

# Clinical characteristics of paediatric rheumatic heart disease in Cambodia

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## Letter to the Editor

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Rheumatic heart disease (RHD) remains a global disease burden that affects children and young adults, particularly in a developing country like Cambodia. The disease is responsible for about 233,000 deaths annually, and about 15.6 million people are affected worldwide.<sup>1</sup> A paper on RHD in Cambodian children that was published over 10 years ago reported about 21.5 (95% CI, 16.8–26.2) per 1000 cases.<sup>2</sup> We conducted an observational cohort study where we reviewed 218 hospital charts of children with echocardiography-confirmed RHD during 2001–2013. We focused on symptoms and signs (or chief complaint) on the day of diagnosis.

Of the 218 patients, females predominated (53%), and the mean age was 12 years ( $\pm 2.8$  years). The majority (83%) of the patients had mitral regurgitation (MR) alone or a combination (mixed) of MR, mitral stenosis, aortic regurgitation, and aortic stenosis. The majority (80%) of the patients were diagnosed with severe RHD via echocardiogram, while 13% were with mild-moderate RHD, and 7% were with unknown severity. Overall, dyspnoea (54%), coughing (44%), and fever (39%) were the most commonly reported chief complaints. When we compared the chief complaint between patients with only MR ( $n = 78$ ) and MS ( $n = 23$ ), dyspnoea, coughing, and fever were also most frequently reported.

Due to its pathophysiology, the majority of the patients had MR (83%), and the most common chief complaint included dyspnoea and coughing. The most important finding was that the majority (80%) of the patient had severe RHD, which suggests several possibilities: recurrent episodes, more virulent strain, genetic susceptibility, late diagnosis, lack of prophylaxis program, and lack of parental and healthcare provider knowledge. Although any combination of these possibilities could explain the severe symptoms and signs at presentation, the lack of access to medical care may have contributed to the late diagnoses, resulting in severe RHD. Health facilities with echocardiography services are distant from the majority of the patients who live in rural areas of Cambodia. Also, mild cases may have escaped clinical recognition by outpatient healthcare providers.

Our study aimed to contribute meaningful information RHD in Cambodia where knowledge of disease prevalence is limited.

## References

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