

COMORBIDITIES AFFECTING CHILDREN WITH AUTISM SPECTRUM DISORDER

A retrospective chart review from the main referral site for ASD evaluation in Manitoba.

Jessy Burns, MD, Ryan Phung, MD, Shayna McNeill, MD, Ana Hanlon-Dearman, MD, M. Florencia Ricci, MD, PhD.

INTRODUCTION

- Autism Spectrum Disorder (ASD) is a developmental disorder characterized by deficits in social interaction/communication, restricted interests and repetitive behaviors.
- Recent discussions have emerged worldwide regarding a possible “overly-inclusive” diagnosis of ASD, adding heterogeneity around presentation/etiology and comorbidities.

AIM

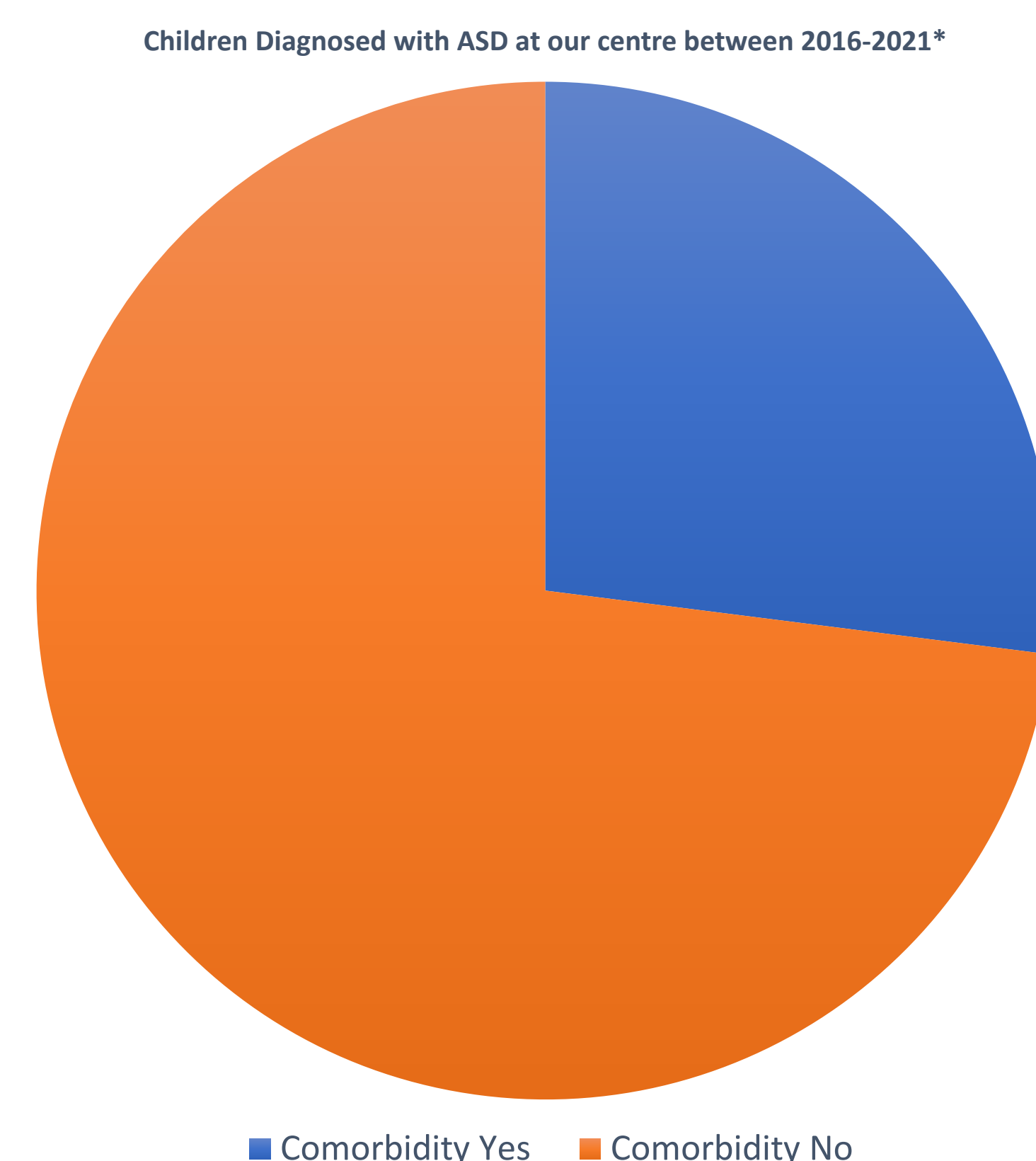
- This study aimed to determine the frequency and characteristics of comorbidities among children diagnosed with ASD in Manitoba, and to evaluate differences in presentation between those with and without comorbidities.

METHOD

- The Rehabilitation Centre for Children (RCC) is the main referral site for children aged <6 years requiring evaluation for ASD in MB.
- We conducted a retrospective chart review of >2000 electronic charts to identify all children aged 0-5 years diagnosed with ASD at RCC between May 2016 to September 2021.
- X² and t test were used to compare groups.

RESULTS

- Of the total of 1858 children identified
 - 504 (27%) had ≥1 medical comorbidity.
 - Most common comorbidities were neurological (12.8%) – including history of seizures, cerebral palsy, hypotonia NYD – and allergies/eczema (6.1%).
 - Comorbid GDD was diagnosed in 428 (23%).
- While there was no significant difference in overall presence of comorbidities by sex (see table below), girls had a statistically significant higher incidence of neurological comorbidities (16% vs. 12%, p:0.03).



* May 2016 and September 2021

	All N=1858	Comorbidity Yes N=503	Comorbidity No N=1355	P value
Maternal age at birth (years)	30.1 (6.04)	30.3 (6.27)	30 (5.9)	.32
Sex Male	1452 (78%)	383 (76.1%)	1069 (78.9%)	.20
Prematurity YES	251 (13.5%)	78 (15.5%)	173 (12.8%)	<0.001
Child's Age at referral (years)	2.77 (1.03)	2.75 (1.17)	2.8 (.99)	.33
Age at diagnosis (years)	3.81 (1.12)	3.85 (1.23)	3.81 (1.11)	.44
Use of ADOS-2 tool	603 (32%)	176 (34.9%)	427 (32%)	.14

CONCLUSION

- Results of this study are consistent with previous studies, which note high comorbidity rates among children with ASD.
- The high rates of associated neurological conditions, GDD and prematurity may relate to the reported “overly-inclusive” diagnosis.
- This study will be used as a catalyst for guiding further prospective studies in the area.

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