

Exploring Distribution Platforms to Mainstream STH PC

Session Date: Saturday, October 27

Session Time: 9:00am – 12:00pm

Session Location: Rosalie, 3rd Floor

Session Description: As countries scale-down their lymphatic filariasis (LF) programs, there is a need to determine how to mainstream preventive chemotherapy (PC) distribution for soil-transmitted helminthiasis (STH) in order to ensure the gains towards STH control are sustained. In particular, new or existing alternative treatment platforms may need to be identified. Currently no framework exists which can assist policy makers and program managers in contextualizing and developing approaches to mainstreaming STH programs. Therefore, as a first step, there is a need to understand what are key factors in determining appropriate alternative distribution platforms to sufficiently reach all 3 at-risk populations. Furthermore, while a 75% coverage threshold has been proposed for WRA, limited evidence is available to validate this value. This session will present country, regional and global examples of grappling with these issues, highlighting where initial operational research (OR) is already taking place to answer these questions and raising gaps in current knowledge.

Session Chairs: Dr. Rubina Imtiaz, Children Without Worms
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KEY DISCUSSION POINTS

With many countries scaling-down their LF programs, there is a need to determine how to mainstream STH PC distribution in order to ensure the gains towards STH control are sustainable. This session explored the possible distribution platforms that could cover all three at-risk populations: school-age children (SAC), pre-school-age children (PSAC), and women of reproductive age (WRA). Based on the information received from the STH and schistosomiasis (SCH) programs in Kenya, Uganda, and the Americas, it became apparent that a single distribution platform would be difficult to identify across countries.

- **Kenya** saw success with a blended approach utilizing school-based platforms and home-based platforms, as shared by Dr. Sultani Hadley Matendechero from the ministry of health (MOH) in Kenya. Dr. Matendechero hypothesized that utilizing this blended approach across the country could achieve superior coverage of STH among SAC in Kenya. Additional research beyond this initial study would need to be completed before Kenya could confidently make this shift, with a particular emphasis on examining the cost-effectiveness of the different platforms. Furthermore, there were various factors that were identified to take into consideration when deciding which platform to use, including different practices between the MOH and Ministry of Education with addressing redistricting, varying

denominators, and ensuring the monitoring and evaluation (M&E) frameworks used in the different platforms can disaggregate target and treatment results by age group.

- In the **Americas**, Dr. Luis Gerardo Castellanos of PAHO described the diversity of the programs by country that makes a single successful platform impossible to identify. Brazil uses multi-treatment platforms that include leprosy, trachoma, SCH, and STH, and Honduras and Paraguay use school-based deworming platforms. Other countries, such as Belize, Guatemala, Haiti, and Nicaragua, conduct deworming activities integrated with World Health Organization's Expanded Program on Immunization (EPI), while Mexico conducts deworming as part of National Health Weeks. Some of the challenges noted for successful mainstreaming include:
 - Political appetite (what's in it for me?)
 - Need for improved STH information (demographics, health services, prevalence and type of parasites, and operational costs)
 - Need to strengthen the cultural understanding of the disease and acceptance of treatment
 - Lack of coordination with faith-based and non-governmental organizations, and lack of utilization of the private sector
 - Low-quality reporting
 - Multiple platforms needed to reach multiple target populations.
- In **Uganda**, Dr. Edridah Muheki of the MOH shared that many districts no longer require community-based treatment for LF. As these districts phase out LF treatments, the treatment of STH-endemic populations of SAC is transitioning to Child Health Days Plus (CHDP). The CHDP is a multi-platform effort that includes health facilities and outreach centers (schools, religious institutions, etc.). Successful deworming through CHDP relies on strong coordination between the Vector Control Division and the Nutrition Division. However, this platform does not cover WRA, and there has been lower reported coverage using CHDP as compared to the community-based LF distribution.
- Mike French of RTI International presented preliminary analysis carried out by the USAID-funded ENVISION project, examining coverage achieved through school-based, community-based, and blended deworming platforms utilized in SCH and STH programs in **USAID-supported countries**. This analysis also showed mixed results for identifying a clear platform. While coverage has increased for both SCH and STH over 2012-2017 period, initial findings showed that there was no clear pattern of higher coverage using one platform versus another. This lack of a clear pattern indicates that the question of identifying the success of a single platform is very complicated.

KNOWLEDGE GAPS IDENTIFIED

- What are the barriers with mainstreaming PC distribution for STH, and how can those be overcome? What are the factors that a national STH program should consider when making the determination of which platform to use to reach each target group?
- Identify what phase the STH programs have reached in each country. A more mature program that is reaching 75% of each of their target populations requires different

information than a less mature program. This links with the proposed tier-grouping of national STH programs.

- Identify if there is a difference between an efficient platform vs. a sustainable platform; they may not necessarily be the same.
- We need to understand what countries actually want from their STH programs, considering the epidemiological, political, and financial implications of these goals.
 - Control vs. elimination as a public health problem
 - Current model vs. mainstreaming
- We need to understand the cultural barriers to STH treatments in specific indigenous populations. With the barriers identified, next would be finding solutions to them with the help of qualified anthropologists. Context-specific approaches (e.g., little doctors in Bangladesh – children educating adults) are necessary.
- Identification of quality medicines is necessary to reach the required STH populations.
 - Donated – Availability of 600 million treatments that is limited to SAC and now PSAC
 - Government-purchased – What is the limitation of obtaining high-quality medicine for the at-risk population not covered by donation?
- Identification of whether or not STH programs should move from a coverage metric to a morbidity metric. What metric would be key for identifying success? What is the supportive evidence for each? OR is needed.
- In WRA, ideally, we should be aiming to pursue the elimination of morbidity and eventually elimination of transmission. While 75% coverage is a reasonable intermediate goal, what data is it based on? Is it high enough to achieve elimination of morbidity? OR is needed.

RECOMMENDED NEXT STEPS

- Development and a trial of a framework that identifies the timing and process to transition to the appropriate STH platforms for the populations requiring treatment
 - The framework would begin with the development of a systematic guide to identify which questions we should be asking, and would incorporate key factors in determining appropriate alternative distribution platforms to sufficiently reach all 3 at-risk populations.
 - Pulling in qualitative researchers and anthropologists will be vital for its success.
 - Hopefully, a standardized framework would be possible that would allow countries to customize their platforms appropriately to achieve the result required by their STH programs.
- Conduct cost-effectiveness studies of the different distribution platforms, taking into consideration the target of the program, the species endemic, cost of volunteers, etc.
- Complete studies that define or confirm estimates of when to move from semi-annual treatment to annual treatment and then to the ceasing of treatment.
- Implementation of a regional workshop to share best practices
- Determine whether modeling can be used to determine how WRA are contributing to ongoing STH infection as well as how deworming of pregnant women in antenatal care settings would impact (or not) their lifetime disease burden