**TOP INTERVENTION RESEARCH PRIORITIES OF THE ONTARIO NEURODEVELOPMENTAL DISORDER COMMUNITY: A CONSENSUS STUDY ENGAGING PATIENTS, CARERS AND OTHER STAKEHOLDERS**

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**Objectives:** Over the last several years, there has been a shift in the research community that acknowledges the importance of engaging people with lived experience in research. It is slowly becoming a widely-held practice to include the input of stakeholders at various stages of the research process to improve study outcomes and allow research to have greater patient impact. We, the Ontario Brain Institute and associated stakeholders from the neurodevelopmental disorders research program, POND, are striving to achieve impact by making stakeholder engagement a priority in our work. The objective of this study was to identify unmet research priorities by working with a wide range of stakeholders across neurodevelopmental disorders (NDD), including intellectual disability (ID).

**Method:** We employed standardized methodology established by the James Lind Alliance (JLA) to set research priorities in NDDs. Through surveys and in-person meetings, patients, carers, advocates and health/education professionals worked together on an equal footing to identify treatment and intervention questions which are important to the community. Those with lived and professional experience jointly prioritized the research questions, and produced a 'Top 10' list.

**Results:** In order of importance, the top 10 priorities for neurodevelopmental disorder research determined by the neurodevelopmental disorder community are:

1. What are the most effective treatment options/plans (e.g., timing, frequency, duration, type, intensity or dosage) for individuals with neurodevelopmental disorders for both short and long-term benefits?
2. How can system navigation be organized in a manner that enables coordinated services and supports across the lifespan for individuals with neurodevelopmental disorders and their families?
3. Which biological treatments (including medications, gene therapy, stem cell therapy, etc.) are effective for neurodevelopmental disorders and associated symptoms?
4. Which child and family-centered interventions or approaches promote optimal individual and family functioning?
5. Which interventions best help individuals with neurodevelopmental disorders develop emotional and behavioural regulation (including increasing impulse control and reducing compulsive behaviour)?
6. Which resources are needed to more effectively address the health, social and emotional needs of families or caregivers of individuals with neurodevelopmental disorders?
7. How can treatment decisions for individuals with neurodevelopmental disorders be more precise (i.e., based on the diagnosis, age, functional need of the individual)?
8. Which are the most effective pharmacological and non-pharmacological treatments for aggressive and self-injurious behaviour in individuals with neurodevelopmental disorders?
9. Which are the most effective pharmacological and non-pharmacological intervention(s) to reduce anxiety in individuals with neurodevelopmental disorders?
10. Which interventions are most effective to help individuals with neurodevelopmental disorders improve their social skills and develop and maintain social relationships?

**Discussion/Conclusion:** We conducted a large stakeholder engagement project that united diverse perspectives from the community across several NDDs for the first time to identify and prioritize research questions related to intervention. By including the voice of the community in setting priorities for research, we gained a better understanding of the priorities of the NDD community and where research can create the most impact. These top 10 priorities will serve as a powerful and valuable tool to spur community-oriented research into neurodevelopmental disorders.

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