Behavior Change: Practical education approaches, promotion strategies, and change interventions for improving the effectiveness of NTDs Programmes

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Global Schistosomiasis Alliance, Communication and Programme Manager
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Introduction

GSA Behavioural Change, Health Education working group established in January 2018:

• To advocate and drive the integration of science-based behaviour change interventions, health education strategies, communication and activities to support control & elimination efforts.
• To become an open convening platform for practitioners of schistosomiasis-related education and behaviour change/ interventions.
• To assemble existing behaviour change, health education, and communication strategies, frameworks, tools, materials, study protocols, and implementation processes, and identify operational gaps.
• To deliver new tools and guidance for education and behaviour change, health education, and communication practitioners.
Objective of the Workshop

- Provide insight into the practical application of behaviour change focused education and interventions
- Discuss the role of social science and behaviour change interventions in improving the impact of NTD programs
- Active discussions in break-out sessions on challenges and opportunities in integrating behavioural change, education into existing NTD programs
Expected output of the workshop

• Gain practical insights in implementing existing behavioural change, health education methodologies and preferred practices on the ground.

• Gain insight of existing social science-based tools and frameworks

• Identification of challenges and opportunities for a better integration of behavioural change focused education programs into existing NTD programs.
A Practical Approach for Designing, Implementing and Evaluating NTD Behaviour Change Interventions

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AIMS

• Provide a brief introduction to behavioural science and health education theories

• Introduce a practical and feasible framework for using behavioral theory constructs to enhance the design, implementation, and evaluation of NTD health behavior change interventions
As an NGO....

• How do we Incorporate health education and behaviour change theories in a way that is practical, feasible, and enhances our typical NTD health behaviour interventions and evaluations?
Social Ecological Model: Underlying Framework

- Individual
- Interpersonal
- Organizational
- Community
- Policy
Sample of Health Education and Behavior Change Theories and Models

- **Individual**
  - Health Belief Model (HBM)
  - Theory of Planned Behavior
  - Stages of Change
  - Theory of Human Motivation

- **Interpersonal**
  - Social Learning Theory
  - Diffusions of Innovation
  - Dialogical Theories or Approaches

- **Organizational**
  - Social Learning Theory
  - Appreciative Inquiry

- **Community/Social**
  - Social Network Theories
  - Theories of Gender and Power
Theories and Constructs for School-Based Schistosomiasis Behaviour Change Intervention

Health Belief Model
- Perceived threat
- Perceived severity
- Perceived benefits
- Perceived barriers
- Cues to action
- Self-efficacy

Social Cognitive Learning Theory
- Observational Learning
- Role modeling
- Reinforcement
- Self-control
- Self Efficacy

Appreciative Inquiry
- What’s working
- What’s possible
- What can grow
- Sources of infinite capacity and imagination
Designing a practical, feasible, and theoretically sound school-based NTD intervention

• Who did we need to change?
• How or what do we want teachers to change?
• What do we need to do to influence teachers to change?
• What approaches would we use when working with teachers to change?
• What health education and behavior change theories or models could we use to guide the people and interventions on order to influence change?
• Who should be the change agents?
• How do we train the change agents?

How do we evaluate the associated behavioral constructs to see if what we did worked?
## Example of Social Ecological Model for Teachers Associated with the ZEST Schistosomiasis School-based Intervention

