

## Towards Elimination of Schistosomiasis and STH: Key considerations for expanded treatment in communities

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### Summary

With the shift of schistosomiasis from control to elimination, strategies need to be scaled up and gaps covered. Towards this vision of elimination, preventive chemotherapy with mass drug administration (MDA) still remains the main key strategy in this process. Indeed, in Cameroon, for the past decade, the schistosomiasis and STH control program privileges this strategy due to its cost effectiveness.

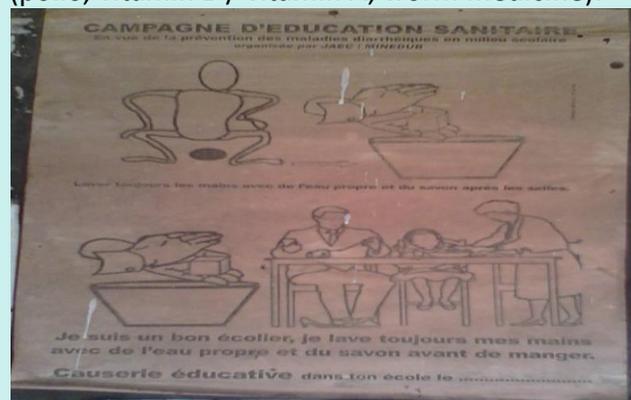
Qualitative research was carried out in Edea Health District (Littoral region, Cameroon), Kumba and Mbonge Health Districts (South West Region Cameroon) in November 2016 and August 2017. This was aimed at capturing community responses to control interventions, as well as stakeholders' perceptions. 125 participants including health officers, health workers, teachers, community drug distributors, councils' staff, private water provider and community members took part in semi-structured interviews. In addition, 4 focus group discussions with teachers and community members were carried out in the various communities with direct observations in schools and within community neighborhoods.

Findings identified some areas which could be scaled up in the implementation of MDAs, and these are critical components in the sustainability of the above mentioned interventions.

**Image opposite: Fig. 1: A sensitization campaign of hand washing with water and soap in a school**

### MDA interventions related to schistosomiasis and STH

Besides the school-based MDA with praziquantel (for schistosomiasis) and mebendazole (for STH), deworming is possible through the administration of albendazole together with ivermectin during community MDA against lymphatic filariasis and STH. Also, during the polio campaign, deworming for STH also occurs (polio, vitamin B / vitamin A, worm medicine).



For the first time, MDA of praziquantel was extended to whole communities in Edea Health District in July 2016, and as part of COUNTDOWN's expanded treatment plan, communities (excluding children under 5 years and pregnant women) in Barombi Mbo and Barombi Kotto were administered praziquantel and mebendazole as well in August 2017.

From observations and interviews carried out as part of social science field work, the following highlights could be drawn on implementation areas where more adaptable activities and information lines on breaches, identified during the implementation of MDA within the communities and in schools, could be introduced.

## Need for improved sensitization

There is a need to improve sensitization and mobilization within communities in relation to deworming campaigns. Some parents as well as teachers interviewed expressed not being aware deworming campaigns had taken place, pointing towards the fact community sensitization was not enough or information was not well disseminated. Furthermore, in the case of Edea, community deworming occurred almost at the same time with the mectizan-albendazole campaign, resulting in community members feeling overwhelmed and reluctant in receiving (more) treatment. In the South West region, most parents interviewed also maintained that they were not informed by the schools before deworming children at schools (in previous school-based campaigns) and none could say precisely what drug was being given to their children in this campaign. This factor also hindered other forms of awareness and raising information on the transmission and control of schistosomiasis as parents were not very much involved.



**Fig. 2: A dysfunction toilet in a school in Edea**

Barombi Kotto now stands as a success story of the benefits of increasing sensitization. In August 2017, prior to the community-based deworming in Barombi Kotto organized by the National Programme for the Control of Schistosomiasis and STH in collaboration with COUNTDOWN, community sensitization and mobilization was maximized which resulted in a high level of adherence to treatment. This goes further to emphasise the importance of effective communication and the possible effects if improved.



