

# WORLD CONGRESS ON RHEUMATIC HEART DISEASE

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**Title:** PREVENTING A FUTURE CRISIS: ADDRESSING RHEUMATIC HEART DISEASE IN SCHOOL STUDENTS IN NOAKHALI DISTRICT, BANGLADESH

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**Background & Aims:** Rheumatic Heart Disease (RHD) remains a significant public health challenge in Bangladesh, particularly affecting the vulnerable population, including children and adolescents. The high incidence and prevalence of these diseases are caused by the traditional risk factors associated with them, such as poverty, overcrowding, ignorance, and a lack of access to health care. The study was carried out in Bhimpur ML High School in Noakhali district, Bangladesh to assess the RHD status among the students in a district of Bangladesh and their knowledge, attitude and practice regarding the diseases and health seeking behavior.

**Methods:** A total of 1200 students of age group 10-18 years were examined. The study followed a protocol developed Jones' criteria, 1992 alongside clinical investigation. A team of cardiologists and health assistants camped in school and taken history of past medical illness during the process of detailed cardiovascular examination.

**Results:** Among 1200 students, 1121 were girls and 79 were boys, and the mean age of girls was 13.9 years ranging from 10 to 18 years, while the mean age of boys was 14.3 years ranging from 10 to 17 years. The study found 13 students diagnosed to have RF/RHD, and a significant murmur was found in 16 cases may actually represent RHD. Except one (01) male case, the remaining 11 were female, and the majority (04) of the RF/RHD case were in 13-17-year age group. Multiple risk factors contributed to the incidence of RHD among students, that included poor socioeconomic status, limited education, cultural practices restricting healthcare-seeking behaviors, and gender-based inequalities in accessing healthcare facilities. Knowledge among the students and RHD was found very poor

**Conclusions:** Rheumatic Heart Disease presents a significant health burden among student in Bangladesh. More echocardiography-based studies are required to determine the current prevalence of RF and RHD. Besides, gender-specific factors, including limited access to healthcare services and sociocultural barriers, contribute to the increased prevalence and adverse outcomes of RHD among female students. Addressing these challenges requires a comprehensive approach that includes awareness-raising, equitable access to healthcare, and gender-sensitive interventions.