Violent Crime in Asperger Syndrome

The Role of Psychiatric Comorbidity

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Contents

Abstract

Although several studies have suggested an association between violent crime and Asperger syndrome (AS), few have examined the underlying reasons. The aim of this review is to determine to what extent psychiatric factors contribute to offending behavior in this population. Online databases were used to identify relevant articles which were then cross-referenced with keyword searches for "violence," "crime," "murder," "assault," "rape," and "sex offenses." Most of the 17 publications which met the inclusion criteria were single case reports. Of the 37 cases described in these publications, 11 cases (29.7%) cases had a definite psychiatric disorder and 20 cases (54%) had a probable psychiatric disorder at the time of committing the crime. These findings underscore the role of psychiatric disorders in the occurrence of violent crime in persons with Asperger syndrome and highlight the need for their early diagnosis and treatment.

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Introduction

Asperger syndrome (AS) was first described under the title "autistic psychopathy" by Hans Asperger, an Austrian physician interested in the habilitation of children with behavioral problems (Asperger 1944). Fifty years after its initial description, it was introduced as a distinct category in the DSM-IV (APA 1994) and the ICD-10 (WHO 1993). At present, it is conceptualized as a variant of autism, marked by social deficits and intense focused interests in the presence of normal intelligence and relatively well-preserved communication skills. In addition, most affected persons have an odd and pedantic manner of speaking (Klin et al. 2005); and poor nonverbal communication (Wing 1981). Although its exact prevalence is uncertain, it is being increasingly recognized in children and adults. Recent figures place its prevalence rate between one and five per thousand (Chakrabarti and Fombonne 2005; Mattila et al. 2007).

An interesting but controversial aspect of Asperger syndrome is its association with violent crime. Although Asperger used the label "autistic psychopathy" as a stable personality style and not as an index of criminality, reports have continued to describe links between AS and violent crime. It was probably Mawson et al. (1985) who first reported an association between Asperger syndrome and violent crime. They described a 44-year-old man who had a long history of violent behavior that led to frequent

admissions to psychiatric hospitals (Mawson et al. 1985). A few years later, Baron-Cohen (1988) described a 21-year-old man with a history of recurrent violence towards his 71-year- old girlfriend. The author speculated that while the primary cause of the patient's violent feelings could not be ascertained, one factor that maintained them was his deficit in social cognition (Baron-Cohen 1988). Ghaziuddin et al. (1991) reviewed the published literature on this topic from 1994 to 1990 and concluded that there was no clear association between AS and violent crime and suggested that people with AS were no more likely to commit violent crime than the rest of the population (Ghaziuddin et al. 1991).

However, since the publication of that review, reports have continued to appear suggesting a link between Asperger syndrome and crime, especially violent crime, including murder (Schwartz-Watts 2005). Several mechanisms have been suggested to explain this association, such as, lack of empathy; social naivete, excessive interests getting out of control etc. Some authors have focused on the tendency of persons with AS to collect objects of special interest as a prelude to criminal behavior. Thus, Chen et al. (2003) described a 21-year-old male with Asperger syndrome who had a history of repeatedly stealing certain objects, such as, plastic bags, boxes and paper cups (Chen et al. 2003). Others have suggested that persons with AS sometimes indulge in criminal behavior because of their sexual preoccupations. For instance, Chesterman and Rutter (1993) described a 22-year-old male with Asperger syndrome who had a history of stealing cotton lingerie and masturbating while holding women's nightdresses. Kohn et al. (1998) described a 16-year-old male with Asperger syndrome who had the habit of grabbing and fondling women in an attempt to make them his 'girlfriends.' Milton et al. (2002) described the case of a Caucasian male in his early thirties with AS who had a history of recurrent sexual offences, such as, touching the private parts of young women; watching women in public toilets; and making obscene phone calls at times pretending to be a gynecologist. Bankier et al. (1999) discussed the case of a 25-year-old male with a history of selective mutism, severe social withdrawal, and recurrent violence against his mother, who met the profile of Asperger syndrome. In addition, at least two reports have suggested that persons with AS may be predisposed to committing arson. Everall and LeCouteur (1990) described a 17-year-old boy with a history of firesetting. In a retrospective study examining the role of neuropsychiatric disorders in a group of 126 juvenile offenders referred to a forensic service in Sweden, Sip- onmaa et al. (2001) found four persons with definite Asperger syndrome. The diagnoses of Asperger syndrome and PDDNOS were over-represented in the arson group than it was in any other offending group (Siponmaa et al., 2001).

