Correctional Management and Treatment of Autism Spectrum Disorder

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Over the past two decades, the recognition and diagnosis of autism spectrum disorders (ASDs) has grown. One result is the parallel recognition of a substantial prevalence of individuals with ASD who, because of life-long social and emotional deficits, have become involved with the criminal justice system (CJS). It is generally acknowledged that many CJS professionals who encounter individuals with ASD are ill equipped to treat or advocate for them. Currently, there is no universal training on ASD for CJS professionals, nor are there service standards for individuals with ASD during incarceration, to support their community re-entry and reduce recidivism. In this article, we review the background and context for management and treatment during incarceration for individuals with ASD.

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Autism spectrum disorder (ASD) is a lifelong neurodevelopmental condition characterized by deficits in communication and social interaction, as well as a restricted repertoire of activities and interests.[1] The recognized prevalence of ASD has increased substantially over the past two decades. According to the Centers for Disease Control and Prevention, ASD is identified in 1 in 68 children, with prevalence among males five times greater than that among females.[2] Of note are those who, before the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)[1] were said to have Asperger's syndrome, pervasive developmental disorder NOS, and high-functioning autism; these disorders now fall under the umbrella of ASD. It is likely that the number of individuals with recognized ASD will further increase as a consequence of improved detection. It is these deficits that increase the risk that individuals with ASD will engage, often unknowingly, in offending behavior leading to contact with the criminal justice system (CJS).

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Studies of ASD in the offender population estimate that the prevalence rate is much higher than that of the general population, notably for individuals with ASD who are higher functioning.[3] Although individuals with profound autism are more readily identified, those on the milder end of the spectrum may have strengths that can mask significant social and communication deficits.[4] In reality, they are functioning at a much lower level socially and developmentally than their neurotypical (non-ASD) peers. Although commonly present in early childhood, symptoms may not fully manifest until social demands exceed the capacity of the individual to cope.[5] As the individual with ASD ages, odd behaviors accepted in childhood may be seen as threatening or unwelcome in adulthood. Although only a minority of people with ASD come into contact with the CJS,[6] well-designed research in this field is still needed to aid in gaining understanding of the specific characteristics that increase potential risks of CJS involvement.[7]

The CJS currently lags behind the community in recognizing and appropriately managing individuals with ASD. Inadequate identification and assessment of adults with ASD prevents potential treatment to reduce or eliminate problematic behavior. Many justice-involved individuals with ASD may remain undiagnosed or even misdiagnosed for years.[8] Societal

misunderstanding of ASD persists, however, in part because of sensational reporting of rare instances of extremely violent crimes committed by individuals with ASD.[9] In this article, we review screening, problematic behavior, and management and treatment during incarceration. Because of the lack of literature on autistic females' experiences in the CJS, this article focuses on incarcerated males.

Screening

In general, there is currently no routine, standardized screening, or assessment undertaken at any stage of the criminal justice process to determine the nature and extent of ASD. For adults, there are several screening tests that have been validated on community samples.[10–12] For example, the Ritvo Autism and Asperger Diagnostic Scale (RAADS)-14 is a 14-item questionnaire derived from an 80-item instrument with a sensitivity of 97 percent and a specificity of 46 to 64 percent.[12] Item domains include mentalization (e.g., "It is difficult for me to understand how other people are feeling when we are talking."), social anxiety (e.g., "It is very difficult for me to work or function in groups."), and sensory reactivity (e.g., "When I feel overwhelmed by my senses, I have to isolate myself to shut them down.").[12] However, neither this tool nor any others have been validated in correctional populations. Piloting and evaluating such tools would be an appropriate next step. Further evaluation by a clinician experienced in ASD would be warranted after a positive screening. Such an assessment would support both the affected individual and the system and reduce the risk of subsequent aberrant behavior.

Problematic Aspects of Behavior

ASD has a range of associated deficits that vary widely across this population, including: difficulty in reading emotions on the faces of others, nonverbal communication, social interactions, and motor coordination; a tendency to state what they think without regard for social consequences; idiosyncratic interests; literal interpretation of language; and an ability to be honest to the point of offending others.[4] Behaviors such as aggression may emerge consequent to misreading another's intentions or confusion regarding why their behavior or comment is received negatively.

An individual with ASD often interacts with correctional staff and other inmates differently than do neurotypical individuals. For instance, persons with ASD are highly suggestible and quick to rationalize their behavior. Their presentation may lack the expected sense of guilt or remorse one would typically expect. Persons with ASD struggle at reading another's face and easily become confused by others. Their tendency to avoid eye contact may be perceived as disinterest or guilt. They may overcompensate with a fixed stare that may be perceived as aggressive. During an interview, persons with ASD may interpret what is being said to them literally and not understand hidden meanings, metaphor, or sarcasm. These behaviors, if not recognized as such by staff or other inmates, put individuals with ASD at risk for serious consequences.

