

Effect of Haemophilus Influenzae Type B (HIB) Vaccination on Child Anthropometry in India: Evidence from Young Lives Study

Authors : Swati Srivastava, Ashish Kumar Upadhyay

Abstract : Haemophilus influenzae Type B (Hib) cause infections of pneumonia, meningitis, epiglottitis and other invasive disease exclusively among children under age five. Occurrence of these infections may impair child growth by causing micronutrient deficiency. Using longitudinal data from first and second waves of Young Lives Study conducted in India during 2002 and 2006-07 respectively and multivariable logistic regression models (using generalised estimation equation to take into account the cluster nature of sample), this study aims to examine the impact of Hib vaccination on child anthropometric outcomes (stunting, underweight and wasting) in India. Bivariate result shows that, a higher percent of children were stunted and underweight among those who were not vaccinated against Hib (39% & 48% respectively) as compare to those who were vaccinated (31% and 39% respectively). The risk of childhood stunting and underweight was significantly lower among children who were vaccinated against Hib (odds ratio: 0.77, 95% CI: 0.62-0.96 and odds ratio: 0.79, 95% C.I: 0.64-0.98 respectively) as compare to the unvaccinated children. No significant association was found between vaccination status against Hib and childhood wasting. Moreover, in the statistical models, about 13% of stunting and 12% of underweight could be attributable to lack of vaccination against Hib in India. Study concludes that vaccination against Hib- in addition to being a major intervention for reducing childhood infectious disease and mortality- can be consider as a potential tool for reducing the burden of undernutrition in India. Therefore, the Government of India must include the vaccine against Hib into the Universal Immunization Programme in India.

Keywords : Haemophilus influenzae Type-B, Stunting, Underweight, Wasting, Young Lives Study (YLS), India

Conference Title : ICPD 2016 : International Conference on Population and Development

Conference Location : Boston, United States

Conference Dates : April 25-26, 2016