

Sightsavers deworming programme, Nigeria – four states: Kebbi, Kogi, Kwara and Sokoto

GiveWell: schistosomiasis (SCH) and soil transmitted helminths (STH) project Year 1 annual report: January 2017 – March 2018

Country: Nigeria

Location (region/districts): Kogi state, Kwara state, Kebbi state and Sokoto state

Duration of project: Two Years, January 2017 – December 2018

Start date: January 2017

Project contact name: Anita Gwom

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 has treated over 400,000 children for STH and over 3 million children for SCH since January 2017. Project targets for treatments and for training teachers, health workers and community members have all been exceeded.

Treatment coverage rates, a key indicator of the success of interventions, have exceeded the year 1 milestone almost two fold. The year 1 target was for 50% of the at risk population in target areas to be treated for both STH and SCH. We have reached 93% for SCH and 83% for STH. (World Health Organisation guidelines for the treatment of STC and SCH identify treatment coverage of 75% of the at risk population as necessary for control).

Despite challenges, such as customs delays with drug shipments and reaching schools unregistered with the government, the project reached all its year one milestones. Project staff worked hard and creatively to ensure this project kept to its schedules and succeeded.

Project output summary

Output	Indicator	Year 1 target	Year 1 to date
Treat school aged children between 5-15 years for STH and schistosomiasis.	Number of school age children between 5-15 years treated for STH	400,145	403,391
	Number of school age children between 5-15 years treated for SCH	2,944,560	3,034,190

Overview of SCH and STH in Nigeria

Nigeria has the highest burden of infection of intestinal helminth infections and cases of SCH. Mapping was completed in all the 36 states and the federal capital territory, and SCH and STH were suspected to be co-endemic in majority of the states.

Nigeria has the greatest number of cases of SCH worldwide, with about 29 million infected cases and about 101 million people are at risk of infection¹. This includes infections with *schistosoma haematobium* (urogenital schistosomiasis) and/or *schistosoma mansoni* (intestinal schistosomiasis).

Prevalence and intensity of these waterborne parasites are highest among school-age children, adolescents and young adults and they cause immense pain, suffering and disability. The debilitation caused by untreated infections hampers economic development in endemic areas. It is therefore essential to give due consideration to the control of morbidity and eliminating SCH infection as a means to contribute to achieving the Sustainable Development Goals in Nigeria.

There is a national NTD programme within the Federal Ministry of Health (FMoH) where the national SCH/STH units sits, headed by a programme Manager and her team. They support policy issues and deworming drug procurements for the country through technical supports to the states. The unit reviewed the Standard Operating Procedure for NTDs (FMoH, 2016) which is being followed by all the states.

The national NTD plan (2015-2020), has an SCH and STH roadmap timeline. Each state, including those supported by Sightsavers, have their state specific master plan and they report their activities to the FMoH.

The national NTD programme (of which the SCH / STH unit is part of) holds zonal, national review and task force meetings annually. Sightsavers supports its staff, and Ministry of Health staff to attend these meetings and make presentations.

Sightsavers works with other partners to support the states' NTDs programme. Sightsavers supports states to implement all aspects of deworming activities according to national standards and strategy. All data from Sightsavers supported states is fed into the national database.

Activity Narrative

Project staff showed considerable dedication to enable the completion of MDA before schools closed in December 2017. Due to issues with customs, the praziquantal needed for SCH was stuck in customs from July and only released in late November 2017. The project team identified surplus praziquantel available from previous rounds of MDA in neighbouring states, which did not require the drugs in 2017. An enormous effort to utilize these drugs was coordinated at a national level and enabled staff to begin delivering SCH treatments to some areas ahead of November.

Once the praziquantal was released the remaining SCH MDA could go ahead. However, starting in late November gave staff a tight timeframe in order to complete activities before the schools closed in late December. It is testament to staff's determination and hard work this was achieved and treatment targets were exceeded in these challenging circumstances.

In Kebbi and Sokoto states, the majority of children attend Islamic schools, which are often unregistered with the government. Project staff have worked with the Ministry of Education to create a more accurate register of schools. The 2017 MDA reached many of these unregistered schools, this contributed to an overachievement of the school output indicator (number of schools training at least one classroom teacher on school MDA).

