EDITORIAL

Co-Occurring Substance Use and Mental Disorders in the Criminal Justice System: A New Frontier of Clinical Practice and Research

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This special section of the *Psychiatric Rehabilitation Journal* focuses on justice-involved persons with co-occurring mental and substance use disorders (CODs). Abundant research in community and criminal justice settings shows that CODs differ widely in terms of their types and combinations as well as their symptom onset, severity, and course (e.g., Kessler et al., 2005; Lurigio, 2011). Research also consistently demonstrates that CODs are more common among persons in jails, prisons, and other criminal justice settings than among persons in the general population (Council of State Governments, 2002). This special section contains seven original articles examining CODs among justice-involved populations that vary by gender, age, setting (e.g., community/court, jail, prison), environment (urban, rural), geographic region, and nationality.

Co-Occurring Disorders in the Criminal Justice System

Health care problems are prevalent within offender populations. For example, more than two thirds of jail detainees (Karberg & James, 2005) and half of prison inmates have a substance use disorder (National GAINS Center, 2004), compared with 9% of people in the general population (Cloud, 2014). Similarly, rates of serious mental illnesses (i.e., bipolar disorder, major depression, and schizophrenia) are 4–6 times higher in jails and 3–4 times higher in prisons than in the general population (Prins, 2014; Steadman, Osher, Robbins, Case, & Samuels, 2009). In addition, various infectious diseases and chronic health care problems (e.g., asthma, cancer, HIV/AIDS, hepatitis C, hypertension, sexually

transmitted disease, traumatic brain injury, and tuberculosis) are also more common in justice settings than in the general population (Cloud, 2014) and are frequently caused or aggravated by CODs (Prins, 2014).

Prevalence rates of mental disorders are high for untreated substance-involved persons, higher for persons in substance abuse treatment programs, and even higher for offenders with substance use disorders (Baillargeon et al., 2010; Lurigio & Swartz, 2000). Jail inmates with mental health problems are more likely than those without such problems to report drug use in the month before their recent arrest (60% vs. 40%; Mumola & Karberg, 2006). Prison inmates with mental disorders are also more likely to have substance use disorders than inmates without mental disorders (74% vs. 56%; Mumola & Karberg, 2006).

CODs are more often the rule than the exception in justice settings (Grant et al., 2004; National GAINS Center, 2004; Peters, Rojas, & Bartoi, in press). The overrepresentation of people with CODs in the criminal justice system can be explained by several factors. Much of the growth in justice populations over the past 20 years is attributable to drug law violators, who have high rates of CODs (Lurigio & Swartz, 2000; Osher, 2013). Elevated rates of homelessness and criminogenic risk factors (e.g., criminal attitudes and peer networks, employment problems, educational deficits, and poor social supports) among persons with CODs also contribute to higher rates of arrest (Morgan, Fisher, Duan, Mandracchia, & Murray, 2010; Osher, 2013; Skeem, Nicholson, & Kregg, 2008).

Persons who have CODs are not only more likely to be arrested, they are also more likely to violate the conditions of community supervision and to commit acts of violence (Balyakina et al., 2014; Corrigan & Watson, 2005; Messina, Burdon, Hagopian, & Prendergast, 2004; McCabe et al., 2012; Mueser, Drake, & Noordsy, 1998; Peters, LeVasseur, & Chandler, 2004; Wilson, Draine, Hadley, Metraux, & Evans, 2011). Furthermore, these individuals remain in jail and prison longer than persons without CODs (Council of State Governments, 2012), are more difficult to manage in custodial settings (Houser & Welsh, 2014), and are more likely to be reincarcerated within 1 year of discharge than those with only a mental or substance use disorder (48% vs. 31%; Messina et al., 2004). Notably, the increased risk for violence among persons with CODs is primarily attributable to substance

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use disorders and antisocial personality features, and not to mental illnesses (Elbogen & Johnson, 2009: Hodgins, 2008).

