

Where, when and how can schistosomiasis be eliminated

Wednesday 18th July, Kigali, Rwanda

Meeting Objectives

The objectives of the meeting were:

- To determine the important programmatic issues that need to be addressed
- To gain insights from a national programme perspective and share experiences and challenges regarding schistosomiasis elimination.
- To establish how ESPEN and GSA can assist programme managers in developing their national agenda for schistosomiasis elimination.

Presentations to set the scene

Presenter	Affiliation
Prof. David Rollinson	GSA Chair of the meeting
Dr. Pauline Mwinzi	WHO/ESPEN focused on programmatic issues
Dr. Ayat Haggag	Ministry of Health and Population, Egypt- Elimination of schistosomiasis from Egypt
Prof. Louis Albert Tchuem Tchuente	Centre Schistosomiasis & Parasitology Cameroon - Precision mapping

1. Dr. Pauline Mwinzi identified the key issues to transition to elimination, particular noting the importance of having the right country strategy in place integrating inter-sectoral approaches to achieve elimination. Schistosomiasis being a focal disease, requires more targeted, all at-risk population treatment, both at district and sub-district level to treat only those who need it. Sharing demographic data will help the national NTD Departments to better plan and optimize the use of available data and Praziquantel. In terms of next steps and opportunities, refined mapping will allow to redirect praziquantel specifically to the affected communities, to determine where to scale-up and scale-down. ESPEN mentioned their support to countries helping them assess which district-wide MDA might have contributed to over- or under-treatment. Leveraging on existing community wide treatment platforms was also a mentioned benefit to extend the use of PZQ to adults. For countries ready to transition to elimination WHO ESPEN also has trained today 20 countries on mollusciciding based on the WHO molluscicide manual.
2. Dr. Ayat presented the elimination strategy of Egypt, demonstrating the long-term efforts driven by political commitment to achieve elimination by revisiting and re-adapting their strategy since 1935 to reduce prevalence of nearly 50% to very low prevalence, and the 'final' push to cut transmission. Egypt demonstrated the long-term results that can be obtained

through the integration of focal snail control, health education, water and sanitation, social mobilization and cost-effective use of PZQ. In addition, periodic assessments of schistosomiasis are also needed to constantly monitor the progress and adjust interventions when needed. Dr. Ayat also presented the forecast of the PZQ up to 2019.

3. Prof. Tchuem Tchuente presented the programmatic steps towards elimination, stating how different PC interventions and measures need to be adapted according to the aims and prevalence of the disease. Furthermore, recommendation on using conventional district mapping were addressed, recommending the use of maximum prevalence rather than the mean for targeting treatment. Cameroon was used as an example, in using maximum prevalence approach at district level, where many other districts became eligible for treatment due to the change in SCH endemicity classification. Last year's scoping review on mapping quality and uncertainties indicated the importance of redefining disease endemicity and focality and the need to change treatment threshold. Furthermore, the importance of precision mapping allows to better understand the distribution of schistosomiasis and safe cost by optimizing interventions. Following an elimination expert meeting in 2017, moving from control to elimination, recommendations were published which included; expand general access to praziquantel treatment, complete precision mapping, intensify multi-sectoral actions and encourage community ownership of the programme. The challenge when to stop treatment was also addressed to avoid re-infection.

Interactive Session:

Interactive discussions followed stating the need to show that elimination is possible and collect the information to prove that elimination can be achieved which in term will trigger political will and domestic funding to go for elimination. The question of terminology arose: do we refer to elimination of the disease or elimination of morbidity, and if different interventions other than snail control can be used. Water and sanitation were also mentioned crucial to avoid re-infection. Other biological control examples were mentioned for reconsider as well as looking into other methods for snail control such as gene editing. A comment was raised on the need to work more through the health systems, and work with health care professionals to better assist in diagnosing and treating individuals and exploring other means to collect information about individuals in need of treatment. It was also mentioned that we need to think out of the box, and build on evidence, and success stories, and keep the momentum to accelerate the progress towards elimination. Challenges were also mentioned in aligning triple treatment at community level, and how to prioritize granular mapping and at what level. One concern was also raised about the ambition of setting national elimination goals, and if we should be better to use a step-by-step approach such as eliminating at district level first. Behavioural change interventions was also mentioned as an important component towards elimination, to empower the communities and move away from risky behaviour, which has also helped Zanzibar in increasing drug compliance. Further question was raised to the donor to extend the use of praziquantel to adults, provided by the response in prioritizing treatment based on the number of available tablets, and the importance of identifying the most efficient and effective delivery platforms to maximize the use of the donation. Reporting back on treatment and demonstrating impact of the donations were stated as important components for the donation program. Today, the number of available tablets are not fully being taken-up. Lastly, one country representative suggested to WHO to

provide clear guidelines on elimination, based on scientific evidence to assist countries how to pragmatically implement the guidelines.

Followed by interactive discussions on the presentations and other country experiences, Dr. Amadou Garba from the WHO concluded that morbidity control and interruption of transmission is achievable. To achieve this, the WHO guidelines need to be applied, stating that schistosomiasis is a focal disease and should be treated as such, by looking at the water plan as basis to determine inclusion and exclusion criteria for treatment. More funding for precision mapping is needed for schistosomiasis to better target treatment to all risk populations and to optimize the use of praziquantel. In order to progress towards elimination, greater involvement and better integration of the program within the health system is needed for the distribution of praziquantel and monitoring of the process. Furthermore, WHO advised countries to target treatment, and excluding communities who are not at risk when applying for Praziquantel, and to report on the progress through conducting impact assessment and sentinel site surveys with the available technical support of WHO, if needed.

Rapporteur: Willemijn Zaadnoordijk