

# DEVELOPING RHEUMATIC HEART DISEASE (RHD) TRAINING MATERIALS FOR A SCHOOL-BASED RHD CONTROL PROGRAM IN TANZANIA

## Report of Stakeholders' Meeting held on 17<sup>th</sup> June 2021 At Protea Courtyard Hotel, Dar es Salaam

### Background and overview of meeting objectives:

Muhimbili University of Health and Allied Sciences (MUHAS) in collaboration with the Bernard Lown Scholars in Cardiovascular Health Program of the Harvard School of Public Health organized the first Stakeholders' meeting on RHD prevention in Tanzania. The meeting was supported by the World Health Organization (WHO) – Tanzania. Around 30 key stakeholders from different sectors attended the meeting, which intended to provide a forum for information exchange and to open a discussion between researchers and key stakeholders on the current status of RHD prevention in Tanzania and obtain a consensus on ways to incorporate school-based RHD prevention programs into policy and practice. Stakeholders were representatives from MUHAS, National Institute of Medical Research (NIMR), Ministry of Health Community Development, Gender, Elderly and Children (MoHCDGEC), Jakaya Kikwete Cardiac Institute (JKCI), Tanzania Cardiac Society, Teachers, Primary Health Care Workers, Directorate of Primary Education at Manyara Region, and people living with and affected by RHD. The meeting was officiated by the Director of Preventive Services at the MoHCDGEC who served as the guest of honor. The overall objective for the meeting was to agree on the need to initiate a school-based RHD prevention program in Tanzania, and specifically the meeting was organized around 4 key objectives:

1. To obtain support of the need to prevent RHD in our communities
2. To obtain consensus on the gaps and strengths in the prevention of RHD
3. To obtain consensus on the information to be included in RHD health education
4. To gather ideas on how to initiate, scale-up and sustain a school-based RHD prevention program

### Opening session main messages:

1. **Message from the Guest of Honor – Dr. Leonard Subi (DPS, MoHCDGEC):** The guest of honor was introduced by the Deputy Vice Chancellor of MUHAS, Prof. Appolinary Kamuhabwa. In his introduction, Prof. Kamuhabwa thanked the guest of honor for setting time to be at the meeting and for his support in the fight against RHD. He briefly introduced the objectives of the meeting and the intended outcome. In his opening remarks, Dr. Subi highlighted the urgent need to prevent RHD from its precursors, i.e. beginning with identification and treatment of sore throat and rheumatic fever (RF) in the communities. He acknowledged efforts MUHAS and other stakeholders are taking and emphasized the need for multi-sectoral stakeholders' engagement. Dr. Subi commended the WHO for supporting the meeting and urged for continued collaboration to support other on-going activities towards RF and RHD control. He reiterated the commitment by the MoHCDGEC towards RF, RHD and other non-communicable diseases control in Tanzania, and urged MUHAS and other stakeholders to come up with research-informed scientific opinions to be presented to the Ministry as a basis for multi-level prevention activities, utilizing existing school- and

community-based health programs as well as lower level health facilities. With these remarks, he officially declared the meeting opened.

## **2. Current situation and the need for health education to prevent RHD - Dr. Pilly Chillo**

The current situation of RHD worldwide and in Tanzania was presented by the project Principal Researcher, Dr. Pilly Chillo - a Cardiologist and Senior Lecturer from MUHAS and a Scholar of the Lown Cardiovascular Health Program at Harvard School of Public Health. Briefly, members were introduced to RHD, how it is connected to a simple throat infection by Group A beta hemolytic streptococcus. The presentations highlighted that women and children from low socio-economic backgrounds are the most affected; and because the condition begins in childhood, health education to raise awareness among children, teachers, community and primary health care workers is of utmost importance. An overview of the problem in the community was presented and it is estimated that in Tanzania, the prevalence of asymptomatic RHD is around 2.1% (i.e. 21 children out of every 1000 children may have RHD). The commitment by different organizations including Word Heart Federation and WHO to prevent and possibly eradicate RHD was presented. Examples from successful country-wide campaigns that focused on comprehensive RHD control program were presented, where Tanzania could benchmark.

## **Workshop activities and deliverables**

The meeting was then arranged in a workshop-setting and participants were organized into 4 groups comprising 5-6 participants each, to discuss and respond on the key objectives of the meeting. Groups were a mixture of participants from different stakeholders to ensure different ideas and the smaller groups ensured everyone participates in bringing their ideas on the table. The groups then presented their responses to the wider audience, followed by members' discussion and questions and answers session until the final aggregated consensus for each objectives were reached. The results are presented below.