Because of difficulties with social imagination, problems with flexibility of thought, general naiveté, and a tendency toward obsessive and repetitive behavior, an individual with ASD may not learn from experience.[8] This deficit increases the risk of repeating the problematic behavior or becoming subject to victimization. He may behave in a way that makes others uncomfortable and not understand the meaning behind the behavior.[8] The following vignette, while fictional, illustrates aspects of this behavior.

> Vignette 1
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> Shortly after arraignment for trespassing and resisting arrest, A.M. was processed into the local jail and shown to a bunk in the jail dormitory. In just a few minutes, A.M. was wandering around the dorm, looking through other inmates' property. Very quickly, another inmate confronted him, yelling for him to back off and get away. The correctional officer responded to the rapidly escalating situation, listened to the concerns, and addressed A.M.'s intrusive behavior. When told to stay in his own area, A.M. responded with a nod of his head. Taking this for acquiescence, the officer returned to his duty post. Ten minutes later, A.M. was again intruding into the space of another inmate. The officer was upset by this repeated behavior and sent A.M. to a restricted housing unit and initiated a disciplinary report for flagrant disobedience.

Behaviors that pose risks include unwelcome advances or unwittingly invading another person's space. Affected individuals may pursue a specific interest with no regard for the effect that their actions may have on others or the possible consequences. They may engage in unexpected violence and outbursts provoked by triggers in the environment caused by sensory overload. Individuals with ASD also may not realize that by acting in a certain way they have broken rules.[8] They may be particularly

vulnerable when questioned, because they are likely to experience difficulty with temporal relationships. They experience problems in differentiating their own actions from those of others, misinterpret what they see or hear, function poorly in unfamiliar environments, and misjudge relationships in formal interviews (resulting in incautious frankness and disclosure of private fantasies, among others). Individuals with ASD also show undue compliance and rigidly stick to an account once it has, in their view, become established, and use words without fully understanding their meaning.[13–16] In addition, there is a different pattern of comorbidity in ASD, with a higher level of psychosis, violent behavior, and depression.[17]

In one small study ($N = 33$), participants with ASD had engaged in an average of three types of offending by the average age of 25.8 years.[4] Violent behavior and threatening conduct were the most common types of offending, followed by destructive behavior, drug offenses, and theft. Repetition of these behaviors during incarceration may lead to further serious consequences, whether additional legal sanctions or direct and potentially brutal retribution by the inmate victim. In addition to these criminal behaviors, several other common behavioral disturbances were found: anxiety, depression, sleeping and eating disorders, attention deficit, temper tantrums, and aggression or self-injury.[4]

Persons with ASD do not generally intend to hurt others; instead they are confused by other people and withdraw socially in preference for the more predictable world of objects. Generally, people with ASD have intact affective empathy: when they hear that someone is suffering, it upsets them. Affective empathy is the drive to respond with an appropriate emotion to what someone is thinking or feeling.[18] In some ways, people with autism may be viewed as mirror opposites of psychopaths.[19] A psychopath has good cognitive empathy, or the ability to imagine someone else's thoughts or feelings: that's how they can deceive others effectively. However, they have reduced affective empathy. People with autism have intact affective empathy and struggle with cognitive empathy for neurological reasons.

Management

For individuals with ASD who become incarcerated, the failure to provide necessary supports is potentially devastating.[3,4,6,8] When a custodial sentence is imposed, best practice dictates that prison authorities consider how the diagnosis will affect the person's behavior and ensure that there are appropriate safeguards and support during his incarceration.[3] Individuals with ASD need to be informed of their diagnosis and learn typical social functioning. They require accommodation and support in negotiating the social world that surrounds them. Researchers have documented that the communication and social impairments that characterize the disorder continue throughout adulthood,[20] a time when such supportive services are not commonly provided.

Clinicians and custody staff in correctional settings without knowledge of ASD may misunderstand presenting behaviors as intentional misbehavior. Given their cognitive and emotional social challenges, individuals with ASD may have an increased likelihood of confrontations with others and may be particularly vulnerable to bullying and exploitation and, consequently, more likely to be socially isolated than other prisoners.[8] Jail and prison settings expose the individual to harm and risk where the individual with ASD is not fully able to understand the situation. The following vignette, also fictional, illustrates this point:

> Vignette 2
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> J. L., a man convicted of assault and theft, was being treated for an anxiety disorder. He noticed that his cellmate had a scenic picture of a mountain in the cell. J. L. collected images of mountains when in the community and took the picture to add to his collection. When confronted by the other inmate, J. L. simply said that he liked it, so he took it. Later that day, while taking a shower, J. L. was beaten into unconsciousness. When subsequently examined in the community hospital, old records revealed a history of ASD that was confirmed on assessment.

