The Need for a Structured Approach to Violence Risk Assessment in Autism

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The relationship between autism spectrum disorder (ASD) and violence is poorly understood. Several violence risk factors are either modified by or are unique to ASD; clinicians conducting violence risk assessment of people with ASD must consider these factors. An ASD-specific risk assessment tool is clearly needed. In the absence of this, clinicians often use risk assessment tools designed for other populations, highlighting the importance of establishing their predictive validity in people with ASD. Girardi and colleagues have taken a very important step in this process in their paper, "Assessing the Risk of Inpatient Violence in Autism Spectrum Disorder," by examining whether the Historical Clinical Risk Management-20, Version 3, can predict violence in male patients with ASD in a forensic setting. Further research is needed to design a risk assessment tool specific to ASD and its unique features.

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The relationship between autism spectrum disorder (ASD) and violence is poorly understood. Affective or impulsive violence, such as lashing out at caregivers when needs are not met, is a common clinical problem both in the community and in inpatient settings and has led to the approval of several medications specifically indicated for the treatment of aggressive behaviors in ASD. Research on the topic, however, is still very limited. For example, we do not know whether there is any relationship between impulsive violence and the type of planned predatory violence that has been associated with ASD in some news articles and case studies, nor do we have a good sense of the prevalence of violence in individuals with ASD. Del Pozzo and colleagues highlighted that the rates of violent behavior in this population vary widely across studies, ranging from 1.5 to 67 percent.² There are a number of explanations for the broadness of this range, including differences in the types of violence under investigation and the nature

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of the subject sample used (e.g., forensic versus community).

Research highlights certain features of ASD that can contribute to a range of offending behaviors. Several risk factors thought to be important in individuals with ASD have not been identified as major risk factors in other populations and relate directly to the diagnostic criteria for ASD. ASD is defined by "persistent deficits in social communication and social interaction across multiple contexts" (Ref. 3, p 50). Fundamental to this abnormality is a problem with understanding both one's own mental state and that of others. This social cognitive deficit is often referred to as a defect in theory of mind or mentalizing, and it can cause the person with ASD to struggle to understand social cues and to appreciate another's perspective. 4

Stalking is just one of many examples of how problems with social cognition can generate offending behaviors. Someone with ASD may fail to recognize the non-verbal cues or even clear statements that someone is not interested in their social or romantic overtures, and may pursue that individual to the point that the person becomes uncomfortable. Discussing stalking, Stokes and Newton wrote "many of the difficulties that individuals with ASDs encounter result from their frequent, eager and sometimes socially inappropriate attempts to make contact with others" (Ref. 5, p 337).

The other defining feature of ASD is restricted, repetitive patterns of behavior, interests, or activities. This can include "stereotyped or repetitive motor movements, use of objects, or speech," "insistence on sameness, inflexible adherence to routines, or ritualized patterns or verbal nonverbal behavior," "highly restricted, fixated interests that are abnormal in intensity or focus," and "hyper- or hyporeactivity to sensory input or unusual interests in sensory aspects of the environment" (Ref. 3, p 50).

All of these characteristics can lead to offending behavior. For example, psychologist Uta Frith described a way in which inflexible adherence to routines may lead to offending: "One very small and gentle 25-year-old carried with him for a time a set of police handcuffs so that he could make a citizen's arrest if he spotted unlawful behavior" (Ref. 6, p 25). Another example is in Wendy Murphy's book, Orphan Diseases, in which she discussed Darius Mc-Collum, a man with ASD who has been arrested and incarcerated multiple times for stealing transit vehicles, including trains and buses. His arrests were generally for impersonating a transit officer. In some cases, he stole a vehicle that he subsequently drove on its prescribed route, stopping for passengers and dropping them off, and eventually returned. Mr. McCollum's behavior is clearly rooted in his restricted, highly focused interest in transit systems, rather than in some secondary gain from stealing vehicles. His many incarcerations, however, indicate that the legal system believes that these factors are not significantly mitigating, i.e., that he should be punished for his actions in the same way as someone who committed the acts for secondary gain.

A common theme in criminal cases involving ASD is that the problematic behavior has a root cause other than the one that would normally drive the behavior. Hingsburger, Griffiths, and Quinsey used the term "counterfeit deviance" to describe problematic sexual behavior rooted in factors such as sexual and social naïveté rather than in a deviant sexual drive. The concept of counterfeit deviance is applicable beyond problematic sexual behaviors.

Returning to the example of Darius McCollum, his behavior is clearly compulsive, a result of his restricted, highly focused interest in transit systems. The significant penalties for his behavior, while they reflect risk in a general way (i.e., he is endangering people by driving vehicles without training), most likely also reflect the assumption that his behavior

is voluntary, subject to self-control, and that it serves some end beyond a psychological one. Mr. McCollum's descriptions of his own experience suggest otherwise, suggesting that his deviance is counterfeit. He can understand and express that his actions are wrong, but he is unable to control his impulses: "It's like I'm drawn in . . . I don't know how to fight that feeling on my own" (Ref. 9, p 1).

Thus, the process of risk assessment might need to be quite different for people with ASD. In addition, there are non-diagnostic behaviors associated with ASD that may modify risk. In this issue of The Journal, Girardi *et al.* summarize what is known about risk factors in ASD: "A growing body of evidence suggests that risk assessment for patients with ASD needs to include ASD-specific risk factors, which may increase the likelihood of engaging in violent behaviors" (Ref. 10, p 000).