### **1. Obtain support of the need to prevent RHD in our communities**

All groups agreed that it is high time to address RHD from the community level, highlighting that this is somehow overdue. The reasons that led a unanimous agreement to the need to prevent RHD were mentioned:

- High prevalence so it is of public health importance
- Patients present to hospitals in late disease stages
- The prevention of RHD is cheaper compared to treating the complications
- The disease has high morbidity and mortality
- There are fewer cardiac specialists, so difficult to treat the complications
- Prevention is possible as other countries have done it

### **2. Obtain consensus on the gaps and strengths in the prevention of RHD**

The gaps highlighted are as follows

- Limited awareness on the association between sore throat, RF and RHD among the general public
- Poor health seeking behavior and self-medications among people

- Poor socio-economic conditions still prevail, especially in rural areas
- Overcrowding in schools
- Lack of diagnostic tools at the community level, eg Streptococcus rapid tests
- Poor knowledge of RF/RHD among health care workers, especially in lower level facilities

The strengths highlighted are as follows

- Existing health infrastructure from primary to referral level
- Existence of community health workers
- Existence of tertiary level cardiac facilities like JKCI
- Existence of Cardiovascular Centre of Excellence
- Existing school- and community-based health programs for other diseases eg malaria
- Political will/commitment
- Regional and International interests to prevent RF/RHD

### **3. Obtain consensus on the information to be included in RHD health education**

The following information were found valid and should be included in the training materials

- Messages on the link between sore throat, RF and RHD
- Messages to increase awareness on risk factors, mode of transmission, complications and importance of completing treatment
- Training modules for primary health care workers, teachers, community health care workers
- Importance of early treatment of sore throat and RF
- When to suspect Strep sore throat, RF and RHD
- Issues of penicillin prophylaxis
- Materials to include video illustrations, radio sessions, TV programs, brochures, billboards, fliers, posters, infographics, songs, roleplay
- The target population should be pupils, teachers, parents, community health workers and primary health care workers

### **4. Gather ideas on how to initiate, scale-up and sustain a school-based RHD prevention program**

The ideas were highlighted as follows

- It has to be a Multi-sectoral approach (Researchers, Policy makers, Health workers, Donors, Patients, Community, etc) in order to ensure uptake and sustainability
- Can integrate into existing programs like school-based health programs (e.g. dental program, etc)
- Conduct a pilot study on health education to test the training materials in improving awareness
- Begin with few regions (most affected) and scale up to include whole country
- Disseminate findings of implementation to stakeholders including TAMISEMI, MoH
- Develop a registry for RF/RHD

- Develop strong advocacy to obtain funding for the long-term project
- Work with Government and other stakeholders to develop policy for inclusion in primary education

### **Summary of the meeting and Closing remarks**

The summary of the meeting was given by **Dr. Reuben Muttgaywa, Cardiologist and researcher from MUHAS**. He reminded participants of all the important points that emerged during this one-day meeting beginning with opening remarks by the Guest of Honor, to the presentations highlights by the Project Principal Researcher and summary of the meeting agreed objectives.

**Dr. Alphoncina Nanai, WHO-Tanzania National Professional Officer for Neglected Tropical Diseases and NCDs** gave her remarks by thanking MUHAS and all stakeholders for a successful meeting, adding that the project is in line with the WHO agenda to prevent and control RF and RHD. She stressed the importance of multi-stakeholders working together for a common goal, and promised to continue to work with MUHAS to finalize the development of the training materials as well as testing them at the community. Further, she suggested that these training modules/materials should be incorporated into the Ministry of Health plan for prevention of NCDs.

**Prof. Gideon Kwesigabo, Epidemiologist and researcher from MUHAS** gave the closing remarks. He began by thanking all participants for setting time to be in the meeting and for their valuable contributions and commitment to join forces to fight against RHD. He highlighted that this meeting/efforts are somehow overdue, but 17<sup>th</sup> June should be marked as the beginning to end RHD. He requested members to feel part of the group that will be working together to this common mission. The meeting was closed at 16:40.

### **Follow-up activities**

Following a successful meeting of the first stakeholders' meeting, the next steps are as follows:

1. Report of the meeting to be prepared and submitted to stakeholders
2. An expert technical working group (to be formed by the Principal Researcher) to prepare the training materials
3. Training materials to be presented to the next Stakeholders' meeting to be conducted in Manyara
4. Testing of the training materials to be done at Dareda Kati Primary School in Manyara
5. Final training materials to be submitted to MOHCDGEC for inclusion into policy/actions



Photo: Participants of the meeting with the Guest of Honor (sited, middle)