Rheumatic heart disease (RHD) is the most common heart problem in young people in Zambia. It causes fatigue, breathlessness, swollen limbs, and frequently requires surgery. Left untreated, it can lead to premature death. Rheumatic heart disease has traditionally received little attention in Zambia but that is now changing. University Teaching Hospital (UTH) in Lusaka has launched a new multi-faceted initiative called “BeatRHD Zambia” with the aim of eventually eliminating RHD. The group, along with the Zambia Paediatric Association, spearheads the commemoration of World Rheumatic Heart Disease during the week of August 3-7, 2019 to increase public education and awareness about the disease and on the 29th September for the World Heart Day every year.

The BeatRHD Zambia team is led by Dr. John Musuku, a paediatric cardiologist at UTH, and is a joint effort with the Ministry of Health; Ministry of Education; Ministry of Community Development, Mother and Child Health; University of Zambia; University of Cape Town; and Novartis. BeatRHD Zambia is an extension of a broader initiative led by the Pan-African Society of Cardiology since 2006 to combat RHD throughout Africa. As part of these activities, WHO and the African Union Commission have recently endorsed RHD policy roadmaps.

“We are partnering with government clinics and schools in Lusaka district to educate families about how a sore throat can lead to a broken heart,” said Dr Musuku. “A bacterium called Strep is a frequent culprit that causes sore throat in children. Left untreated, Strep throat can lead to a condition called rheumatic fever and then to rheumatic heart disease. It is entirely preventable. All we must do is ensuring that our children with sore throats receive prompt medical attention.”

Symptoms of Strep throat include pain, redness, or white patches in the throat. Also, the neck glands may be swollen and children may complain of stomach pain. The treatment is an antibiotic. The most commonly used antibiotic for Strep throat is penicillin. A single injection is all that is needed to treat Strep throat and prevent the risk of RHD.

Dr. Musuku spearheaded a large research study to measure the prevalence of rheumatic heart disease in Zambia in 2016. This was the first time in 25 years that such an investigation had been conducted. In the study, teams of doctors, nurses, and ultrasound technicians screened several thousand children in 50 Lusaka schools using state-of-the-art handheld echocardiography. The results are helping to advocate for health services that can prevent RHD. Children who are identified to have RHD receive treatment in a local health clinic and long-term medical care at UTH.

The BeatRHD Zambia team is also working directly with Lusaka health clinics to improve the diagnosis and treatment of Strep throat. The BeatRHD Zambia team hopes to be able to work with health clinics across the country over the next years.

RHD Week is held annually in Zambia in order to raise public awareness about the disease. RHD Week activities include a speech by the Minister of Health; display of educational posters and distribution of educational materials at shopping malls and a March Pass

“In the effort to eliminate RHD, we all have essential roles to play,” said Dr. Musuku, “it is up to parents and guardians to seek medical attention for their children when they complain of a sore throat. If all children with Strep sore throat are treated promptly with a single injection of penicillin, Zambia can stop RHD in our lifetime.”

Photo caption: “Dr. John Musuku from University Teaching Hospital demonstrates to Lusaka district schoolteachers the state-of-the-art handheld echocardiography device that is being used in a large research study to detect children with rheumatic heart disease.”

“The van used by the BeatRHD Zambia team helps to spread the educational message that untreated Strep sore throats can lead to rheumatic heart disease.”