SEX AND GEOGRAPHIC DIFFERENCES IN THE PREVALENCE OF CHILDHOOD SPEECH AND LANGUAGE DISABILITY

[1]YEN-CHENG TSENG, [2]DER-CHUNG LAI, [3]HOW-RAN GUO

[1]Department of Business Administration and Language Education Center, Chang Jung Christian University, Tainan, Taiwan
[2]Department of Physical Medicine and Rehabilitation, Ditmanson Medical Foundation Chia-Yi Christian Hospital, Chia-Yi, Taiwan
[3]Department of Environmental and Occupational Health, National Cheng Kung University, Tainan, Taiwan
[3]Department of Occupational and Environmental Medicine, National Cheng Kung University Hospital, Tainan, Taiwan

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. The local governments in Taiwan began to certify disabled residents and provide various services in 1980 according to the law, and the central government maintains a registry of certified 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 annually, and the prevalence generally increased every year in all age groups ($p < 0.01$). 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 ($p < 0.05$). A higher prevalence was observed in the rural areas over the years, and the prevalence rate ratio increased from 1.35:1 to 1.71:1 ($p < 0.05$ in all years), with an increasing trend over time ($p < 0.05$).

Keywords - Speech And Language Disability; Prevalence; Registry; Gender; Geographic Distribution; Taiwan