Integrating schistosomiasis and soil-transmitted helminth control programs into primary health care in Nigeria:
Research brief of a mixed-methods evaluation in four districts

The Carter Center
Dr. Emmanuel Emukah, Dr. Abel Eigege, Lindsay Rakers, Emily Griswold, Lauren Thrash, Dr. Jenna Coalson, Jayden Pace Gallagher, Dr. Gregory Noland

Other partners: State and Local Ministries of Health of Nigeria
Abstract

Problem
• Schistosomiasis (SCH) and Soil-Transmitted Helminths (STH) are widespread in Nigeria.
• Global funders wish to stop supporting SCH and STH programs, transferring all implementation to the country’s primary health care system, aka “mainstreaming.”

Questions
• How do personnel tasked with implementing SCH and STH programs respond to the withdrawal of support?
• How is coverage of SCH/STH prevention affected by mainstreaming?

Methods
• Qualitative and quantitative study of treatment coverage and community attitudes and perceptions in 4 districts of Nigeria before and after a mainstreaming effort.

Conclusions
• Nigerians confronted with mainstreaming are highly skeptical that it will succeed and expect children’s health to be negatively impacted.
• Mebendazole coverage was similar after mainstreaming, but some weaknesses were seen in access to praziquantel.
Objectives & Research Questions

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1</strong>: Transition schistosomiasis and soil-transmitted helminth treatment programs to the primary health care system or routine health services in select districts currently supported by The Carter Center.</td>
<td><strong>Primary question</strong>: How will the treatment coverage of a district SCH/STH program in Nigeria change when the district is transitioned from partial support by an external partner to full support by the various levels of government involved in school-based mebendazole and praziquantel distribution?</td>
</tr>
<tr>
<td><strong>Objective 2</strong>: Evaluate the effects of transitioning the program to full government ownership by comparing treatment coverage among the target population before and after the transition to the primary health care system or routine health services to evaluate the success of the transition, supplementing the results with qualitative data.</td>
<td><strong>Secondary question</strong>: How will transitioning support for the SCH/STH program from external partners to local government affect the distribution of responsibilities and the mechanics of MDA among staff from throughout the local health system?</td>
</tr>
<tr>
<td><strong>Objective 3</strong>: Develop recommendations based on study findings to inform SCH/STH transition plans for other districts and states in Nigeria.</td>
<td></td>
</tr>
</tbody>
</table>

HEALTH CAMPAIGN EFFECTIVENESS
Strengthen Systems, Maximize Impact.
A program of the TASK FORCE on
GLOBAL HEALTH
Methods

**Quantitative:** MDA Coverage

- Coverage surveys (pre- and post-transition)
  - 30 communities in each of 4 districts
  - Households selected systematically
  - Target sample size = 1435 per district

**Qualitative:** Interviews and FGDs on the process and challenges of mainstreaming

- Focus groups
  - 9 Groups of key personnel in health and education (avg n=9/FGD)
  - Participatory mapping of NTD program

- Interviews
  - Key personnel in health and education (n=56)
  - Structured interview and discussion guides
  - Transcribed directly or summarized by local staff
  - Content analysis

**FGD =** focus group discussion  
**MDA =** mass drug administration  
**NTD =** neglected tropical disease

Limitations to surveys: young children may be less able to recall details of MDA, confirmation bias, etc.
Limitations to qualitative methods: time restraints and interviewer skill kept discussion structured with uneven follow-up, mainstreaming was abstract and unfamiliar for most participants, etc.
Map of the Four Study Districts
Key Findings from MDA and Coverage

Pre-mainstreaming coverage was generally good in school-aged children

Most distribution occurred in schools; coverage was low among unenrolled children

- Mainstreaming approaches used:
  - Parent-teacher associations
  - Immunization programs
  - Local governments
  - Community volunteers
  - Senior (previously trained) staff

Post-mainstreaming coverage generally declined, but not significantly; bigger differences for praziquantel

School-aged children (5-14 years) interviewed = 11,901
Households interviewed = 5,972
Key Findings from Interviews & FDGs

- Respondents were concerned about the sustainability of MDA following mainstreaming.
- Recommendations for effective mainstreaming included clear budget allocation by the government, robust training of all involved parties, and advocacy to stakeholders and community members.
- Respondents viewed the Ministry of Health and state and local governments as minimally involved in program planning, training, transportation and overall drug distribution.
  
  "The government has solely relied on TCC for the technical and other support, and the sudden transition will cause a lot of undesirable changes." (Health director)

- Access remains a key challenge to school-based MDA.
- Advocacy, planning, and trust-building among stakeholders will be key for mainstreaming success.
  
  "[The Carter Center] should pay an advocacy visit to the governor himself, make him know the importance of these diseases though they are neglected; ... let him know that the Edo state indigenes are suffering from [these NTDs], let him see the priority of continuing the program." (Health worker)
Promising Practices

- Seek clarity into how an international NGO’s support is and isn’t relied upon in a longstanding neglected tropical disease (NTD) program – many respondents overstated The Carter Center’s role in program operations, weakening their faith in local authorities’ ability to sustain the program.

- Begin querying about transition perspectives early. Multiple years of transition planning and implementation are necessary to ensure that it is smooth, and the program is sustainable. Respondents want The Carter Center to remain involved with the NTD program in Nigeria for up to four more years – far beyond the scope of this project.

- Undertake widespread advocacy and sensitization to promote awareness and engagement among key stakeholders such as ministries, local government, community leaders and members of the target population.

- Utilize new and existing partnerships facilitate program sustainability by supplementing government effort and resources.
Lessons Learned

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Challenge encountered</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengthen qualitative skills</td>
<td>Some KIIIs and FGDs could have gotten specifics and nuances that may not be evident to external readers, lessening data quality.</td>
<td>Ensure interviewers are prepared to probe thoroughly and effectively to capture attitudes and experiences surrounding relevant issues.</td>
</tr>
<tr>
<td>Clarify roles, responsibilities, and timelines</td>
<td>Participants want TCC to support the program for up to four more years – beyond the scope of this project</td>
<td>Clearly document what specific support is desired and work with government to plan for a full transition.</td>
</tr>
<tr>
<td>Identify weakest points at highest risk</td>
<td>School schedules, drug logistics management, and training expectations all threatened the success of MDA</td>
<td>Clarify consequences of failures at various points, develop alternative plans, and adjust expectations.</td>
</tr>
</tbody>
</table>
Implications

This study presents steps Nigeria can take toward full ownership of a NTD control program, potentially helping to inform Nigeria’s official NTD Master Plan.

Topics for further research:

• What are the outcomes of mainstreaming in the long term?
• What happens when mainstreaming is done over a longer timeframe?
• What are the barriers to integration within institutions, procedures, and in the skills and motivations of staff?

The SCH/STH program is popular and dear to the people of Nigeria, who are committed to its success.
Thank you!!