Offenders with CODs might have a shared genetic predisposition that places them at elevated risk for both types of disorders. Genes can have a direct effect on the development of these disorders or an indirect effect on both by bequeathing an individual with poor coping skills and the inability to manage environmental stressors. Indeed, several regions of the human genome are associated with increased risk for mental and substance use disorders (National Institute on Drug Abuse [NIDA], 2010). Similar regions of the brain, especially those pathways that involve the neurotransmitter dopamine, influence the expression of both mental and substance use disorders (NIDA, 2010; Volkow, 2009). Several common environmental factors enhance vulnerability to both mental and substance use disorders. These include exposure to traumatic events (e.g., violence in childhood), and environmental stressors such as poverty, educational and vocational difficulties, social isolation, and residing in drug-infested neighborhoods (Mueser, Kavanagh, & Brunette, 2007; Noordsy, Mishra, & Mueser, 2013), Substance use has also been found to have a "kindling" effect in triggering the onset of various mental disorders (NIDA, 2010). On the other hand, brain changes associated with the onset of mental disorders can leave a person more vulnerable to addiction by enhancing the pleasurable effects of drugs and diminishing awareness of the negative consequences of their misuse. Finally, persons with serious mental disorders also tend to use substances to alleviate their symptoms (NIDA, 2010).

Interventions for CODs in the Criminal Justice System

Several interventions have proven to be effective in treating CODs in the community and hold considerable promise for implementation in criminal justice settings. These include Illness Management and Recovery (IMR), integrated group treatment, cognitive–behavioral therapy, therapeutic communities (TCs), assertive community treatment, family psychoeducation, social skills training, case management, and the use of medications to treat both mental and substance use disorders (NIDA, 2010; Steadman et al., 2013). Integrated treatments simultaneously attend to both sets of disorders, consider them both as "primary" conditions, recognize the reciprocity between their etiology and symptoms, and adhere to consistent philosophies and treatment plans (Chandler, Peters, Field, & Juliano-Bult, 2004; Mueser, Noordsy, Drake, & Fox, 2003; Osher, 2008, 2013).

Programs for CODs in various justice settings (e.g., courts, jails, prison, reentry) appear to share several common principles, including the use of highly structured treatment and supervision services, extended program duration, techniques for motivation and engagement in services, outreach and crisis care, supportive versus confrontational therapeutic philosophies, and cross-training of staff (Lurigio, 2011; Peters & Bekman, 2007; Peters, Kremling, Bekman, & Caudy, 2012). Specialized COD interventions are also needed to address the unique needs of justice-involved women, who frequently have histories of trauma and post-traumatic stress disorder, and who typically require intensive services related to parenting, family reunification, health care, education, employment, and literacy (Sacks, 2004). COD services in the criminal justice system are generally located in settings that afford organi-

zational support for evidence-based practices and innovation (Taxman, Cropsey, Melnick, & Perdoni, 2008).

Only a few controlled studies have examined the effectiveness of COD programs in justice venues. For example, Sacks and colleagues (Sacks, Chaple, Sacks, McKendrick, & Cleland, 2012; Sacks, Sacks, McKendrick, Banks, & Stommel, 2004) investigated TCs designed for offenders with CODs in both prison and community corrections settings. Findings indicate that reincarceration rates for TC participants were significantly lower than among those receiving customary prison mental health services. Furthermore, reductions in reincarceration were maximized for persons receiving TC services in both prison and community corrections settings. In addition, research indicates that specialized community supervision teams and approaches can reduce violations and revocations among probationers with CODs (Skeem, Louden, Polaschek, & Camp, 2007; Skeem & Manchak, 2008).

Public Policy Issues

Policymakers have begun to recognize that substantial resources are required to incarcerate nonviolent offenders who have CODs (Clement, Schwarzfeld, & Thompson, 2011; Council of State Governments, 2012; Pew Center on the States, 2012; Vera Institute of Justice, 2013a). As a result, many states are now realigning their law enforcement and prosecution approaches, sentencing laws, and incarceration practices, so that eligible nonviolent felons are diverted to community placements that include services for mental and substance use disorders (Council of State Governments, 2012). These reforms have improved public safety, lowered rates of incarceration, and diminished the need for jail and prison construction, as well as averted costs associated with court processing and victims services (Council of State Governments, 2013; Vera Institute of Justice, 2013b).

Although community treatment and supervision is an effective alternative to incarceration for many offenders with CODs, integrated services for this population are sorely lacking in many communities (Chandler et al., 2004; Drake & Green, 2014; Lurigio, 2011). For example, most traditional mental health and substance abuse treatment programs offer no specialized services for CODs and have only limited capacity to address the complex needs of these offenders, such as interventions to reduce "criminal thinking" (Osher, 2008; Peters, Rojas, & Bartoi, in press). The lack of specialized services contributes to high rates of dropout from treatment, rearrest and reincarceration, and rapid cycling among crisis centers, hospital emergency rooms, jails, and prisons (Council of State Governments, 2012, 2013).

