



Rheumatic Heart Disease in India: Has It Declined or been Forgotten?

Balaji Arvind¹ · Anita Saxena^{1,2}

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Rheumatic heart disease (RHD) is a late consequence of acute rheumatic fever (ARF) following group A streptococcal (GAS) infection [1]. ARF and RHD are considered diseases of poverty, which presents challenges not only for the patients and their families, but also for the communities, and health systems. These challenges are magnified in low- and middle-income countries such as ours, which, unfortunately are the regions with the highest burden of this potentially preventable condition. In the article by Dixit et al., the authors have only falsified the general belief that the burden of RHD is declining [2]. In India, RHD continues to be a significant cause of cardiovascular morbidity and mortality among children, adolescents, and young adults. This article reminds us that RHD has not declined, but it has only been neglected by the medical community in the burgeoning epidemic of lifestyle diseases such as coronary artery disease, diabetes, and hypertension.

The exact burden of RHD is almost impossible to estimate because of the multiple shortcomings with the available data. A report by Ramakrishnan et al. stated, more than a decade ago, that the cumulative burden of the disease remains high in India [3]. Since then, there has not been much change in the RHD burden, as shown by this systematic review. With recognition of subclinical RHD, and most of the surveys excluding the population worst inflicted by RHD, it is likely that the actual burden is far higher than the presented figures. The heterogenous methodologies adopted by the included studies also adds to the complexity. Dixit et al. have also looked into another important aspect of ARF and RHD surveillance: the prevalence of pharyngitis and the prevalence of GAS among school-aged children. While the development of a successful anti-GAS vaccine remains outstanding, due

to the inherent challenges, emphasis should be placed on creating awareness among the community about the fact that sore throat in their child may not be as benign, and about its serious repercussions, if left untreated [4]. The knowledge about differentiating viral and bacterial pharyngitis and the importance of early diagnosis and treatment of streptococcal pharyngitis should also be widely disseminated among primary care physicians. However, the prevalence of GAS among asymptomatic children is a twist to this tale.

In summary, there are several complexities that pose barriers to the elimination of RHD in India. A comprehensive and a systematic approach is required with concerted efforts by cardiologists, pediatricians, community physicians, microbiologists, biomedical scientists, and public health advocates to attract the attention of policymakers towards RHD prevention and control. Future RHD research should focus on standardizing data collection procedures, establishing new registries and strengthening the existing ones, since generating accurate epidemiologic data is crucial towards planning RHD control programmes and advocacy activities. Simultaneously, accelerating translational research on the genomics of GAS strains in India is also required. This, along with coordinated efforts by global experts in vaccinology, should result in the production of a “viable” antistreptococcal vaccine [5]. There is an urgent requirement from all the stakeholders to upscale collective efforts aimed at mitigating the impact of this lethal disease. Reduction in the RHD burden among the small proportion of privileged population should not make us lose focus from this enigmatic illness, which continues to devastate the most productive population of our country. Whether RHD is here to stay forever or otherwise would only be decided by our future efforts.

✉ Anita Saxena
anitasaxena@hotmail.com

¹ Department of Cardiology, All India Institute of Medical Sciences, New Delhi, India

² Vice Chancellor, Pt. BD Sharma University of Health Sciences, Rohtak, Haryana 124001, India

Declarations

Conflict of Interest None.

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