

# Challenges of inpatient psychiatric treatment for children & adolescents with Autism Spectrum Disorder

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## Background

### CASE

A 12 year old male with autism spectrum disorder (ASD) presents to the emergency department brought in by his mother for severe head banging, and aggression towards mother. His mother reports inability to manage his behaviors safely at home. In-home therapeutic services have not been effective either. Mother reports previous psychiatric hospitalization made the patient's symptoms worse as he had difficulty adapting to the milieu of the unit. Inpatient psychiatric hospitalization is recommended for the patient based on acute concerns for safety. However, it takes 15 days before a specialized inpatient psychiatric facility for ASD is found for the patient.

This is one of several cases that I have encountered as a Child and Adolescent Psychiatry fellow that have motivated me to look into the challenges of inpatient psychiatric hospitalization for patients with autism spectrum disorder (ASD)

## Introduction

- Patients with ASD see, hear and feel the world differently than other individuals with qualitative impairment in social interaction, communication as well as restrictive stereotype patterns of behaviors, interests or activities.
- The 3 month point prevalence of comorbid psychiatric disorders in patients with autism spectrum disorder is 70.8 %.
- Children with an ASD utilize 11.9 times as many psychiatric hospital days as children without an ASD
- The total costs per year for children with ASD in the United States were estimated to be between \$11.5 billion – \$60.9 billion (2011 US dollars).
- On average, medical expenditures for children and adolescents with ASD were 4.1–6.2 times greater than for those without ASD.

## Methods

A literature search was conducted on PubMed and Google Scholar using the keywords "autism", "inpatient", "psychiatric" and "hospitalization".

## Results

A study by Maloret & Scott (2018) identified how patients with ASD experience and cope with admission to an acute mental health facility.

Superordinate themes	Subthemes
ANXIETY	Fear
	Lack of routine and structure
	Sensory profile of the unit
	Food
COPING STRATEGIES	Isolation
	Stopped eating
	Self-harming

TABLE 1. Subordinate themes and associated subthemes related to anxiety in patients with ASD admitted to an inpatient psychiatric facility (Adapted from Malorett & Scott (2018))

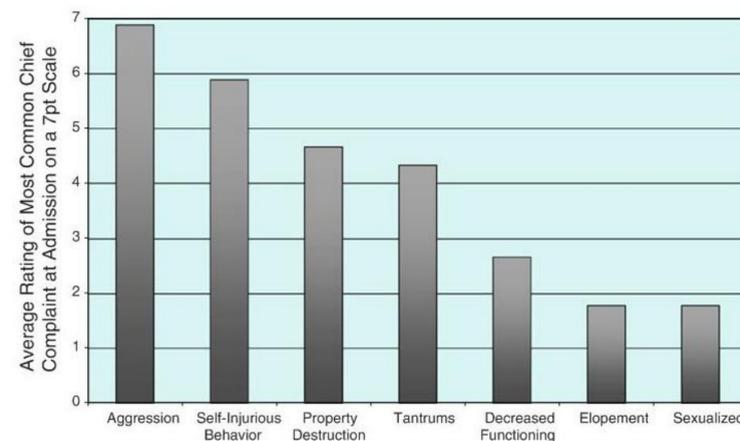


TABLE 2. Most common chief complaint at admission for children with ASD in specialized inpatient units. (Adapted from Siegel et al., (2011).)

- Most patients with ASD receive inpatient psychiatric treatment in general psychiatry units.
- There are few specialized inpatient psychiatric units identified in US for children with ASD.
- They offer inpatient services embedded within a continuum of specialized developmental disorder services run by the institutions. They are composed of multidisciplinary teams-child psychiatrist, social worker, psychologist or board certified behavior analyst.
- These are mostly concentrated geographically in northeastern United States.
- Challenges faced by specialized units include finding adequate staff number, trained clinicians and finding appropriate follow up services after discharge.
- It has been shown that there is a decrease in readmission rate (33 % vs 12%) when children with ASD are admitted to a general psychiatry unit compared to a specialized unit within the same facility.
- According to the Autism Inpatient Collection (AIC) study, there was a significant reduction in problem behaviors from admission to discharge and 2 month follow up when these children were admitted to specialized inpatient units for ASD.
- Results from the Autism care pathway (ASD-CP) in a public hospital also showed a decreased in average length of stay by 40% and a decrease in the use of crisis interventions.

	GENERAL PSYCHIATRY UNIT	SPECIALIZED PSYCHIATRY UNITS
TREATMENT	Therapeutic modalities based on verbal and social communication e.g individual therapy, group therapy	Behavioral focused modalities suited to patients with ASD e.g Applied Behavior Analysis.
STAFF	Less trained in dealing with patients with ASD Low staff to patient ratios	Staff with training in dealing with patients with ASD High staff to patient ratio
LENGTH OF STAY	Not well suited for longer length of stay needed by this population	Well suited to length of stay needed by this population

TABLE 3. Comparison of inpatient psychiatric treatment of patients with ASD in generalized versus specialized psychiatry units.

## Conclusions

- Patients with autism spectrum disorder make up a substantial number of psychiatric patients requiring inpatient psychiatric hospitalization. Their unique characteristics pose challenges for treatment.
- These patients require a high staff to patient ratio, specialized behavioral treatments and thus the overall costs of care are higher. There are limited facilities specialized in the treatment of these individuals.
- Results from the Autism Inpatient Study (AIS) have shown that the treatment provided in specialized inpatient psychiatric facilities is highly effective for these patients compared to general psychiatric facilities.
- More inpatient facilities or treatment pathways specifically targeting this population are needed to provide efficient effective psychiatric care.

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