1. Context

Madagascar is a low-income country that has suffered from several years of political crisis and limited international aid. Only recently has the country regained the confidence of donors, and has gradually been able to reinforce public health measures. Madagascar is endemic for five different neglected tropical diseases (NTDs): schistosomiasis, soil-transmitted helminths (STH); ascariasis, trichuriasis and hookworm infection, and lymphatic filariasis. In most endemic districts, people have gone untreated for many years. The Schistosomiasis Control Initiative (SCI) is supporting the Ministry of Public Health and of Education in order to put in place mass treatment campaigns of school-age children in the northern and western parts of the country.

2. Overview

An in-country visit took place from late September to late October 2014, and the week during which the mass drug administration (MDA) took place in mid-November. The first aim of the visit was to bring all SCI partners together in order to create a common understanding of the aims and to specify the targets of the project. SCI successfully brought together and facilitated the communication with financial partners RISEAL Europe and RISEAL Madagascar on the one hand, and the implementing partners, the Ministry of Public Health (MOH) and Ministry of Education (MOE), on the other. The partners expressed appreciation for the in-country visit and the discussions to finalise the goals and plans for the MDA. The second aim was to get an overview of the previous activities and planning that had taken place. This was done through meetings with the MOH and MOE.

3. Planning

The next phase included a thorough review of the literature and data that were the foundation for the MDA. The results of this review showed that 2 of the 5 pilot districts planned for the SCI-supported MDA in 2014 lacked sufficiently recent data on the prevalence of schistosomiasis and STH for appropriate decision-making and allocation of resources. Following thorough discussions with the SCI monitoring and evaluation officer and biostatistician, as well as discussions with the MOH and MOE, it was decided that the planned sentinel site survey prior to treatment should be replaced by completion of the mapping in the pilot districts.

The planned treatment figures and praziquantel (PZQ) needs were reviewed in order to ensure correct planning figures and need for drugs. From early September, the MOH and WHO HQ and Madagascar were contacted in order to ensure that the drugs would be available for the planned SCI-supported MDA in mid-November 2014. This was a slow process, probably affected by a number of external factors, such as other competing priorities and drug availability, please see below.
A thorough budgetary revision followed in order to minimise the cost per child treated and in order to accommodate the costs for the planned mapping exercise. Until the in-country visit, only funds for the MDA had been transferred from SCI, as it proved impossible to plan other activities than the MDA prior to the visit. SCI successfully revised the budget to include 6 instead of 5 pilot districts (please see map below), resulting in a cost of approximately 40 US cents per child treated. Also, the costs of the mapping were taken into account by the first transfer of funds, allowing the mapping to be performed prior to treatment as recommended by WHO.

Finally, the cascade training and information, education and communication (IEC) materials were reviewed with the MOH and MOE. All the material, including posters, flyers, guides for drug distributors and social mobilisers, other training material and radio spots were reviewed and the messages adjusted to current guidelines and streamlined with each other. All material were prepared in Malagasy, and was orally translated to French during the working sessions.

4. Mapping

In parallel with the above, the team started planning the mapping of the two districts of Mahabo and Marovoay, please see map below. The team at the MOH and MOE had not previously conducted mapping, and the technicians at Institut Pasteur de Madagascar, which have the best capacities in this area in Madagascar, were almost all busy with other mapping activities. With support from the SCI team in London, a budget was put in place, funds were transferred in order to back up any costs not covered by the available funds in-country, and procurement of equipment was initiated. Sufficient staff from the MOH and MOE were recruited and comprehensively trained in order to carry out the mapping according to the most recent WHO guidelines and international standards.
5. Implementation

With invaluable support from SCI, two teams were trained and all equipment was in place by mid-October. The mapping was done in 10 to 12 days, just prior to the school holidays the first week of November. The teams were supervised by an experienced technician from Institut Pasteur and by the SCI PM. In order to perform the mapping of the randomly selected schools within known schistosomiasis-endemic zones, the teams needed to cover vast geographical distances, including organising transportation to schools that were unreachable by car. The preliminary results from the mapping were presented for WHO Madagascar, and will be validated by the SCI biostatistician.

In parallel, the cascade training was rolled out in the 6 pilot districts by the remaining team members at the MOH and MOE, and included training for drug distribution by teachers (for enrolled school-age children) and community drug distributors (for non-enrolled school-age children) as well as training for social mobilisation.

The MDA was rolled out the 13th of November in 4 of the 6 pilot districts. The PZQ left over from last year’s MDA in the south (approximately 215,000 pills), were used for the treatment in 4 of the SCI-supported districts, together with mebendazole (sufficient stocks). Unfortunately, despite coordinated and intensified efforts to ensure the timely arrival of PZQ, the pills did not arrive prior to the planned treatment day. Preliminary oral reports indicate that the majority of the drugs were distributed, that the communities highly appreciated the treatment offered, and that only a few minor adverse effects, such as vomiting, were observed. The PZQ needed to complete the treatment will be dispatched to the districts as soon as the drugs are available in order to complete the treatment of all 6 districts. Final distribution reports are due during the month of December.
6. Stakeholder meetings

During the in-country visit, SCI liaised with the MOH and MOE through meetings and public events. The NTD master plan was officially launched the 1st of October 2014. This was followed up by a meeting planned with the Minister of Health (+Prime Minister) of Madagascar. Unfortunately, as the meeting was about to start, the ex-president of Madagascar had returned to the country for the first time in 5 years, and the Minister had to leave. However, SCI met with and discussed the control of NTDs in Madagascar and the upcoming MDA with the Minister’s special advisors.

SCI met several times with WHO Madagascar in order to coordinate as best possible the order and timely arrival of praziquantel needed for the MDA. Further, a meeting was organised with the Health specialist in charge of the World Bank’s NTD control programme in the country. Their funding covers 2013-2015 through an emergency project created following the political crisis. There seems to be an important opportunity in convincing the World Bank to continue the funding of treatment in the south, and SCI will support the MOH and MOE in developing a proposal for this.

7. Public information

Interviews were performed at all implementation levels and photographs taken during the preparations, mapping and MDA in order to ascertain appropriate public information for the SCI-supported control of NTDs in Madagascar. The material has been shared with SCI’s PI manager.

CONCLUSIONS

- The MOH and MOE have significantly strengthened their capacities regarding the control of NTDs
- The mapping and MDA have been streamlined with current SCI principles and WHO guidelines
- The mapping of the 6 SCI-supported pilot districts in 2014 has been completed and the data shared with WHO Madagascar; validation will be ensured by the SCI biostatistician.
- The MDA was initiated with the available drugs in-country and will be completed when the officially ordered praziquantel arrives during the month of November
- The targeted communities suffer from a high prevalence of NTDs and negligence for several years, and highly appreciate the treatment offered; few adverse effects were observed
- Final reports from the drug distribution are due during the month of December 2014

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