

Abstract

The prevalence of *Cryptosporidium* was assessed among 760 children with diarrhea in seven districts of the West Bank. Sixty two fecal samples were collected from northern, central and southern regions from children without diarrhea as the control group. Fecal specimens were concentrated by sedimentation technique and stained by modified acid fast staining. Data on each child was obtained and documented.

Eighty eight (11.6%) of the 760 fecal specimens examined were positive for *Cryptosporidium*. The prevalence rate in females was 12.4% (38/307), and 11.0% (50/453) in males. The highest prevalence rate of *Cryptosporidium* in Hebron was 15.2% (28/184), followed by Jenin 14.3% (9/63), Nablus 11.1% (7/63), Qalqilya 10.8% (16/148), Toulkarm 10.7% (6/56), Ramallah 9.3% (12/129), and Bethlehem 8.5% (10/117). The prevalence rate was found to be slightly higher in camps (12.9%) than villages (12.2%) and cities (9.8%). This can be due to the poor hygienic and sanitary conditions. The prevalence rate of *Cryptosporidium* in the control group was 3.2% (2/62) which is consistent with other previous studies.

Significant difference in the prevalence rate of *Cryptosporidium* was clearly detected among different age groups. The age group (<5 years) is extremely higher (14.4%) than other groups; (5-10 years) age group (7.7%) and (10-15 years) age group (5.9%).. This may be due to lack of sanitary practice, self awareness and personal cleanliness in (0-5 years) group of children because they tend to put every thing in their mouths without awareness.

The data suggest that there is a need to implement routine testing for *Cryptosporidium* on all diarrheal stool specimens obtained from children. This study necessitates the re-evaluation of the current standards for safe drinking water. The Ministry of Health should develop new strategies to prevent the transmission of cryptosporidiosis.