

GEOGRAPHIC AND GENDER DIFFERENCES IN AUTISM SPECTRUM DISORDERS AMONG CHILDREN: ANALYSIS OF THE DATA FROM THE NATIONAL REGISTRY IN TAIWAN

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Background and Aims: The prevalence of autism spectrum disorders (ASD) in the world has increased dramatically in the recent decades. However, data at the national level are limited, and geographic differences are seldom evaluated. We conducted a study to estimate the prevalence of ASD in Taiwanese children and to assess the geographic and gender differences.

Methods: According to the law, each city and county in Taiwan is mandated to certify the disabled residents and provide various services, and the Department of Interior maintains a registry of certified cases. The registry started to enroll cases of ASD since 1990 and publish summary data annually, which provide a unique opportunity to study epidemiology of ASD at the national level. We analyzed the data from 2000 to 2009.

Results: From 2000 to 2009, the registered cases increased from 2,062 to 9,160 annually, and the prevalence increased every year in all age groups. In each year there were more male cases than female cases, and the male-to-female ratio ranged from 5.99 to 6.80, with an increasing trend over time ($p < 0.01$). A higher prevalence was observed in the urban areas over the years, and the prevalence rate ratio ranged from 2.49 to 2.99, with a decreasing trend over time ($p < 0.01$).

Conclusions: The prevalence of ASD has been increasing in Taiwanese children. The risks were higher in rural areas than in urban areas and higher in boys than in girls. Further analyses of data on individual cases are desirable.

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