Sightsavers deworming programme; Guinea Bissau
GiveWell schistosomiasis (SCH) and soil transmitted helminths (STH) project
Year 1 annual report: January 2017 – March 2018

Country: Guinea Bissau
Location: Nationwide
Duration: Two years, in the first instance, January 2017 – December 2018
Start date: January 2017
Project contact name: Balla Musa Joof, Senior Programme Manager

Project goal: The reduction in the prevalence and intensity of schistosomiasis (SCH) and soil transmitted helminths (STH) in school age children.

Project summary
The project treated over 180,000 children for STH and over 200,000 children for SCH in April 2018.

Although highly successful this project is delayed by 3 months due to the complexity of successfully undertaking a nationwide STH and SCH remapping survey essential to ensure MDA is delivered where it is most needed. The preparatory work, such as training, was completed in quarter 1 2018, with the actual treatments delivered successfully in April. Accomplishing this is testament to growing national team capacity.

<table>
<thead>
<tr>
<th>Output</th>
<th>Indicator</th>
<th>Year one target</th>
<th>Year one to date pending validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treat school aged children between 5-14 years for STH and SCH through Mass Drug Administration (MDA).</td>
<td>Number of school age children between 5-14 years treated for STH</td>
<td>181,951</td>
<td>245,997</td>
</tr>
<tr>
<td></td>
<td>Number of school age children between 5-14 years treated for SCH</td>
<td>221,452</td>
<td>341,082</td>
</tr>
</tbody>
</table>

* Target based on results from the 2017/18 impact survey

Protracted discussions with the Ministry of Health over the districts in need of treatment were ongoing for quite some months. Sightsavers recommended that resources focus on districts where prevalence is above World Health Organisation thresholds. Treatment began in early April 2018. Discussions are ongoing over the best treatment strategy for those districts where there are alternative interpretations of the impact survey results.

Overview of SCH and STH in Guinea Bissau

In 2005, the Guinea Bissau Ministry of Health conducted a nationwide mapping for all five Preventive Chemotherapy (trachoma, onchocerciasis, lymphatic filariasis, schistosomiasis and soil transmitted helminths) NTDs with support from WHO. The mapping results indicated that all the five NTDs, including SCH and STH, are endemic within the country.
Among the 11 regions:

- SCH and STH prevalence ranged from 0-16% and 13-93%, respectively
- 8 regions qualified for SCH MDA and 10 qualified for STH MDA

As the baseline was conducted over 12 years ago with no action taken since, a new baseline is required to update the prevalence so that future treatment decisions can be made with more accurate prevalence and intensity data.

The national master plan contains clearly defined strategies to control both SCH and STH in Guinea Bissau, including the need for the integration of NTDs and the strengthening of the health system.

Sightsavers, as the main NGDO NTD partner in Guinea Bissau, has participated and provided technical support during the development of the NTD master plan.

**Location:** Nationwide, Bafata, Gabu, Oio, Farim, Bolama, Cacheu, Biombo, Tombali, Quinara, Bijagos and SAB/Bissau regions

**Activity narrative**

The project started with a workshop in May 2017, which was attended by regional health and education directors from all 11 health regions of Guinea Bissau, as well as senior Ministry of Health and Ministry of Education officials at the national level.

Following this meeting, World Health Organisation / Regional Programme Review Group (RPRG) and Sightsavers conducted a high-level technical support visit to Guinea Bissau to help the national team to develop a roadmap. This visit also finalised the SCH and STH re-mapping protocol. This was necessary as the existing baseline data was from 2005 and was therefore unlikely to give an accurate picture of current prevalence rates. The Ministry of Health with support from Sightsavers developed the protocol for the re-mapping.

In October 2017, the survey protocol was finalised and submitted to the National Ethics Committee for review and approval. Training then began for those involved in the mapping exercise. From November 2017 to February 2018, the nationwide re-mapping of the diseases sampled 122 schools across the country. The objective of the re-mapping was to re-evaluate the SCH and STH prevalence by region.

