

Watch Report

Report No. 6

Research and Evaluation Division, BRAC

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Illnesses and Treatment Among Children in Rural Bangladesh

Introduction

The health status of children in rural Bangladesh has been improving gradually as a result of the efforts of both the government and non-government organizations. Consequently, the pattern and distribution of diseases have also been changing. Diseases like small-pox or plague were totally eradicated, and diphtheria and tetanus have largely been reduced. Information on the changing pattern of diseases has important implications since health planners should have knowledge about the incidence and prevalence of diseases, the demographic or regional distribution of diseases to address the program priorities.

Unfortunately, morbidity data at the national level have never been comprehensive although sporadic attempts have been made at the local level. According to a report of 1987, the major types of morbidity among children under 5 years of age were diarrhoeal diseases, worm infestation, acute respiratory infections, skin diseases and ear infections (UNICEF, 1987). It is not known, however, whether the morbidity pattern has changed much since then. The objective of this report is to estimate the current rate of illnesses among children and their treatment in selected rural areas of the country.

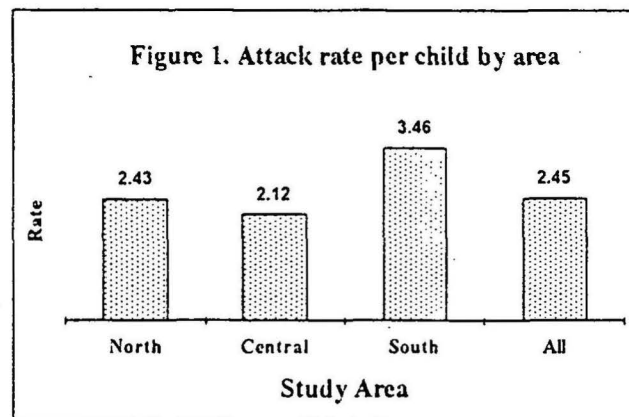
Data and Methods

BRAC has been operating a demographic and health surveillance system since 1986, known as *Watch*, in three rural unions in its project area in Manikganj district (central area). The system was introduced to document the changes that was induced as a result of a development project in such areas as health, income generation, education, women's program. The *Watch* was expanded in 1987 to three more rural unions in Joypurhat district (northern area) where no such development intervention was underway. In 1993, the system was further expanded, temporary for a year, to the island of Kutubdia in Cox's Bazar district (southern area) where BRAC has begun its rehabilitation and development activities after the cyclone of 1991. The morbidity component was added to the *Watch* in 1993 consisting of 11 villages in all three areas with a total of 723 children (<5 years). The study villages were purposively selected. A stratified

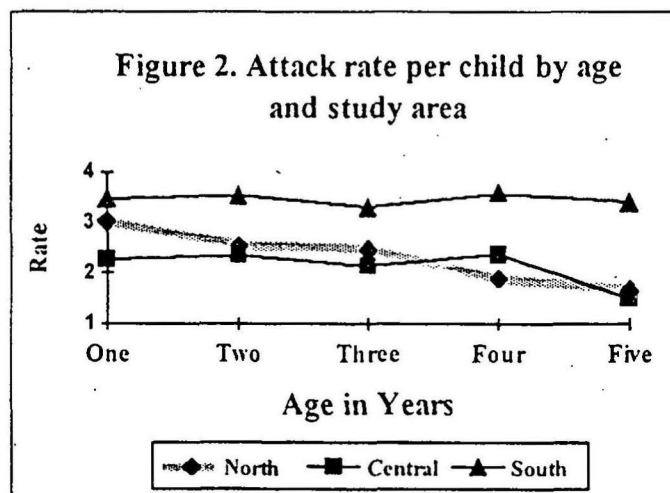
random sampling (by age and sex) was employed to select study children. Each of the study children was visited fortnightly on a regular basis. This report is based on data collected during July through December, 1993.

