

## BRIEF REPORT: Emergency Department Assessment and Outcomes in Individuals with Autism Spectrum Disorders

### Abstract

*Individuals with autism spectrum disorders (ASD) have complex care needs and may face unique challenges in the emergency department (ED). A review of ED chart audits was conducted on a sample of 24 individuals with ASD who had visited the ED for a psychiatric or medical crisis. These individuals had a combined total of 39 visits, 30 of which were for psychiatric crises and 9 for medical crises. The majority of ED visits were a result of physical or verbal aggression episodes. The care received, ED dispositions, and implications for community resources and ED staff training are discussed.*

Individuals with autism spectrum disorders (ASD) have complex care needs with high rates of co-occurring physical and mental health problems (Ghaziuddin, Weidmer-Mikhail, & Ghaziuddin, 1998; Gurney, McPheeters, & Davis, 2006). They encounter greater difficulties than those with intellectual disabilities (ID) when accessing appropriate medical care (Krauss, Gulley, Sciegaj, & Wells, 2003), with caregivers often turning to the emergency department (ED; Bradley & Lofchy, 2005). However, despite their significant needs, little is known about what occurs when individuals with ASD visit the ED.

Research from the ID literature indicates that the ED can be extremely stressful for affected individuals and their caregivers (Lunsky & Gracey, 2009; Weiss, Lunsky, Gracey, Canrinus, & Morris, 2009). With impairments in social skills, communication and behaviour (American Psychiatric Association, 2000), individuals with ASD may face unique challenges in the ED (Bradley & Lofchy, 2005; Owley, 2004; Vaz, 2010). To better understand these challenges, further information is required about the details of the ED experiences of individuals with ASD.

The current study describes the antecedents leading up to ED visits, the care received, and the disposition or outcome of the visit of individuals with ASD through a retrospective audit of ED charts. This study was carried out as part of a larger project examining the experience of crisis in individuals with ID in Ontario, Canada.

### Methods

#### Participants

Staff from 34 of 47 community agencies serving individuals with developmental disabilities, including ASD, provided crisis reports and client background forms over a two-year period. When a crisis resulted in an ED visit, consent was

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obtained to review hospital charts and documentation. Ethics approval was attained from all 10 hospitals providing ED charts.

Twenty-four individuals with ASD or their substitute decision makers consented to participate in the chart audit study (100% of those approached). Persons with ASD ranged in age from 16–72 ( $M = 28.08$ ,  $SD = 12.66$ ) and were predominately male (83.3%). The 24 individuals had a combined total of 39 visits, 30 of which were for psychiatric or behavioural crises. The remaining nine visits involved medical crises. Table 1 summarizes sample demographics.

## Results

### Presenting Problems

The majority of ED visits (54%) were a result of episodes of physical or verbal aggression. For example, one individual assaulted a group home staff member. Nine visits (23%) involved medical emergencies including a physical reaction to a wasp sting and injuries sustained from a fall. Self-harm and/or suicidal behaviours constituted 13% of total visits, while the remaining 10% of visits were due to various other presenting problems.

Table 1. Sample Demographics

<i>Gender</i>	<i>Age</i>	<i>Current Living Situation</i>	<i>Severity of Cognitive Disability</i>	<i>Recorded ED Visits</i>
Male	Adolescent	Family	Borderline/Normal	1
Male	Adolescent	Family	Mild	2
Female	Adolescent	Family	Moderate	1
Male	Adolescent	Family	Moderate	1
Male	Adolescent	Family	Severe	1
Male	Adolescent	Family	Severe	1
Male	Adolescent	Minimal Supports	Borderline/Normal	1
Male	Adolescent	Minimal Supports	Moderate	3
Male	20s	Family	Mild	1
Male	20s	Family	Profound	3
Male	20s	Minimal Supports	Mild	1
Male	20s	Group home	Moderate	1
Male	20s	Group Home	Unknown	1
Male	20s	Group Home	Mild	1
Male	20s	Group Home	Severe	3
Male	30s	Family	Unknown	1
Male	30s	Minimal Supports	Mild	1
Male	30s	Minimal Supports	Borderline/Normal	3
Female	30s	Group Home	Borderline/Normal	2
Male	30s	Group Home	Unknown	2
Female	30s	Group Home	Moderate	1
Male	30s	Group Home	Mild	4
Female	40s	Minimal Supports	Unknown	2
Male	70s	Group Home	Unknown	1

