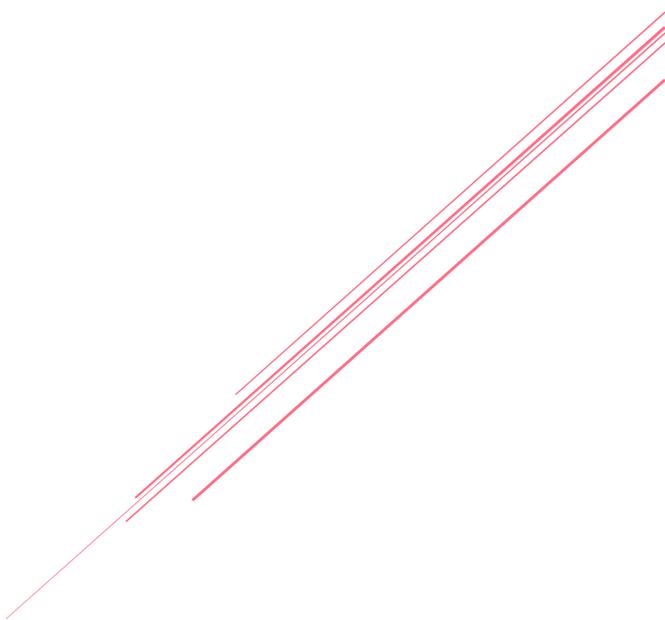


Evidence
Action

Deworm the
World Initiative

School-based Deworming in Ogun State, Nigeria

Process Monitoring and Coverage Validation
Report



2020 Round

Contents

Glossary	3
1.0 Executive Summary	4
2.0 Background	7
3.0 Methodology	8
3.1 Process Monitoring	8
3.2 Coverage Validation	9
4.0 Results	10
4.1 Review of LGA and teacher training	10
4.1.2 Attendance during trainings	10
4.2 Topic coverage	11
4.2.1 Information on worms and target population	11
4.2.2 Drugs and Drug Administration	13
4.2.3 Side effects	14
4.2.4 Recording and reporting forms	15
4.2.5 Roles and Responsibilities	16
4.3 Distribution of drugs and materials	17
4.3.1 Community sensitization materials	17
4.4 Community Sensitization	18
4.4.1 Implementation of community sensitization	18
4.4.2 Community knowledge	18
4.5 Deworming day	19
4.5.1 Preparedness for deworming day	19
4.5.2 Deworming day delivery	20
4.5.2.1 Adherence to MDA procedures	20
4.5.2.2 Management of side effects and referrals	21
4.5.3 School coverage of eligible and non-enrolled children	21

5.0 Coverage Validation	21
5.1 STH Results	21
5.2 Schistosomiasis Results	22
5.3 Reasons for non-compliance	24
5.4 Unprogrammed deworming	25
6.0 Recommendations	25
6.1 What worked well	25
6.2 What can improve	27

Glossary

FLHF. Frontline health facility

FMOH. Federal Ministry of Health

IEC. Information education communication

LGA. Local government area

MDA. Mass drug administration

NTD. Neglected tropical disease

PPE. Personal protective equipment

PPES. Probability Proportionate to Estimated Size

SAC. School aged children

SAE. Severe adverse event

STH. Soil-transmitted helminths

WHO. World Health Organization

1.0 Executive Summary

In November 2020, Ogun state conducted a round of school-based deworming, the fourth year of deworming in Ogun, targeting both enrolled and non-enrolled school-aged children (SAC), 5-14 years. Due to the COVID-19 pandemic, only one round of deworming took place in 2020, rather than the two that were initially planned as per WHO treatment guidelines based on disease prevalence of soil-transmitted helminths (STH) and schistosomiasis (SCH) within the Local Government Areas (LGAs) in Ogun. For this round of deworming, approximately 4,549 schools and 787,983 enrolled and non-enrolled SAC were targeted to receive deworming treatment in both public and private, primary, and junior secondary schools, and 592,885 children were treated, resulting in 75% coverage.

