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**Title:**  RWANDAN NURSES SAVE LIVES: RHEUMATIC HEART DISEASE

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**Background & Aims**:  Rheumatic Heart Disease (RHD) is the most common acquired heart disease for people under the age of 25. In Rwanda, a low-resource country, the devastation by RHD as a chronic healthcare issue has an estimated 40, 000 children living with the fatal disease. Eighty percent of Rwanda's heath care is obtained in rural health-care centers which are often ran by nurses. Many of these nurses have received discordant education on clinical diagnosis/treatment of strep throat and potential sequala of RHD. These nurses do not have access to stethoscopes, nor the skills of cardiac auscultation yet are accountable for RHD referrals.

**Methods**: A RHD knowledge translation project by the six students in an innovative Specialized Cardiac Nurses: train-the-trainer program by Team Heart, Inc and the University of Rwanda was completed. Utilizing the nursing theory Novice-to-Expert (Benner) a 2-day knowledge and skills conference based of evidence-based research on RHD combined with Rwandan nursing and healthcare referral systems was created. The knowledge aspect had six components: GAS Strep throat, acute rheumatic fever, RHD (overview and valve damage), heart failure, and nursing empowerment. The skills acquisition included history, symptom analysis, HEENT, Respiratory, cardiac, and abdominal assessments and included a stethoscope for participants.  Data revealed the Rwandan Western Province had the greatest late entry RHD cases. Thus, 20% of the District hospitals were selected and 100% of their health-centers were invited to participate.  For improved outcomes the participants were divided into 6 groups with a SCN student as virtual mentor via WhatsApp for 2 months.

**Results**: As a pilot study this project received IRB from the University of Rwanda to design and evaluate the first nursing RHD knowledge and skills conference.  Evidence-based literature review concerning RHD, knowledge translation, and nursing empowerment was conducted.  Data was gathered, reviewed and a conference manual written in English as the 3-4 language.  The manual content was reviewed by a US cardiologist and Advanced Practice Nurses specialized in cardiology. Subsequent questionnaires for knowledge, skills, and conference were designed.  The course and participant list were approved by the Rwandan Biomedical Council. Funding sources were obtained with Team Heart and Rotary International sharing costs. Thirty-one nurses traveled more than five hours to Kigali and attended 100% of the conference. Language became a barrier with the need to switch to French and Kinyarwanda.  During the skills portion, RHD patients were models for abnormal cardiac sounds. The participants were divided into 6 groups. All break out activities, meals, and skills were conducted in these groups to facilitate trust and relationships. Each group had a WhatsApp group where they had discussions and mentorship to use the stethoscope on every patient. Post conference questionnaires after the 2-month mentorship is currently being collected and will be ready by November 2023.  A SWOT analysis of the conference has been completed by a variety of stakeholders. The project is being evaluated for a sustainable process to provide education at 47 District hospitals in Rwanda plus being embedded education in Nursing curriculums. Post-conference evaluation indicates nurses' engagement and need of content.

**Conclusions**: Education and support provided to remote nurses in Rwanda may make a difference concerning recognition and proper treatment of Strep Pharyngitis, Acute Rheumatic Fever, RHD, and Heart Failure. The provision of a personal stethoscope with virtual mentorship is a unique process that may facilitate improved assessment skills of nurses. In addition, the dedicated time on nursing empowerment and responsibility in remote settings may be an added benefit to professional identity of remote nurses in low-resource settings. The development of relationships between the health-center and District hospital nurses may also facilitate earlier referrals. Participants report a high approval rate for learning.