Abstract:

AIM: Establishment of baseline epidemiology of intussusception in developing countries has become a necessity with the possibility of reintroduction of rotavirus vaccine. The current study assessed the seasonal trend in cases admitted with intussusceptions and dehydrating acute watery diarrhoea in children aged 2 months to 10 years. METHODS: In a prospective surveillance study, teaching and research hospital sites in India (Lucknow and Nagpur), Brazil (Fortazela), Egypt (Ismailia) and Kenya (Nairobi) established a surveillance where a network of hospitals with surgical facilities catered to a reference population of about 1-2 million for reporting of intussusception. One large hospital per site also recruited admitted cases of acute watery diarrhoea. RESULTS: From April 2004 to March 2006, 173 and 2346 cases of intussusception and diarrhoea, respectively, were recruited. Cases of intussusception had no apparent seasonality. Most cases of intussusception (61.3%) (107/173) were in the < or =1 year age group, with males comprising 68.8% (119/173) of all cases. Hospital mortality of intussusception was 4.2% (4/96). Cases of diarrhoea peaked in March, with 56.6% (1328/2346) of admitted cases being males. Majority (83.1%) of cases of diarrhoea had received antibiotics, and the hospital mortality was 0.8% (18/2280). CONCLUSION: Intussusception in the four participating countries exhibited no seasonal trend. We found that it is feasible to establish a surveillance network for intussusception in developing countries. Future efforts must define population base before the introduction of rotavirus vaccine and continue for some years thereafter