CONCLUSION

This paper concludes that a real-time, responsive, participatory and qualitative field-testing methodology is a key stage of communication materials development. As a result, MMV has now adopted this approach when developing its communication materials, including its injectable artemisinin toolkit now used by the National Malaria Programs of 11 African countries, as well as materials on seasonal malaria chemoprevention. This methodology can be used to guide other groups who wish to develop communication materials for new public health interventions destined for developing countries. In the case of severe malaria and the use of rectal artesunate for children with danger signs, we can be more certain that the end-users will be able to understand the images regardless of literacy levels and seek the various stages of care and administer this life-saving ‘first step’ intervention.

KEY FINDINGS

Communicating in a culturally appropriate manner

If an image in the communication materials does not resonate with the day to day life of the end-user - the user will be distracted by that misplaced image and will tend not to focus on the core messages. A challenge when developing these communication materials is to ensure that there are no such distractions.

Outcome: One of these culturally misplaced images emerged in Malawi. Although the position of the mother with her arm raised prepping the baby did not illicit any cultural sensitivities in Senegal, this position disturbed the mothers and health workers in Malawi to the point where they were significantly distracted away from the key messages. The images needed to be adapted to capture the more familiar sitting position with legs extended.

Communicating a complex sign or symptom

An abstract symptom can be challenging to communicate in images. Lethargy /unconsciousness as a core danger sign of severe malaria in children is one of these abstract symptoms. When developing an effective image one must identify key features of the symptom that captures the fundamental elements of the symptom, if not the exact condition.

Outcome: In both Senegal and Malawi the majority of the respondents struggled to recognize and describe this danger sign in the absence of text explanations. The initial versions tried to use an indirect means of communicating the unresponsiveness of the child, by illustrating the community health worker clapping her hands near the child in order to illicit a response. The act of clapping is an interpretative move by many mothers as well as some trained and untrained community health workers. Although most respondents detected that the child was very sick, they tended to focus their attention on the person with her hands in the air and not on the child. The hands were misconstrued to represent praying and or magic and traditional healing practices. The image was therefore simplified and the attention drawn back to the sick child and the limp arm and the lack of interest in play communicated by the ball.

Communicating urgency in the context of distance and time

Communicating urgency through images can be a challenge, particularly within the context of the large distances and potential delays that rural mothers with very sick children often face when trying to access care. Communicating urgent transfer to a higher level health facility after the administration of RAS is one of the key challenges facing WHO as it promotes this pre-referral drug.

Outcome: Besides the fact that different communities and countries across Africa use different methods to transport sick children and their caregivers, in general respondents communicated that urgency also had to be illustrated in a way that fostered responsibility. Therefore attempts to depict urgency by showing a mother running to the health centre were deemed unacceptable, whereas an image of a bicycle in Malawi and in a cart (Senegal) swiftly, while supported by a family member was appropriate and did not distract the users from the key message of ‘urgency’. Communicating ‘time passing’ was especially difficult, while an attempt to show distance with a long winding road was rarely captured as ‘far away’. Unexpectedly the hand with a finger pointing proved powerful as an authoritative instruction to go to the hospital or health centre (recognized by a green or red cross) without delay.

METHODOLOGY

Communication materials tested
1. Poster sensitizing parents / caregivers of children under 6 years of age and at risk of severe malaria;
2. Visual aid with a training guide for community health workers with instructions on administration and the referral process.

CATEGORIES OF PARTICIPANTS

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>TOTAL Respondents across 2 countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNGP (Programme national de lutte contre le paludisme)</td>
<td>2</td>
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<tr>
<td>NGO representative in country</td>
<td>1</td>
</tr>
<tr>
<td>District Management Team/Trainers</td>
<td>1</td>
</tr>
<tr>
<td>Nurses in charge of health posts</td>
<td>4</td>
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<tr>
<td>Agents de santé communautaires (ASC) &amp; DISDOMS (Dispensaire de soins à domicile)</td>
<td>22</td>
</tr>
<tr>
<td>Mothers/Caregivers</td>
<td>19</td>
</tr>
<tr>
<td>TOTAL Respondents</td>
<td>158</td>
</tr>
</tbody>
</table>

Testing approach
Phase 1: Consultation - key advisors and end-users during formative phase (March –April 2015).
Phase 2: Pre-testing with end-users in rural Malawi (August 2015) followed by further modification of materials.
Phase 3: Pre-testing with end-users in rural Malawi (August 2015).
Phase 4: Finalisation and dissemination to international partners for final review (December 2015).

Iterative process

Kinds of questions asked – general to specific

- Is the information – text and images presented in a comprehensible manner?
- Is the information – text and Images relevant to end-users?
- Is the tool, its format and its content practical for end-users?
- Are problem areas or potential issues identified, potential solutions are drafted?
- Design Rapid Prototypes are tested with the end-users.
- Do the solutions improve comprehension?
- Designs reach a highly acceptable comprehension rate.

COMMUNICATION MATERIALS TESTED

- Poster sensitizing parents / caregivers of children under 6 years of age and at risk of severe malaria;
- Visual aid with a training guide for community health workers with instructions on administration and the referral process.

BACKGROUND

Severe malaria represents the end-stage of untreated uncomplicated malaria leading to almost certain death with a heavy toll on children. Out of an estimated 216 million annual malaria cases, an estimated 8 million are severe malaria (World Malaria Report 2014).

The World Health Organization (WHO) recommends that when parenteral therapy (an injection) is not possible, suppository formulations of artemesin are given as a pre-referral treatment.

Medicines for Malaria Venture’s (MMV) has developed key communication tools – posters, leaflet and video - to assist countries introducing RAS into their rural community health services.

A key component of development was pre-testing the materials in various situations and contexts in order to ensure that the materials are responsive to the end-user’s needs.