

**Epidemiology of invasive haemophilus influenzae B disease in infants and preschool children in the district of Colombo, Sri Lanka**

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Haemophilus influenzae type b (Hib) infection occurs worldwide and is considered a major childhood killer, causing severe forms of infection including meningitis, septicaemia and pneumonia. With the wide use of second generation conjugate Hib vaccines, the countries which introduced the vaccine in the western hemisphere have almost eradicated the Hib diseases. The availability of safe and effective vaccines highlights the need for accurate Hib incidence data for making decisions on vaccine policy. The present study was planned with the intention of accurately estimating Hib disease incidence in the district of Colombo, Sri Lanka. The study consisted of a prospective, population based study of Hib infections in the District of Colombo and a case control study to examine the association of Hib infection with selected factors. All five hospitals in the district of Colombo with a consultant paediatrician participated in the study. With the objective of describing the epidemiology of Hib infections in the age group 0-5 years in the district of Colombo, the present study was carried out during the year. The study documented for the first time a community based microbiological analysis of meningitis in infants and preschool children. All Hib infections detected were that of type b and accounted for 50 percent of the aetiologically confirmed meningitis. The next two common micro organisms were Group B Streptococcus (23 percent) and Streptococcus pneumoniae (13 percent). Hib meningitis constituted 84 percent of the Hib diseases. Almost 80 percent of the Hib meningitis cases occurred in the age group below 24 months and 59 percent of all meningitis cases were below 12 months of age. The highest incidence of Hib disease was in the 3-5 months age group. A biphasic seasonality pattern of Hib disease incidence was demonstrated by the present study. Sri Lanka has an extensive primary health care network and a well performing EPI programme. Current DPT+HepB schedule of 2,4, 6 months further enhances the opportunity to introduce the Hib vaccine as the disease is seen more in early infancy as demonstrated by the present study.