Findings and Discussion

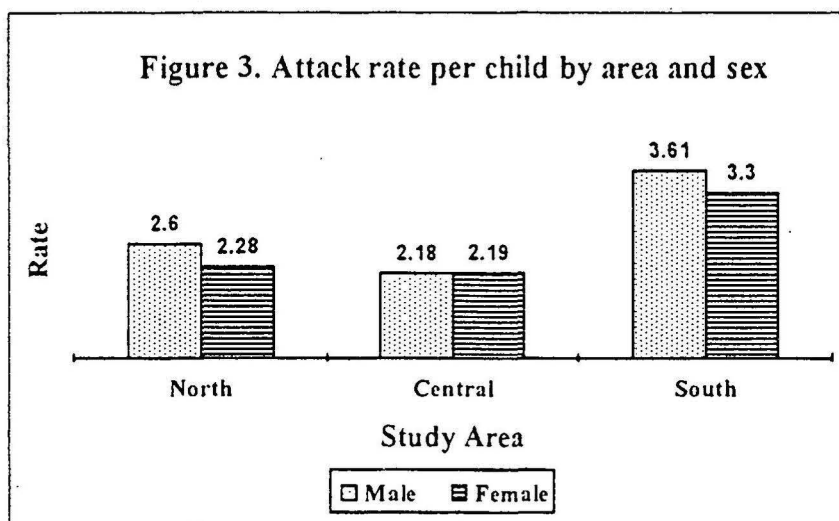
Most of the study children (92.5%) had at least one episode and nearly 29% had at least four episodes of illness during the first six months of this study. The episodes of illness per child during the study period or the *attack rate* (Park & Park, 1991) is found as 2.45 (Figure 1). The southern area has the highest rate of attack followed by the north ($p < .01$). The central area, probably because of an on-going development program, shows the lowest rate of illness.



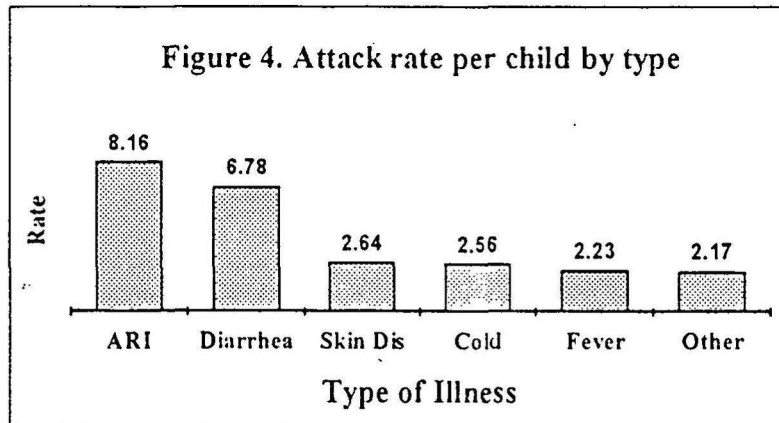
Age preference in attack rate appears to be negligible (Figure 2). The attack rate per child is generally higher among the younger (2 years or less) than adult children particularly in the north and central areas. The rate declines as the children grow older except in the south where all children seem to be equally exposed to risk of illness.



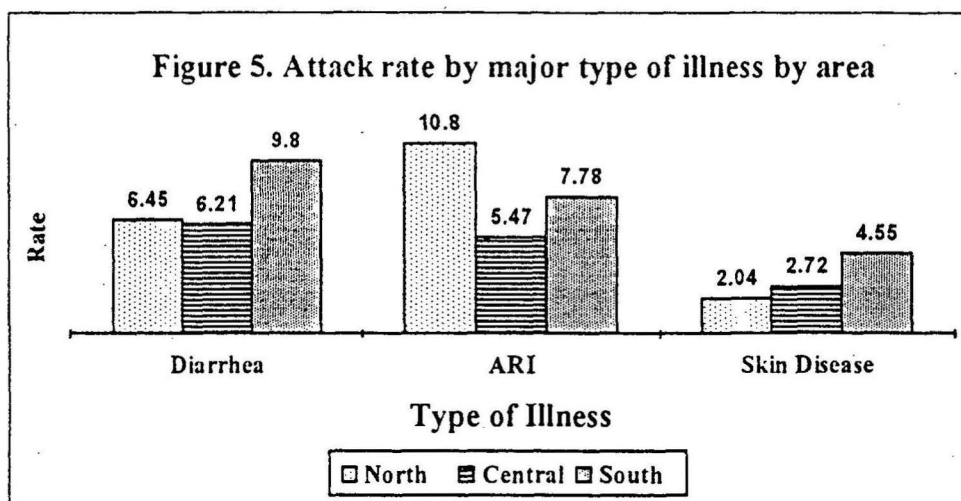
No gender variation in attack rate is found in the central area although more male than female children are found sick in other areas (Figure 3). The variation is most prominent in the north followed by the southern areas.



