Integrated Stopping Decision for LF and Oncho: Experiences from the Field

Session Date: Saturday, November 4

Session Time: 9:00am – 12:00pm

Session Location: Severn III

Session Description: Lymphatic filariasis (LF) and onchocerciasis (oncho) overlap in 29 countries in Africa. The goal of this session is to review data and experiences to date from operational research studies on integrated post-treatment lymphatic filariasis and onchocerciasis assessments in co-endemic areas with the aim of establishing initial conclusions and directions for future research.

Session Chairs: Kira Barbre, NTD Support Center
Chukwu Okoronkwo, Federal Ministry of Health, Nigeria
Maria Rebollo Polo, Expanded Special Project for Elimination of Neglected Tropical Diseases (ESPEN)

Session Rapporteur: Katie Gass

KEY DISCUSSION POINTS

- Identifying optimal sentinel sites and first line villages for pre-assessment (pre-iTAS) is challenging because breeding sites may not be known; treatment coverage also affects oncho transmission and is not always known. People also move around causing them to be exposed to transmission areas outside of their area of residence.
    - Random sampling can help to increase confidence that oncho transmission has truly been interrupted throughout the evaluation unit and may identify additional positive Ov16 signals in sites unknown to the program as having transmission (due to unknown or shifting breeding sites or areas where MDA coverage was poor).
- The integrated LF/oncho assessment is being used to provide the programs with important information about the current status of oncho, both in settings where oncho is hyper-/meso-endemic and has been under treatment, as well as in low-endemic settings that have never received IVM-only treatment for oncho.
- We need to think about how serology can be integrated into PTS and post-elimination surveillance for oncho.
    - Integrating with TAS 2 and TAS 3 represents an opportunity
- Transmission zones are defined differently by different programs. Nigeria has defined it by state, other countries define by district. Another possibility is through blackfly population genetic methods; areas that may appear to be one transmission zone may actually have two separate vector populations, such that interrupting transmission of one species may enable part of the transmission zone to stop treatment.
- Due to definition of transmission zones, it may not be possible to use integrated TAS results to make oncho treatment stopping decisions in all settings. In places where the results will not be used for an oncho stopping decision, it may be useful to incorporate some sort of integrated assessment (e.g. LF TAS+Ov16) to gain knowledge about oncho transmission status.

KNOWLEDGE GAPS AND RECOMMENDED NEXT STEPS

- What threshold is appropriate for stopping? An upper 1-sided CI of <0.1% is difficult to measure, even when all results are 0.
- What are the cost-drivers of integration and how can we make the surveys more efficient?
- Some countries use school-based surveys, whereas others use community-based. What is the cost difference between school-based and community-based surveys? Are the programmatic conclusions from school-based surveys equivalent to those from community-based surveys?
- Guidance needs to be provided on how countries can reconcile LF evaluation units, which are at the district level, with oncho transmission zones, which may span multiple districts or just a fraction of a district.
- There is a suggestion to break down the different oncho programmatic settings for which an integrated assessment may be beneficial (e.g. stopping, mapping, mid-point assessment).
- When the integrated assessment is in an area not under treatment for oncho, should the stopping MDA serological threshold of <0.1% apply or should the mapping assessment criteria apply?
- What is the appropriate programmatic response when one EU passes the serological evaluation but the transmission focus is larger than the EU? The oncho guidelines state that oncho PTS does not start until LF treatment has stopped, but there is no guidance for LF. Currently, the LF program allows sites to continue with their PTS even if treatment for oncho is ongoing.
- The current reliance on Ov16 ELISA is challenging for programs because they need partner support to process the DBS. When is an Ov16 RDT sufficient, as compared to an Ov16 ELISA, and in what scenarios is each diagnostic appropriate?