

PREVENTION OF SHIGELLOSIS BY HANDWASHING.

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Shigellosis infection in Dacca is approximately 6%. But as 76.6% of all the hospitalized Shigellosis cases are children below the age of 5 years it can be said a pediatric disease. People of the lowest income groups are most affected. Secondary infection, within families of clinical cases, has ranged from 20-25%. In hospitalized cases, the mortality rates for severe cases were 4.9-7.1%, 10-15 times higher than in cholera indicating that simple rehydration is inadequate. In view of this mortality and the reality of very poor sanitation in Dacca city, we elected to determine whether a simple intervention without other changes in the environment or in the community might effectively prevent disease. Handwashing with soap and water was chosen as simple and possibly effective.

On the basis of cultures, cases and controls were selected from the hospital for a 10 day follow up. Age, social economic status and neighbourhoods were matched in selecting controls. 2-3 pieces of bath soap and 2-3 earthen pitchers were provided to the study families. Members were advised to wash hands with soap and water before meals. Compliance was checked by observing decreased size of the soap and water usage. Daily rectal swabs of members were obtained for culture.

The overall secondary infection rate in the study group was 7% and the control group 31%. The secondary case rate in the study group was 2% and in control group 15%. These initial results suggest an effect of a simple and inexpensive intervention that is easily understood and implemented by families even in adverse environments.