

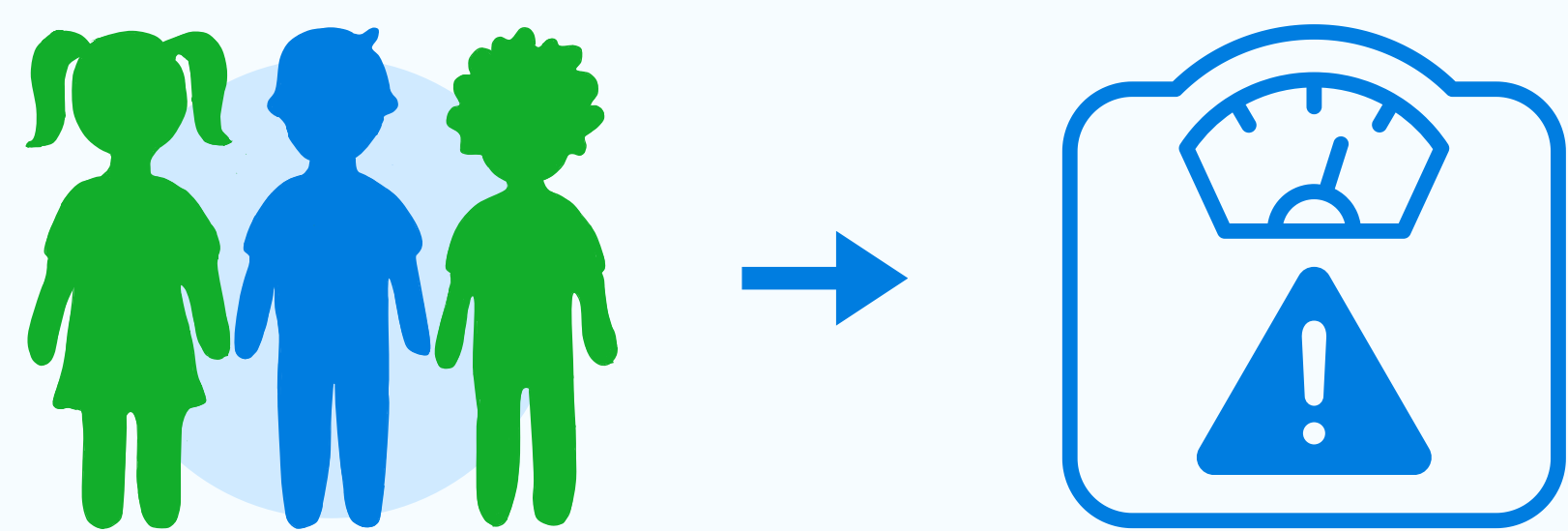
Examining Weight Status Among Children and Youth with ADHD and OCD: A Cross-Sectional Analysis

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Background

- 1 Children with neurodevelopmental disorders (NDD) are at **increased risk for atypical weight**.^{1,2}



2 **UNDERWEIGHT** **BOTH ENDS³** **OVERWEIGHT / OBESITY**

Delays in growth and development

Negatively impact lifelong health

Higher risk of cardiovascular disease

3 **Many studies look at...** **...but not together.**

Diagnosis Symptoms Medication

Research Question

How are paediatric ADHD, OCD, and related clinical factors associated with weight status compared with typically developing (TD) peers?

Method

OUR PARTICIPANTS
POND database: 2 – 18 years

ADHD
n = 887 (72.8% Male)

OCD
n = 238 (51.3% M)

TD
n = 339 (56.3% M)

Weight Status

Calculated BMI-for-age z-scores (zBMI), as per WHO definitions.⁴

Underweight (< -2 SD)

Normal Weight (-2 to 1 SD)

Overweight (1 to 2 SD)

Obesity (2 to 3 SD)

Severe Obesity (> 3 SD)

Statistical Analysis

Multinomial logistic regression compared ADHD, OCD to TD peers

Children with ADHD and OCD demonstrate different weight-related health profiles that may inform diagnosis specific monitoring.



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Holland Bloorview
Kids Rehabilitation Hospital



Results

ADHD associated with increased weight risk

ADHD: Adjusted Odds Ratios (aOR) vs. TD peers

Overweight
aOR 1.63
95% CI 1.11–2.38

Obesity
aOR 1.55
95% CI 1.08–2.59

Severe Obesity
aOR 1.71
95% CI 1.24–3.30

OCD: No significant association between OCD and weight status.

Symptom Severity
No association between symptom severity and weight status in ADHD (SWAN Scale) or OCD (TOCS Scale).

Sex Differences
ADHD: Significant sex-by-diagnosis interactions.

Underweight:
M: aOR 0.39 (95% CI 0.20 - 0.76)
F: aOR 0.51 (95% CI 0.28 - 0.93)

Obesity:
M: aOR 1.27 (95% CI 0.80 - 2.01)
F: aOR 1.08 (95% CI 0.65 - 1.80)

Severe Obesity
M: aOR 1.85 (95% CI 1.12 - 3.05)
F: aOR 2.45 (95% CI 1.52 - 3.95)

OCD: Not significant

Medication Status
ADHD: Stimulants are associated with lower odds of:

Obesity:
aOR 0.36 (95% CI 0.15 - 0.88)

Severe Obesity:
aOR 0.47 (95% CI 0.16 - 0.94)

OCD: Not significant

Relevance to HB clients and families

Understanding diagnosis-specific differences in weight status can support clinicians with earlier identification of at-risk children who may benefit from earlier intervention, improving long-term health outcomes.

Conclusions and Next Steps

Children with ADHD had increased odds of overweight and obesity, whereas OCD was not associated with weight status.

Clinical Implications

Earlier Identification
Screen children with ADHD for atypical weight to support earlier identification of those at risk.

Diagnosis-Informed Care
Use diagnosis-specific information to guide monitoring and multidisciplinary management.

Targeted Prevention
Inform development of targeted prevention and intervention strategies to promote healthy weight outcomes.