

# Teachers' Knowledge and Attitudes Related to Rheumatic Heart Disease in Zambia

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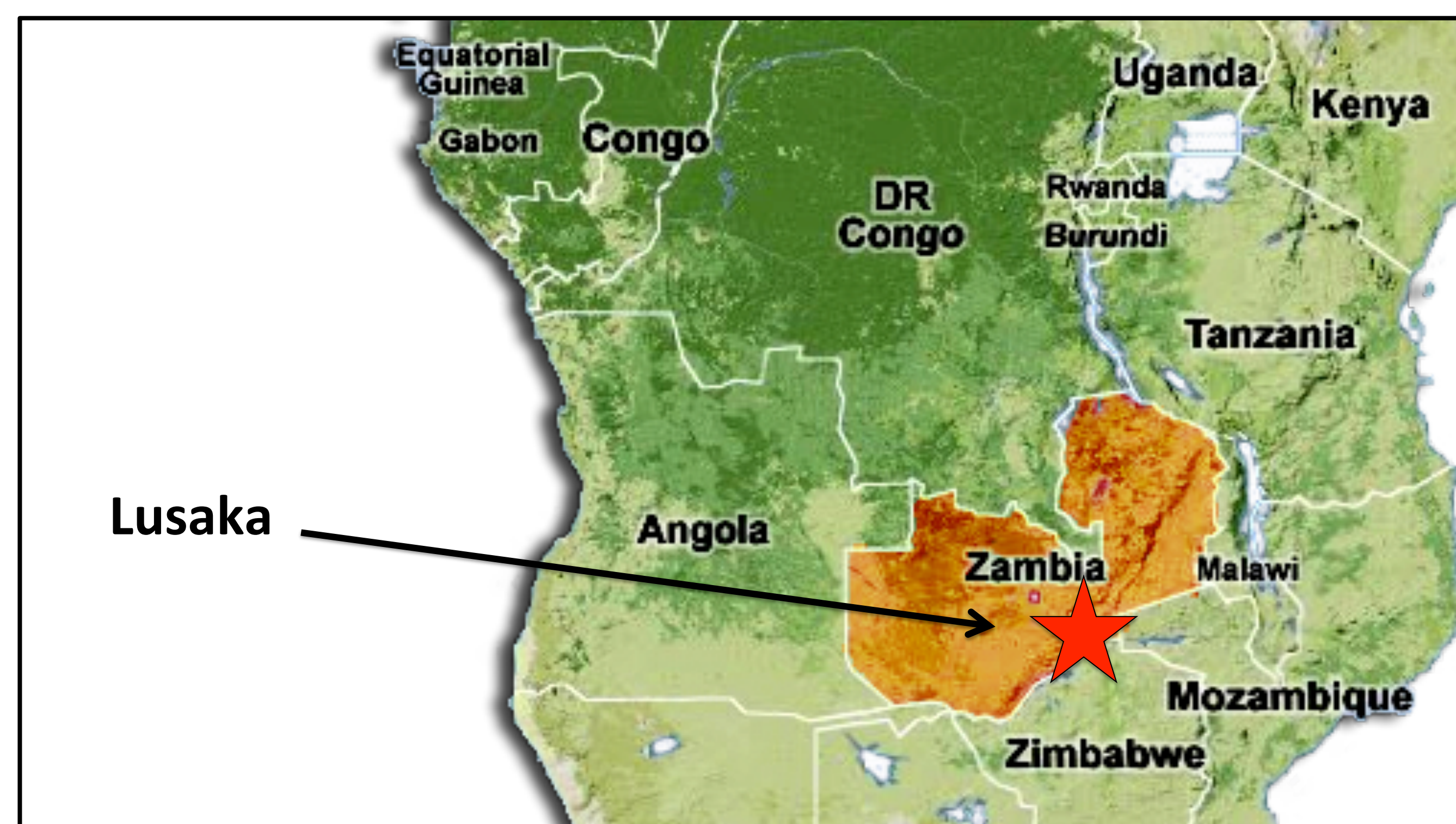
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## Purpose

Rheumatic heart disease (RHD) is a major public health problem in Africa affecting 1-5% of school-aged children. Community and school involvement is increasingly recognized to be an essential component of national strategies to control RHD, but very little is known of teachers' knowledge and attitudes about the disease. As part of a public-private partnership to combat RHD in Zambia, school-based screening of up to 10,000 school children will be conducted in Lusaka for the first time using portable echocardiography. In preparation, we sought to characterize teachers' knowledge of RHD, explore their willingness to participate in RHD screening programs at their schools, and assess their general interest in participating in advocacy efforts relating to RHD.

## Methods

A workshop was conducted for primary and secondary school teachers in Lusaka in February 2014. The curriculum was developed from educational materials produced by the World Health Organization and the World Heart Federation, and included a focus group session and written attitude survey. Participants also completed an 8-item multiple-choice questionnaire before and after the course to evaluate basic knowledge about RHD. Mean test scores were compared using paired Wilcoxon signed rank sum testing (SOFA software, version 1.3.4).



**Competing interests:** JM receives grant/research support from Novartis. AL receives travel reimbursement to Zambia from Novartis. BT and JS are employees of Novartis.

## Engaging school teachers to combat rheumatic heart disease in Zambia



**Figure 1:** Representatives from more than 45 schools attending a workshop focused on rheumatic heart disease in February 2014



**Figure 2:** Paediatric cardiologist Dr. John Musuku demonstrates portable echocardiography that will be used for school-based screening of children for rheumatic heart disease in Lusaka.

## Results

Fifty-three teachers from more than 45 schools participated. Most were female. All but 3 had been teachers for at least 5 years and 26% had taught for more than 15 years. Approximately half of the teachers also served as their school's health officer. Only 55% had ever heard of RHD before the workshop, and 24% reported that they had known a student with RHD. Forty-nine percent of teachers were unaware that RHD is caused by bacterial infection of the throat and few (less than 25%) knew that children with RHD require regular antibiotics to prevent progression of their heart disease. Pre-post knowledge scores improved from 3.8/8 (SD 0.9) to 5.9/8 (SD 1.2;  $p < 0.001$ ). In the focus group discussion, teachers were overwhelmingly eager to help facilitate RHD screening programs at their schools. They also expressed interest in learning more about how to prevent and treat RHD in order to help keep their students healthy.

## Conclusions

- Teachers' baseline awareness of RHD is poor and few have had firsthand exposure to students with RHD despite the high prevalence of the disease in Africa.
- Notwithstanding, teachers were eager to learn about RHD and they demonstrated significantly improved knowledge after the workshop.
- Teachers in Lusaka appear poised to be vital partners in school-based screening programs and may also play important roles in long-term efforts to control RHD in Zambia.



## Further information

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