



CS003

Cardiothoracic Surgery & Interventions • Poster Presentation

ESTABLISHING PEDIATRIC CARDIAC SURGERY CAPACITY IN A REGIONAL NIGERIAN TERTIARY HOSPITAL: EARLY OUTCOMES FROM THE INAUGURAL OPEN-HEART SURGERY PROGRAM AT FEDERAL MEDICAL CENTRE KEFFI

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Background: Congenital heart disease (CHD) significantly contributes to pediatric morbidity and mortality in Nigeria due to infrastructure gaps and limited specialized centers. Establishing regional cardiac surgery programs can improve access to care.

Methods: A retrospective observational study evaluated pediatric patients undergoing open-heart surgery during the inaugural cardiac mission at Federal Medical Centre (FMC) Keffi, Nigeria (April–May 2023). Demographics, diagnoses, procedure types, Risk Adjustment for Congenital Heart Surgery (RACHS-1) categories, and early postoperative outcomes were analyzed using SPSS v.28 and bootstrap analysis (1,000 replications).

Results: Seventeen children underwent surgery (mean age: 5.18 years; mean weight: 16.2 kg). Ventricular septal defect (47.1%) and Tetralogy of Fallot (23.5%) were most prevalent. Eight patients (47.1%) had high RACHS-1 risk scores. Procedures included outflow tract reconstruction, baffling, valve repair, and palliative shunts. Early postoperative survival was 100% for tracked patients, with a mean hospital stay of 7.07 days.

Conclusion: The FMC Keffi pilot project demonstrates that establishing regional pediatric cardiac surgery services at a Nigerian tertiary hospital is feasible and can meaningfully reduce the national burden of CHD.

Keywords: Congenital heart disease; Pediatric cardiac surgery; Open-heart surgery; Cardiopulmonary bypass; RACHS-1; Nigeria; Health systems strengthening.