

**Causes of re-admissions for Heart Failure at Muhimbili National Hospital:  
a Prospective Descriptive Case Study Conducted at Muhimbili National Hospital**

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The World Health Organization cautions that heart failure is a growing public health problem, which is common, costly, disabling and deadly. It is the principal complication of all heart diseases. In Tanzania, The Ministry of Health reports indicate that it accounted for 0.3% of all hospital admissions and 2.85% of all hospital deaths for patients aged 25 years in 1995 countrywide. At Muhimbili National Hospital (MNH) it accounted for 11.5% of all admissions to the medical wards between June 1999 and May 2000. A re-admission rate of 19% was observed at MNH in 1971• the causes for them were not known. The study set out to establish these. Readmissions increase mortality and they are costly, as >70% of all costs for heart failure care go to service admissions. Thus it is good to avoid them. Method: 97 patients (56 females and 41 males) re-admitted for heart failure at MNH between May and October 2001 were studied. Their demographic characteristics, clinical presentations and laboratory data were studied. Cardiac evaluation with chest radiography on 75(77.3%), ECG on 79(81.4%) and echocardiography on 75(77.3%) were done. A standard questionnaire was used for evaluation of risk factors, treatment, follow-up and social economic attributes. Categorization into underlying, precipitating and facilitating causes of readmission was done. Results: Sixty-one (62.9%) were re-admitted within three months of discharge. The major clinical underlying causes of readmission were cardiomyopathy 58(59.8%), readmission by echocardiography were: cardiomyopathy 38(50.7%), H1ID 26(34.7%), RHD 23(30.7%), pericardial disease 17(22.7%) and CHD, arrhythmia and cor pulmonale with 4(5.3%) patients each. The five common precipitating causes of readmission were infections 61(62.9%), hypertension 39(40.2%), non-compliance 18(18.6%), anemia 15(15.5%), and arrhythmia 15(15.5%) patients each. The facilitating causes were, inadequate medical treatment- 49(50.5%) patients who were poorly compliant; inadequate follow up- 32(33.0%) patients that were not on any follow up program; ignorance- 41(42.2%) patients who knew none of the risk factors for cardiovascular disease; severity of the illness- average hospital stay was 16.5 days with a mortality rate of 17(17.5%);

and economic hardship- treatment for one patient costs an average of TZS 294,187.00 (USD 305.71) annually. The National GDP per capita is only TZS 202,083.00 (USD 210.00). Conclusion: About half (48.4%) of the underlying causes observed (rheumatic, pericardial and renal diseases) are potentially treatable. Lack of the infrastructure for such treatment in the country makes it impossible for many such patients to be treated. Treatment abroad is costly. Patients seen at MNH are a small proportion of many scattered across the country. Programs to prevent increase, alleviate suffering of the affected and modify community risk behavior are required .