¹ Dawaki S, Al-Mekhlafi HM, Ithoi I, Ibrahim J, Abdulsalam AM, Ahmed A, et al. (2015) The Menace of Schistosomiasis in Nigeria: Knowledge, Attitude, and Practices Regarding Schistosomiasis among Rural Communities in Kano State. PLoS ONE 10(11): e0143667. doi:10.1371/journal.pone.0143667

Due to learning arising from this project, we have changed to a combination of school and community based treatments in all states in order to target out-of-school children. This is particularly important in areas where enrolment in public schools is low, especially for girls. In addition, where girls are enrolled their actual attendance can be intermittent. Nigeria has 10.5 million out-of-school children²; 60% of these children are girls³. 60% of all out of school children in Nigeria live in the North. By complimenting in school drug distribution with community distribution we have ensured that we reach girls as well as boys and those attending non registered schools.

In Kwara state, anecdotal evidence indicates that the use of community drug distributors (CDDs) and health workers in targeted communities to enable the treatment of out of school children has improved treatment uptake. Efforts have also been made to reach other marginalised communities, for example, the training of church members as CDDs helped mobilize the Christian community and has increased awareness amongst Christians, who are a minority group in some of the states. Project staff are working with government to address this by updating the list of registered schools ready for year 2 activities.

State level advocacy and deworming education workshops for the Ministry of Education (MoE), Primary School Education Board, traditional and religious leaders, the media and other stakeholders were conducted in all states. Meetings were held to encourage other stakeholders to support deworming activities.

Other activities such as, training of teachers, volunteers and health workers were conducted before the MDA began. We supported the training of more health workers than originally planned in order to reach out of school children through community MDA. This was necessary due to low school enrolment / attendance in some areas. We were able to exceed training targets due to some states choosing to subsidise some of the training costs; training more individuals reduces CDD / population ratio and therefore their workload.

Education sessions in schools highlighted the need for children to eat well before taking treatment to reduce side effects. Teachers were trained to administer the treatments and educated on the benefits of treatment to children. This increased the uptake of treatment as evidenced by low refusal rates and the exceeding of treatment targets.

² https://www.unicef.org/nigeria/education_2161.html

³ <https://collaboration.worldbank.org/groups/youthsummit/blog/2016/10/13/out-of-school-girls-in-northern-nigeria-challenges-and-opportunities>

Results against targeted year one activity (January 2017 – March 2018)

Output	Indicator	Year 1 target	Year 1 to date
Train health staff, community members and teachers to deliver SCH/STH MDA to schools and endemic communities	Number of Teachers trained on SCH/STH MDA	5,098	6,573
	Number of health workers trained on SCH/STH MDA	1,218	3,443
	Number of CDDs trained on SCH/STH MDA	4,000	4,729
	Number of schools training at least one classroom teacher on school MDA.	5,368	7,029
Treat school aged children between 5-15 years for STH and schistosomiasis through Mass Drug Administration (MDA).	Number of school age children between 5-15 years treated for STH	400,145	403,391
	Number of school age children between 5-15 years treated for SCH	2,944,560	3,034,190
	Number of treatment coverage surveys conducted with data disaggregated by age group and gender and school attendance.	1	1
Ministry of Health coordinates and supports targeted regions/districts to implement the National NTD Plan with focus on SCH and STH.	Number of advocacy meetings conducted with stakeholders on SCH/STH Interventions.	8	8
Data on hand washing and latrine facilities in schools available at operational level.	Proportion of LGAs reporting on government collected indicators on hand washing and latrine facilities in schools.	10%	0%*

*The project gathered data on the number of LGA's 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.

Project location: GiveWell's support is enabling school based drug distribution in a total of 51 local government areas (LGAs) across four states, as follows:

Name of state	No. LGAs treated for SCH	No. LGAs treated for STH
Kebbi	12	0
Kogi	13	9
Kwara	11	5
Sokoto	15	3
Total	51	17

Treatment coverage rates

The project achieved treatment coverage rates that far exceed World Health Organisation recommended levels of 75% for STH and SCH control. Over time this will make a contribution to reducing the prevalence of both STH and SCH in Kebbi, Kogi, Kwara and Sokoto.