<table>
<thead>
<tr>
<th>Level</th>
<th>Who do we want to change</th>
<th>What do we want to change</th>
<th>Behavioral Construct to influence</th>
<th>Intervention Approach</th>
<th>Change Agents</th>
<th>Trainings for Change Agents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual</strong></td>
<td>Schoolteacher, Madrassa Teacher</td>
<td>Learn about kichocho, Perceive threat/severity, Decide to teach kichocho, Develop self-efficacy to teach, Develop skills to each, Use new teaching materials, Engage teachers &amp; Students, Take the lead for Kichocho Day event, Urinate in toilet/bush, Wash laundry with tap water or not standing in the river, Swallow MDA tablets.</td>
<td>Knowledge (HBM), Perceived threat (HBM), Perceived severity (HBM), Access to materials (HBM), Skills building(SCT), Behavioural capability (SCT), Self-efficacy (HBM/SCT), Outcome expectancies (SCT), Access structural interventions, Access MDA.</td>
<td>One-on-one, Small groups, School meetings, Education lectures, Demonstrations, Interactive activities, Role modeling, Practice teaching.</td>
<td>NTD Team</td>
<td>Science-based disease, Behavior change, Communication, Interactive teaching methods and tools.</td>
</tr>
<tr>
<td><strong>Interpers.</strong></td>
<td>Headmaster, Other Teachers, Coaches, Volunteers, School Club Members</td>
<td>Learn about kichocho, Perceive threat/severity, Decide to teach kichocho, Develop self-efficacy to teach, Develop skills to each, Use new teaching materials, Engage teachers &amp; Students, Participate in Kichocho Day events, Urinate in toilet/bush, Wash laundry with tap water or not standing in the river, Swallow MDA tablets</td>
<td>Knowledge (HBM), Perceived threat (HBM), Perceived severity (HBM), Access to materials (HBM), Skills building(SCT), Behavioural capability (SCT), Self-efficacy (HBM/SCT), Outcome expectancies (SCT), Access structural interventions</td>
<td>One-on-one, Small groups, School meetings, Education lectures, Demonstrations, Interactive activities, Role modeling, Practice teaching.</td>
<td>NTD team Teachers</td>
<td>Science-based disease, Behavior change, Communication, Interactive teaching methods and tools.</td>
</tr>
<tr>
<td><strong>Organiz.</strong></td>
<td>Headmaster, School Committees, PTA, Ministry of Education District Level</td>
<td>Learn about kichocho, Perceive threat/severity, Commit school to be Kichocho free, Provide time &amp; resources for Kichocho Day, Participate in Kichocho Day Event, Engage parents and community members, Urinate in toilet/bush, Wash laundry with tap water or not standing in the river, Swallow MDA tablets</td>
<td>Knowledge (HBM), Perceived threat (HBM), Perceived severity (HBM), Access to materials (HBM), Skills building(SCT), Behavioural capability (SCT), Self-efficacy (HBM/SCT), Outcome expectancies (SCT), Access structural interventions, Access structural interventions.</td>
<td>One-on-one, School meetings, Demonstrations, Interactive activities, Role modeling, School-wide events, Peer-to-peer sessions.</td>
<td>NTD team Teachers Club members</td>
<td>Science-based disease, Behavior change, Communication, Interactive teaching methods and tools, Peer training.</td>
</tr>
</tbody>
</table>
## Portion of Social Ecological Model for Teachers associated with the ZEST Schistosomiasis School-based intervention

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<tr>
<th>Level</th>
<th>Who do we want to change?</th>
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<th>Trainings for change agents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Change</td>
<td>Primary teachers</td>
<td>Learn about schistosomiasis&lt;br&gt;Perceive threat and severity of disease&lt;br&gt;Decide to teach students about schistosomiasis&lt;br&gt;Develop skills and confidence for using interactive teaching methods about schistosomiasis&lt;br&gt;Have access to teaching materials and tools&lt;br&gt;Engage students in schistosomiasis teaching activities&lt;br&gt;Engage other teachers in schistosomiasis teaching activities</td>
<td>Knowledge (HBM)&lt;br&gt;Perceived Threat (HBM)&lt;br&gt;Perceived Severity (HBM)&lt;br&gt;Access to teaching tools&lt;br&gt;Behavioral capability (SCT)&lt;br&gt;Self-efficacy (SCT)&lt;br&gt;Outcome expectancies (SCT)&lt;br&gt;Skills building (SCT)</td>
<td>One-on-one&lt;br&gt;Small group&lt;br&gt;School meetings&lt;br&gt;Education lecture&lt;br&gt;Demonstration&lt;br&gt;Participatory activities&lt;br&gt;Role modeling&lt;br&gt;Practice teaching</td>
<td>NTD Team</td>
<td>Science-based disease sessions&lt;br&gt;Science-based behavioural sessions&lt;br&gt;*Communication Strategies&lt;br&gt;Interactive teaching tools &amp; materials&lt;br&gt;Activities and games for children</td>
</tr>
</tbody>
</table>
Linking Behavioural Constructs to Evaluation Questions
Sample Questions to Assess Health Belief Model Constructs

