Community dialogues for prevention and control of schistosomiasis in Mozambique

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Background: schistosomiasis

- Schistosomiasis control focuses on reducing disease through periodic, large-scale population treatment (‘mass drug administration’) with praziquantel.
- Adopting protective behaviours (e.g. avoiding contact with infested water, improved sanitation) also reduces transmission.
- A prerequisite for both strategies is that communities have an understanding of the disease and what solutions are available for its prevention and control.
Background: community engagement

• Health interventions can fail because communities do not understand their need or rationale, leading to poor uptake of recommended practices.

• Community engagement strategies address this challenge by enabling communities to take ownership of health issues.

• In resource poor settings, community engagement approaches need to be practical and feasible.
Background: community dialogues

- The community dialogue approach involves training non-specialist, unpaid community volunteers (‘facilitators’) on a health issue and facilitation techniques.
- Facilitators are equipped with visual tools designed to stimulate discussions among the community, following a simple, repeatable process.
- Facilitators conduct regular dialogues in their communities to **explore** how a health issue affects their community, **identify** solutions and **plan** for taking action.

Figure 1: Theory of change, adapted from Integrated Model of Communication for Social Change (Figueroa et al. 2002)
Study aims and objectives

Aims

To improve schistosomiasis prevention and control at community level

Objectives

1. To adapt the community dialogue approach to the context of schistosomiasis prevention and control

2. To implement a pilot intervention in all administrative units (‘bairros’) of four districts of Nampula province, Mozambique

3. To evaluate the pilot intervention with regard to its feasibility, acceptability and potential to improve schistosomiasis prevention and control (in terms of knowledge, attitudes and practices and community participation)
Study setting

• Average prevalence among school-age children in Nampula province is 78%, with a number of districts recording 90% prevalence among school-age children.

• Four intervention districts selected purposively, based on prevalence and socio-geographic conditions.

• Total population of study districts: 708,000.

• Mass drug administration targeting school-age children started between 2010 and 2014.

Figure 2: Maps of Mozambique and Nampula province
Pilot intervention: toolkit

- **Flipchart**: images designed to stimulate discussion about causes and symptoms of schistosomiasis, as well as recommended protective behaviours.

- **Guidebook**: provides facilitators with relevant information relating to the images on the flipchart, as well as tips for mobilising participants and facilitating discussions.
### Pilot intervention: timeline

<table>
<thead>
<tr>
<th>May 14</th>
<th>Jun 14</th>
<th>Jul 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitisation meetings with community leaders</td>
<td>Baseline data collection</td>
<td>Communities self-select volunteers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>157 volunteers receive three-day training</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Facilitators conduct 1st cycle of community dialogues</td>
<td>Mid-term data collection</td>
<td>Facilitators conduct 2nd cycle of community dialogues</td>
<td>Endline data collection</td>
</tr>
</tbody>
</table>

*Figure 3: Intervention timeline*
Methods

The evaluation of the community dialogues pilot intervention used a convergent mixed-methods approach:

Table 1: Evaluation data collection activities, data sources and focus

<table>
<thead>
<tr>
<th>Data collection activity</th>
<th>Data source(s)</th>
<th>Evaluation focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus groups</td>
<td>• Facilitators (n=8) • Participants (n=12) • Community leaders (n=2)</td>
<td>• Feasibility and acceptability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Knowledge, attitudes and practices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Community participation</td>
</tr>
<tr>
<td>Observation visits</td>
<td>Researcher’s observation notes (n=11)</td>
<td>• Feasibility and acceptability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Knowledge, attitudes and practices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Community participation</td>
</tr>
<tr>
<td>Routine M&amp;E</td>
<td>• M&amp;E forms completed by facilitators for each dialogue (n=1,458)</td>
<td>• Feasibility</td>
</tr>
<tr>
<td></td>
<td>• Planning sheets completed by facilitators during each cycle (n=152)</td>
<td>• Community engagement</td>
</tr>
<tr>
<td>Household surveys</td>
<td>Representative sample of households in study districts (n=1,583)</td>
<td>Knowledge, attitudes and practices (population level)</td>
</tr>
</tbody>
</table>
Results: feasibility

• Most facilitators remained active throughout the intervention period; only nine did not interact with project staff after the training.

