The relationship between maternal race-ethnicity, immigrant status and country of birth and the risk of having a child with autism spectrum disorder in Western Australia

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Background

The risk of autism spectrum disorder (ASD) varies by maternal race-ethnicity, immigrant status and birth region. Women from Asia and East Africa have had higher rates of ASD with ID in their children. We aimed to investigate the odds of ASD with ID in children born in Western Australia (WA) according to maternal race-ethnicity, country of birth and immigrant status.

Methods

We linked state registries and examined the odds of ASD with ID in children born in WA from 1994-2005, by maternal race-ethnicity, country of birth and immigrant status.

Results

Compared to Caucasian non-immigrant women immigrant women were 40% less likely, to have a child with ASD with ID. Women of Asian race-ethnicity from Central and South Asia were slightly more likely than Caucasian non-immigrant women to have a child with ASD with ID but children of women of Asian race-ethnicity from other parts of Asia had about half the odds of having ASD with ID. Black women from East Africa had more than three and a half times the odds of ASD with ID in their children.

Conclusions

Our results suggest an interaction effect between race-ethnicity, immigrant status and birth region, with Black East African women having highest odds of a child with ASD with ID. Research is implicated on specific risk and protective factors for ASD with ID in the children of immigrant women.

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