Incarceration of offenders who have CODs generally leads to poor outcomes. Absent a significant risk to public safety, this population is better served by placement in community treatment and supervision services. Treatment in jail and prison to address CODs is frequently inadequate in both scope and quality (Chandler et al., 2004; Peters & Bekman, 2007). For example, most jails and prisons provide no medication-assisted treatment (e.g., methadone) for substance use disorders (Ludwig & Peters, 2014; Mitchell et al., 2009), and many correctional facilities operate with limited medication formularies (Daniel, 2007) that require newly admitted inmates to discontinue their current medication, often leading to an exacerbation of psychiatric symptoms and the presence of adverse side effects from new medications.

Due to their compromised functioning, persons with CODs are more likely to be victimized while in jail and prison (Blitz, Wolff, & Shi, 2008). They also exhibit greater behavioral problems (Houser & Welsh, 2014) and, as a result, are significantly more likely to be subjected to the use of force by correctional staff and placed in isolation or administrative segregation (e.g., solitary confinement; American Civil Liberties Union of Colorado, 2013; Metzner & Fellner, 2010; Winerip & Schwirtz, 2014). The use of solitary confinement for inmates who have major mental disorders has been shown to cause trauma, long-term psychological impairment, and psychiatric decompensation (Arrigo & Bullock, 2008; Smith, 2006). The misuse of solitary confinement in jails and prisons has been the subject of recent administrative policy changes in California and a major lawsuit in New York City. Many correctional facilities are now reexamining their policies to restrict the use of this practice with inmates who have mental illness.

Community reentry from jails and prisons presents significant challenges for persons who have CODs. Key barriers to successful reentry include the difficulty of securing stable housing, discontinuity of medications and other treatment services, and high rates of substance use relapse and recidivism (Baillargeon, Hoge, & Penn, 2010; Messina et al., 2004; Osher, 2007; Peters & Bekman, 2007). Several innovative models have been developed to assist in community reentry, including Medicaid enrollment services, prerelease planning, intensive case management and treatment services, development of psycho-educational skills, and specialized staff training (Draine & Herman, 2007; Osher, Steadman, & Barr, 2003; Rotter, McQuistion, Broner, & Steinbacher, 2005). Research indicates that COD treatment programs in correctional institutions coupled with structured and intensive services in the community can greatly reduce rates of substance use and recommitment to prison (Sacks et al., 2004, Sacks et al., 2012).

The recent implementation of the Affordable Care Act (ACA) presents a critical opportunity to enhance both the scope and quality of services for offenders with CODs (Cloud, 2014; Rich et al., 2014). The ACA expands health insurance coverage for lower-income populations, creates a funding stream to support front-end criminal justice diversion programs, and establishes Medicaid-funded "Health Homes" for persons with chronic conditions such as CODs. Through the ACA, health system "navigators" have been enlisted to help enroll eligible people and coordinate Medicaid services in criminal justice settings (Cloud, 2014).

In summary, persons with CODs are disproportionately represented in the mental health and substance abuse treatment systems, as well as in the criminal justice system. This population presents a significant challenge for treatment providers and consumes a tremendous amount of public health and other community and institutional resources. Persons who have CODs typically suffer from multiple disorders (e.g., mental, substance use, other chronic health disorders) and are unlikely to recover without long-term care and supervision. CODs routinely go unnoticed in criminal justice settings, increasing risk for recidivism and threatening public safety in the communities where they reside (Peters & Petrila, 2004). As previously discussed, persons who have CODs are more likely to be arrested, incarcerated, and to commit acts of violence, although substance use and antisocial personality features are much stronger contributors to these adverse outcomes than serious mental illness. Integrated services represent the most promising approach to support recovery and successful community reentry among justice-involved persons with CODs. Despite the importance of such interventions, truly integrated services are sorely lacking, particularly in correctional institutions and in community settings, which provide continuity of care for those released from jails and prisons (Chandler et al., 2004; Lurigio, 2011; NIDA, 2010).

Contents of the Special Section

The articles in this special section explore the nature and extent of CODs among justice-involved youths and adults, and suggest strategies for treating these conditions to avoid adverse outcomes in criminal justice and behavioral health care systems. In the first article, Hunt et al. (2015) analyze a large sample of data from the Arrestee Drug Abuse Monitoring Program (ADAM II) to examine the substance abuse and mental health treatment histories of men detained in metropolitan jails. The researchers report that a substantial proportion of arrestees need treatment for both mental and substance use disorders; however, relatively few arrestees received either type of these services in the past year or during their lifetimes. In addition, Whites were more likely than African Americans and Hispanics to receive substance abuse or mental health treatment, or both. The authors conclude that " . . . offender treatment services have not expanded to meet the growing needs of justice-involved individuals who have severe substance use and mental disorders" (p. 12).