The distribution of attack rate by type among the study children indicates that acute respiratory infections (ARI) are the most frequently occurring illnesses followed by diarrhoeal diseases (Figure 4). The incidence of other illnesses such as skin diseases, common cold, fever, etc. is relatively lower than ARI and diarrhoeal diseases.



The major types of illnesses are distributed by area in Figure 5. The ARI attack rate is found highest in the north while diarrhoeal diseases are found highest in the southern area ($p < .01$). The skin diseases are also found in the south although relatively lower in other two areas. No significant variation in the episodes of other diseases is reported among the study areas.



About a third of the illnesses has been treated by trained health care practitioners (MBBS, Medical Assistant or Palli Chikitshak) while nearly 40% of the reported illnesses have been treated by the untrained practitioners (unqualified rural doctor, compounder or homoeopath). Unlike conventional belief, the traditional health practice (Kabiraj or supernatural healer) is reported very low (6.4%) in the study areas. It should be noted, however, that more than a fifth of the illnesses among children have never been treated.

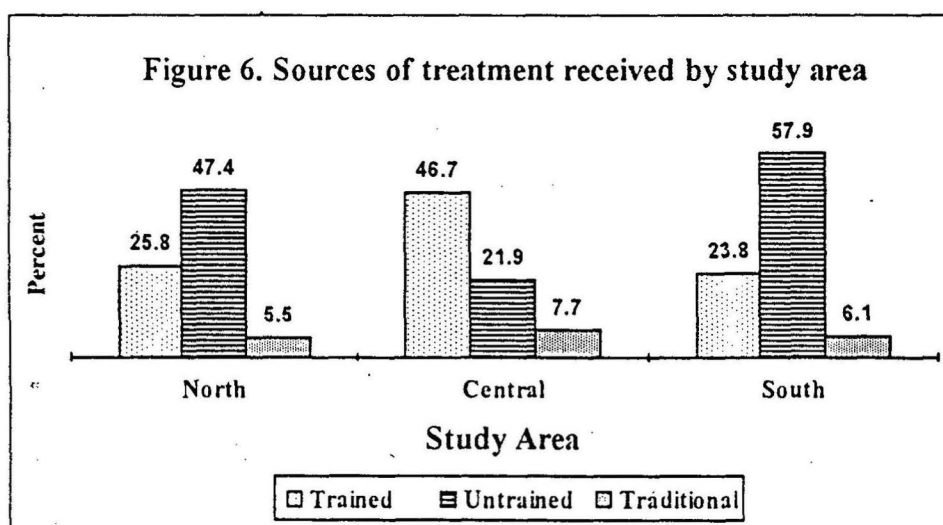


Figure 6 shows the distribution of sources of treatment received by study children. The role of modern practitioners is found highest in the central area (46.7%) followed by only 25.8% in the north and 23.8% in the south. The untrained practitioners are the most significant health care providers in the south and northern areas. The role of traditional practice is generally low and the areal variation in traditional practice is insignificant.

The findings presented in this report suggest that the incidence of diseases among children has remained very high although geographical variation is quite

prominent. Development programs provided by the NGOs may have played an important role in reducing illnesses in the central area. The boys are found more likely to be sick than girls. The data also reveals that illness has age preference and the incidence of illness reduces as children grow older.

Although emphasis had already been given to oral rehydration therapy (ORT) and immunization of children, the acute respiratory infections and diarrhoeal diseases have remained the most frequently occurring diseases regardless of gender and geographical differences. In the event of illness, only a third of rural children has the opportunity to be treated by a trained medical practitioner and nearly one-fifth of them go untreated. It has been suggested, therefore, that the parents should be made aware about the need and timely treatment when their children are sick.

References

Park JE and Park K, 1991. *Textbook of Preventive and Social Medicine*. (Thirteenth edition, p53). Jabalpur: M/s Banarsidas Banot.

UNICEF, 1987. *An Analysis of the Situation of Children in Bangladesh*. Dhaka: United Nations Children Fund.

This report has been prepared by Abdullahel Hadi of the Research and Evaluation Division of BRAC in July 1994.