

**Risk Factors of Specific Language Impairment in Preschool Children  
at Division of Developmental and Behavioural Paediatrics  
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**ABSTRACT**

Specific language impairment (SLI) is one of the most developmental concerns in childhood, accounted for 6.0% of children in Thai speech and language services. Risk factor studies have demonstrated that risk for language problems has been associated with biological and environmental factors. Currently, the research on risk factors in SLI is sparse and often contradictory. The study aimed to investigate risk factors associated with SLI in preschool children. A retrospective case-control study was performed. Cases were preschool children age 1-6 years meeting the criteria for SLI at Division of Developmental and Behavioural Paediatrics, Vajira Hospital during February 2013 to November 2017 (N=40). Controls were normally developing preschool children (N=40). Multiple logistic regression analysis was used to analyse factors correlated with specific language impairment. A number of factors identified as the risk of SLI were age (OR 7.86, 95%CI 2.79-22.16), gestational age (OR = 2.58, 95%CI: 1.03-6.66), birth weight (OR = 10.23, 95%CI: 2.14-48.85), family history (OR = 16.71, 95%CI: 2.05-136.08), and maternal education (OR = 2.64, 95%CI: 1.04-6.69). Multiple logistic regression analysis showed that age  $\leq 3$ , gestational age  $< 37$  weeks, birth weight  $< 2,500$  grams, family history, and high maternal education were the highest risk factors for specific language impairment. Our findings support data presented previously in the literature that boys are at greater risk than girls for expressive disorder at age 2. The majority of the prematurely born children, of low to very low birth weight seem to survive with no language deficits, there still remains some of children with language impairments. Language impairments generally run in families; therefore, parental influences on offspring can be attributed to genetic factors. High maternal education in urban society might be more focusing on earn living and challenging career path and growth than low maternal education that lead to inadequate stimulation at home or mothers with high education were more aware of such difficulties and greater access to health services. In conclusion, there are both biological and environmental factors combined in young children with language impairment. Early identification is mandatory in order to provide early interventions. Speech and language services for these young children may be a powerful approach to help facilitate prevention or amelioration of language impairments.

Keywords: risk factors, preschool, specific language impairment,