The second contribution, by Ogloff et al. (2015), examines the effects of CODs in a forensic sample that included unadjudicated men in Victoria, Australia, who were the subjects of a presentence psychological or psychiatric investigation, and the residents of a state forensic hospital, who were deemed unfit to stand trial or not guilty by reason of mental impairment. Of particular interest in this study are the effects of antisocial personality disorder and other co-occurring mental and substance use disorders on criminal behavior. The investigators report that CODs are related to histories of violent offending, juvenile records, imprisonment, and drug use preceding the commission of a crime. In addition, the presence of antisocial personality disorder and other rate and severity of offending.

The next three articles describe research with female adult offenders. The third contribution in the special section, by Houser and Belenko (2015), explores the relationship between CODs and institutional misconduct/disciplinary actions in a sample of female inmates. Using correctional records, the investigators report that women who have CODs were more likely than those with no disorders or only a single disorder to be disciplined for minor infractions while incarcerated. Specifically, female inmates with CODs were 4 times more likely than those with no disorders to be disciplined for minor institutional misconduct.

In the fourth article of the section, Scott, Dennis, and Lurigio (2015) present a study that investigates CODs in a sample of female detainees in a drug treatment program within a large urban jail. The researchers performed a discriminant function analysis to identify the variables that differentiated the women into three categories: those with a substance use disorder only and no CODs (Category 1), those with a substance use disorder and an internalizing disorder (e.g., anxiety or depression; Category 2), and those with a substance use disorder (e.g., anxiety or depression) and an externalizing disorder (e.g., antiso-

cial or borderline personality disorder; Category 3). Findings indicate that women with both internalizing and externalizing disorders (Category 3) were more likely than other female detainees to have histories of trauma and to engage in criminal thinking, both of which are risk factors for continued criminal behavior.

The fifth article describes a study of HIV risk behaviors among female detainees in a substance abuse treatment program within a rural jail. Through interviews with the detainees, Staton-Tindall (2015) found that a large proportion reported symptoms of depression, anxiety, and posttraumatic stress disorder. Those who reported such mental health problems also reported severe substance use and risky sexual behaviors.

The sixth article features a sample of juvenile justice-involved youth. In this study, Santisteban et al. (2015) implemented a randomized controlled design to test the comparative effectiveness of two types of interventions for youth with co-occurring borderline personality disorder and substance use disorders. Both of the tested interventions were manualized; one was family based (integrated borderline personality disorder-oriented adolescent family therapy), the other was individually based (individual drug counseling). At 12 months postbaseline, both groups improved clinically. However, within the former group, only adolescents with co-occurring depression showed reductions in substance use. From a clinical standpoint, the findings suggest that improvements in the symptoms of borderline personality disorder may have no effects on the symptoms of substance use disorders and vice versa.

The final article in the special section, by Stein et al. (2015), weighs the associations between gender, ethnicity, and race on the service needs of detained and incarcerated girls. The study employed a risk-needs-responsivity (RNR) framework in an archival analysis of the institutional records of a large sample of youth in a state juvenile correctional facility. Youth were assessed with standardized tools that were compatible with the RNR model. The researchers found that girls were more likely than boys to be diagnosed with a psychiatric disorder. Girls were older than boys when they entered the juvenile justice system but younger than boys at their first detention. The investigators suggest that RNR-based treatments designed to reduce recidivism for girls should address family dysfunction, parental relationships, academic performance, and sexual behavior.

In conclusion, the seven papers in this special section of the *Psychiatric Rehabilitation Journal* demonstrate the pervasiveness and severity of CODs among persons in the juvenile and criminal justice systems from arrest to detention to incarceration. Moreover, the studies remind us that CODs can emerge in adolescence, and of the importance of early identification, assessment, and treatment in the juvenile justice system. The articles also emphasize the sequelae of CODs that render those afflicted with a higher risk of recidivism and relapse, compared with persons who have only one type of disorder. Finally, the studies presented here underscore the importance of integrated services for CODs, which are provided in both institutional and community settings and are gender and race sensitive.

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