

# WORLD CONGRESS ON RHEUMATIC HEART DISEASE

2-4 November 2023 • Abu Dhabi



**Submission Id:** 214

**Title:** RHEUMATIC HEART DISEASE IN MOZAMBIQUE: RESULTS OF 21 YEARS OF SURGERY

**Authors:** Carol Nhavoto, Sheila Aissa, Beatriz Ferreira

**Background & Aims:** Rheumatic heart disease (RHD) results from damage to heart valves caused by episodes of rheumatic fever, an autoimmune inflammatory reaction to throat infection with group A streptococci. It remains the leading cause of preventable death and disability in children and young adults, killing an estimated 320,000 individuals worldwide yearly. In Mozambique, its prevalence is estimated in approximately 30.4 cases per 1,000 school children.

The Heart Institute in Maputo is a non-profit organization that operates free of charge children with acquired and congenital heart disease since 2001. Until today 2,131 patients have been operated and 35% of these patients had RHD.

**Methods:** This is a retrospective study on 644 patients with RHD who underwent valve repair or replacement surgery at the Heart Institute in Maputo between 2001 and 2022. All data were collected from the hospital patient's database and patients' clinical files. The patients' information such as social demographic data, clinical features, surgical data, results and survival were analysed. Descriptive statistics was applied to the data and it was expressed as mean with standard deviation or simple frequencies and percentages.

**Results:** Most of the operated patients were originally from Mozambique but at least 1% of them came from other African countries like Malawi, Swaziland, South Africa and Uganda.

Thirty-eight percent (38%) of the patients were operated by the national surgical team and the rest of them were operated by surgeons coming from Portugal (39%), United Kingdom (15%), Swiss (6%) and France (2%). There were 258 males, and 386 female patients whose ages varied from 3 years to 73 years (mean, 19 years).

Most of the operated patients had involvement of one single valve (49%) and the rest had involvement of two valves (42%) and three valves (9%). The mitral valve was affected in most of the cases (93%), followed by the tricuspid (29%) and aortic valve (26%). Seventy-one percent (71%) of the operated patients underwent valve repair and only 29% of the patients had valve replacement by mechanical and bioprosthetic valves. Twelve percent (12%) of the surgeries had complications and the main complications were due to heart failure, arrhythmias, postoperative bleeding and pericardial effusion. The average length of hospital stay was 14 days and the postoperative mortality was 2.8%, mainly related to heart failure. The surgical outcome was excellent in 72% of the cases and the survival rate after 5 years was estimated around 94%. The reoperation rate was 9.8% and 21% of the operated patients were lost to follow up.

**Conclusions:** RHD has a heavy burden in school children and young adults with severe impact in school performance and working capacity of the affected subjects. The surgical outcomes are generally good whenever valve repair is possible although the reoperation rates can be high and the anticoagulation management of the patients who undergo valve replacement can be a serious struggle especially to those coming from rural areas with limited resources. Most of our patients present with severe and advanced disease consequently primary prevention and early diagnosis are the fundamental key for the successful control and eradication of RHD in Mozambique.