

Longitudinal Predictors of Behavioural Crises in Children with Neurodevelopmental Disorders

Canning, E. [1, 2], Lentz, S. [2], Rapley, J. [2], Baribeau, D. [2],
 1. Department of Psychology, Carleton University
 2. Bloorview Research Institute, Holland Bloorview Kid's Rehabilitation Hospital

Background

Autistic youth are at increased risk for:

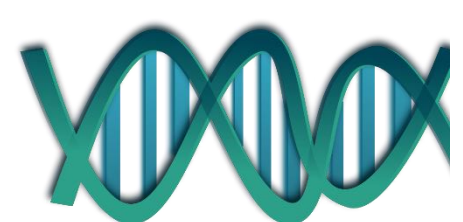
Mental health crises (suicidality, self injury, and aggression) [1-3]



Emergency department visits, inpatient hospitalization, police calls [4]

Objective

What biological, behavioural, environmental, and sociodemographic variables are associated with crisis outcomes in children with NDDs?



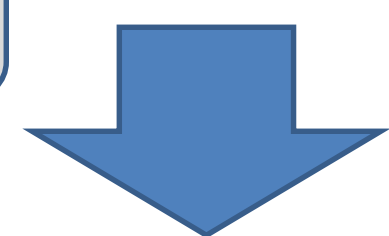
Methods



We conducted a chart review from the Psychopharmacology clinic:

110 patients

1051 visits



A cox proportional hazard model was used to estimate the rate of crisis since initial visit

Family and environmental factors significantly predict behavioural crisis in children with neurodevelopmental disorders



References

- [1] Wijnhoven LA, Niels-Kessels H, Creemers DH, Vermulst AA, Otten R, Engels RC. Prevalence of comorbid depressive symptoms and suicidal ideation in children with autism spectrum disorder and elevated anxiety symptoms. *J Child Adolesc Ment Health* 2019;31(1):77-84. (In eng). DOI: 10.2989/17280583.2019.1608830.
- [2] Blaskowitz MG, Hernandez B, Scott PW. Predictors of emergency room and hospital utilization among adults with intellectual and developmental disabilities (IDD). *Intellectual and Developmental Disabilities* 2019;57(2):127-145.
- [3] Segers M, Rawana J. What do we know about suicidality in autism spectrum disorders? A systematic review. *Autism research : official journal of the International Society for Autism Research* 2014;7(4):507-21. DOI: 10.1002/aur.1375.
- [4] van Steijn DJ, Oerlemans AM, van Aken MA, Buitelaar JK, Rommelse NN. The Reciprocal Relationship of ASD, ADHD, Depressive Symptoms and Stress in Parents of Children with ASD and/or ADHD. *Journal of autism and developmental disorders* 2013 (In Eng). DOI: 10.1007/s10803-013-1958-9.

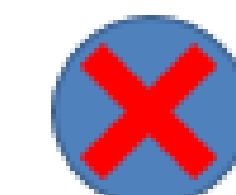
Results

Predictors of Behavioural Crisis:

Variable	Hazard ratio	p
Female	0.74 (0.26, 2.14)	0.579
ID	1.42 (0.58, 3.44)	0.443
Verbal	1.27 (0.46, 3.52)	0.648
Age	1.44 (1.23, 1.69)	<0.001
Trauma	3.71 (1.56, 8.84)	0.003
Burnout	6.48 (3.16, 13.29)	<0.001
Supports	1.57 (1.20, 2.05)	<0.001
Finances	2.31 (0.99, 5.35)	0.051



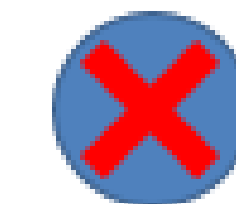
Parent burnout



Intellectual disability



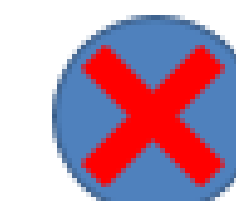
More behavioural supports



Sex



Trauma/stressor



Communication ability



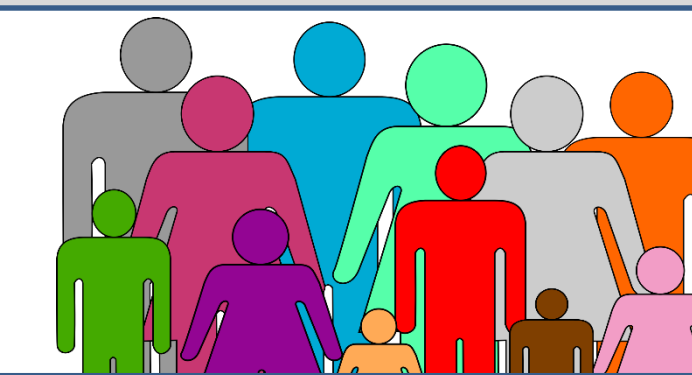
Age

Conclusions

Family and environmental factors are important predictors of crisis

Relevance

Clinicians and families can anticipate needs and direct resources to prevent behavioural crisis



Acknowledgements

I would like to thank the Ward Summer Student Research Program, the Bloorview Research Centre, and the Autism Research Centre.

Holland Bloorview
Kids Rehabilitation Hospital

