Rheumatic Heart Disease Control Programmes in Africa: a Systematic Review of Reviews

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Introduction

Rheumatic heart disease (RHD) has a prevalence rate of 10.31 cases per 1000 people in Sub-Saharan Africa and is a significant global cause of heart failure. This review aims to comprehensively map RHD control programmes within the World Health Organisation (WHO) African Region, where Sub-Saharan Africa contributes 28% of RHD cases worldwide.

Methods

Five databases were searched for reviews published between January 2012 to February 2024. Data were analysed based on the 25 domains of Wyber's Core Conceptual Framework for Comprehensive Rheumatic Heart Disease Control Programmes (see QR code).

Results

We retrieved 49 reviews conducted in 36 of the 47 African region Member States. Only one country had published prevention guidelines for RHD.

Table 1: Country RHD Programmes in two African subregions

1A East Africa
1B Southern Africa

1A

Category	Burundi	Comoros	Djibouti	Eritrea	Kenya	Madagascar	Malawi	Mauritius	Rwanda	Seychelles	South Sudan	Uganda	Tanzania	Zambia
Burden of disease data														
NF-RHD advisory committee														
Funding														
Laboratory services														
Integration with primary care and health systems														
Government engagement														
Disease notification														
Human resources														
Health worker training														
Programme evaluation														
Community education														
GAS diagnosis and treatment guidelines														
Delivery of primary prophylaxis														
Active case finding via sore throat clinics														
Vaccine development														
RF/RHD register														
BPG supply														
Provision of secondary prophylaxis														
Priority based follow-up (secondary)														
Active case finding via echo screening														
Medical management														
Anticoagulation														
Stage of intervention candidates														
Priority based follow-up (tertiary)														
Provision of interventional services														

1B

Category	Botswana	Lesotho	Namibia	Mozambique	Swaziland	Zambia	Zimbabwe
Burden of disease data							
NF-RHD advisory committee							
Funding							
Laboratory services							
Integration with primary care and health systems							
Government engagement							
Disease notification							
Human resources							
Health worker training							
Programme evaluation							
Community education							
GAS diagnosis and treatment guidelines							
Delivery of primary prophylaxis							
Active case finding via sore throat clinics							
Vaccine development							
RF/RHD register							
BPG supply							
Provision of secondary prophylaxis							
Priority based follow-up (secondary)							
Active case finding via echo screening							
Medical management							
Anticoagulation							
Stage of intervention candidates							
Priority based follow-up (tertiary)							
Provision of interventional services							

- Adequate information on the topic found
- Limited information found or mention of the lack thereof
- Articles found but no information on the topic
- No articles found for the country

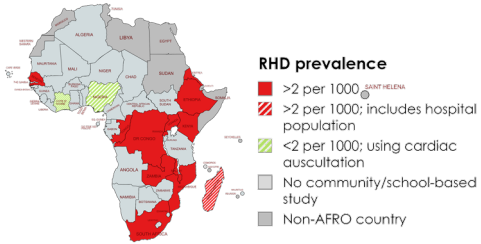

Figure 1: RHD prevalence data

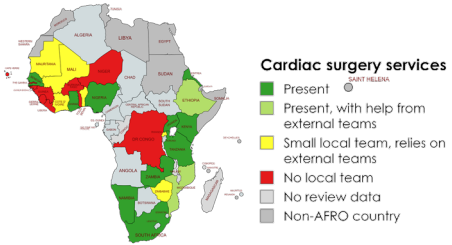

Figure 2: Tertiary service availability

Discussion & Conclusion

While over two-thirds of the Member States have data available on RHD control programmes, this review, nevertheless, highlights the gaps in RHD control programmes in the WHO African region. This work has led to the subsequent planned roll-out of a WHO African region-led survey to complement the data obtained to date. This work illustrates the benefit of our collaborative partnership in addressing the challenges of RHD control on the African continent.