

Abstract

Clinical, Epidemiological, and Echocardiographic Profile of Children with Down Syndrome Followed at Luanda Pediatric Hospital

Irina Cristina Pacavira Gaspar ^{1, *}, Sebastiana Gamboa ¹

¹ Department of Pediatrics, Faculty of Medicine, Agostinho Neto University, Luanda, Angola.

* Correspondence: irinapacas@hotmail.com.

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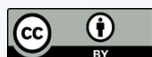
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Introduction: Down syndrome (DS) is the most common chromosomal disorder and is strongly associated with congenital heart disease (CHD), particularly atrioventricular septal defects. In sub-Saharan Africa, epidemiological and echocardiographic data on these patients remain scarce, hindering the development of appropriate healthcare policies. **Objective:** To characterize the clinical, epidemiological, and echocardiographic profile of patients with DS evaluated at the Cardiology Clinic of David Bernardino Pediatric Hospital (HPDB) between June 2024 and January 2025. **Methods:** A retrospective, descriptive, observational study was conducted involving a sample of 117 children aged 0 to 17 years with DS who were followed at the HPDB Cardiology outpatient clinic and had undergone at least one echocardiographic examination. Sociodemographic, clinical, epidemiological, and echocardiographic data were collected using a structured form based on the Cardiology Department database, stored and analyzed using SPSS version 21 through descriptive statistics. **Results:** The sample was predominantly female (53.8%), with the 1–5-year age group being the most represented (41.9%). Congenital heart disease was identified in 89.7% of patients, predominantly acyanotic forms (80.3%): ventricular septal defect (27.3%), patent ductus arteriosus (21.2%), atrial septal defect (17.0%), and atrioventricular septal defect (12.8%). Cyanotic congenital heart diseases accounted for 9.4%, with Tetralogy of Fallot being the most frequent (5.8%). All patients presented characteristic facial features, and dyspnea was the most common symptom (81%). Cognitive developmental delay was present in 83.3% of cases. Pulmonary hypertension occurred in 13% of patients with CHD, and only 6.8% underwent corrective cardiac surgery. Maternal age ≥ 35 years was identified as a risk factor in 58.1% of cases, and overall mortality was 6.9%. **Conclusions:** The high prevalence of congenital heart disease among children with Down syndrome confirms the need for early cardiological assessment and echocardiography as an integral component of the clinical management of these patients. The low rate of surgical correction and the persistence of complications such as pulmonary hypertension reflect important gaps in pediatric cardiovascular care in Angola. Strengthening diagnostic capacity, specialized follow-up, and congenital cardiac surgery should be prioritized to reduce morbidity and mortality in this population.