This was the first round of deworming in Ogun state since the start of the pandemic. Evidence Action supported the Ministry of Health to safely conduct deworming activities and limit the spread of COVID-19 through the provision of personal protective equipment (PPE) such as surgical face masks, hand gloves, hand hygiene, waste management materials, and sensitization materials. The team also contextualized COVID-19 protocol to be used before, during, and after the deworming exercise based on WHO and ministry guidelines. In addition to the global pandemic, the state also experienced violence, severe vandalism and loss of lives and properties caused by a nationwide End Police Brutality (#EndSARS) protest and a cholera outbreak across a few LGAs during the course of the school-based deworming exercise which culminated into setbacks and delays in program implementation and activity timelines. A total of fourteen LGAs were targeted and treated, of which two LGAs are endemic for STH only, nine LGAs endemic for schistosomiasis only, and three LGAs co-endemic for both STH and schistosomiasis. Evidence Action monitors the key implementation processes before, during, and after each mass drug administration (MDA) to assess the effectiveness of training and supply chain, adherence to deworming protocol, and treatment coverage to inform program design and improvements. Evidence Action recruited an independent firm to collect data from a sample of 7 LGA training sessions, 27 teacher training sessions, 30 schools on deworming day, and conduct interviews at sampled schools and communities for coverage validation.

On average, 82% of expected schools were in attendance for teacher training, which was 15 percentage points higher when compared to the last round of deworming (67%). Trainers reported that the majority of teachers that did not attend cited their inability to make it to school (43%), school/teacher unawareness (39%), late communications on change of date/venue (5%), schools not targeted (5%), fear of schools to attend due to their registration status (5%), and inadequate transport refund (5%). The best¹ covered topic during the LGA and teacher training was on worms and the target

¹ Highest coverage of all key messages under the topic

population, with coverage (complete or partial) of the three key messages (prevention of worms, transmission of worms (STH and schistosomiasis), and the negative impact of worms) noted in at least 80% of training sessions. In post-training interviews, more than 95% of participants correctly responded to questions under the three key messages stated above. The types of side effects received the lowest coverage as only vomiting as a side effect was covered in more than 80% of LGA and teacher trainings. Read more on training on [page 10](#).

Directly following teacher training, 89% of training sessions distributed all key materials (drugs, reporting forms, tablet poles in schistosomiasis focused training) to all participants. All (100%) (27 out of 27) of the monitored teacher trainings distributed drugs to teachers to take to their respective schools for deworming. As for materials, 100% of training distributed summary forms, 100% distributed treatment registers, and 87% distributed tablet poles². However, direct observation at schools on deworming day and follow-up interviews with the head teachers/teachers after the process of drug administration at schools revealed that all schools (100%) had received drugs prior to deworming day, and 97% of participating schools had sufficient drugs to deworm all children on deworming day³. Ninety-seven percent of participating schools had all the key materials (drugs, reporting forms, tablet poles in schistosomiasis focused training), on deworming day. Read more on distribution on [page 17](#).

Eighty-nine percent (n=83) of parents were aware of deworming day; with this proportion higher among parents of enrolled children (100%) as compared to the parents of non-enrolled children (63%)⁴. Seventy-two percent of the parents aware of deworming day indicated that they would be sending their children for deworming while twenty eight percent of parents said they would not send their children for deworming. The reasons cited included lack of awareness (9%) and that the children will be dewormed the following day (4%). The main sources of deworming day information cited by parents were children (80%), teachers (43%) and radio (46%). Read more on awareness on [page 18](#).

The rate at which schools conducted deworming was 86% of expected schools distributing tablets on deworming day. All (100%) teachers provided the correct mebendazole dose and also used the tablet pole for praziquantel dosing. However, in 13% of schools, teachers did not ask whether children were sick before administering deworming medicine. deworming day observations also indicated that non-enrolled

² As most schools already had tablet poles, only schools that needed a replacement were provided with poles.

³ All the schools that did not have sufficient drugs on deworming day were able to contact the LGA Coordinator or LGA Educational Secretary to procure sufficient medicine to treat all children.

⁴ This rate among parents to non-enrolled children has levelled off when compared to previous monitoring periods (Y3R2 - 62%, Y3R1 - 44%, Y2R1 - 63%, Y1R1 - 63%).

children were dewormed in only 10% of monitored schools. Read more on drug administration on [page 19](#).

Coverage validation was conducted within two weeks of MDA treatment in two LGAs (Ogun Waterside and Obafemi Owode). Overall, 84% of the children in Ogun Waterside were offered the chance to swallow the drug for STH treatment (program reach), and 79% of the surveyed individuals ingested the drug (surveyed coverage). Coverage validation for schistosomiasis treatment indicated that 81% and 82% of targeted children in Obafemi Owode and Ogun Waterside, respectively, were offered the chance to swallow the drug (program reach), and 78% of the surveyed individuals in both LGAs actually ingested the drug (survey coverage). When comparing surveyed coverage for STH and schistosomiasis to government reported coverage, reported coverage was outside the 95% confidence interval of surveyed coverage in both LGAs for schistosomiasis and in Ogun Waterside for STH, which suggests overreporting. However, based on surveyed coverage in both LGAs, we can confidently say that this round has met the WHO therapeutic coverage threshold for STH and schistosomiasis treatment (75%), implying successful implementation of the program in these LGAs. Read more on coverage validation on [page 21](#).

