**INTELLECTUAL AND DEVELOPMENTAL DISABILITY AS A POTENTIAL RISK FACTOR FOR POLYPHARMACY IN ADULTS ASSESSED FOR HOME CARE SERVICES IN ONTARIO, CANADA**

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**Objectives:** Adults with intellectual and developmental disabilities (IDD) experience aging earlier than adults without IDD, which can be attributed to higher incidences of multimorbidity in this population. Multimorbidity is a risk factor for polypharmacy, a healthcare concern that in varying populations of interest, has been associated to adverse drug reactions, prescription errors, falls, and increased mortality risk. This study aims to: (1) assess the differences in polypharmacy in adults with and without IDD assessed for home care services in Ontario, and (2) determine if these differences in polypharmacy can be attributed to IDD status.

**Methods:** Samples of adults with and without IDD in the Central Local Health Integration Network, assessed for home care from April 2017 to March 2018, were selected. The identifiers for 93 adults with IDD were provided by the Successful Aging project. A random sample of adults without IDD will be selected; it will be restricted to the same age range and residential settings as found in the sample with IDD. Home care assessments were completed using the Residential Assessment Instrument for Home Care, which includes medication use information.

Polypharmacy, defined as the use of five or more medications, will be compared across the samples with and without IDD. The samples will be described in terms of age, sex, frailty, mental health diagnosis, challenging behaviour, and cognitive impairment. Bivariate analysis will compare the polypharmacy and non-polypharmacy groups. Odds ratios will be used to determine the association between the covariates of interest and polypharmacy. A multivariate logistic regression will be performed to examine the independent association between IDD status and polypharmacy.

**Results:** Preliminary results are available for the sample with IDD only. 60.2% of the sample were males. The age ranged from 42 to 83, with an average of 61.3 years (*SD* = 7.5). The majority of the sample lived in a group setting with non-relatives (71.0%), and others lived alone (16.1%) or with others that are not spouse or children (12.9%).

Almost a quarter of the sample (23.7%) had at least one psychiatric diagnosis, and 7.5% had an Alzheimer’s or dementia diagnosis. Verbally or physically abusive, or socially inappropriate/disruptive behaviours were exhibited by 22.6% of the sample. Most of the sample had at least moderately severe cognitive impairment (92.5%) but only 7.5% were frail.

The prevalence of polypharmacy was 53.8% (*N =* 50). Only 11.8% took 0 to 1, 62.4% took 2 to 5, and 25.8% took 9 or more medications.

**Discussions:** This study will provide a better understanding of what contributes to an observed difference in polypharmacy in adults with and without IDD. It is important to assess this potential disparity because it is not yet known whether it can be justified by the differences in clinical need resulting from IDD status.

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