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18th Annual Child Health Research Days

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**ABSTRACT SUBMISSION FORM**

## CHR D 2022: Abstract & Poster Submission Form

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**Presenter Status**

- Undergraduate Students
- Masters Student
- PhD Student
- Post-Doctoral Fellows
- Residents
- Non-Trainee

**Research Category**

- Basic Science
- Clinical
- Community Health / Policy

**Role in the project**

- Design
- Perform Experiments
- Analyze Data
- Write Abstract

**Title**

Comorbidities affecting children with autism spectrum disorder: A retrospective chart review from the main referral site for ASD evaluation in Manitoba.

## Background

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.

## Objective

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.

## Methods

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. X<sup>2</sup> and t test were used to compare groups.

## Results

Of the total of 1865 children identified, 1459(78%) were male, 252 (13.5%) were born prematurely, 504 (27%) had ≥1 medical comorbidity. Most common comorbidities were neurological (12.7%) and allergies/eczema (6.1%). Comorbid GDD was diagnosed in 428 (23%). Age of referral to RCC and age of diagnosis did not differ between groups. Comorbidities were more common among preterm children (31% vs 26%, p:<0.01). There was no significant difference in overall presence of comorbidities by sex (29.5% vs. 26.6%, p: 0.25), however girls had a statistically significant higher incidence of neurological comorbidities (16% vs. 12%, p:0.03).

## 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.

## Do you have a table/figure to upload?

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## Authors

- For each author, please click "[+] Add Item" and provide the author's information

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