An external consultant was appointed to analyse data and provide a final report on the mapping results and treatment recommendations to the Ministry of Health.

Sightsavers technical staff analysed the same data as the consultant, but due to differences in interpretation of World Health Organisation guidelines, came to different prevalence figures and therefore different treatment recommendations. Both sets of results were presented to the Ministry of Health and it was decided to start treatment on the non-contentious regions in early April 2018.

In early May a decision was taken to treat the contentious areas highlighted in the impact survey, based on the Ministry of Health's desire to treat the maximum number of people potentially at risk. These three areas will be treated in May 2018 and are not included in the output table below. We will report on these treatment numbers separately to year 1 and year 2 output reporting.
Based on the re-mapping results, SCH and STH mass drug distribution was conducted in March/April 2018 in line with World Health Organisation guidelines. Treatment targets in the GiveWell logframe have been revised accordingly.

In April 2018, SCH/STH MDA was successfully delivered in seven regions; five for SCH, two for STH.

**Results against targets to date (January 2017 – March 2018)**

All output and outcome data is preliminary and awaiting validation from the Guinea Bissau MoH.

<table>
<thead>
<tr>
<th>Output</th>
<th>Indicator</th>
<th>Y1 target *</th>
<th>Y1 to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train health staff, community members and teachers to deliver SCH/STH MDA to schools and endemic communities</td>
<td>Number of Teachers trained on SCH/STH MDA</td>
<td>2,912</td>
<td>2,532</td>
</tr>
<tr>
<td></td>
<td>Number of health workers trained on SCH/STH MDA</td>
<td>212</td>
<td>171</td>
</tr>
<tr>
<td></td>
<td>Number of CDDs trained on SCH/STH MDA</td>
<td>1,380</td>
<td>1,285</td>
</tr>
<tr>
<td></td>
<td>Number of schools training at least one classroom teacher on school MDA.</td>
<td>1,305</td>
<td>Awaiting data</td>
</tr>
<tr>
<td>Treat school aged children between 5-14 years for STH and SCH through Mass Drug Administration (MDA).</td>
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</tr>
<tr>
<td></td>
<td>Number of treatment coverage surveys conducted with data disaggregated by age group and gender and school attendance.</td>
<td>1</td>
<td>1 (planned May 2018)</td>
</tr>
<tr>
<td>Ministry of Health coordinates and supports targeted regions/districts to implement the National NTD Plan with focus on SCH and STH.</td>
<td>Number of advocacy meetings conducted with stakeholders on SCH/STH Interventions.</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Data on hand washing and latrine facilities in schools available at operational level.</td>
<td>Proportion of LGAs reporting on government collected indicators on hand washing and latrine facilities in schools.</td>
<td>18%</td>
<td>***0%</td>
</tr>
</tbody>
</table>

* Target based on results from the 2017/18 impact survey
** Includes 161,284 school aged children treated in Gabu and Bafata, which had a prevalence rate of just under 20%, however the Ministry of Health felt strongly it was important to treat these districts.
*** The project gathered data on the number of districts reporting WASH indicators, none as yet are doing so. Our future work in this area will continue to encourage cross sectoral coordination and advocate for a complementary approach.
Preliminary treatment coverage rates

Preliminary data from the April 2018 MDA suggests a high level of coverage for treatments of both SCH and STH, however achieving over 100% would suggest issues with the denominator used, which in this case is the national census estimate. We hope that the TCS will give further insight to programme performance.

