

Abstract

Epidemiological and Clinical Characteristics of Patients Undergoing Cardiac Valve Replacement Surgery in Angola: A Retrospective Study of 100 Cases

Núria Machado ^{1, *}, Humberto Morais ¹, Mauer Gonçalves ¹

¹ Center for Advanced Studies in Education and Medical Training, Faculty of Medicine, Agostinho Neto University, Luanda, Angola.

* Correspondence: nuriamachado10@icloud.com.

Keywords: Valvular Heart Disease; Clinical and Epidemiological Profile; Angola.

Proceedings of the IV Huambo Cardiology Conference, held from September 11 to 12, 2026, in Huambo, Angola.

Citation: Machado N, Morais H, Gonçalves M. Epidemiological and Clinical Characteristics of Patients Undergoing Cardiac Valve Replacement Surgery in Angola: A Retrospective Study of 100 Cases. Brazilian Journal of Clinical Medicine and Review. 2026 Jan-Dec;04 (Suppl.6):jch4

<https://doi.org/10.52600/2763-583X.bjcmr.2026.4.Suppl.6.jch4>

Published: September 11, 2026



Copyright: This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0).

Introduction: Valvular heart disease is a significant and growing global health concern. It is one of the leading causes of cardiovascular morbidity and mortality in sub-Saharan Africa. Historically, rheumatic heart disease has been the predominant form of cardiovascular disease in sub-Saharan Africa. **Objective:** To characterize the clinical and epidemiological profile of patients undergoing cardiac valve replacement surgery at the Cardiorespiratory Diseases Hospital Complex Cardinal Dom Alexandre do Nascimento between 2022 and 2025. **Methods:** This was a retrospective, descriptive, cross-sectional observational study using non-probability convenience sampling and incorporating quantitative and qualitative variables. The study population consisted of patients who underwent cardiac valve replacement surgery between 2022 and 2025. A total of 100 patients comprised the study sample. Patients aged ≥ 18 years who underwent cardiac valve replacement surgery during the study period were included. Patients who underwent valve repair without replacement and those with incomplete medical records were excluded. **Results:** The mean patient age was 34.9 years, ranging from 18 to 73 years, with a predominance of patients aged 18–40 years. Female patients predominated (66%), as did patients from Luanda Province. The most prevalent comorbidities were hypertension (18%), atrial fibrillation (7%), and diabetes mellitus (2%). Rheumatic etiology was the leading cause of valvular disease (66%), with the mitral valve being the most frequently affected and mitral regurgitation the predominant lesion. Biological prostheses were the most commonly used (70%). The main postoperative complications included bleeding, pulmonary thromboembolism, and stroke, while in-hospital mortality was only 1%. **Conclusion:** Rheumatic etiology remained the leading cause of cardiac valve replacement, predominantly affecting young women, with the mitral valve being the most frequently involved. Low in-hospital mortality and predominant use of biological prostheses were observed. These findings reinforce the need to strengthen strategies for the prevention of rheumatic heart disease and the planning of cardiac surgery services in Angola.