

Commentary: Treatment and Violence Risk Mitigation in High-Functioning Autism Spectrum Individuals

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The article by Lerner and colleagues will allow forensic clinicians to gain more understanding of how the specific cognitive deficits in persons with high-functioning autism spectrum disorder (HFASD) relate to the propensity of these individuals to engage in cognitive distortions associated with violence. These deficits are relevant to a variety of forensic evaluations of matters such as criminal responsibility. We argue that they also have implications for the treatment and risk mitigation of individuals with HFASD who have engaged in violent behavior.

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Some individuals with high-functioning autism spectrum disorder (HFASD) engage in problematic aggressive behavior. Lerner and colleagues¹ propose that cognitive deficits associated with HFASD can lead to violence. They implicate three specific deficits: the ability to put oneself in someone else's shoes (an ability that has been labeled theory of mind); the ability to regulate thoughts, bodily experiences, and behaviors related to emotions (emotion regulation); and the ability to reason practically about what one ought to do (moral reasoning). Models have been developed over the past 25 years to link violence to the specific deficits found in HFASD individuals.² Although the authors posit that these three deficits can explain violence in HFASD individuals, they acknowledge that others may be relevant in making sense of the link between HFASD and violence. These three types of deficits have consequences, not only with respect to fair judicial treatment, for instance, with regard to mitigating and exculpatory factors, but also with respect to the treatment of HFASD individuals, in forensic settings such as secure hospitals or other settings, and with respect to risk mitigation.

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Lerner and colleagues wisely note that the literature on the link between HFASD and violence is ambiguous. In contrast to many other diagnostic categories, the statistical link between HFASD and violence is weak, at best. The odds ratios that describe the strength of the association between violence and diagnostic entities commonly encountered in forensic settings are expressed in orders of magnitude. For example, individuals with schizophrenia have a risk of violence that is up to seven times that of the general population.^{3,4} By contrast, HFASD individuals appear to have an incidence of violence roughly comparable with that of the general population. Nevertheless, a select subset of HFASD individuals appears to have a propensity to engage in acts of violence that may best be understood as the expression of the core features of their pathology—namely, their tendency to distort reality as a function of failing to interpret correctly the motives of others and then failing to modulate emotional responses to such distortions. Lerner and colleagues convincingly argue this point, in part with illustrative case vignettes.

Another merit of the authors' analysis lies in its implications for the treatment and violence risk management of HFASD individuals. They discuss the importance of training and education for law enforcement officials and attorneys regarding the deficits and challenges of HFASD individuals when questioning or evaluating them, informing them of their *Miranda* rights, and preparing proper defense

strategies for them. Equally important, the authors suggest that more education in public schools and other treatment facilities for those interacting with HFASD individuals may provide an important step toward reducing the potential for criminal behavior by helping such persons to understand the legal system better and thus to avoid being exploited or violated accidentally by it. In addition to the training of those interacting with HFASD individuals, training for these persons themselves to strengthen the deficits noted in the three models constitutes a worthy focus for treatment. Training to reduce potential criminal behavior is a particular area of interest for mental health professionals working in inpatient settings where HFASD individuals may be receiving treatment due to aggressive and violent behavior. This potential benefit exists both in cases that have not attracted the courts' attention and in adjudicated cases. Utilizing treatment approaches that work to improve the deficits noted in the three models may reduce future violence or avoid it all together, as illustrated in the following case example.

A young man with a diagnosis of Asperger's disorder was admitted to an inpatient state facility from a group home after incidents of severe destruction of property and assaultive behavior toward others, including young children, age peers, and older adults. He had had several inpatient admissions and had not been able to live safely in the community for more than a few months because of these aggressive outbursts. He had not had any legal involvement yet, but his behavior was becoming increasingly violent, resulting in his current hospitalization and in increased risk of criminal prosecution. In providing treatment to this individual, his treatment team recognized that emotion regulation, the "ability to inhibit quickly and appropriately the expression of strong emotions" (Ref. 1, p 181), was a key area for assisting the patient in reducing his aggressive behavior. In collaboration with him, his treaters developed a 10-point anger scale that the patient could quickly use to rate himself and let others know when he was feeling upset and needed assistance. He also developed a hierarchy of coping interventions. If anger was in the 1 to 4 range, talking with a trusted staff member was the recom-

mended course of action to prevent aggression; if the range was 5 to 6, making an entry in a personal journal or walking quickly was suggested; oral medication and physical isolation were reserved for the 7 to 10 anger range. In addition, he received weekly psychotherapy to address mood, self-esteem, and social skills. The client began using the scale with the staff, sometimes verbalizing the number he was feeling, other times using a hand signal to indicate his current level. The staff was able to use the recommendations developed by the client and was able to reduce his aggressive episodes successfully from his baseline of one to two per week to no episodes. While he continued to have difficulty with his social skills and his understanding of the manner in which others view the world, his improved ability to regulate his emotions was instrumental in reducing violence and making it possible for him to return to the community.

The authors clearly indicate that there are additional models of deficit potentially relevant to understanding violent behavior in HFASD individuals. The emergence of neuropsychological theories of autism include models relying on new and sophisticated neuroimaging and computational neuroscience tools, including mirror neuron system dysfunction, connectivity deficits, and a neural network model to examine deficits in autism.² These models may hold promise and point to treatment approaches that will provide tools for forensic and nonforensic clinicians to support HFASD individuals in coping in a nonviolent way.

References

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