Infant deaths in a health unit area of Northern Sri Lanka

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Abstract

97 infant deaths that occurred during 1 year were almost equally distributed in the neonatal and post-neonatal periods. The low infant mortality rate (IMR) reported for the area was found to be due to poor registration of deaths. The actual IMR is 35.4. Lower respiratory tract infections and gastroenteritis were the chief causes of death, with low birth weight contributing to it. Among these deaths, as a conservative estimate, 20 have been identified as preventable. Prevention of these deaths would reduce the IMR to 28.1. Practitioners of indigenous medicine need training on the management of dehydration in infants, and the mothers should be taught the proper use of oral rehydration solution. Families belonging to low 'social caste' were more at risk of infant deaths. This study shows the importance of small, community-based investigations in order to identify vulnerable small socio-cultural groups in developing countries.

The 97 infant deaths occurring in June 1982-May 1983 in the Kopay Health Unit in northern Sri Lanka were analyzed to increase understanding of regional differences in infant mortality rates. During the study period, the birth rate was 24.5/1000 and the infant mortality rate was 35.4/1000 for the health unit area of Kopay compared with 28.6/1000 and 18.0/1000, respectively, for the district (Jaffna) to which Kopay belongs. Only 35 (36%) of the 97 infant deaths in Kopay were registered; thus, the official infant mortality rate would have been only 12.8/1000. 51 (53%) of the infant death occurred in the neonatal period, predominantly within the first 7 days of life. Of the 46 postneonatal deaths, 21 involved children over 6 months of age. Lower respiratory tract infections and gastroenteritis accounted for 47% of infant deaths; low birth weight was responsible for an additional 16%. Malnutrition, measles, and unsatisfactory housing conditions contributed to the deaths from lower respiratory tract infection, while severe dehydration and lack of medical treatment accounted for many of the deaths due to gastroenteritis. Overall, 6 of the 26 deaths due to lower respiratory tract infection and 14 of the 20 deaths due to gastroenteritis are considered to have been preventable through improvements in health education and nursing care. Practitioners of indigenous medicine need training on the management of dehydration in infants, and mothers should be taught the proper use of oral rehydration solution. The study also illustrates the impact of social caste on infant mortality. 49 (50%) of the deaths investigated involved families of laborers, who belong to the lowest social ranks in the Hindu caste system in Sri Lanka.

Indexed keywords

**EMTREE medical terms:** age; central nervous system; child; child health care; classification; clinical article; diagnosis; digestive system; economic aspect; education; epidemiology; ethnic or racial aspects; etiology; fatality; gastroenteritis; geographic distribution; human; infant; infant mortality; infant welfare; infantile gastroenteritis; lower respiratory tract infection; management; newborn; newborn death; priority journal; respiratory system; short survey; social aspect; social medicine; therapy

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