

MEETING THE NEEDS OF YOUTH WITH NEURODEVELOPMENTAL DISABILITIES ON A GENERAL CHILD AND ADOLESCENT PSYCHIATRY INPATIENT UNIT: A QUALITY IMPROVEMENT PROJECT

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Introduction

Youth with neurodevelopmental disabilities (NDD), such as autism spectrum disorder, are 6 times more likely to require inpatient psychiatric hospitalization compared to other youth.^{1,2} Indications for hospitalization may include safety, medication adjustment and stabilization, and other factors including placement concerns. Unfortunately, there is a paucity of NDD-specialized inpatient units for patient care. Many patients, especially if verbal, are instead hospitalized on general pediatric psychiatry units. Staff on these units are often not trained or experienced in the recognition and treatment of psychopathology in this population, which can potentially lead to suboptimal quality of care.³ Therefore, there is a need for assessing the quality of care on these units. There is also a need for a simple, and quick questionnaire to be made available to hospital staff to reliably ascertain the needs and strengths of NDD youth to guide the unit's treatment planning and interventions.

Objectives

The primary purpose of this project is to develop a standardized questionnaire for a general CAP inpatient service in order to enhance the ability to appropriately care for patients with neurodevelopmental disabilities. Appropriate care will be assessed by key indicators including 1) service utilization, 2) length of stay 3) seclusion/restraint rates, 4) PRN medications for aggression, and 5) patient satisfaction.

Methods

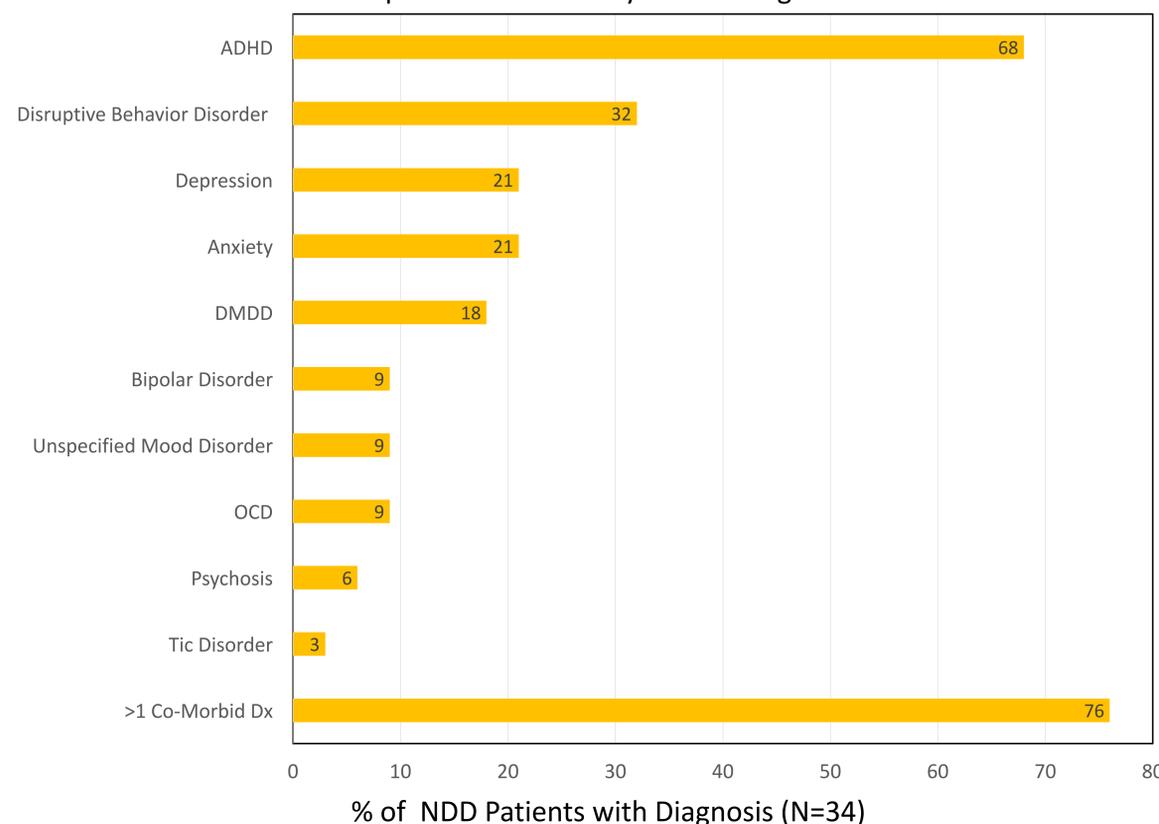
- (1) A retrospective chart review was conducted in order to obtain clinical information on previously admitted youth with neurodevelopmental disabilities. Data was obtained on consecutively admitted individuals over a 6 month period that had an admission or provisional discharge diagnosis of autism spectrum disorder, intellectual disability, or another neurodevelopmental disability. Co-morbid psychiatric diagnoses, age, gender, length of stay, and restraint/seclusion events were also obtained.
- (2) A provisional questionnaire was developed based on current practice parameters for the assessment of youth with neurodevelopmental disabilities and input from key stakeholders.⁴ This questionnaire will be completed by admitting physicians and nurses, as well as reviewed and implemented by the treatment team.

