

Abstract

Injury recurrence in young children is a significant public health concern, as it may indicate an unfavorable home environment. This study evaluates whether infantile injuries increase recurrence during preschool years, contributing to more effective prevention strategies for vulnerable families. The study included 20,191 children from "The Longitudinal Survey of Babies in the 21st Century," a representative sample of infants born in Japan between May 10 and 24, 2010. We conducted a logistic regression analysis to compare injury recurrence risk between children aged 18 months to seven years with and without infantile injury histories. The study revealed that infants with a history of injuries had a higher risk of subsequent hospital visits for injuries during preschool years (crude Odds Ratio (cOR) 1.52, 95% CI, 1.41-1.64, adjusted OR (aOR) 1.48, 95% CI 1.37-1.60). Specific injuries, such as falls (aOR 1.34, 95% CI, 1.26-1.43), pinches (aOR 1.22, 95% CI, 1.15-1.29), drowning (aOR 1.29, 95% CI, 1.19-1.40), ingestion (aOR 1.35, 95% CI, 1.17-1.55), and burns (aOR 1.47, 95% CI, 1.31-1.65), independently increased the risk of future injuries. Our findings highlight the necessity of universal safety measures in the home environment and targeted interventions for families with a history of high-risk injuries.