

Rheumatic heart disease in Africa: the Mosi-o-Tunya call to action



Rheumatic heart disease is a neglected post-infectious chronic disease of children and young adults that continues to maim and kill millions of people needlessly. Sub-Saharan Africa is the hotspot of the world, with a prevalence of 5.7 per 1000 in children aged 5–14 years in 2005.¹ This information galvanised the Pan African Society of Cardiology (PASCAR), together with the WHO Regional Office for Africa (WHO-AFRO), the World Heart Federation, and the South African National Department of Health to convene the first All-Africa Workshop on rheumatic fever and rheumatic heart disease on Oct 15–16, 2005, near Drakensberg in South Africa.² The intensive deliberations that ensued resulted in the adoption of the Drakensberg Declaration on the control of rheumatic fever and rheumatic heart disease in Africa, a clarion call for the establishment of national programmes to prevent rheumatic fever and rheumatic heart disease in all African countries.³

In the past decade, the Drakensberg Declaration has spawned a series of studies that have shown that the burden of rheumatic heart disease is much higher than estimated in 2005. An influential echocardiography screening study⁴ showed that the prevalence of rheumatic heart disease among school children was 30 per 1000 (95% CI 23 to 38) in Mozambique. The high prevalence in asymptomatic school children in the sub-Saharan African region was subsequently confirmed in Uganda where the rate was reported to be 15 per 1000 children (95% CI 7 to 22).⁵ Although no population-based studies of the incidence of acute rheumatic fever have been reported from Africa,⁶ the incidence of heart failure due to rheumatic heart disease remains high.^{7,8} In Soweto near Johannesburg, the industrial hub of South Africa where a low burden of rheumatic heart disease might be expected owing to better socioeconomic conditions,⁹ the incidence of heart failure due to rheumatic heart disease ranges from 30 per 100 000 per year in individuals aged 14–19 years to 53 per 100 000 per year in people 60 years or older (figure).⁷ The sub-Saharan Africa Survey of Heart Failure (THESUS-HF) registry of 1006 patients with heart failure from nine African countries shows that rheumatic heart disease is the third most important cause of heart failure in adult Africans,

accounting for 14.3% of cases.⁸ The most worrying finding has been the high morbidity and mortality associated with rheumatic heart disease in pregnancy. A study¹⁰ from Senegal showed that rheumatic heart disease is associated with a maternal mortality rate of 34% in pregnancy and a high rate of fetal loss among survivors. Therefore, the high burden of rheumatic heart disease in sub-Saharan Africa undermines efforts to achieve the Millennium Development Goals.

Although much has been achieved over the past 10 years in terms of improved understanding of the high burden and poor outcomes associated with rheumatic heart disease in sub-Saharan Africa, little progress has been made in terms of establishing national prevention policies and programmes. It is therefore timely that PASCAR, in conjunction with WHO-AFRO, convened the 2nd All-Africa Workshop on Rheumatic Fever and Rheumatic Heart Disease in Livingstone, Zambia, on Feb 1–2, 2014, to review progress and chart the way forward for the control of rheumatic heart disease in Africa. At the workshop, the failure to eliminate rheumatic heart disease was recognised as being related partly to the poor treatment of *Streptococcus pharyngitis* with penicillin in primary care in many African countries.¹¹ Furthermore, a virtual absence was noted of register-based secondary prevention programmes in African countries.

An urgent need therefore exists for ministries of health to introduce programmes for the primary and secondary

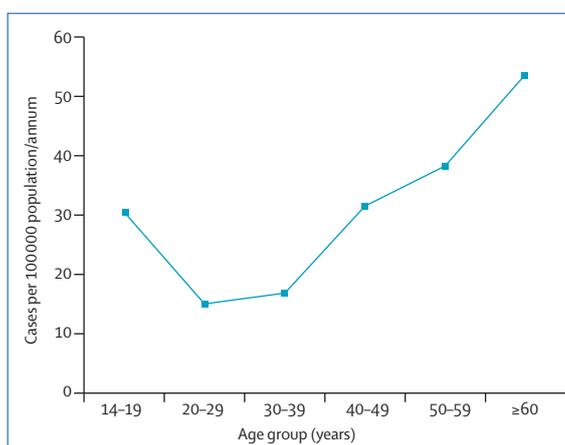


Figure: Incidence of heart failure due to rheumatic heart disease in Soweto, South Africa⁷

prevention of rheumatic heart disease through their non-communicable disease programmes. The delivery of penicillin for the treatment of sore throat in children and the prevention of recurrent attacks of rheumatic fever in affected individuals is the central intervention needed to eliminate rheumatic fever and control rheumatic heart disease.¹² PASCAR and WHO-AFRO have issued the Mosi-o-Tunya Call to Action¹³ to governments in endemic countries to ensure that the scourge of rheumatic heart disease is eliminated in our lifetimes.

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