Outcome Indicator	Year 1 Jan 2017 - Mar 2018	
	Milestone year 1	Achievements to Date
% of all targeted people among targeted local government areas (LGAs) treated with praziquantel for SCH (ultimate threshold at least 75%).	50%	93%
% of all targeted people among targeted local government areas (LGAs) treated with at least one round of albendazole/mebendazole against STH (ultimate threshold at least 75%).	50%	83%
% of existing schools among targeted LGAs participating in the school deworming programme.	80%	100%

Key successes:

- The project staff's quick and effective re-allocation of surplus praziquantel, enabled the completion of MDA in the four states by December 2017.
- Parent teacher associations, traditional, religious and community leaders all responded well to deworming educational activities.
- Schools provision of food for students during SCH treatment demonstrated their support of the project and their understanding of treatment side effects.
- The involvement of polio supervisors, with previous experience of data collection, as volunteer CDDs during the project's MDA helped improve the monitoring of activities and reporting.
- The markers (on participating children's fingernails) used during school based treatment was successful in avoiding double treatment and cross over with community based treatment.
- The integration of the programme into state health systems is evidenced by the involvement of state health education officers in Kebbi during project planning, and the loan of mobile vans belonging to the state for education work in Kwara. Both of these approaches helped to improve awareness of de worming treatment and reduce adverse side effects.
- Effective monitoring during MDA has helped to ensure the right dosage is adhered to, thus reducing adverse reactions. This has been evidenced in Kwara, where there was an increase in uptake of services in nomadic settlements where adverse reactions had previously been an issue.

Key challenges:

- During Ramadan some communities made the decision to treat during the night, due to praziquantel having to be taken with food to avoid adverse side effects. This made it difficult for health workers to supervise the process. In these cases, health workers were advised to visit the communities the next day and check the reporting and ask pertinent questions.

- Many schools, unregistered with the government, are not accounted for in government documentation, but required treatment. The team continue to work with the Ministry of Education to ensure a correct and updated list of schools is shared with the Ministry of Health.
- Many schools have poor census records on the number of children attending, which affects the quantity of drugs provided to them. Schools were supported to update their school registers and additional drugs were provided as required.
- National level supply chain issues led to a long delay in getting drugs to the project areas. This created time pressure as it was necessary to get as much school based treatment completed as possible before the schools closed in December.
- Security challenges (communal clashes, risk of kidnap and armed robbery) in some communities delayed treatment in some areas within Kebbi and Kogi.

Project monitoring and coverage survey activity

- The state NTD team, Sightsavers and the Federal Ministry of Health visited targeted health facilities and communities to monitor and supervise implementation, during drug distribution.
- Health workers supervised the volunteers within their catchment area during distribution, and district ward supervisors supervised health facilities and communities within their wards. The local government area coordinators monitored selected health facilities and communities.
- Due to the delay in completing the MDA, the TCS was re-scheduled to January and February 2018. The survey has now been completed and the data is currently being analysed. We are currently on track to submit the survey to GiveWell by June 30.
- QSATs have been completed in all four states and are currently being finalised with the Programme Systems and Monitoring Team.

Lessons learned

- In Kwara, the importance of deworming sensitisation activities in schools and communities is directly linked to the project's success. The school staff's increased understanding of how to mitigate adverse drug effects with the provision of food during SCH treatment will contribute to a good uptake in 2018.
- Advocacy work with the Ministry of Education is essential to ensure up to date and accurate registers of schools, to prevent whole cohorts of school children potentially missing essential health interventions.
- The use of volunteer CDDs and health workers in targeted communities with low school enrolment enabled the treatment of the huge numbers of out-of-school children in Nigeria. This had a hugely beneficial impact on treatment numbers and treatment coverage rates.

Looking ahead to 2018

The highly successful teacher training activities, high treatment coverage rates and successes in tackling areas of previous low uptake, mean the project is well placed to meet 2018 targets. In addition, so far, drug shipments are on track to enable timely MDA in 2018.

The measures to produce a more accurate list of schools will result in a more accurate representation of the number of participating schools in 2018.

Sightsavers is currently in the process of preparing a funding application to DFID, UK Department for International Development, for the inclusion SCH and STH MDA activities within an extension of their existing integrated onchocerciasis and LF program. The outcome of this application will be not be known until 2019. Currently, we do not anticipate submitting a full STH and SCH proposal for Kebbi, Kogi, Sokoto and Kwara states in our GiveWell wishlist 3, in the hope that we are successful with the larger one to DFID.

However, if we are unsuccessful, and GiveWell continue to recommend Sightsavers as a top charity, we would have a very strong need for funding for deworming activities in the four states in 2020. The huge numbers of school children in Nigeria living in endemic areas make this project a high priority for Sightsavers and for the control of SCH and STH.