

Innovative Strategies to Increase Compliance

- Session Date:** Friday, November 3
- Session Time:** 1:00pm – 4:00pm
- Session Location:** Potomac
- Session Description:** The goals of this session are: 1) To examine the cross-cutting nature of factors affecting compliance with neglected tropical diseases addressed by preventive chemotherapy (PC-NTDs); 2) To review how innovative strategies could be integrated to address multiple PC-NTDs; 3) To formulate operational research questions to understand factors that reduce compliance and to test strategies to increase it.
- Session Chairs:** Gary J. Weil, Washington University in St. Louis
Mark Bradley, GlaxoSmithKline
- Session Rapporteur:** Joshua Bogus

KEY DISCUSSION POINTS

Presentations described the challenges of achieving and maintaining high levels of compliance in mass drug administration (MDA) programs across several neglected tropical diseases (NTDs). The challenge is especially acute when MDA programs continue for many years and communities develop MDA fatigue. All four presenters offered ideas about what could be done to overcome the challenges. The session discussion prompted ideas about operational research that may help to identify tools that could be used by programs to encourage compliance and advocate for the resources required to accomplish the task.

Risk Factors for Non-Compliance across NTDs

Results from a compliance study following azithromycin for trachoma finds that household and program characteristics could describe risk of non-compliance. These risk factors include:

- *Parental Factors:* young parents, each additional child, other family member with health problem, fear of side effects, don't know drug distributors, less ability to rely on others
- *Program Factors:* less than 2 community treatment assistant (CTAs)/1,000 residents, 2 vs. 5 days of MDA distribution, households >1 hour away from drug distributors, male drug distributors
- *NOT Factors:* perceived risk, education

A network analysis of a schistosomiasis drug distribution program presented factors related to drug distributors that reduced coverage and compliance.

- *Marginalized communities:* Drug distributors were less likely to offer medicines to marginalized communities.
- *Information and Education:* Drug distributors may not be providing enough information and may not be trained appropriately – 70% of noncompliers in a network analysis study of non-compliance did not take drugs because they did not know what the medicines were for. Only 39% of these people named drug distributors as someone they could trust for health information.

Lymphatic filariasis: Problem of Fatigued areas

MDA programs that go on for many years find it difficult to maintain adequate compliance. A clinical safety study for triple drug therapy was conducted in Indian and Haitian communities that had 12 and 8 rounds previous rounds of MDA. An acceptability study found that there were some aspects of the clinical trial that the study participants preferred to normal MDA. These aspects could be introduced to MDA programs to change “business as usual” and increase compliance.

- Professionalism of drug distributors
- Radio spots and SMS messages
- Doctors present or a number to call in case AEs are experienced
- Enforcing DOT is important to close the coverage-compliance gap as well as a way to reassure communities that distributors are responsible
- Free treatment of AEs

Lessons from the Onchocerciasis Control Program

The community driven treatment model works to encourage participation, but there are challenges:

- Over time participation rates have fallen as community fatigue has set in
- When populations are no longer experiencing morbidity, MDA is less of a priority
- Drug distributors require sustained supervision and encouragement to maintain their motivation
- Accurate record keeping is important to continue monitoring the success of the program
- Monitoring and evaluation must be sustained for the duration of the program

Areas for Improvements

Presenters suggested some ways that MDA programs could be improved to increase compliance.

Drug Distributors

- Enforce DOT
- Select distributors who are respected individuals in their community
- Improve distributor training to improve quality of interactions and professionalism
- Supervise distributors and provide feedback to to keep them energized
- Consider incentives for distributors
- Distributors cannot be overused

AE Management

- Health system should be engaged and aware of MDA, and be ready to manage adverse events if they occur
- In particularly difficult areas medical professionals could be present at start of MDA
- Participants should be informed how to access health care in the event of AEs (ex. could be given a phone number to call)
- Provide simple AE management (ex. analgesics, etc.)

Social Mobilization

- Strengthen tools to understand and harness power of social networks and identify highly influential individuals
- Leverage other influencers outside of distributors to provide messages around MDA
- Need to improve reaching marginalized households
- Organize community supervision (supervise themselves), get community involved
- Counteract non-compliance spread by targeting individuals who are highly connected in their community network
- Involve medical professionals visibly at the start of social mobilisation campaigns

KNOWLEDGE GAPS IDENTIFIED

- Is there a method (ex. composite index) to help us identify marginalized households or households that are more likely to be systematic non-compliers?
- Are there ways to integrate with other programs (MCH, malaria, etc.) that would improve compliance?
- What is the message that needs to be sent out, and when? By what channels should those messages be sent? How should those messages change over the course of an MDA program?
- What training and support do distributors need to make them experts and increase professionalism?
- How can we achieve the greatest impact with minimal cost?

RECOMMENDED NEXT STEPS

- Develop and test **process tools** to help programs conduct situation analysis and understand why their MDA programs are not achieving high coverage and what they should do about it.
- Develop the business case for additional resources required to improve compliance so that programs can advocate for these resources. Improved compliance costs more in the short run but it should decrease the number of years required to reach elimination goals and decrease overall program costs.
- The session was very useful, but it only represents the beginning of what should be a continuing conversation regarding compliance across NTD control and elimination programs. We discussed the potential merit of forming a compliance (or adherence) consortium to facilitate exchange of ideas and to plan applied field research on this important subject.