Table 1: Key Performance Indicators

	Percent
Target schools represented at teacher training	82%
Target schools with adequate drugs during deworming	97%
Target schools utilizing at least one awareness activity or material ⁵	77%
Parents who report seeing or hearing about deworming through IEC deworming materials or word of mouth this round	89%
Target schools distributing tablets on deworming day	86%
Enrolled children present in school on deworming day	85%
Targeted children who report receiving unprogrammed deworming in the last six months	10%
Target population validated as swallowing mebendazole tablets on deworming day based on coverage validation	79%
Target population validated as swallowing praziquantel tablets on deworming day based on coverage validation	78%

Overall, implementation of the 2020 deworming round was successful especially in the context of the COVID-19 pandemic, highlighted by high attendance rates at teacher trainings, and an effective supply chain (97% of schools noted to have all key materials on deworming day), with 86% of expected schools distributing tablets on deworming day. Additionally, interest and approval rate of parents who want to send their kids to deworming is good, with seventy-two percent indicating that they would send their children for deworming, and of the parents aware of deworming day, 98% indicated

⁵ IEC deworming materials include posters

receiving messages encouraging them to feed their children before deworming, with 96% of these parents reporting that they complied. Lastly, compared to the last deworming round, handwashing prior to the administration of treatment improved (63% from 17%).

However, there were also challenges that should be addressed ahead of the next round of MDA, such as the adherence to COVID-19 protocols needs to increase with 89% of the teacher training sessions not observing the COVID-19 guidance of providing hand washing/sanitation facilities and wearing masks. Information on drug and drug administration needs to be covered completely and what drug administration steps to follow. Even though the screen of children was high (87%), it is essential that teachers know when to treat and when not to treat children on deworming day. The program should review the overall training cascade which can affect the overall quality/level of mobilization within the schools and impact treatment coverage. The program needs to look at coverage rates for non-enrolled children and how enrollment rates can improve along with teachers deworming non-enrolled children. Lastly, the program needs to continue to work with the teachers during training and on deworming day about the importance of filling out the treatment forms correctly, as 23% of schools did not use the reporting forms to record treatment (though this is an improvement from 33% in the last deworming round). This is a recurring challenge, as the teachers are focused on treating children and then returning to their primary duties rather than filling out the forms. The full summary of successes, challenges, and recommendations can be found on [page 25](#).

2.0 Background

Evidence Action provides technical assistance to the Ogun state government as it conducts school-based deworming through MDA for SAC in a bid to control parasitic worm infections. In November 2020, the only round of its fourth year of statewide school-based deworming took place in 14 LGAs in Ogun state which are endemic for STH and/or schistosomiasis.

Prior to activity start, Evidence Action supported the Ministry of Health to safely conduct deworming activities and limit the spread of COVID-19 through the provision of PPE⁶, and stationery⁷ and program specific COVID-19 protocols (adapted from WHO and national guidelines), to be observed during trainings, meetings and the deworming campaign. Evidence Action updated training materials and allotted training time to discuss COVID-19 protocols, emphasizing prevention and adherence to safety measures before, during, and after school based deworming exercise, especially at all levels of the training cascade. Special provisions of sanitizers, facemasks, and COVID-

⁶ PPE included surgical masks - 1000 pieces, hand sanitizers - 40 pieces, hand gloves - 1,000 pieces, disposable bags - 2,000 pieces, methylated spirit - 50 packs, ziplock bags - 1,080 pieces and surgical gowns - 30 pieces

⁷ Stationery included 15 rims of A4 paper, 90 pieces of markers, 750 writing pens, 15 big size cellotape pieces, paper tape, and masking tape, and 150 pieces of felt pens

19 information education communication (IEC) materials were made available at training centers and schools.

A total of **787,983** enrolled and non-enrolled children aged 5-14 years were targeted to receive deworming treatment in both public and private primary and junior secondary schools, with **160,706** receiving treatment for STH and **511,770** for schistosomiasis by the end of the MDA (62% STH coverage and 78% schistosomiasis coverage). Approximately **3,818** teachers were trained to properly administer the safe and effective deworming drugs. It is to be noted that **three out of the fourteen LGAs targeted did not reach the therapeutic coverage rate of 75%**. Further work will be carried out to see the reasons for the low coverage and what programmatic improvements can be made before the next deworming round.