<table>
<thead>
<tr>
<th>Outcome Indicator</th>
<th>Year 1 Jan 2017 – Mar 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Milestone Y1</td>
</tr>
<tr>
<td>% of all targeted people among targeted health districts treated with praziquantel for SCH (ultimate threshold at least 75%).</td>
<td>50%</td>
</tr>
<tr>
<td>% of all targeted people among targeted districts treated with at least one round of albendazole/mebendazole against STH (ultimate threshold at least 75%).</td>
<td>50%</td>
</tr>
<tr>
<td>% of existing schools among targeted health districts participating in the school deworming programme.</td>
<td>75%</td>
</tr>
</tbody>
</table>

Key successes:

- Successfully conducted the re-mapping of SCH and STH in ten health regions of the country between November 2017 to February 2018 (the eleventh health region was conducted by LSHTC)
- Successfully conducted inaugural national SCH and STH MDA campaign
- The social mobilisation for the re-mapping survey was a success and this led to strong regional administrative support, which enabled the survey teams to conduct a highly successful survey.
- The project purchased six microscopes for the mapping survey and they are now being used by the Ministry of Health to strengthen the health system.
- Sightsavers supported the skills development of government staff and the national lab technicians who participated in the survey. As a result, the survey was implemented by the national NTD team for the first time. This type of capacity building within national health systems builds the long term sustainability of deworming activities.

Key challenges:

- The complexity of finalising the survey protocol resulted in late implementation of the mapping in the country (further delayed by school holidays over the Christmas period). This had a knock on effect on the start of MDA activities, as the results were necessary to determine the regions to treat and the frequency of treatment.
- There was limited time from the date the survey protocol was approved to the start of the mapping to procure the required materials and consumables. Getting the required quotations and invoices was a protracted process, but necessary in order to adhere to financial regulations.
- Teachers in the capital, Bissau, were generally unwilling to be trained in MDA. The team trained and mobilised additional CDDs in the city to overcome this challenge.
**Project monitoring and coverage survey activity**

- In November 2017, a monitoring and evaluation officer was recruited by Sightsavers to be based in Bissau. He has been working closely with the Ministry of Health NTD team to help coordinate the survey and mass drug distribution activities. Sightsavers is also in the process of setting up a programme management unit in Guinea Bissau. In addition to the monitoring and evaluation officer, this unit will include a project officer, finance officer and senior manager who will provide project oversight and have management responsibilities.

- Project activities are monitored and supervised at a number of different levels throughout the mass drug distribution cycle. For example, the national Ministry of Health team select training sessions (from all levels) at random for supervision, whereas the regional Ministry of Health team will purposely supervise areas they believe to need extra support e.g. poor coverage reported from a previous round of mass.

- During MDA volunteer community drug distributors (CDDs) report to a supervisor on a daily basis at an 8:1 ratio. The supervisor is tasked with going through the days data collection with the volunteers and helping them complete their daily summaries. This is done on a daily basis in an effort to reduce the chance of arithmetic error when compiling the full week’s mass drug distribution data.

- As part of the project monitoring, a Quality Standards Assessment Tool (QSAT) and Treatment Coverage Survey (TCS) will be conducted in May 2018. These will be run by Sightsavers and recommendations from both activities will be fed back to the Ministry of Health to be considered when planning 2018 activities.

**Lessons learned**

- Improved social mobilisation at regional and district levels led to the smooth implementation of the survey. There were no reports of participation refusal by school authorities or school children.

- Interpretation of guidelines and protocols should be clarified before analysis of data to avoid discrepancies in statistical analysis. Even a small change in methodology can lead to very different treatment recommendations.

- Coordination support provided by Sightsavers during the mapping helped to resolved issues on the spot which could have led to the delay of the survey.

**Looking ahead to 2018**

The project is in a strong position for year 2 MDA. The nationwide re-mapping of STH and SCH prevalence means that project staff have an accurate understanding of disease prevalence and can target treatment to where it is needed most. Spot-check of prevalence will continue within the three contentious regions to monitor the need for treatment in future years.

Year 2 MDA will take place early 2019, to allow for a twelve month gap between MDA rounds as per World Health Organisation protocol.

The preliminary results from all the regions indicated a nationwide reduction in the prevalence of both SCH and STH, which is fantastic news for Guinea Bissau.

In 2018 /2019, utilising GiveWell funding for year 2, we will continue to support SCH and STH treatments nationwide in Guinea Bissau.