- My children are at risk for kichocho (*perceived susceptibility*)
- My chances of getting kichocho are high. (*perceived susceptibility*)
- I will have side effects if I take the kichocho medicine. It is too strong. (*perceived barrier to MDA*)
- It’s inconvenient to go to the tap for washing my clothes. (*perceived barrier to using the safe water*)
- I have no control over where I wash my clothes. The piped water only comes sometimes. (*perceived barrier*)
- I have had kichocho before. It is in all the streams where we bathe and we do not have any other water to bathe. (*perceived susceptibility*)
- The possibility that we will use the laundry washing platform is very high. (*behavioral intention*)
- Now that I have seen the blood fluke I see it needs a strong medicine to kill it. (*benefits of MDA*)
- I can now tell someone what causes kichocho and how they can prevent it. (*benefit of intervention*)
- I am confident that I can stay out of the contaminated water. (*self-efficacy*)
- What prompted you to change your behavior? (*cue to action*)
## Sample Questions to Assess Social Cognitive Theory Constructs

1. Please rate how certain you are that you can do each of the things described below by writing the appropriate number. Rate your degree of confidence by recording one number from 0 to 10 using the scale given below:

<table>
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<tr>
<th>Cannot do</th>
<th>Moderately can do</th>
<th>Highly certain can do</th>
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<tr>
<td>0</td>
<td>5</td>
<td>10</td>
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</table>

- Teach students about the blood fluke ______
- Teach students about the life cycle of *kichocho* ______
- Teach students about the symptoms of *kichocho* ______
- Teach students about the health consequences (such as bladder cancer) of *kichocho*____
- Teach students about how to take the medicine that kills *kichocho*____
- Teach students about the prevention of *kichocho* ______

2. Please rate how certain you are that you can do each of the things described below by writing the appropriate number. Rate your degree of confidence by recording one number from 0 to 10 using the scale given below:

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- Plan and prepare for *kichocho* day ______
- Influence teachers to help with *kichocho* day____
- Mobilize children to participate in *kichocho* day____
- Conduct games and activities for *kichocho* day____
- Work with Kichocho Team on *kichocho* day____
In Conclusion

• Answer the eight questions (shown again in next slide)
• Identify the health education and behaviour change theories/models with constructs that will best fit your NTD
• Prepare the social ecological framework
• Enter the information under the headings that match with the level of the intervention you propose
• Assure that the linked constructs are appropriate for the desired change and the interventions associated with them are feasible
• Assess your resources and availability of change agents
• Review the framework to be sure is socially and culturally appropriate
• Link your change constructs with evaluation questions
Designing a practical, feasible, and theoretically sound NTD intervention

• Who needs to change?
• How or what do we want to change?
• How do we influence individuals to change?
• What approaches do we use when working individuals to change?
• What behavior change and health education theories or models could we use to guide interventions to influence change?
• Who should be the change agents?
• How do we train the change agents?
• How do we evaluate the associated behavioral constructs to see if what we did worked?
Thank you!

Our Teachers

ntd-ngonetwork.org
Case Studies for discussion

• NALA Case Study – Sustainability of WASH in schools
• Schistosomiasis Case Study: Perceived Threat – Rebranding the worm
• Trachoma Elimination in Australia – Behaviour Change and environmental improvement
• NALA Case Study – Integration of disease prevention for different diseases
Questions - Case Studies

1. Are the intervention, challenges & solutions presented in this case study relevant to your programme?
2. In your experience what is the biggest challenge you have faced or you perceive in implementing BC interventions?
3. Are there other solutions that you have employed that others could use?
4. I will add one more question on **Sustainability**, how do you sustain the outcomes of your BC projects?

We will review these towards the end of the session
WASH-NTD roundtable – Behaviour Change focus:

- Synthesise information and evidence-based approaches
- Key guiding principles
- WASH-NTD Tool Kit WHO
- Specific tasks team focused on Behaviour in WASH Working group

- Wednesday – half day
Human-Centered Design

• Is a process and set of techniques used to create solutions to problems that starts with the people for whom we are designing the intervention.

• The process examines the needs, ideas, and behaviors of the people we want to affect with our solutions. We hear what they have to say, create a solution together and deliver what is feasible and viable to the people.
Human Centered Design Methods for NTDs

- Conduct qualitative interviews and discussions to hear what community members have to say about schistosomiasis

- Partner with the community by giving back the findings and creating the health behavior change interventions together

- Partner with the community to deliver the health behavior change interventions we developed together