

## Alternative methods for assessing attainment of the trichiasis target for elimination of trachoma as a public health problem

<b>Session Date &amp; Time:</b>	Tuesday, November 19; 9:00 AM to 12:00 PM
<b>Session Location:</b>	Aria
<b>Session Description:</b>	Countries continue to progress towards eliminating trachoma as a public health problem. Previously, to determine if a district prevalence of trachomatous trichiasis (TT) was below the WHO elimination threshold, a survey was needed. As new evidence has become available so has the need to refine programmatic approaches and global policy.
<b>Session Chairs:</b>	Amir B. Kello (WHO-ESPEN, Moderator) and Caleb Mpyet (Moderator)
<b>Session Rapporteur:</b>	Kerry Dobies, IMA World Health

### KEY DISCUSSION POINTS

*First Presentation – Mapping Trachoma elimination in Ethiopia, Peter Diggle, Lancaster University*

**Q:** Is there profound variation within due to ethnic differences that result in differences?

**A:** Geostatistical model takes this into account d(x) portion.

**Q:** Analyzing data in real time?

**A:** What takes a long time is to build the model.

*Second Presentation: Prevalence Surveys, Caleb Mpyet, Sightsavers*

#### **Questions raised:**

- How reliable is the denominator (district household [HH]/persons population)?
- What percent geographic coverage will be considered sufficient with case finding?
- If there is a need to revisit a district with case finding, which areas will be revisited?
- How many times should a revisit be scheduled?

*Third Presentation: (Michael Kelly, Sightsavers)***Questions raised:**

- How do you organize and execute the case finding in a cost-effective, efficient and consistent way that will also ensure that the ministry of health (MoH) and World Health Organization (WHO) are confident that elimination as a public health problem has been achieved?

*Fourth Presentation: Helen Bokea, Sightsavers***Questions raised:**

- On the role of documentation, how do you ensure case finder (CF) records are accurate?
- How do you verify?
- How do you ensure that cases verified go to the outreach site (if there is low trust in the health system)?

*General Discussion*

**Q:** Are we using existing structures or are we creating new structures for case finding? And what about cost? Is it going to all communities and areas?

**A:** In most countries, existing structures are being used. Regarding costs, the cost per case increases as you approach elimination as there are fewer cases remaining to find. By organizing systematically from the beginning a program will save money over time. If a program does not organize house to house case finding to ensure 100% geographical coverage from the beginning, the work will likely need to go on for much longer – increasing costs significantly.

- Discussion about timing
  - Ability to use house-to-house (HtH) CF (sweeping) as evidence for reaching WHO threshold.
  - The aim is to sweep 100% **ahead** of the next survey – this can then confirm that the case finding has been effective, and the district is below threshold. ‘
  - If no survey is due, then the documentation of the coverage and management of found cases is what is required to provide evidence to WHO.
  - If survey results show that a district is not below threshold, then an analysis of the areas swept and documentation needs to be done and work will need to recommence.

- In Guatemala, doing TT CF HtH
  - What are the minimum parameters at each level?
  - Discussion of tailoring the strategy
  - It is important to adapt the approach to the country context, but aim to keep to the guiding principles.
- Claims of full geographic coverage
  - It is important to regularly review the case finder documentation and program records to be confident that any supervision issues are addressed, maps are updated and no areas are missed or populations missed due to migration or other issues.
- Focus in many programs is the HH number, rather than population.
  - This tends to work better in some contexts but not others.
  - Counting the households as a proxy for population may not always be accurate due to migration, or if the case finder doesn't look at everyone 15 years and over in the household, in which case population count is more accurate.
  - Training locally based case finders and limiting the time taken to cover 100 HH (as an example – over two weeks only) will lessen the burden on the volunteer.

## KNOWLEDGE GAPS IDENTIFIED

*Group 1:* How should geostatistical approaches be used to generate more precise TT prevalence estimates (or similarly precise estimates at lower cost)?

*Group 2:* How do you organize and execute the case finding in a cost-effective, efficient and consistent way that will also ensure that the MoH (and WHO) is confident that elimination as a public health problem has been achieved?

*Group 3:* How to document full geographical coverage for purposes of demonstrating elimination?

*Group 4:* How do we move from good case finding to ensuring that the potential cases get a service?

**RECOMMENDED NEXT STEPS***Group 1: Geostatistical Approaches*

1. Examine the spatial correlation distance of cluster-level TT data at different time-points, and in different countries, using data collected using standardized approaches by the Global Trachoma Mapping Project and Tropical Data. Data from Mozambique and Nigeria present particular opportunities.
2. Convene a policy dialogue to determine (a) how confident we should be that TT prevalence is below the 0.2% elimination threshold for validation of elimination of trachoma as a public health problem; and (b) for what population size range we should allow TT prevalence estimates to be generated.
3. Determine whether geostatistical approaches can be used to guide sampling locations for surveys in real time. (NGO partners supporting programmes in Amhara and Oromia, Ethiopia, both expressed interest in participating in a trial.)
4. Undertake similar analyses for trachomatous inflammation – follicular (TF) and anti-*Chlamydia trachomatis* seropositivity, expecting that the spatial correlation distance would be considerably smaller.
5. Consider whether the geostatistical approach could also be applied to post-validation surveillance.

*Group 2: Case Finding*

1. Compare different models of case finding and surgical camps in order to understand the cost drivers, the effectiveness and completion of geographical coverage and patient loss to follow-up. With the wealth of data available this may start with a desk review.
2. Consider confidence in available data. How can we validate case finder documentation? What needs to be understood if a program reports 100% geographical coverage but a survey shows a district to still be above elimination threshold? There is an ongoing study to understand the ‘mismatch’ (i.e. the discrepancy between survey findings and program or interview findings).
3. Are there electronic means to better manage data and understand where to target/follow-up patients?

*Group 3: Documenting full geographic coverage*

1. Examine difference between CF coverage and surveys.
2. What minimum coverage is needed of households for TT elimination thresholds? For example, to be below 0.2%, how many houses don't have to be seen?
3. What triggers repeated case finding? What time frame is needed before the dossier? And what are the geographical areas?

4. Best practices for documentation are based on country-specific examples, which come from country representatives (not just HQ staff).

*Group 4: From case finding to service delivery*

1. Short intervals are needed between case detection and management.
2. Complete documentation linking case identification to services.
3. Where possible, use electronic data capture with a build-in alert.
4. CF role must include reminding detected cases to attend the service on the day when the TT surgical camp is conducted.
5. Bring services closer to the community where the intervention is needed.
6. Need an effective plan from case detection to case confirmation and management
7. Ensure quality service delivery as a preferred practice. This includes proper outreach, planning, effective health education, and proper counselling.

*Comment: Workflow analysis of TT case management during service delivery may minimize number of people dropping out.*