

Cardiac Surgery: One Year Experience of Cardiac Surgery at Muhimbili National Hospital, Dar es Salaam – Tanzania

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Abstract

Background: Establishing a cardiac unit in developing countries is usually difficult as it is associated with many obstacles of both expertise and financial constraints and more alarming is the mortality rate that may be high. Even after success in the initial stage sustainability of such program is a dilemma. The aim of this study was to determine pattern of disease profile, type of cardiac surgery done and the overall outcome.

Methods: All patients who underwent cardiac operation at the centre were prospectively recruited. Patients' demography and disease characteristics as demonstrated at echocardiography and its confirmation at operation were recorded. Peri-operative factors were the measurable statistics that determined the overall patients' outcome. All data were entered and analyzed using a SPSS 11.5 window program.

Results: A total of 105 cases of cardiac surgery were done 21% were male and 79% were females. Mean age was 19.4 ± 12.3 . The majority of cases were due to Rheumatic heart diseases (47.6%), congenital heart disease (35.2%), myxomatous valvular degeneration (16.2%) and pericardial disease 1%. Mitral valve disease was the commonest cause of cardiac disease (58.1%). Prolonged duration of aortic cross-clamp and total operation time were associated with prolonged intensive care stay and poor patients' outcome respectively ($p < 0.05$). While, ventricular dysfunction and total cardiopulmonary bypass time were not. The overall mortality rate was 13.3%. Majority of all death (64.3%) followed mitral valve repair.

Conclusion: The majority of patients (86.7%) who underwent cardiac surgery had full recovery. The mortality of (13.3%) is probably comparable to other settings. The diversity of spectrum of cardiac disease found elsewhere is also found in our community and therefore need to increase community awareness. Mitral valve repair deserve a special entity that requires skills and expertise. The mere presence of suboptimal ventricular dysfunction is probably not a contraindication to cardiac operation. The duration of aortic cross-clamp and total operation time were determinant of postoperative outcome.