• Facilitators conducted dialogues in 40 of the 68 (59%) administrative units in the four districts.

• Coverage was high in three of the four districts (77-100%), but low in one district (31%). Differing local concepts of ‘community’ were a major challenge to achieving high coverage.

• On average, approx. 30 dialogues were conducted per administrative unit.
Results: acceptability

- Facilitators enjoyed their role and, in particular, appreciated being agents of change within their own communities.

- Participants generally found the dialogues useful and valued their interactive and inclusive nature.

- The toolkit was very well received by both facilitators and participants.

- The main criticism was that the project did not provide resources and was not linked to mass drug administration campaigns.

“I was interested not for personal gain, but because I explained to the community how to prevent a disease. And then people say, ‘What you explained is having a positive effect on the community.’ So it’s satisfying.”

- Focus group with facilitators

“Everyone had the opportunity to speak, no one felt excluded. This is not a party political meeting. The disease affects us all, so all of us talked about it.”

- Focus group with participants
Results: knowledge, attitudes and practices

- Facilitators and participants showed a very good level of knowledge.
- Occasionally, knowledge was not biomedically accurate, while still relating to generally positive behaviours (e.g. hand washing as a protective behaviour for schistosomiasis).
- Many facilitators and participants reported that behaviour in the community had changed as a result of the dialogues, e.g. construction of latrines.

“We discussed how we can prevent contracting this disease. We explained that people get it from microbes that live in snails and are invisible to the naked eye.”

- Focus group with participants

“The facilitators talked about hygiene [...] We mustn’t wash our hands without soap.”

- Focus group with participants
Results: knowledge, attitudes and practices

At population level, there was some improvement with regard to correct knowledge. However, misconceptions persisted and uptake of protective behaviours did not improve significantly between baseline and endline.

Table 2: Key knowledge, attitudes and practices indicators from baseline and endline household surveys

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline % (95% CI)</th>
<th>Endline % (95% CI)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heard of schistosomiasis</td>
<td>91 (89-93)</td>
<td>91 (89-93)</td>
<td>1</td>
</tr>
<tr>
<td>Names at least one correct risk behaviour</td>
<td>20 (17-23)</td>
<td>30 (26-33)</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>Names at least two effective prevention or treatment mechanisms</td>
<td>13 (10-15)</td>
<td>15 (13-18)</td>
<td>0.2</td>
</tr>
<tr>
<td>Knows there is a drug that treats the disease</td>
<td>28 (25-32)</td>
<td>47 (43-51)</td>
<td>&lt;0.001**</td>
</tr>
<tr>
<td>At least one child in household received praziquantel</td>
<td>9 (7-12)</td>
<td>15 (12-18)</td>
<td>0.006**</td>
</tr>
<tr>
<td>Practices at least one effective protective behaviour</td>
<td>44 (38-51)</td>
<td>51 (45-58)</td>
<td>0.15</td>
</tr>
</tbody>
</table>
Results: community participation

- Facilitators reported that they had strong support from community leaders/structures in mobilising participants.

- Participation was generally high, with average numbers of participants between 20 and 40 per dialogue.

- Several communities reported taking communal action, e.g. supporting construction of latrines.

- However, the planning step was frequently not well executed and responsibility for implementing decisions remained vague.

"After the decision [to build latrines] was made, I had help from the local authority. We formed a ‘community police’ to make sure that people no longer practiced open defecation."

- Focus group with facilitators
Conclusion

• Community dialogues are a **feasible** approach for prevention and control of schistosomiasis. The main challenge is achieving high coverage and determining the coverage level required for achieving impact at population level.

• Community dialogues are **acceptable** and well-received by facilitators and participants. In order to increase acceptability, they should be closely linked with existing health structures and mass drug administration campaigns.

• There are indications that community dialogues contribute to **increasing knowledge and adoption of protective behaviours**. A more integrated approach including diseases requiring similar behaviour changes should be considered.

• Community dialogues also appear to contribute towards **increasing community participation**. However, the planning step needs to be strengthened to better enable communities to take communal action.
Key messages

- Community dialogues are a promising community engagement approach for improving schistosomiasis prevention and control.

- They are practical in resource-poor settings, because they use community volunteers and require little investment beyond the development of materials and training.

Figure 4: The community dialogues model
Acknowledgements

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Thank you