

# WORLD CONGRESS ON RHEUMATIC HEART DISEASE

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**Title:** PROGRESSIVE DETERIORATION IN CLINICAL OUTCOME IN RHD (INFLUENCE OF THERAPEUTIC INTERVENTIONS)

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**Background & Aims:** Rheumatic Heart Disease (RHD) continues to be a major cause of morbidity and mortality in many low- and middle-income countries. However, the long-term outcome and its determinants remain understudied.

**Aim:** Analyze the influence of therapeutic interventions on the clinical outcome of RHD

**Methods:** A total of 2595 consecutive patients with RHD were enrolled in a hospital-based registry prospectively from March 2009 to April 2023. Their baseline characteristics, the pattern, and severity of valvular involvement were defined. Patients were followed-up at 6-monthly intervals (6-170 months ( $53 \pm 31.6$ )) (complete in 92.6% of patients).

Patients judged to have moderate or severe disease had intervention (group 1). Group 2 had no intervention. Outcome was defined as: 1) survival, as well as 2) combined endpoint of cardiovascular (CV) event: atrial arrhythmia, thrombo-embolic event and/or cerebrovascular accident.

**Results:** A total of 1273 (49%) patients underwent surgical ( $n=978$ , 77%) or percutaneous ( $n=295$ , 23%) cardiac interventions, of which 35 (3%) were emergency.

During the study period, 347 patients (13%) died. CV events were experienced in 385 patients. Both groups continued to show progressive deterioration in CV outcomes during follow-up. Undergoing intervention was associated with lower risk of both mortality and CV event (Figure 1).

**Conclusions:** All patients with RHD continue to have deterioration in outcome, however, intervention slows down the deterioration. Further efforts to determine the exact causes involved and improve prognosis are warranted.