Differences in the Behavioral Phenotype of ASD in a Population Sample of Somali, White, Non-Somali Black, and Hispanic Children

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INTRODUCTION

The Minneapolis Somali Autism Spectrum Disorder Prevalence Project (MSASDPP) was conducted to determine if more Somali children had autism spectrum disorder (ASD) than non-Somali children. In addition to estimating ASD prevalence, the project identified differences in characteristics of ASD across racial and ethnic groups. The overall project found that white and Somali children did not differ statistically in ASD prevalence; black (non-Somali) and Hispanic had significantly lower rates than white and Somali children.

Somali children with ASD were far more likely to have intellectual disability than children with ASD in all other racial and ethnic groups. DSM-IV Social Interaction: Somali children were more likely than white and Hispanic children to have deficits in seeking to share enjoyment. DSM-IV Communication: Somali children were more likely than other racial/ethnic groups to have lack of pretend play documented in their records.

RESULTS

DSM-IV Restricted, Repetitive behaviors: Somali children were more likely than Hispanic children to have stereotyped and repetitive motor mannerisms. Somali and White children had a greater number of DSM-IV repetitive behavior symptoms documented in their records than Hispanic children, and Somali children were more likely to have co-occurring concerns of abnormalities in eating and drinking patterns than White and non-Somali Black children.

Associated Features: Somali children were significantly more likely to have atypical eating/drinking habits than white and black non-Somali children.

DISCUSSION

The project’s main finding was that Somali children were far more likely to have ASD + intellectual disability (ASD+ID) documented in their records than other racial/ethnic groups. A few additional differences in DSM-IV symptom endorsement were found across groups.

An important caveat is that sample size was not adequate in most cases to compare differences in rates of symptom endorsement when controlling for presence of ID. When the sample was limited to only children with ASD+ID, high rates of DSM-IV symptoms and associated features were endorsed for all groups. This suggests differences in ASD-specific characteristics across groups may have been driven by level of cognitive impairment rather than by race/ethnicity.

IMPLICATIONS

The findings of lower rates of ASD among non-Somali Black and Hispanic children point to potential bias and disparities in diagnostic practices and access to specialized evaluations for ASD. Results also indicate that Somali children may require a higher level of service in terms of frequency, intensity, and coordination than other children with ASD due to their high rate of co-occurring intellectual disability.