

Spectrum of Cardiac Diseases in Children seen at a Tertiary Hospital in Northwestern Tanzania

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Background: Given an estimated incidence of congenital heart disease (CHD) of 8/1000 live births worldwide, the number of newborns with CHD in Tanzania (46 Mio people, annual birth rate 1.9 Mio) could be as high as 15.200 per year. Therefore, CHD together with acquired heart diseases (AHD) will significantly contribute to morbidity and mortality of Tanzanian children.

Objective: To describe and analyze the spectrum of cardiac diseases as presented to Bugando Medical Centre (BMC), Mwanza.

Methods: Descriptive analysis of patients with cardiac conditions seen at the paediatric department of BMC, one of the four tertiary hospitals in Tanzania mainland (catchment area 13-14 million people) and one out of two hospitals offering regular paediatric echocardiography services.

Results: From 09/2009 to 08/2015 a total of 5249 echocardiography studies for 3188 patients were performed. In 1477 patients (46.3%) congenital and acquired heart diseases were detected.

1106 patients (74.9%) were diagnosed with CHD, the remaining (25.1%) presented with acquired cardiac conditions, mainly rheumatic heart disease (RHD).

VSD was the leading CHD in 302 cases (27.3%), followed by PDA (20.1%) and AVSD (11.4%). Most common cyanotic heart disease was TOF (9.6%). Only 36.1% of patients with CHD were diagnosed in the first 6 months of life.

Indication for surgery or intervention was given in 722 cases (65.3%) of CHD. Unfortunately, nearly 10% of patients presented too late for any surgical or interventional treatment.

209 cases of RHD were diagnosed and indication for surgical treatment was already given in 174 patients (83.2%) at time of diagnosis.

Conclusion: Proportion of pathologic echocardiography studies is high and majority of children diagnosed with cardiac diseases are in need of surgery, which is not yet easily available in Tanzania.