COMMUNITY INVOLVEMENT IN MALI CAN HELP PREVENT TRACHOMA AND BLINDNESS

It’s one in the afternoon in Mali’s Koulikoro Region and the sun is high in the sky. Mahawa has been at the local health center in Fana since 10 a.m. because she suspects her son Moulaye may have a trachoma infection. Moulaye’s eyes have been red and producing a yellow discharge for the past two days. Despite the wait, Mahawa did the right thing when she decided to get Moulaye’s eyes checked.

Seeking treatment at a health center for eye infections was one of the behaviors promoted in two regions of Mali by the “Right to Sight” program designed by the Johns Hopkins Bloomberg School of Public Health Center for Communication Programs (CCP) with support from the International Trachoma Initiative (ITI). An evaluation of the program’s impact was recently conducted. The results indicate an increase in trachoma awareness and an increase in knowledge of how to prevent and treat it.

CCP provided assistance to Mali’s National Blindness Control Program (PNLC) to develop and implement the two-year behavior change communication program (2002-2004) in the Malian regions of Kayes and Koulikoro. The program objectives included increasing knowledge of trachoma transmission, prevention and treatment among men and women with children under 12; increasing the number of men and women with children under 12 who wash their children’s face at least twice a day to prevent trachoma; and increasing use of health services to treat early trachoma infection and for surgery to prevent blindness due to trichiasis, a complication of chronic, untreated trachoma infection.

Personal (face washing) and environmental hygiene can help limit flies that transmit trachoma. Eyelid surgery performed in time can prevent blindness due to trichiasis.

Trachoma is an eye infection caused by the Chlamydia trachomatis bacterium. The infection is prevalent among children, while trichiasis affects mostly adults and can result in blindness if eyelid surgery is not performed in time. Trachoma can be easily cured with antibiotics. Baseline data from the Right to Sight program showed that surgery was almost never mentioned as a way to treat trichiasis. Also, more than a third of those interviewed used traditional healers.

**Blindness Prevention**

Based essentially on the WHO SAFE strategy (Surgery, Antibiotics, Face washing, clean Environment) the program focused on mobilizing rural communities through radio programming, community events, and advocacy activities. The program’s primary audience was caretakers of children under 12 (mothers, fathers, grandmothers, and older children in or out of school) in both rural and urban areas. Secondary audiences included community health workers and health service providers.

Figure 1: Perception that trachoma is easy to treat and selected methods of treatment cited, by exposure

Figure 2: Children’s eye infection in past 30 days and advice seeking by exposure
Impact!

The program included interventions to improve access to trachoma prevention and treatment services. Program staff developed an interpersonal communication and counseling curriculum on trachoma prevention and treatment to improve community health workers’ skills.

The program also worked to increase demand for trachoma prevention, treatment information, and services as well as increase trachoma preventive and treatment behaviors. Its slogan was: “Ta vue est entre tes mains” or “Your sight is in your hands.” Primary messages included: wash your children’s face at least twice a day with clean water; keep your environment (dwelling surroundings and latrines) clean; and go to the health center as soon as you notice signs of infection. Messages were disseminated through radio and community interventions.

The slogan and program logo were featured on various campaign materials, including a pamphlet; a comic book for school children; a set of counseling cards for health and social service providers; and promotional materials such as T-shirts and hats.

Materials were distributed to partner NGOs and CBOs, local administrative and community authorities, schools, health and social service providers, as well as community workers. The program produced a 20-minute advocacy video documentary aimed at decision-makers and community leaders.

Audio materials aired on community radio included a 20-minute radio magazine and a two-minute radio infomercial on trachoma prevention and treatment that were distributed to a network of 16 partner local and community radio stations. These materials were aired weekly and biweekly, respectively. A song contest with trachoma messages yielded three winning songs that were also broadcast.

**Impact**

The results were measured in two ways. First, in-depth interviews were conducted with teachers, students, health agents, and community and religious leaders to explore changes perceived to have been brought about by the program. Second, a pre-post research design was used to quantitatively assess changes. A baseline survey was conducted in November-December 2002 in “communes” randomly selected throughout the two regions. A final evaluation was carried out in February-March 2005, but this time, “communes” were randomly selected among purposively chosen intervention and control areas.

A total of 1,284 and 1,069 mothers with children age 12 or younger were interviewed at baseline and final evaluation, respectively. Presented here are a few results of the program’s impact, with an emphasis on the difference in outcomes between people exposed to at least one of six program components and those exposed to none. Thirty-seven percent (37.1%) of respondents were exposed to at least one of those components.

Trachoma is well-known in the two regions. Overall, two-thirds of the respondents had heard about it before the program. This proportion increased to 78% after exposure. Analysis indicates that those exposed had generally better outcomes than those not exposed. Those exposed were significantly more likely to have heard of the disease than those not exposed (88% versus 73%). Similarly, people exposed were more likely to believe that trachoma is easy to treat. Knowledge of trachoma treatment was also better among the exposed. They were more likely to cite antibiotic ointment and drops as treatment methods and less likely to mention traditional healers (Figure 1).

Prevalence of trachoma did not differ by exposure status to the campaign. In fact, Figure 2 shows slightly more eye infections in the 30 days preceding the survey among the children of exposed women. However, this may be due to more attention to the issue and a better recognition of the signs of eye infection as a result of the program. Despite this lack of difference in prevalence, it is interesting to note how mothers of sick children responded differently. Mothers exposed to the campaign were more likely than those not exposed to seek advice about the eye infection and they were more likely to seek that advice from a specialist (hospital, health center, dispensary, private clinic or doctor, or pharmacy).

The program’s success can also be analyzed by level of exposure to its components. Figure 3 shows a clear dose response effect: the higher the exposure, the better the outcomes. Thus, people who had high exposure (exposed to three or more components) had greater responses than those with low exposure (exposed to one or two components). Even very low exposure produced substantially superior outcomes than no exposure at all.

The results demonstrate that the program successfully raised awareness about trachoma, perceived seriousness of the disease, and increased knowledge of the means to prevent and treat it. Behavior change theories indicate that individuals move through a series of stages before change in practice is actually observed. The improvement in the intermediate outcomes have yet to be translated into practice, but it nevertheless indicates that this audience has begun moving towards positive behavior change to prevent trachoma and trachoma-related blindness.

**Figure 3: Selected outcomes by level of exposure to ITI program components**

<table>
<thead>
<tr>
<th>Outcome</th>
<th>None (0)</th>
<th>Low (1-2)</th>
<th>High (3+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heard of trachoma</td>
<td>72.9</td>
<td>31.6</td>
<td>52.8**</td>
</tr>
<tr>
<td>Easy to prevent trachoma</td>
<td>86.4</td>
<td>52.8**</td>
<td>52.8**</td>
</tr>
<tr>
<td>Easy to treat trachoma</td>
<td>90.1**</td>
<td>38.8</td>
<td>69.4***</td>
</tr>
<tr>
<td>Treat with antibiotics</td>
<td>69.4***</td>
<td>50.8</td>
<td>54.5</td>
</tr>
<tr>
<td>Seek advice about eye infection</td>
<td>77.8***</td>
<td>60.9</td>
<td>77.8***</td>
</tr>
<tr>
<td>Ask specialist</td>
<td>53.7**</td>
<td>39.6</td>
<td>75.0**</td>
</tr>
</tbody>
</table>

†: p<0.25 **: p<0.05 ***: p<0.001

COMMUNICATION Impact!

Summarizes key research and programmatic findings from Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs (CCP).

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Communication Makes the Difference!