Evidence Action recruited an independent firm, Infotrak Research and Consulting, to monitor random samples of program activities to assess the quality of implementation, adherence to protocol, and supply chain effectiveness. During this round, monitors observed 7 LGA trainings, 27 teacher trainings, 30 schools on deworming day, and interviewed 63 parents in the community. Evidence Action designed data collection tools and sampling methods and cleaned and analyzed the data from the above activities. The findings are presented in this report.

3.0 Methodology

3.1 Process Monitoring

Process monitoring was conducted in the 14 LGAs targeted for mass deworming. A random sample of 7 LGA trainings (out of 14 LGAs), 27 teacher training sessions (out of 206 sessions) and 30 schools implementing deworming (out of 4,548 schools) were monitored. The sample sizes were calculated to meet a 90% confidence level and a margin of error of 15%, distributed across all LGAs based on the number of activities happening in each LGA.

At each randomly sampled teacher training sessions, trainers were interviewed and training sessions observed. Prior to the start of these sessions, four participants were targeted for pre-training interviews and four participants for post-training interviews. The participants interviewed were systematically sampled so that every third participant to arrive at the venue was interviewed pre-training and every third participant to receive training materials was selected for a post-training interview.

On deworming day, the monitors conducted interviews at the sampled schools with the following individuals:

1. Head teachers, to assess deworming knowledge, frontline health facility (FLHF) staff engagement, deworming preparedness, mobilization, and availability of deworming materials.

2. A member of the deworming team (a teacher), to ascertain their knowledge of deworming and the activities they conducted in preparation for deworming.
3. One parent who brought their children for deworming, to understand their experience with deworming.
4. Three children (two enrolled children from the class register and one non-enrolled child) to gather information on their MDA experience. This was conducted in one randomly selected class.
5. To assess the effectiveness of the community mobilization and sensitization methods, two systematically selected households with enrolled children and one with non-enrolled children within the school catchment area were interviewed.
6. Finally, monitors observed one class as deworming occurred to assess adherence to guidelines, such as the recording of treatment, administration of the right dosage to the correct age-group, and deworming steps. Monitors also made observations to assess school infrastructure, including WASH facilities, presence and location of sensitization materials, and deworming location.
7. At various stages of cascade implementation, monitors observed for the adherence to COVID-19 guidelines. These related to the wearing of masks, and sanitization practices.

3.2 Coverage Validation

Coverage evaluation surveys were conducted within two weeks of the MDA in two randomly selected LGAs – Obafemi Owode (treating for STH only) and Ogun Waterside (treating for both STH and schistosomiasis), with the purpose of validating coverage within the LGAs, confirming reported treatment data, and identifying reasons for non-compliance. A total of 2,301 children were interviewed from the two LGAs using a two-stage probability proportional to estimated size (PPES) sampling design. Table 2 below shows the targeted and achieved sample sizes for the monitoring activities.

Table 2: Process monitoring targeted and actual sample sizes

Monitoring activity	Population	Target sample size	Actual sample size
LGA training			
Total number of LGA training sessions	14	7	7
Pre-training interviews		28	28
Post-training interviews		28	28
Teacher training			
Total number of teacher training sessions	206	27	27
Pre-training interviews		108	108
Post-training interviews		108	100 ⁸

⁸ In some trainings, participants left immediately after the training hence the monitors did not meet the required sample of attendees.

Deworming Day			
Head teachers interviewed		30	30
Total number of schools monitored	4,548	30	30
Parents interviewed		30	18 ⁹
Enrolled children interviewed		60	60
Non-enrolled children interviewed		30	3 ¹⁰
Community Mobilization			
Households surveyed - Parents of enrolled children		60	59
Households surveyed - Parents of non-enrolled children		30	24 ¹¹
Coverage Validation			
Number of children		2,927	2,301 ¹²

4.0 Results

4.1 Review of LGA and teacher training

Prior to deworming implementation, a training cascade is initiated at the LGA level training of health and education officials, who then conduct teacher training. To share information and keep participants engaged, trainers are encouraged to use a combination of methods. The most common methods during the teacher training were lecture based presentations (85%), followed by discussion/participatory approach (52%), demonstrations (33%), and role plays (4%).

