even for individuals who were initially unmotivated to quit [139]. Varenicline is another leading pharmacological treatment that interferes with nicotine receptor stimulation and reduces craving. However, the cost is high and there is not presently a generic form, so it is likely not an easily accessible option for individuals in community corrections. Antidepressants such as nortriptyline and bupropion have also been utilized as smoking cessation pharmacotherapies and may be valuable for criminal justice involved individuals, as this population is at higher risk for experiencing mental illness, including mood disorders. Bupropion specifically has been shown to improve smoking cessation rates in community corrections individuals who take the medication reliably [140].

Some of the behavioral interventions utilized in smoking cessation treatment are adapted from broader therapies, such as Cognitive Behavioral Therapy (CBT),

whereby individuals are taught to recognize specific circumstances that precede or trigger smoking and learn cognitive and behavioral strategies to effectively cope with those triggers. The WISE intervention (Working Inside for Smoking Elimination), which utilizes techniques from CBT and other empirically supported therapies, specifically targets inmates who are approaching discharge and has shown to reduce smoking relapse upon release from smoke-free prisons [141]. Mood Management (MM) Training was designed to prevent smoking relapse, and like CBT, it aims to identify triggers associated with smoking and to develop coping strategies. One study that adapted MM for a correctional population found it to be an effective smoking cessation treatment when combined with NRT [142]. One of the only known interventions that specifically targets smoking cessation in community corrections populations is DIMENSIONS: Tobacco Free Program, which was developed by Arkansas Community Correction (ACC) along with the University of Colorado's Behavioral Health & Wellness Program. The DIMENSIONS program is based on techniques and philosophy derived from tobacco cessation programs that target mental health populations and aims to provide holistic community-based support for individuals in community corrections. Results of the program are promising with the majority of individuals having exhibited decreased tobacco use after completing half the program, and those who completed the full program decreased tobacco use by at least 50% [143].

Along with a dearth of specifically targeted behavioral interventions, poverty and generally inadequate healthcare make even basic pharmacotherapies inaccessible for many individuals in community corrections. Unfortunately, lack of access to healthcare and negative attitudes about healthcare may contribute to exhibiting poor medication adherence, creating even more challenges in treatment. Medication adherence has shown to be the most powerful predictor of successful smoking cessation, and it is also a common issue in the community corrections population. However, individuals who have utilized pharmacological treatments in the past are more likely to succeed in subsequent cessation attempts [140]. Even short-term exposure to smoking cessation medication may be beneficial in increasing the likelihood of adherence in the future. Individuals who utilize smoking cessation medication in the presence of a treatment provider are also more likely to adhere to treatment even if the provider is minimally trained [144]. This is promising for individuals in community corrections, as they may not have consistent access to more highly trained professionals.

Smoking cessation treatment for individuals in community corrections is rife with challenges that impede success. Despite high rates of smoking in this population, as well as high interest in quitting, accessible interventions are sparse. Further research examining the effectiveness of certain interventions for individuals in community corrections, as well as methods of increasing accessibility, are certainly necessary. Future studies should also explore means of improving medication adherence to increase successful cessation. Regardless of differences in treatment effectiveness in certain subgroups, it is suspected that increasing adherence to medication will improve treatment effectiveness for the entire community corrections population.

5. Conclusions

Historically, the treatment of substance use disorders in U.S. correctional populations has been slow to take hold. Traditional models of incarceration focused almost entirely on punitive sentencing with little afterthought devoted to rehabilitation efforts. These approaches failed to reduce recidivism. Diversion rehabilitation models, particularly the Risk-Need-Responsivity model [12], which divert offenders from incarceration and provide tailored treatment in the community, have been shown to reduce recidivism rates both in research and practice. Popular implementations include TASC, Drug Court, and Mental Health Court, among others. Due to the high rates of substance abuse in these populations, most programs offer some form of substance abuse treatment. Different forms of Cognitive Behavioral Therapy (i.e., ART, SSC, MRT, R&R, RPT, and T4C) are the most commonly employed and likely have the most empirical support as well. Furthermore, substance abuse treatment in community corrections is typically complicated by high rates of comorbidity, as well as other factors such as poverty, unemployment, and inconsistent housing, which only serve to further complicate treatment [9]. As a result, these versions of therapy are often longer and more intensive than traditional forms of CBT. The cumulative product is an increased dosage and specificity of psychotherapy that had never been seen in U.S. corrections previously.

While increased substance abuse and mental health treatment are worthy of praise, especially considering the history of treatment in corrections, this same level of treatment would not be heralded as progress in a hospital or more controlled medical setting. There are multiple targets of treatment, such as traumatic brain injury and other organic issues that occur at a high base rate in both correctional and CC populations, and these diseases go almost wholly unaddressed [8, 145]. Furthermore, while the therapies employed in correction and CC specifically are comprehensive and span a multitude of presenting problems, there is a complete absence of dismantling studies to identify meaningful mechanisms of action. Furthermore, CBT based therapies are often supplemented by other forms of therapy, such as Mindfulness, social skills training, pharmacotherapy, or smoking cessation. The literature provides less support for using these other forms of therapy without some form of CBT. Therapies could likely be streamlined to focus more on the most meaningful components. Additionally, pharmacotherapy and smoking cessation can both have a positive impact on recovery but are highly underutilized in CC programs. The incorporation of treatment and therapy into the legal system has yielded very promising results, but these approaches are still in development and many have only come into existence over the past two decades. Future work needs to identify additional targets of treatment within this population, as well as streamline therapies to better emphasize the more important components.

A final component in need of change is continuity of care. The constitutional mandate to provide healthcare to prisoners does not extend to those supervised in the community. Transition from confinement back into the community is an extremely sensitive period with elevated homicide, relapse, and suicide rates [146, 147]. Furthermore, transitions from jail to CC and back to jail are often common for individuals who commit minor drug offenses, and this is especially true for individuals with limited criminal justice involvement. This period represents a window of opportunity for intervention, but coordination of treatment will require the cooperation of the treatment community and the legal system. Coordination at the national and/or state levels would likely be needed to standardize treatment and communication between jail and prison and CC providers as well as to provide consistent funding. This would likely come at considerable cost, yet the legal system in its current form was estimated to cost 182 billion in 2017 [148]. A more effective system better able to promote rehabilitation would certainly be better for offenders and may be more cost effective in the long run.

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