

ciprofloxacin suspension, 10 mg/kg 12 hourly or amdinocillin pivoxyl tablets, 15-20 mg/kg 8 hourly for 5 days. Therapy was clinically effective, if a patient did not have frank dysentery on day 3; and had no bloody-mucoid stools on day 5, had ≤ 1 watery stool, ≤ 6 total stools, and was afebrile; and bacteriologically successful, or if *Shigella* could not be isolated from faecal samples on day 3 and thereafter. The rates of clinical and bacteriologic cure, and the rates and types of the adverse events in the two treatment groups were compared using the standard statistical tests.

Results: Therapy was clinically successful in 48/60 (80%) and 39/60 (65%) patients (difference 15%; 95% CI -0.7-30.8), and bacteriologically successful in 60 (100%) and 54 (90%) patients (difference 10%; 95% CI 2.4-17.6%) who had received ciprofloxacin and amdinocillin respectively. Joint pain after initiation of therapy occurred in 13/70 (18.6%) and 16/71 (22.5%) patients who had received ciprofloxacin and amdinocillin respectively ($p > 0.2$), and no patient had signs of arthritis.

Conclusion: Ciprofloxacin is an effective and safe drug for use in multiply-resistant childhood shigellosis.

¹International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), GPO Box 128, Dhaka 1000, Bangladesh

²Department of Medicine, New England Medical Center, Boston, MA 02111, USA



Health Conditions of Pregnant Women and Perinatal Mortality in a Slum of Dhaka City, Bangladesh

Abdullah Al Mamun¹ and Therese Juncker²

Objective: Examine the association between perinatal mortality with health conditions, and treatment-seeking behaviour of pregnant women in a slum population of Dhaka city in Bangladesh.

Methodology: A cohort of 2,007 pregnant women with a community setting was studied between June 1994 and January 1997. Women who, according to their last menstruation date, had less than 21 weeks of amenorrhoea, were considered for the study. The women were recruited from two antenatal clinics run by Radda Barnen, a large organization established in Mirpur, and from house-to-house survey in the catchment area of Radda Barnen. Those who signed a consent form were interviewed. The women were followed from 21 weeks of gestation to pregnancy termination. Information was collected on height, weight, mid-upper arm circumference (MUAC), haemoglobin, blood pressure, incidence of illnesses, and their treatments. Socioeconomic information was collected during the recruitment of the women, and information on the type of pregnancy termination was collected within 3 days of termination. Stillbirth or mortality of the newborns within 3 days of delivery was taken as the indicator of perinatal mortality.

Results: Perinatal mortality was 60.3 per 1,000 livebirths (stillbirth ratio was 40.5 and 0-3-day mortality was 18.8 per 1,000 live-births). The logistic regression analysis showed that eclampsia, history of blood loss during pregnancy, hypertension, haemorrhage, and other infections were significant risk factors for perinatal mortality. Intrauterine device used within the last two years preceding the present conception was also a significant risk factor for perinatal mortality. Body mass index or heights were not associated with perinatal mortality. Perinatal mortality was negatively associated with the number of visits to medical professionals during pregnancy. The educated women had significantly lower perinatal mortality than the uneducated ones, after controlling for demographic, biomedical and economic factors.

Conclusion: Access to medical care during pregnancy can substantially reduce perinatal mortality among the poor women in the urban slums.

²BADC, The Philippines

¹International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), GPO Box 128, Dhaka 1000, Bangladesh



Determinants of Safe Delivery Practices in Rural Bangladesh

M Mafizur Rahman, Barkat-e-Khuda, Thomas T Kane, Masud Reza, and ABM Khorshed A Mozumder

Objective: Investigate the demographic, socioeconomic and cultural factors associated with safe delivery practices in rural Bangladesh.

Methodology: Data were drawn from a cross-sectional survey conducted in six rural subdistricts of Bangladesh in 1994. A sample of 10,368 currently married women of reproductive age was selected, following the multistage random-sampling procedures, they were interviewed using a structured questionnaire to elicit information on various demographic, socioeconomic, cultural and selected programmatic variables, including public health issues, such as maternal health care and delivery practices. In analyzing data, descriptive statistics and multivariate regression methods were employed. In this analysis, the term "safe delivery" refers to a delivery conducted by a qualified person, such as registered physician, paramedic, nurse, or trained traditional birth attendant.

Results: The results of the study showed that almost all deliveries (99%) took place at homes of the women, and most of them (93%) were conducted by the untrained traditional birth attendants, relatives, or neighbours in unsafe and unhygienic conditions. Only 7% of the deliveries (referred to here as "safe deliveries") were conducted by the qualified persons, such as registered physicians, nurses, paramedics, and traditional birth attendants. The multivariate regression results showed that the younger women and the women with lower parity were significantly more likely to have safe deliveries. Education and exposure to radio and television were significantly associated with the safe delivery practices. The women with five or more years of education, and those who possessed radio or television, were also more likely to have safe delivery.

Conclusion: The results of the study suggest that information, education, and communication (IEC) activities should be strengthened to educate the community, particularly the uneducated and older women on the importance of safe delivery. Pregnant women need greater access to trained providers and facilities providing emergency obstetric care.

International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), GPO Box 128, Dhaka 1000, Bangladesh



Teenage Pregnancy and its Consequences: Evidence from Rural Bangladesh

Nikhil C Roy, ABM Khorshed A Mozumder, Shameem Ahmed, and Barkat-e-Khuda

Objective: Investigate the factors regarding health of mother and children associated with teenage pregnancy and the consequences of pregnancy for these women who gave birth by their teenage.

Methodology: Data for this study came from a longitudinal Sample Registration System (SRS) in two rural sub-districts under the ICDDR,B Operations Research Project, for a two-year period covering January 1995 to December 1996. A total of 6,508 married women of reproductive age (15-49 years) categorized in two groups: those who had