Few studies, however, have examined the role of psychiatric factors that might contribute to the occurrence of violent crime in this population. In one of the few reports on this topic, Palermo (2004) emphasized the importance of psychiatric factors by describing two cases of AS and one of PDDNOS, all of whom had a history of violence and arson, and additional psychiatric disorders. Other reports have alluded to the psychiatric status of the offenders but not provided enough details. Surveys of

special hospitals, for example, have found an excess of persons with AS. Scragg and Shah (1994) studied the entire male population in a maximum security hospital in the U.K., and found nine subjects who met the characteristics of Asperger syndrome. The authors concluded that the rate of AS was higher in that hospital than that in the general population. There have also been reports in the media, especially in the United States, speculating on an association between AS and random acts of campus violence in the United States. Thus, despite the public health importance of the topic, relatively little is known about the psychiatric status of violent offenders with Asperger syndrome. The purpose of this review is to examine this issue.

Method

We performed an extensive computer-assisted search of professional databases including MEDLINE, CINAHL, Cochrane database of systematic reviews, and pertinent textbooks and related resources, to identify all published papers describing the association of Asperger syndrome with crime and violence. Reference lists of articles were also examined for additional sources. Searches were performed using the keywords 'Asperger syndrome,' 'pervasive developmental disorders;' and 'autistic psychopathy.' These categories were cross referenced with the keywords "violence," "crime," "murder," "assault," "rape," and "sex offenses." The articles were reviewed to determine if they included sufficient information of the criminal behavior.

For the purpose of this review, violent crime was defined as any act for which the person could be charged with a crime (including but not limited to murder, attempted murder, assault and/or battery, sexual assault, arson, stalking, robbery) or which resulted in a significant injury to another person. Since the study was based on the information already contained in the published reports, it was not possible to examine the motives or the reasons for the violent act. Therefore, the definition of violent crime was based on the observed behavior and its consequences rather than the intent. Temper tantrums, nonspecific behavioral problems, and self-injurious behaviors were excluded. Articles were also excluded if they did not include sufficient information to determine the diagnosis of the subjects or a detailed description of the criminal behavior. Only articles published in English were reviewed.

Subjects were divided into three categories; those with definite psychiatric disorder; those with probable psychiatric disorder; and those with no clear evidence of a psychiatric disorder. To be classified as suffering from a "definite" psychiatric disorder, the subject had to have a psychiatric diagnosis given by a psychiatrist and/or to have symptoms and behavior described in sufficient detail to allow for a diagnosis to be made. Cases that probably had a psychiatric illness but did not have enough details described of their behavior were classified as having had a "probable" psychiatric disorder. Finally, cases who had no evidence of a psychiatric disorder based on the description given in the report were classified as not having any such disorder.

The first author examined the case histories and then both the authors, after discussion, jointly categorized whether or not the act described in the publication met the inclusion criteria.

Results

Computerized database searches yielded 59 candidate articles for review. An additional 13 articles were found through reference lists, resulting in a total of 72 publications. Of these, 54 were excluded for not meeting the inclusion criteria, leading to a total of 18 publications. Another article (Anckarsater 2005) was excluded because, on further examination, it had the same cases that had been included in a previous publication (Soderstrom et al. 2005). This led to a total of 17 publications and 37 cases. Of these, 11 (29.7%) cases had evidence of a definite psychiatric disorder and 20 (54%) cases of probable psychiatric disorder. In only six cases (16.2%), was there no clear evidence of a comorbid psychiatric disorder (Table 1).

Discussion

The main finding of the study is that an overwhelming number of cases had coexisting psychiatric disorders at the time of committing the offence. Eleven cases (29.7%) cases had a definite psychiatric disorder and 20 cases (54%) had a probable psychiatric disorder. Examples of cases with a definite psychiatric disorder included the three cases described by Palermo (2004) had comorbid psychiatric disorders (ADHD and Mood Disorders). Four of the 34 cases in Wing's study were categorized as having a definite psychiatric disorder (Wing 1981). In Baron- Cohen's (1988) study, the patient, a 21-year-old man, believed that he looked like a werewolf and was obsessed with his jaw. He too was classified as having a definite psychiatric disorder. All the nine cases described by Scragg and Shah (1994) were in a maximum security hospital for mentally ill offenders. Because sufficient details of their behavior were not given, these nine cases were classified as having a probable psychiatric disorder. Thus, on the whole, the findings suggest that impairment of mental health may be an important reason why some persons with Asperger syndrome commit violent criminal acts.

