

## **ABSTRACT**

Speech and language disability (SLD) is not uncommon in children. However, data at the national level are limited, and geographic differences are seldom evaluated.

Starting from 1980, the local governments in Taiwan has begun to certify disabled residents for providing various services and report cases to the central government according to the law, and the central government maintains a registry of reported cases, which provides a unique opportunity for studying SLD at the national level.

Using the registry data from 2004 to 2010, we calculated the prevalence of SLD by age, gender, and geographic area and assessed the changes over time. Because the government discourages the certification under 3 years of age, we excluded cases under 3 years old from the analyses. We found that from 2004 to 2010 the registered cases between 3 and 17 years old increased from 1418 to 1637 per year, and the prevalence generally increased every year in all age groups except in 12-14 years of age. In each year there were more boy cases than girl cases, and the prevalence rate ratio increased from 1.50 to 1.83 ( $p < 0.05$  in all years), with an increasing trend over time ( $p < 0.01$ ). A higher prevalence was observed in the rural areas over the years, and the prevalence rate ratio increased from 1.35 to 1.71 ( $p < 0.05$  in all years), with an increasing trend over time ( $p < 0.01$ ). Further studies identifying the risk factors contributed to the increases might help the prevention of SLD in the future.

*Keywords:* speech and language disability; impairment; prevalence; registry; gender;  
geographic distribution; Taiwan