

O : GEOGRAPHICAL EPIDEMIOLOGY
TUESDAY P.M.

EPIDEMIOLOGIC FEATURES OF CAMPYLOBACTER ENTERITIS IN BANGLADESH

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Preliminary reports suggest there may be major differences in the epidemiology and the clinical consequences of Campylobacter jejuni infection in developed and less developed countries. To determine the role of Campylobacter as an enteropathogen in Bangladesh, we have monitored since February, 1980, Campylobacter infections and disease symptoms in three Bangladeshi populations - a 4% sample of patients with diarrhoea attending the cholera hospital in Dacca, family contacts of 40 diarrhoeal patients with and 40 without Campylobacter infections who have been cultured every other day for at least two weeks, and a cohort of 180 village children aged six months to six years who have been cultured for every diarrhoeal episode as well as on routine monthly examination.

Campylobacter jejuni is commonly isolated in Bangladesh but its role in the pathogenesis of diarrhoeal disease remains unclear. While the rate of isolation among 3,392 Dacca hospital patients was 14%, the rates in family contacts of diarrhoeal patients with and without Campylobacter infection were the same; neither was significantly different from the rate in hospital patients when adjustment was made for age. Campylobacter was isolated more frequently ($p < .01$) among village children cultured monthly on routine examination (135/1,465) than from those cultured specifically for diarrhoea (16/360). With repeated monthly cultures, 60% of all these children and 75% of those under three years old had Campylobacter isolated at least once. No characteristic presentation for Campylobacter enteritis could be identified in any group.

Because of this difficulty in linking Campylobacter infections with disease, we are examining paired sera from patients, serotyping isolates and trying to identify further microbiological markers of pathogenicity which might help explain our results in light of those observed in more developed areas.

Intl. Workshop Campylobacter infections