**Fig. 3: A community area in Edea**

Another way of improving sensitization is by considering the social status of sensitizers, especially their position as individuals within a stratified society. A negative effect is sometimes posed when social cadets attempt to educate their elders in the domain of health. For the community-based deworming programme which replaced the school-based distribution in the South West region due to political unrest in April 2017, four community drug distributors (CDDs) distributed MDA in Barombi Kotto village in both the island and mainland communities. These CDDs were mostly youths with some under-21 years. This drew our attention, considering that in most communities it is disrespectful culturally, for a very young person to offer advice to older people. This point raises the issue around the selection criteria for CDDs and contextualizing campaigns.

Also, school institutions face a similar problem where, sometimes they have limited time to inform parents of planned deworming. Despite informing parents beforehand, some parent still refuse to allow their children to receive treatment and these teachers do not have enough time nor an adequate platform to explain/convince parents of the need and importance of their children receiving treatment. Thus, not everyone is treated at the end of the school-based campaigns.

## Working conditions for community drug distributors and teachers



**Fig. 4: Bad roads in Barombi Kotto**

Community drug distributors and teachers contribute to the sensitization of parents and pupils during deworming campaigns. In schools, it is common to find posters on walls which stress on the importance of clean water and proper sanitation

However, the messages outlined in the posters are often not appropriate for the context where they are displayed. Such as encouraging the use of latrines and boreholes without the accompanying infrastructure. Some of the boreholes created are not functioning properly due to lack of maintenance and within most communities, water sources and toilets are deplorable.



**Fig. 5: Bore hole provided by a private stakeholder to a school which is now out of use**

Environmental conditions not only limit access to all populations at risk, but it also poses issues around proper use of toilets. In Barombi Mbo for example where the soil is wet, it was observed that toilets were shallow and community members sometimes prefer to ease themselves in the streams than use the shallow toilets.

In addition to this, CDDs complain about their incentives being low, their inability to cover the expenses they incur in the course of distributing drugs and their lack of necessary equipment to work.

In some instances, the praziquantel campaign was carried out during the rainy season and it was quite challenging to get to remote areas where treatment is most needed because of the lack of adequate working equipment such as rain boots, umbrellas and jackets to protect them (figure 4).

Low incentives during deworming campaigns, coupled with precarious working conditions act as barriers which limit CDD commitment and output. As a result, there are cases of refusals and a lack of community ownership of the control interventions, which could otherwise be avoided.

Beside these incentives, materials such as boots to ease movements in muddy areas as well as umbrellas and rain coats to protect against rain, can play a role in improving CDD commitment to MDA programs.

## Conclusion

These observations from our fieldwork in Barombi Kotto, Barombi Mbo and Edea are shared here to highlight some key considerations when NTD programmes are expanding treatment from schools to the wider community or integrating medicine delivery. These include; the working conditions and remuneration of drug distributors who face many challenges when trying to engage parents, children and community members, the importance of context specific sensitization and mobilization strategies that include the use of effective information, education and communication materials to increase awareness and acceptability of medicines.



*Fig. 7 Community toilet*

### Image credits

- Fig. 1 - M. Siping, November 2016
- Fig. 2 - E. Kouokam, November 2016
- Fig. 3 - M. Ntsinda, November 2016
- Fig. 4 - C. Makia, June 2017
- Fig. 5 - E. Kouokam, Edea, November 2016
- Fig. 6 - C. Makia, Barombi Mbo, June 2017
- Fig. 7 - C. Makia, Barombi Mbo, August 2017

# COUNTDOWN

Calling time on Neglected Tropical Diseases

COUNTDOWN (grant ID PO 6407) is a multi-disciplinary research consortium dedicated to investigating cost-effective, scaled-up and sustainable solutions to control and eliminate the seven most common NTDs by 2020.



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