

## **OUTCOME AND CHALLENGES OF TRANSCATHETER PROCEDURES IN LOW-INCOME COUNTRIES, A CASE OF JAKAYA KIKWETE CARDIAC INSTITUTE, TANZANIA**

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### **Background:**

Transcatheter intervention(s) are modality of treatment alternative to intra-cardiac repairs among patients with CHD.

### **Objective:**

To describes outcome and challenges of transcatheter procedures in low-income countries, a case of Jakaya Kikwete, Tanzania.

**Methodology:** A cross-sectional retrospective study was conducted from 2017 to May 2019, for patients with CHD who underwent transcatheter, and followed up after 2 weeks, (1, 3, 6 months), and then 1, 2 years.

**Results:** Among 204 patients, (n=87, 42.6%) were males and (n=117, 57.4%) females. 13.7 (28) aged < 1 year, (n=112, 54.9%) were between 1-5; (n=37, 18.1%) between 6-10 years, 12 (5.9%) were (11-15), and 7.4% (15) were aged above 16 years. Procedure done were as follows, device closures 106 (51.9%) PDA, 31 (15.2%) VSD, 19 (9.3%) ASD, 17 (8.3%) Pulmonary balloon valvuloplasty, 2 (0.64%) Balloon of the CoA, (n=1, 0.49%) had RVOT stenting, Rashikind procedure/LPA stenting /PDA coiling, and 26 (12.7%) had diagnostic catheterization. Early complication encountered were 2 (0.9%) had device dislodged, 27 (13.2%) arrhythmias, 4 (1.96%) infections, 2 (0.64%) hematoma, 1 (0.46%) patient experienced long-term neurological deficit.

**Conclusion:** Our experience, incidence of severe complication was low, arrhythmia which resolved spontaneously, one patients with dislodged device developed neurological deficit, recovered slowly on physiotherapy. Despite this procedures are valuable, sustainability of this procedures, is challenged by various factors such as high cost, lack of adequate materials, skills and experience.