## **ORIGINAL ARTICLES**

# STUDY ON LIFE STYLE OF THE PATIENTS OF RHEUMATIC FEVER ATTENDING THE NATIONAL CENTRE FOR CONTROL OF RHEUMATIC FEVER AND HEART DISEASES (NCCRF/HD) DURING THE YEAR 1993 TO 1996

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#### Abstract:

A Retrospective study was designed to see the status of housing and living environment of the patients of Rheumatic fever. The study was done from January to June 1997 on 477 (Four hundred seventy seven) patients of Rheumatic fever whose data were collected from the records of National Centre for Control of Rheumatic Fever and Heart Diseases (NCCRF/HD), Sher-E-Bangla Nagar, Dhaka. All of them were diagnosed cases of Rheumatic fever of both sexes attended the hospital from the year 1993 to 1996. The study showed that 257 (54%) patients out of 477 came from a family comprising of 7 members or more, 196 (41%) patients from a family comprising of 4-6 members. 50.1% cases resides in kutcha house, 32.9% and 17% cases resides in Pukka and semi-pukka house, respectively. The study shows that 67% of the patients came from the house consisting of 1-2 living rooms, 27.9% from the house consisting of 3-4 rooms. Family comprising of more members, type of residing house especially kutcha house and house consisting of less living rooms increases the incidence of the Rheumatic fever.

Key words: Rheumatic fever, Family members, Type of housing and living rooms.

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#### Introduction:

Bangladesh is a developing country having many health problems. Rheumatic fever is still the most common cause of heart disease in children and young adults in developing countries<sup>1</sup> like Bangladesh. This disease is typically associated with poverty, in particular with poor housing, overcrowding and inadequate medical care. Rheumatic fever has almost disappeared from economically developed countries with the improvement in standard of living<sup>2</sup>. Rheumatic fever is disease which usually follows streptococcal infection of throat<sup>3</sup>. Incidentally, it has been emerging as a public health problem in Bangladesh. The study shows that Rheumatic fever affects young

population of poor socio-economic group living in over crowded and unhygienic conditions<sup>4</sup>. It is a preventable disease and in some developing countries, already prevention had been accomplished<sup>5</sup>. 80% of the heart valve operations in National Institute of Cardiovascular Diseases (NICVD) were of Rheumatic origin. Experience from the implemented pilot project for control and prevention of Rheumatic fever and Rheumatic heart diseases in Bangladesh showed that 20% of the children are suffering from streptococcal sore throat, 4/1000 children Rheumatic fever and Rheumatic heart diseases<sup>6</sup>. However, there are some risk factors e.g. poor housing and crowded living environment which influence

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the incidence of Rheumatic fever and preventive measures are to be taken rather than treatment<sup>7</sup>. It may be mentioned that in India, extensive publicity to the mass media among the lower class people including people residing in slum area has created much awareness about the prevalence and incidence of Rheumatic fever and Rheumatic heart disease<sup>8</sup>. This awareness has inspired them to take proper adequate treatment of the disease in spite of their poverty, which has declined the incidence of Rheumatic fever and Rheumatic heart disease<sup>8,9</sup>.

#### **Methods:**

The present study was performed on 477 Bangladeshi people of both sexes who were diagnosed as patients of Rheumatic fever. Among them, 277 were male and 200 were female, age ranging from 1 to 55 years and attended the hospital from the year 1993 to 1996. Data were collected from the records of National Centre for Control of Rheumatic Fever and Heart Disease, Sher-E-Bangla Nagar, Dhaka in March and April of 1997. This centre is the only specialized outdoor hospital in Bangladesh for Rheumatic fever and Rheumatic heart disease 10. This hospital deals all the patients of Rheumatic fever or Rheumatic heart disease referred from different medical colleges, modernized district hospitals, upazilla health complexes and other hospitals. A checklist was prepared from record review. All the available data were collected from case records of 477 patients which include information about age, sex, the number of family members, type of housing and number of living rooms of the patients. After the data collection, those were checked, verified and edited for consistency before the hand tabulation. Then they were analyzed as per objectives of the study. The results were then calculated from the tabulated column. The results were explained according to the findings from the obtained data.

#### **Results:**

The present study was performed on 477 Bangladeshi people of both sexes. Among them, 277 were male and 200 were female, ranging from 1 to 55 years. The study showed that 257

(54%) patients came from a family comprising of 7 members or more, 196 (41%) patients from a family comprising of 4-6 members (Table-I). It was also observed that 50.1% of the total cases reside in Kutcha house and 32.9% and 17% reside in Pukka and semi-pukka house respectively (Table-II). Most of the patients (67%) live in the house consisting of 1-2 rooms, where as only 5.1% have their adequate living rooms i.e. 5 or more (Table-III).

**Table-I**Distribution of Rheumatic Fever according to number of family members

Number of	Number of	Percentage
family members	cases	
1-3	24	5%
4-6	196	41%
7+	257	54%
Total	477	100%

**Table-II**Distribution of Rheumatic Fever according to type of house

Type of house	Number of cases	Percentage
Kutcha	239	50.1%
Pukka	157	32.9%
Semipukka	81	17%
Total	477	100%

**Table-III**Distribution of Rheumatic Fever according to number of living rooms

Number of	Number	Percentage
living rooms	of cases	
1-2	320	67%
3-4	133	27.9%
5+	24	5.1%
Total	477	100%

#### Discussion:

Agarwal (1981)<sup>1</sup> described that Rheumatic fever and Rheumatic heart disease is in someway related to poverty. Damp and crowded living conditions in the slum of low income group in cities may possible be an important factor for the causation of Rheumatic fever. Faruq et al. (1992)<sup>6</sup> stated that 60% belonged to low income class, 60% lived in small space and 70% belonged to large families. Haque et al. (1992)<sup>7</sup> described that Rheumatic fever and Rheumatic heart disease is related to poor housing condition, low socio-economic condition and overcrowding in living environment. The results of the present study are in an agreement with the above mentioned observations. Family comprising of more members, type of residing house especially kutcha house and house consisting of less living rooms increases the incidence of the Rheumatic fever $^{11,12}$ .

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