Edinburgh Scottish Development Centre for Mental Health reports that people with ASD in secure services are often multiply disadvantaged, with complex care and psychiatric histories commonplace. Staff clearly felt that individuals with ASD did not fit well within those services and that their needs were unmet. They felt that the inmates concerned presented a risk to others, but were themselves significantly at risk of exploitation and abuse from other prisoners.[21] There is a growing recognition that the experience of serving a sentence in an environment of volatile dynamics is likely to be more burdensome to those with ASD. For example, two adults with ASD incarcerated in the United Kingdom faced challenges in understanding the complex formal and informal

social hierarchies of life and accepting unfamiliar or nonpreferred rituals and routines. As would be expected, both functioned poorly and ultimately were placed in modified solitary confinement for their own safety.[22]

Several measures have been suggested for reducing the vulnerability of people with ASD within correctional settings. As a starting point, staff education and training about ASD are important. Providing people with ASD with information about their condition that can be given to others is another simple measure that may help.[23] Other specific management techniques include using short sentences and clear language, asking specific questions to avoid ambiguity, allowing the individual time to think before expecting a response, and allowing time for frequent breaks. For those individuals whose symptoms and behavior continue to expose them to significant risks in the general correctional population, placement in supported residential housing should be considered. Such housing options are available in most correctional systems for individuals with serious mental illness who are unable to function successfully and safely in general population settings. Unless an informed and flexible approach to management can be developed, programs to modify offending behaviors can be highly punitive and completely counterproductive for someone with autism,[6] as represented in Vignette 1.

Treatment

In current practice, there is no specific treatment for autism itself. The recommended treatment involves habilitation and skills based educational therapies: applied behavioral analysis, speech therapy, sensory integration therapy, and auditory therapy, among others.[24] Individuals with ASD need therapeutic approaches such as development of fundamental social skills, more general habilitation, and treatments that improve empathy.[25] Training for individuals with ASD that ameliorates their deficits may reduce risk of reoffending. It is important to ensure that individuals with ASD understand properly the consequences of their actions and the impact that their behavior may have on others.

Inadequate identification and assessment of adults with autism not only leads to inadequate care but may also result in inadequate recognition and treatment of coexisting mental and physical health problems.[26,27] Moreover, it is not entirely clear that generic mental health services do, in fact, have the expertise to habilitate such individuals.[6] Failure to identify and address their needs denies them their right to access services inside the CJS, and in some cases may meet the threshold of a constitutional violation, as reflected in *Estelle v. Gamble*[28] when the deliberate-indifference standard is met.[29] Denial of services is a particular problem for adults with ASD who have an IQ over 70 and do not have a comorbid severe and enduring mental illness. They may be excluded from both learning disabilities and mental health services.[30]

Psychotherapy

The optimum treatment in ameliorating the core behavioral deficits in autistic children is early intensive behavioral and educational interventional therapy.[31] Most incarcerated adults with ASD have not had the benefit of such early intervention. Although intensive, integrated, multidisciplinary programs are not realistic for correctional settings at this time, more limited but beneficial interventions are possible. Improvement in social skills and encouraging prosocial friendships with peers is essential. Treatment of comorbid conditions is important in controlling potentially risky behavior. These interventions typically include anger-management training, treatment of an underlying anxiety disorder to reduce the compulsive nature of the special interest, resolution of past injustices, and guidance in relationships and sexuality. In particular, skills-training therapies that are clearly defined and operationalized would logically be of benefit. For example, the use of functional behavioral analysis as part of the therapy would build on an intact cognitive skill set.[32] In this context, a recent problematic event is reviewed and analyzed, and a healthier alternate behavior is rehearsed to establish a new response set.

Psychopharmacology

Pharmacologic agents may be effective in treating various behavioral symptoms that are interfering with daily life or causing impairment or distress.[33] Various off-label uses of pharmacological agents have proved effective in treating the behavioral symptoms of ASD. At this time, there are only two U.S. Food and Drug Administration (FDA)–approved medications, risperidone[34] and aripiprazole,[35] for treating the irritability associated with ASD. Many other medications are used for comorbid conditions or for

off-label indications. Some reviews also suggest some behavioral and affective benefits of selective serotonergic reuptake inhibitors[36] and the opiate antagonist naltrexone[37] for ASD.

Recommendations for Future Research

There is a great need to survey jails and prisons, first to determine how they currently process individuals with ASD, and then to develop and test screening, accommodation, and treatment models. The model of one size fits all in treating and habilitating individuals with ASD is inadequate and will perpetuate the problem. Many individuals with ASD who come into contact with the CJS may have undiagnosed or misdiagnosed ASD.[8] There is currently neither universal training on ASD for CJS professionals, nor are there service standards for individuals with ASD during incarceration to support their community re-entry and reduce recidivism. A critical next step is the development of programs for ASD in the correctional environment in staff training, management, treatment, and community reintegration of offenders with ASD. Formal research and evaluation of each element would subsequently build a solid evidence basis for implementation and broad dissemination.

Conclusions

Despite recognition of the complex and lifelong needs of adolescents and adults with ASD in the community, the development of appropriate and effective services in correctional settings continues to lag behind those currently available for persons with less severe disabilities. Reflecting this deficiency and lack of a knowledge base, a recent textbook of correctional psychiatry does not cover ASD.[38] This disparity between the potential for an integrated and productive life and the lack of services to achieve this potential in correctional facilities represents an ongoing challenge. If we are to meet the needs of adults with ASD more effectively and appropriately, some significant changes to current systems of planning and intervention appear to be necessary.

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