Title: Mental and Physical Health Conditions of Individuals with Intellectual and Developmental Disabilities (IDD) with and without Down Syndrome (DS)

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Introduction: Individuals with Down syndrome (DS) have lower rates of psychiatric disorders when compared to people with IDD without DS but may show a different pattern of disorders. Most studies address Alzheimer’s disease in DS. Fewer studies examine other psychiatric syndromes in the population, and conflicting findings are reported. This includes that psychosis occurs more and less often, and that depression occurs more often or at similar rates in contrasts with subjects with IDD without DS. Most studies found low rates of Bipolar Disorder. Several studies noted associations between health issues and mental health concerns of people with DS. Capone and colleagues (2013) demonstrated an association between sleep apnea, regression and depression. More investigation of these and other medical phenomena may inform improved mental health care for people with DS. The main aim of the current study was to contrast mental and physical health conditions of people with IDD, with and without DS, served in a specialized behavioral health program.

Method: Deidentified routinely collected intake data for 78 individuals with DS (mean age 32) and 1472 people with IDD and no DS (other-IDD, mean age 30) served in START. (Systemic, Therapeutic, Assessment, Resources and Treatment) programs were reviewed. START provides outreach, training, consultation and crisis services to individuals with IDD with behavioral health needs. Association between DS, psychiatric and medical disorders were calculated using chi-squared or t-tests, as well as the Aberrant Behavior Checklist subscale scores (a frequently used and psychometrically sound instrument measuring psychopathology in people with IDD). For significantly associated variables, logistic or linear regression models were applied adjusting for age, gender, and level of ID.

Results: Based on initial chi-squared or t-tests, individuals with DS were more likely to have depressive disorders and less likely to have psychotic disorders, bipolar disorders, ASD, or ADHD. Individuals with DS had a lower number of psychiatric disorders and were using a lower number of psychiatric medications (all p<0.05). There was a trend for individuals with DS to have a higher Aberrant Behavior Checklist lethargy subscale score, though this did not reach significance. Individuals with DS were more likely to have endocrine, ears-nose-throat, sleep disorders, and a greater total number of medical conditions(all p<0.05). After adjustment, however, only depression (OR= 2.8, p<0.001) and endocrine disorders (OR= 3.96, p<0.0001) were still significantly more frequent for the DS group. Other findings that remained significant (p<0.05) included that the DS group were less likely to have psychosis or ASD; were taking fewer psychotropics and had fewer psychiatric conditions.

Discussion: In the present exploratory study, findings confirmed some of the past research suggesting people with DS and mental health disorders are more often suffering from depression and less often psychosis, though overall they have fewer diagnostic labels and are treated less with psychotropics than peers without DS. Findings support previous investigations indicating a need to study links between medical concerns such as hypothyroidism and depression in groups of adults with DS. A follow-up survey of enrollees with DS will be conducted this year, to identify more detailed possible associations with behavioral health challenges and health conditions.

References/Citations: