

epidemiology of acute respiratory infections in children in Nairobi, Kenya.

Hazlett, D.T.; Bell, T.M; Tukei, P.M; Ademba, G.R; Ochieng, W.O; Magana, J.M; Gathara, G.W; Wafula, E.M; Pamba, A.; Ndinya-Achola, JO

Abstract:

Acute respiratory infection (ARI) is the most common cause of illness and death in young children worldwide. Because of inadequate laboratory facilities and financial resources the etiological agents responsible for most cases in developing countries remain unknown, thus obviating appropriate management. Therefore, an ARI program was commenced at the Kenyatta National Hospital, Nairobi, Kenya in 1981 with the objectives of establishing the microbial causes, clinical presentations, and diagnoses of ARI in children under 5 years of age and of developing simple, rapid, and inexpensive diagnostic techniques. Viruses were demonstrated in 54% of the 822 children studied, but over half of the viruses identified were types not commonly associated elsewhere with the causation of severe ARI. Respiratory syncytial, parainfluenza, and adenoviruses occurred in the same age groups and during similar weather conditions as elsewhere. Measles virus occurred most frequently in those 7 to 9 months old. Herpes simplex, rhino-, and enteroviruses play causative roles in some cases of severe ARI in Kenyan children. A combination of immunofluorescent and cell culture techniques were shown to be essential for the detection of viruses.