Results

Table 1: 6 month consecutive admission data

Admissions and NDDs	N	%	
Total Admissions	344		
Autism Spectrum Disorder	15	4.3%	
Intellectual Disability	14	4.0%	
ASD + ID	2	0.6%	
Other ND Disorder	3	0.9%	
Total NDD Admissions	34	9.9%	
Characteristics			
Gender (N)	Male: 23	Female: 10	Transgender: 1
Age (years)	Range: 5-17	Mean: 13.6	
IQ (N=12)	Range: 40-70	Mean: 61.5	
Length of Stay (days)	Mean: 10.9		
Episodes of Restraint/Seclusion	Mean: 0.35 per admission		

Graph 1: Co-Morbid Psychiatric Diagnoses



Johns Hopkins Hospital Child and Adolescent Psychiatry
Inpatient Neurodevelopmental Questionnaire

- 1a. Has your child ever been diagnosed with, or have you ever been concerned that your child may have a neurodevelopmental disorder (e.g. Autism Spectrum Disorder, Intellectual Disability)?
- 1b. Have you ever been concerned about your child's motor (gross motor, fine motor), language or social development?
- 2a. Has your child been previously diagnosed with a mental health disorder in addition to the developmental concerns?
- 2b. Does your child currently receive any mental health services (psychiatric medication management and/or individual or family therapy services or social skills group therapy)?
- 3a. Does your child have any of the following difficulties? If so, what is likely to provoke or stop the behavior?
 - Aggression
 - Self-Injurious Behavior (e.g. head banging, punching, hitting, cutting, etc.)
- 3b. What are your child's favorite activities and areas of interest?
- 3c. Does your child have a preferred method of communication or communication difficulties?
- 4a. Does your child have any medical conditions (e.g. seizures or head trauma)?
- 4b. Does your child have any sensory sensitivities (e.g. to sounds, lights, odors, taste, touch, temperatures, clothing preferences, movement, etc.)?
- 4c. Does your child have specific food preferences or dietary restrictions?
- 4d. Does your child have any difficulties independently completing daily activities (e.g. brushing teeth, bathing, dressing, putting on shoes, eating with utensils, toileting)? If so, please describe.
- 5a. If known, what is your child's learning age, functioning grade level or Full Scale Intelligence Quotient (FSIQ)?
- 5b. Does your child receive any academic or behavioral accommodations at school? If so, please describe.
- 5c. Does your child currently receive physical therapy, occupational therapy or speech and language therapy either through school or privately?

Conclusions and Future Directions

- (1) Approximately 10% of our general CAP admissions include NDD patients of which the majority have ADHD and three quarters have more than one psychiatric diagnosis.
- (2) We will continue to obtain clinical information of our NDD youth.
- (3) We will begin to implement the questionnaire and link services and/or accommodations to the responses. For example
 - o Youth with noise sensitivity may be provided with noise cancelling head phones
 - o Youth with a preference for non-verbal communication may be provided with visual tools
 - o Youth with issues completing ADLs will have an ADL evaluation with occupational therapy.
- (4) We will track post-implementation changes by reviewing service utilization, length of stay, episodes of seclusion and restraints, PRN medications for agitation, and patient satisfaction.
- (5) The Johns Hopkins Hospital Inpatient Neurodevelopmental Questionnaire may be a useful tool to improve the quality of care of youth with neurodevelopmental disabilities.

References

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