Rheumatic heart disease is one of the commonest causes of heart disease in Nigeria. Prior to the advent of echocardiography, the diagnosis of rheumatic heart disease was essentially clinical. This study was aimed at determining the burden of chronic rheumatic mitral valve disease, pattern of valvular involvement, severity and associated valvular lesions, using echocardiography.

Between May, 2004 and May 2005, 55 patients with symptomatic rheumatic heart disease, seen in the cardiac clinics of University of Nigeria Teaching Hospital, Enugu, were recruited for the study. There were 39 (70.9%) females and 16 (29.1%) males. Age ranged from 12 to 59 years, with a mean age of 29.34 ± 11.57 years. Thirty-six age and sex matched controls, 25 females and 11 males, were also recruited with similar age range. Mean age of controls was 27.75 ± 8.2 years. There was no statistically significant difference between the mean ages of the two groups.

The patients and controls groups were all investigated non-invasively with M-mode, Two-dimensional, Pulsed wave, Continuous wave and colour
flow Doppler echocardiographic techniques in order to assess the mitral valve for evidence of rheumatic heart disease.

Rheumatic mitral valve disease was found in 54 (98.2%) out of 55 patients with rheumatic heart disease. Mitral regurgitation was the predominant pattern of involvement, comprising 64.8%, mixed mitral valve disease was found in 25.9% and pure mitral stenosis in 9.3%. There was a strong negative correlation between severity of mitral stenosis and mitral valve area.

Aortic valve disease was the most common associated valvular lesion.

Rheumatic heart disease is essentially a disease of the mitral valve. Echocardiography should be done routinely for patients with rheumatic heart disease to facilitate accurate diagnosis and definitive treatment.