A Hard Pill to Swallow: Prescribing Stimulants Within the Prison Setting

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In the film *The Matrix*, the character Neo is offered a choice between a red pill and a blue pill. Choosing the blue pill would allow him to continue his existence in the artificial reality of the Matrix, and therefore, he would continue living the blissful ignorance of illusion. The red pill would mandate a return to the real world and the painful truth of reality.¹

It is apparent that in the modern era of correctional psychiatry, we as clinicians are faced with a similar dilemma when querying a diagnosis of attention deficit hyperactivity disorder (ADHD) in our patients. Do we continue to see the use of certain treatments as antithetical to sound practice or do we swallow the proverbial red pill and embark on the difficult but necessary course of considering these treatments in the prison setting? We believe it should be the latter.

During the past decade, an abundance of data highlighted the elevated rate of ADHD in prison settings, in addition to describing parallels between the illness and criminal behavior. Prevalence estimates of ADHD in forensic samples vary widely, with some rates as high as 72 percent.² When comprehensive clinical assessments using Diagnostic and Statistical Manual of Mental Disorders criteria are employed, persistent ADHD symptoms are found in 30 percent of adult male inmates, 10 percent of adult female inmates, and 45 percent of youthful offenders.³

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A recent Canadian study reported the prevalence of ADHD to be 16.5 percent in an adult prison sample.⁴ Several important associations were also uncovered. For example, ADHD was linked to unstable employment, lower educational attainment, substance abuse, greater levels of criminogenic risk/ needs, and a higher incidence of institutional misconduct. In other studies, similar associations have been found between ADHD, prison breaches, and episodes of reactive aggression.^{5,6} Yet, despite the mounting evidence linking ADHD to a host of criminogenic variables, clinicians are often reluctant to treat ADHD in the prison setting. We suggest that this is true for several reasons.

Without question, the use of psychostimulants in correctional settings requires a careful and thoughtful approach, given the many concerns about prescribing a controlled substance in this population. High rates of substance abuse, potential for misuse or diversion, challenges for health care staff, and availability of alternative treatments have all been cited as arguments against the regular use of stimulants in prisons.⁷

In addition, simply making a diagnosis of ADHD while a patient is incarcerated can be a challenge, with difficulties related to the acquisition of the necessary collateral information to verify childhood impairment, the presence of significant comorbidity that confounds diagnostic clarity, and insufficient resources to conduct what is often a lengthy assessment.⁸ The possibility of malingering, which further complicates the assessment and treatment process, must also be considered when a patient is seeking stimulant treatment.

In recent years, there have been protocols and consensus statements published to standardize the assessment and treatment of ADHD in correctional set-

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tings. In Massachusetts, a state-wide protocol was enacted in 2005 to assess and treat ADHD in male offenders.⁸ The protocol described a rigorous assessment procedure, including obtaining collateral reports, conducting neuropsychological testing, establishing impairment in occupational or vocational endeavors, and seeking approval from each institution's chief psychiatrist. The criteria did not include disruptive and aggressive behavior on their own as indicators of impairment. The protocol also called for at least one previous trial of a nonstimulant medication before consideration was given to stimulant therapy. Under the protocol, the requirement for stimulant treatment was deemed necessary in only 0.7 percent of the population assessed.⁸

A consensus statement was published in the United Kingdom to guide clinical practice in the assessment and treatment of ADHD within prison settings.⁹ One highlight of the consensus was that it included input from several stakeholders, including forensic mental health clinicians and other allied professionals within prisons, probation programs, and the metropolitan police service.⁹ The consensus statement highlighted three main benefits of treatment of ADHD in prisons: reductions in mood lability, impulsivity, and restlessness.⁹ It was determined that improvements in these domains would allow patients to more readily take advantage of programming within the correctional setting. In addition, it was also speculated that treatment of ADHD could lead to improvement in comorbid conditions, such as substance use disorders, personality disorders, and mood and anxiety disorders.⁹ In contrast to the Massachusetts protocol, methylphenidate was recommended as a first-line treatment, with the caveat that a nonstimulant treatment such as atomoxetine should be considered in cases where there was a significant risk of substance misuse or diversion.⁹

The U.K. consortium emphasized that treatment in prison settings should strive to reflect best practices as they exist in the general population.⁹ Therefore, offering stimulant medications, which are firstline treatments in the community, as second-line options in prisons, undermines this principle. Nonstimulant medications such as atomoxetine, although effective, can take more than 12 weeks to reach optimal efficacy.¹⁰ This is a lengthy time to wait for relief, particularly in the often stressful and claustrophobic confines of the prison setting.

Prevention of stimulant abuse and diversion is a high priority and several strategies can be used to minimize the potential for misuse of these agents. Observed administration of all stimulant formulations may curb the incidence of medication abuse and diversion. Some of the long-acting stimulant agents, such as lisdexamfetamine dimesylate, can be dissolved in water before administration.¹¹ In addition, lisdexamfetamine dimesylate is a prodrug, requiring enzymatic bioconversion to dextroamphetamine, for optimal potency.¹¹ This factor may serve to reduce the incidence of downstream diversion and misuse.¹¹ There are now liquid formulations of longacting methylphenidate available in some countries, which would effectively serve the same purpose.¹² These strategies could be used in much the same way that some methadone maintenance programs operate in prison: observed administration of the controlled substance in liquid form.

To reduce the potential for malingering, one tool to use in the assessment process would be continuous performance tests (CPTs).^{13,14} CPTs are computer-based assessment tools that require patients to respond differentially to visual and auditory stimuli. With variable speed and frequency of stimulus presentation, parameters such as inattention, impulsivity, and vigilance can be measured, producing a final composite outcome measure that is largely resistant to attempts at deception. CPTs could be included in assessment algorithms for patients who have a positive score on initial screening instruments for ADHD.

When attempting to conceptualize the role of stimulant treatment within the prison setting, it is often worthwhile to embed our thinking within a "tried and true" theoretical construct. The risk-needs-responsivity (RNR) model¹⁵ provides an influential and useful construct when considering the assessment and treatment of ADHD in offender populations, including those currently serving custodial sentences. The model highlights the importance of focusing treatment on the offenders at highest risk of recidivism, and who have the greatest criminogenic needs and need for treatment. Tailored treatment plans are then developed to maximize each individual's learning style. Among the central eight RNR factors, impulsivity, substance abuse, and school/employment problems are key targets that could be remedied with successful treatment of ADHD. We suggest that any successful rehabilitation program within the correctional setting should endeavor to address these criminogenic needs linked to ADHD.

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We believe that the development and implementation of clinical algorithms and practice guidelines for assessing and treating ADHD in correctional settings is vital. There is inconsistency with respect to diagnosis and clinical management between and within institutions. Hence, the development of clinical algorithms would provide much-needed guidance for correctional clinicians, who are often tasked with assessing and treating much larger numbers of patients relative to clinicians working in community settings. Guidelines should be based on evidencebased practice to ensure that patients are receiving quality care, regardless of the setting. For example, if patients with significantly impairing ADHD are routinely denied access to stimulant treatment, they are robbed of a potentially efficacious therapy.

With an eye toward the future, correctional clinicians must be mindful of the potential impact that ADHD symptoms can have on the rehabilitative trajectory of inmates who have the condition. Psychological and behavioral treatments are helpful in many cases.¹⁶ Pharmacotherapy remains the mainstay of treatment. Stimulants are the most significant class of medication in terms of efficacy and rapidity of action. Considering the gravity of the circumstances that many inmates find themselves, it behooves us as clinicians to afford them the greatest chance of success in rehabilitation.

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