Gunasekaran has recommended that any risk assessment conducted with individuals with ASD needs to take into consideration the individual's characteristics and idiosyncrasies and must also be informed by specialist assessments.¹¹ Gunasekaran investigated patients with a primary diagnosis of ASD in a secure inpatient setting and identified a number of common themes underlying risky behavior. These included: inability to seek an appropriate course of action in response to perceived or actual difficulties caused by others and reacting to such difficulties by means of violence (which is exaggerated by the difficulty of finding solutions by meaningful negotiations); passive aggression by refusing to cooperate, eat, speak, dress, or attend to self-care as a way of protest; and inability to appreciate social boundaries, resulting in deficient empathy and display of inappropriate behavior, sometimes combined with inappropriate sexual or other unusual interests or preoccupations (Ref. 11, p 316). Gunasekaran also makes the important point that "these characteristics should not be seen as risk factors themselves when they are not associated with violence and are not thought to be factors predicting violence" (Ref. 11, p 316).

Given that at least some risk factors are different in or unique to ASD, it seems reasonable to assume that conventional risk factors, including co-morbid mental illness, age, and socioeconomic status, may play out differently when associated with ASD. Several papers suggest that this is the case. For example, Kanne and Mazurek¹² found that higher parental

income increases risk for violence, a finding at odds with a substantial literature that describes the opposite finding in other populations. As a result, risk profiles might be very different in ASD, and the task of risk assessment may need to be quite different than the one used for people without ASD.

Because risk profiles may be different, it is unclear whether risk assessment tools designed for other populations are effective at predicting violence in ASD. In addition, there are no studies that we are aware of that look at the predictive validity of violence risk assessment instruments in people with ASD. Girardi *et al.* have taken a very important step in rectifying this by examining whether the Historical Clinical Risk Management-20, Version 3 (HCR-20^{V3}), which is a widely used structured professional judgment tool, can predict violence in male patients with ASD in a forensic setting.

There is a large literature on various tools, including the HCR-20^{V3}, and violence risk assessment in the population without ASD. The extent of this literature was captured by Singh *et al.*¹³ when they surveyed 2,135 mental health professionals from 44 countries who had conducted risk assessments during their careers. Singh *et al.* reported that most of these professionals used some sort of structured instrument for risk assessment, and more than 400 instruments were described. Half of the instruments were widely available; the rest were designed for within-institution use. None of the instruments, however, were designed for assessing risk in the population with ASD.

Clearly there is an urgent need for an ASD-specific risk assessment tool. Such a tool should not only include the factors that may increase offending behaviors in ASD, but also the protective factors (e.g., a structured and unambiguous immediate environment). In the absence of validated instruments specifically developed and normed on individuals with ASD, clinicians must rely on research based on neurotypical individuals and extrapolate from this to in-

dividuals with ASD. The paper by Girardi and colleagues¹⁰ is groundbreaking, not only because of what it found, but because it represents a major step in tackling the problem of how to assess risk for future violence in people with ASD using a structured tool. The next step for the field is to assess the utility of other risk assessment tools in ASD, and ultimately to design an instrument that contains this information as well as the unique risk factors that have been identified in individuals with ASD.

References

- 1. Maras K, Mulcahy S, Crane L: Is autism linked to criminality? Autism 19:515–6, 2015
- Del Pozzo J, Roché MW, Silverstein SM: Violent behavior in autism spectrum disorders: who's at risk? Aggress Viol Behav 39: 53–60, 2018
- American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. Washington, DC: American Psychiatric Association, 2013
- Baron-Cohen S: Mindblindness: An Essay on Autism and Theory of Mind. Cambridge, MA: MIT Press, 1995
- Stokes M, Newton N: Autistic spectrum disorders and stalking. Autism 8:337–8, 2004
- Frith U: Asperger and his syndrome, in Autism and Asperger Syndrome. Edited by Frith U. Cambridge, UK: Cambridge University Press, 1991
- 7. Murphy W: Orphan Diseases: New Hope for Rare Medical Conditions. Brookfield, CT: Twenty-First Century Books, 2002
- Hingsburger D, Griffiths D, Quinsey V: Detecting counterfeit deviance: differentiating sexual deviance from sexual inappropriateness. Habil Mental Health Care Newsl 10:51–4, 1991
- 9. Wallace S: Notorious transit thief Darius McCollum: "it's like I'm drawn in." Available at: http://www.nbcnewyork.com/news/local/darius-mccollum-notorious-thief-new-york-city-nyc-buses-trains-planes-368520401.html. Accessed June 6, 2017
- Girardi A, Hancock-Johnson E, Thomas C, Wallang PM: Assessing the risk of inpatient violence in autism spectrum disorder. J Am Acad Psychiatry Law 47:000–000, 2019
- 11. Gunasekaran S: Assessment and management of risk in autism. Adv Mental Health Intellect Disabil 6:314–20, 2012
- 12. Kanne SM, Mazurek MO: Aggression in children and adolescents with ASD: Prevalence and risk factors. J Autism Dev Disord 41: 926–37, 2011
- 13. Singh JP, Desmarais SL, Hurducas C, *et al*: International perspectives on the practical application of violence risk assessment: a global survey of 44 countries. Int J Forensic Mental Health 13: 193–206, 2014