

# WORLD CONGRESS ON RHEUMATIC HEART DISEASE

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**Title:** ECHOCARDIOGRAPHIC SCREENING FOR RHEUMATIC HEART DISEASE IN RURAL CAMEROONIAN SCHOOL CHILDREN

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**Background & Aims:** Efforts to decrease the incidence of rheumatic fever and the severity of rheumatic heart disease involve reduced exposure to group A streptococcus, appropriate treatment of streptococcal pharyngitis, and prevention of rheumatic fever recurrence. Approximately 90% of cases of rheumatic heart disease are silent on physical examination and detectable only by echocardiography. We aimed to establish the prevalence of rheumatic heart disease in rural school children using echocardiography

**Methods:** School-based echocardiography cross-sectional survey conducted in Bui division, Cameroon. A total of 1027 attendees were randomly selected for the study in three primary schools. The first school had 435, the second 350 and the third 242 children respectively. To all children of each school was done an echocardiogram and rheumatic heart disease was evaluated according to the World Heart Federation criteria.

**Results:** The results showed that of the 1027 children recruited, 807 were female, representing 78, 5% of the population. Children were aged from 5 - 14 years old with a mean age of 8,  $4 \pm 3$  years old. According to the classification of the world heart federation, definite rheumatic heart disease was found in 10 children giving a prevalence of 9, 7%: pathological mitral regurgitation and at least two morphological features of rheumatic heart disease of the mitral valve were found in 4 males and 4 females, pathological aortic regurgitation was found in two females. Normal echocardiographic findings with isolated morphological feature of rheumatic heart disease of the mitral valve was found in 19 females and 15 males. A female with severe mitral regurgitation was symptomatic, the rest of patients asymptomatic.

**Conclusions:** The prevalence of rheumatic heart disease as well as the incidence of congenital heart disease in the studied population is almost the same like in other sub-saharan studies. Such investigations should be done in other regions of Cameroon in elder groups to better understand the prevalence of the disease in this country.