

study suggest that low birth weight is still a problem, and that lack of mothers' education and spontaneous premature delivery are associated with low birth weight in rural Bangladesh.



Effects of Age, Duration of Illness and Infecting Species on the Pathology of Fatal Childhood Shigellosis

AK Azad, M Islam, R Islam, MA Salam, AN Alam, and T Butler*

Objective: Understand the pathogenesis of the complications and the pathophysiologic mechanisms involved in the persistence of the diarrhoeal illness, and determine the severity of colitis associated with infection due to different species of *Shigella*, on the basis of results from the recent series of autopsies.

Methods: At the ICDDR,B's Dhaka-based hospital, the Clinical Research and Service Centre, over 100,000 diarrhoea patients are seen annually. At the histopathology laboratory, autopsies are conducted on a sub-sample of patients who die in the hospital.

Results: Infants with infection due to *Shigella flexneri* more often presented with watery stool and bacteraemia than did the older children. Large areas of deep ulceration of the colonic mucosa and even ulceration involving the entire colonic mucosa were common in infantile *S. flexneri* infection. Hypoproteinaemia and bacteraemia in such cases may be the consequences of exudation of proteins through the denuded colonic mucosa and loss of the protective mucosal barrier. Cases with a prolonged course of diarrhoeal illness were found to have persistent mucosal abnormalities, including large areas of deep ulceration of the colonic mucosa. In contrast to *S. flexneri* infection, *S. dysenteriae* type 1 infection was generally associated with higher instances of shock, leukocytosis, azotaemia, severe hypoproteinaemia, intestinal obstruction associated with transmural inflammation of colon, and disseminated intravascular coagulation. They also had significantly higher frequencies of pseudomembranous inflammation of the terminal ileum and colon, severe necrotizing haemorrhagic colitis, microvascular thrombosis of the mucosa and submucosa of colon, and glomerular capillary thrombosis. An association of infantile *S. dysenteriae* 1 infection with severe necrotizing haemorrhagic colitis, leukaemoid reaction, and development of glomerular capillary thrombosis with or without haemolytic-uraemic syndrome was apparent.

Conclusions: A routine programme of autopsies helps clinicians better understand the underlying complications associated with fatal cases of diarrhoeal illnesses.

*Texas Technical University, Texas, USA



Awareness of Transmission and Prevention of Sexually-Transmitted Diseases Among Rural Women in Bangladesh

Mehrab Ali Khan, Mizanur Rahman, Parveen Akhter, and Barkat-e-Khuda

Objective: Study the awareness of sexually-transmitted diseases (STDs) among rural women and family planning field workers.

Methods: The MCH-FP Extension Project of ICDDR,B works with the Government of Bangladesh, conducting operations research to improve health and family planning service-delivery. A sample of over 6,000 married women of reproductive age in three project sites was surveyed during 1994 to examine their awareness of STDs. Both bivariate