

Prevalence and frequency of *Giardia lamblia* in children aged 0 to 60 months with and without diarrhoea

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Abstract:

Stool specimen results from children with diarrhoea and without diarrhoea, in a rural village community in Kenya, were analysed in order to compare prevalence and age frequency distributions of *Giardia* between the 2 groups. There was evidence for 2 age-related prevalence peaks for *Giardia* in children 60 months and below. Furthermore, there appeared to be a clear *Giardia*-diarrhoea relationship in the age group of 19 to 24 months. PIP: Stool specimen results were analyzed from children with diarrhea and without diarrhea in a rural village in Kenya, Nderu, to compare the prevalence and age frequency distributions of *Giardia* between the two groups. Data for *Giardia* were available from the National Diarrhea Control Program (NDCP) for the period September 1985 to September 1986 for 608 diarrhea specimens. These data were compared to those from 408 stool specimens collected during four cross-sectional surveys in Nderu between July 1985 and October 1986 from children aged 0-60 months without diarrhea in 60 families. The impact of *Giardia* in childhood morbidity in communities where the organism is endemic remains elusive. The major problems encountered when defining the morbidity of *Giardia* in an endemic setting are the limitations of applying epidemiological methods where the organism is so frequent, and the phenomenon of poly-parasitism making it very difficult to pinpoint the effects of a single organism. It was nonetheless determined that a significant proportion of childhood diarrhea, at least among 19-24-month olds, is associated with and probably caused by *Giardia*. This increase in prevalence of *Giardia* in the 19-24-month group apparently leads to a second peak of *Giardia*-induced diarrhea at 37-48 months. This second peak is difficult to interpret