## Summary of Care Received

Restraints were used during 16 (53%) psychiatric/behavioural visits, but not during medical visits. A psychiatrist or crisis team member saw patients in 17 (56.7%) psychiatric/behavioural visits, and during one (11.1%) medical visit. The remaining visits involved only ED nurses and physicians. Additionally, medications were changed during four (13%) psychiatric visits and two (22%) medical visits.

## ED Dispositions

Eighteen (46%) ED visits resulted in an inpatient admission. Five individuals waited in the ED overnight before they were seen. During the 21 visits that did not result in admission, individuals were sent home without follow up resources or appointments 85% of the time based on the information recorded.

## Discussion

Similar to findings on ID generally, aggression was the most prevalent issue leading to ED use (Lunsky, Tint, Robinson, Kohaverdian, & Jaskulski, 2011; Weiss et al., 2009). Challenging behaviours are common in individuals with ASD and can be particularly stressful for caregivers (Lecavalier, Leone, & Wiltz, 2006), driving many to turn to the ED in times of crisis (Bradley & Lofchy, 2005). Further, openings in community-based respite care, which may reduce caregiver stress (Cowen & Reed, 2002), are often scarce (Sperry, Whaley, Shaw, & Brame, 1999), and/or inaccessible as aggressive behaviour often prohibits individuals with behavioural problems from their use (McGill, Papachristoforou, & Cooper, 2006). Preventative and intermediary community efforts are clearly needed to help allay the burden on ED services and the associated stress for individuals with ASD and their caregivers.

Several findings speak to the unique challenges when treating individuals with ASD in the ED. For example, in the current study, one patient with limited communication abilities was brought to the ED due to increasing agitation and self-injurious behaviours at home. ED staff noted in his chart how difficult it was to com-

plete an assessment but discharged him, as they were unable to find any obvious medical cause of his discomfort. This individual returned to the hospital three months later experiencing similar distress and was then admitted to an inpatient unit.

ED staff may also lack training and skills in understanding the symptoms of ASD, which may make them uncomfortable, and in some cases even resistant to treating these patients. For example, one patient was brought to the ED by ambulance due to facial swelling after being stung by a wasp. Upon arrival, the ED physician expressed discomfort in treating individuals with ASD and the patient was subsequently transferred to, and treated at, a second hospital. Such discomfort has also been identified in studies of ED use and ID (Lunsky, Gracey, & Gelfand, 2008; Sowney & Barr, 2006).

To alleviate stress of the ED visit and facilitate clinical examinations in the ED, several environmental and treatment accommodations for patients with ASD can be made (Bradley & Lofchy, 2005; Vaz, 2010). For instance, when possible, examinations should be done in quiet rooms with minimal sensory stimulation (i.e., dim overhead lights, replace paper gowns and coverings with cloth); the number of ED staff involved in treating an individual with ASD should also be limited (Vaz, 2010). Additionally, ED staff need to recognize that proper assessment in individuals with ASD may require more time (Bradley & Lofchy, 2005).

Although the detailed experiences of 39 visits by individuals with ASD are outlined, this study is preliminary and results are descriptive in nature. Our results may be limited due to our small sample size as it is unknown how these experiences generalize to the entire ASD population. Additionally, our retrospective chart audit may not have captured all ED visits and data accuracy was dependent on ED and community agency staff's written documentation of events based on information recorded in charts.

Overall, individuals with ASD face a host of challenges and stressors when visiting the ED. Further research is needed to determine how these challenges differ from other populations with special health care needs, including individuals with ID without ASD.

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## Key Messages from This Article

**People with disabilities:** You deserve good, quality care when you visit the emergency department, and we are learning more about what happens during these visits and ways to help.

**Professionals:** More training and skills in understanding the symptoms of ASD may help to make ED visits less stressful for individuals with ASD.

**Policy makers:** Policies to promote supports and services to help prevent hospital visits by individuals with ASD, and more training for ED staff are necessary.

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