

**Study on *Cyclospora* Associated with
Diarrhoeal Diseases in Nepal**

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Background: Diarrhoeal diseases are the most common illness of children and endemic in developing countries. Enteric parasites, particularly diarrhoeagenic protozoa, are common among poor population. **Objective:** Find out the prevalence of *Cyclospora* associated with diarrhoea in Nepal. **Methodology:** The study was conducted during October 1999-August 2002 (Year 1: October 1999-September 2000, Year 2: October 2000-September 2001, and Year 3: October 2001-August 2002). In total, 1,397 diarrhoeal faecal samples collected from all age groups at different healthcare centres in Kathmandu city and its suburb (n=1,326) and public schools, both inside and outside of Kathmandu Valley (n=71), were studied. *Cyclospora* was detected by the direct microscopic method by ultraviolet and differential interference contrast microscopes in Japan. **Results:** The overall positive rate was 9.2% (128/1,397) with an equal positive rate in males (9.1%) and females (9.3%). A higher positive rate was observed in children aged 10 years and less than 10 years (11.1%) and lowest in the age-group of 51-60 years (3.1%), however, without any significant difference ($p>0.05$). The highest positive rate was found in Year 1 (17.9%), followed by a marked decrease in two successive years (Year 2: 8.8%; Year 3: 2.0%) ($p<0.01$). A significantly higher positive rate was observed in summer (rainy season) (12.6%), followed by autumn (6.8%) and winter (2.4%), with the lowest prevalence in spring (dry season) (1.8%) ($p<0.05$). Only males were positive in winter, whereas in summer, females showed a higher positive rate ($p<0.01$). Month-wise, the peak incidence was observed in July, followed by August and zero in December, January, and February. The positive rate was closely associated with rainfall in the first two years but not in Year 3. A significantly higher prevalence was observed in females in summer ($p<0.05$). **Conclusion:** The findings indicate that the parasite is endemic in Nepal and widely distributed irrespective of sex, location, and age-groups.