Table 1 Psychiatric comorbidity of AS subjects with violent criminal behavior

Study	N	Psychiatric disorder	Comments
Wing (1981)	4	Definite	"Bizarre and antisocial acts"
Mawson et al. (1985)	1	Probable	History of psychiatric admissions
Baron-Cohen (1988)	1	Definite	Obsessed with his jaw. Probable dysmorphophobia
Everall and Lecouteur (1990)	1	Not clear	No clear comorbid diagnosis. Compulsive fire-setter
Chesterman and Rutter (1993)	1	Probable	Probable Obsessive Comp Disorder. "Personality Disorder"
Scragg and Shah (1994)	9	Probable	All patients probably had a comorbid psychiatric diagnosis
Kohn et al. (1998)	1	Probable	Diagnosed with 'conduct disorder
Bankier et al. (1999)	1	Probable	Diagnosed with "obsessional neurosis"
Siponmaa et al. (2001)	4	Probable	History of fire-setting
Milton et al. (2002)	1	Nil	No comorbid diagnosis. Paraphilia and serial sexual offenses
Silva et al. (2002)	1	Nil	Case report on Jeffery Dahmer. Diagnosis doubtful
Silva et al. (2003)	1	Not clear	Case report on Theodore Kaczynski, History not clear
Palermo (2004)	3	Definite	Pt 1: ADHD; Pt 2: Depression; Pt 3: Mood disorder
Silva et al. (2005)	1	Nil	Case report on Joel Rifkin, Diagnosis doubtful
Schwartz-Watts (2005)	3	Cases 1 & 3, Definite	Pt 1: Overdose, 3: Nil; 3: Schizoaffective disorder
Soderstrom et al. (2005)	3	Probable	From 100 admissions to forensic hospital

The association between violent crime and mental health is well established (Swanson et al. 1990). Psychiatric problems are over-represented among violent offenders although the nature of the association between psychiatric disorder and criminality is not clearly understood. Factors such as substance abuse; family history of criminality and other psychosocial stressors are also important. Therefore, when violent crime occurs in the setting of Asperger syndrome, the cause may lie as much in the diagnosis of AS as in the other factors that contribute to its occurrence in the general population, including comorbid mental disorders.

Persons with Asperger syndrome have sometimes been described as lacking in empathy and in their ability to experience the feelings and emotion states of others. In fact, diagnostic measures of autism often incorporate questions dealing with the child's ability to share feelings with and offer comfort to others. As an extension of this belief, persons with Asperger syndrome have been described as lacking in conscience, which increases their risk for committing crime. However, although some persons with Asperger syndrome may be described as defiant and oppositional, aggressive behavior is not one of its defining or discriminating features (DSM, APA 1994).

It is important to emphasize that six cases (15%) did not have any comorbid psychiatric disorder which suggests that some persons with AS indulge in violent crime for no apparent reason. These persons may meet the criteria for antisocial personality disorder although the two conditions are regarded as distinct entities (Wing 1981). In a cohort of violent offenders, Anckarsater (2005) found that 18 of the 89 offenders subjects had a history of an ASD (five cases had autism; three had Asperger syndrome and 10 had atypical autism). Although Asperger sydnrome symptoms/ autistic traits were positively correlated with the Psychopathy Checklist-Revised scores (PCL-R; Hare 1991), the superficiality that characterized psychopathy was different from the social disability of autism (Anckarsater 2005). Studies comparing differences in the social impairment of AS with those of conduct disorder (which is often regarded as a forerunner of antisocial personality disorder) have also reached similar conclusions (Green et al. 2000).

Since the study consisted of 37 subjects, it may be criticized as being too restrictive and hence not being representative. The most common reason why subjects were excluded was a lack of clarity about the diagnosis. For instance, two reports were excluded because the subjects had mental retardation (Simblett and Wilson 1993; Cooper et al. 1993), which is not consistent with a diagnosis of Asperger syndrome based on the DSM-IV (APA 1994) criteria. In other cases, the diagnosis was made for the first time in adulthood without a reliable early developmental history (for example, Murrie et al. 2002). Another reason why subjects were excluded was a lack of clarity about the reason for referral and insufficient description of the offending behavior. Thus, the study by Mandell and colleagues (2005) was excluded because the nature of the behavioral problems was not specified. Another study was excluded because the offender had a history of stealing (Chen et al. 2003) but not of any violent crime. Finally, one study (Anckasarter 2005) was excluded because its sample was common to another

study that was included (Soderstrom et al. 2005). Thus, on the whole, the findings of our study seem to be representative of persons with Asperger syndrome referred to specialist services.

Our review did not attempt to find out if, based on recent literature, persons with AS can be described as being at greater risk of committing violent crime than the general population. For this purpose, systematic population-based studies are required. In perhaps the only study of its kind, Woodbury-Smith and colleagues (2006) compared the rates of offending behavior in a community sample of persons with high-functioning forms of ASD with a matched general population control group. Although the study was based on a small sample of 24 cases, and did not examine the psychiatric comorbidity of the offenders in a systematic manner, its findings provide further support that persons with ASD do not seem to be at an increased risk of criminal behavior. More studies of this nature are urgently needed.

In conclusion, this review found that most of the cases of Asperger syndrome who commit violent crime suffer from additional psychiatric disorders. While this finding in itself does not fully explain why some persons with AS commit violent crimes, it suggests that co-existing mental disorders raise the risk of offending behavior in this group, as it does in the general population. Thus, persons with AS charged with violent crimes should be examined for the presence of additional psychiatric disorders. Clinicians should look beyond the diagnosis of AS and attempt to explore the factors that might contribute to criminal behavior in this population. In addition, professionals working in forensic settings should be trained in the recognition and treatment of persons with autistic spectrum disorders and special services should be designed for mentally ill offenders with Asperger syndrome.

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