

Sandoz donates penicillin for Rheumatic Heart Disease research

Rheumatic heart disease (RHD) is a silent killer that is still prevalent in developing countries. A new study by the Novartis Institutes for BioMedical Research (NIBR), which uses Sandoz-donated, life-saving penicillin, aims to address RHD among children in Zambia, with the ultimate goal of eliminating this disease.

Rheumatic heart disease is caused by streptococcal pharyngitis - commonly known as strep throat. If left untreated, a small percentage of patients will eventually form scars on the valves of the heart. Over time, this can lead to heart failure and, ultimately, early death. Once rheumatic heart disease develops, monthly penicillin injections or daily penicillin pills are required to slow its progression.

With the Lusaka University Teaching Hospital (UTH) and the Ministry of Health in Zambia, NIBR will screen 3000 children, ages 6-21, for RHD at 50 public schools in the Lusaka area using echocardiography. Portable echocardiography machines create ultrasound images of the heart that can show tissue damage even before symptoms appear. The data will be entered into an electronic registry to document disease prevalence and RHD-positive children will be enrolled into a multi-year follow-up program to monitor adherence to penicillin treatment and disease progression of RHD patients.

Working with Dr John Musuku at UTH, as the Principal Investigator and the Ministry of Health, NIBR plans to establish a community-based registry for children with RHD in Zambia. The goals of the effort are to:

1. document prevalence of the disease in school-age children
2. raise awareness about strep throat, rheumatic fever and RHD
3. provide primary and secondary penicillin prophylaxis
4. improve adherence to RHD treatment and prevention regimens

Patient registry technology and Sandoz medicines are critical success factors

The anticipated 1-2% RHD-positive children will be put on secondary prophylaxis of monthly intramuscular penicillin injections and monitored for severe drug allergies. Sandoz will donate 25,000 units of injectable benzathine penicillin G for the duration of the study. Records for RHD-positive children will be entered into an electronic registry, a cloud-based mobile clinical data-entry system. Dimagi, Inc, a US-based social enterprise that develops open-source software to improve healthcare in developing countries, has developed the registry for this project. The electronic registry is available to healthcare staff across Africa

To help ensure patients receive their monthly injections, the study team will use the new electronic registry to track patients

and send automatic SMS reminders to their mobile phones when it is time for treatment. Working with local clinics, NIBR will also help strengthen the health systems in Lusaka by educating healthcare professionals about the connection between sore throat and rheumatic heart disease and through primary prevention programs that treat children with sore throat with an injection of penicillin. Penicillin prophylaxis is the only way by which new cases of rheumatic heart disease can be prevented.

UN Millennium Development Goals

The UN lists "reduce child mortality" and "improve maternal health" as two of eight Millennium Development Goals to be achieved by the end of 2015. Sandoz is committed to supporting the achievement of these goals by increasing access to high quality, affordable medicines, as well as healthcare services and education for mothers and children around the world.

For more, visit: <https://www.bizcommunity.com>