4.1.1 COVID-19 safety protocols

To limit the spread of COVID-19 infections and ensure the safety of all trainers and participants, adherence to public health measures, including hand washing/sanitizing and mandatory wearing of masks in public places, was recommended during trainings. However, only eleven-percent (11%) of the teacher training sessions correctly implemented both COVID-19 prevention/safety measures of handwashing/use of hand sanitizer and proper wearing of masks. Individually, participants in 67% of training centers were provided facilities for sanitizing/washing hands and all attendees and trainers in 19% of training centers wore masks.

4.1.2 Attendance during trainings

Phone calls (85%), SMS (74%), WhatsApp (41%), official letters (19%), and in-person communications (7%) were the most common means with which teachers reported being invited to the training. On average, 24 teachers were expected to attend each teacher training, but only an average of 20 attended, representing 82% of expected

⁹ On DD, monitors found parents in school during deworming in only 18 of 30 schools monitored.

¹⁰ Non-enrolled children were not available on deworming day in some of the monitored schools.

¹¹ There were difficulties in locating households where all children aged 5-14 do not attend school.

¹² Based on the WHO CES protocol, if a monitor visits a household and finds no target children, there should be no replacements made.

schools.¹³ However, teacher attendance rate is 15 percentage points higher than that noted in the last round of 2019. According to trainers, the key reasons why teachers did not attend the training included teacher inability to make it to school (43%), school/teacher unawareness (39%), late communications on change of date/venue (5%), schools not targeted (5%), fear of schools to attend due to their registration status (5%), and inadequate transport refund (5%). Ninety-three percent of the observed teacher training sessions had an attendance sheet.

Sixty-six percent (66%) of attendees from the LGA level training were on time for the sessions while 65% of teachers were on time for the teacher training.¹⁴ From post-training interviews, teachers that self-reported arriving late cited going to school/class first (54%), late invitations (28%), traveling long distance (15%), had other engagements at school (5%), and that they thought training was on a later date (3%).

4.2 Topic coverage

Seven topics are required to be covered in the training sessions, which are discussed in detail below. For the purposes of this report, the seven topics are compacted into five thematic areas (information on worms and target population, drugs and drug administration, side effects, recording and reporting forms, and roles and responsibilities). Monitors assessed the coverage of key messages within these five thematic areas as well as participants' pre- and post-training knowledge levels. During training observations, the monitors had a checklist with which to indicate if a topic was either covered completely, partially covered, not covered, or if wrong information was delivered. "Completely covered" means all the information and messages in a given topic were relayed.

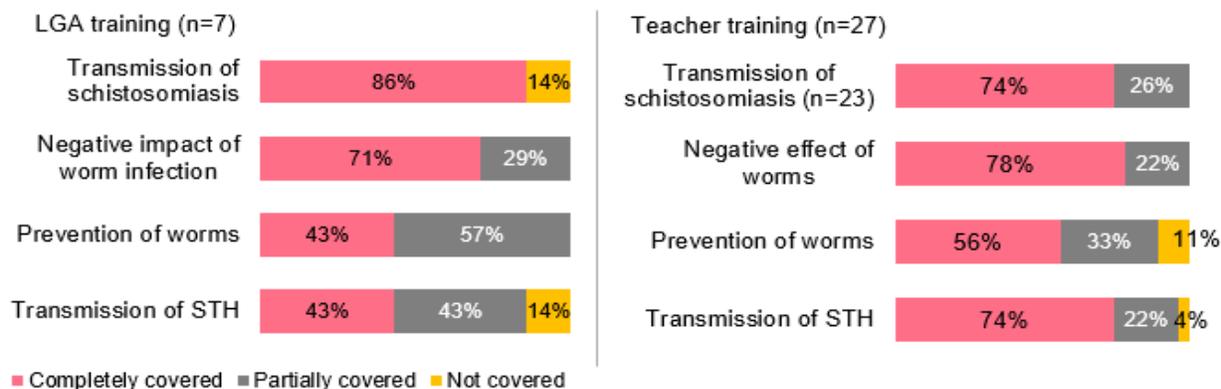
4.2.1 Information on worms and target population

The three messages regarding worms include prevention of worms, transmission of worms (STH and schistosomiasis), and the negative impact of worms. Among these, messages on transmission of schistosomiasis and STH were not covered in 14% of LGA trainings, while the 11% of teacher trainings did not cover the prevention of worms. (Figure 1).

Figure 1: Messages covered under "worms" during LGA and teacher trainings

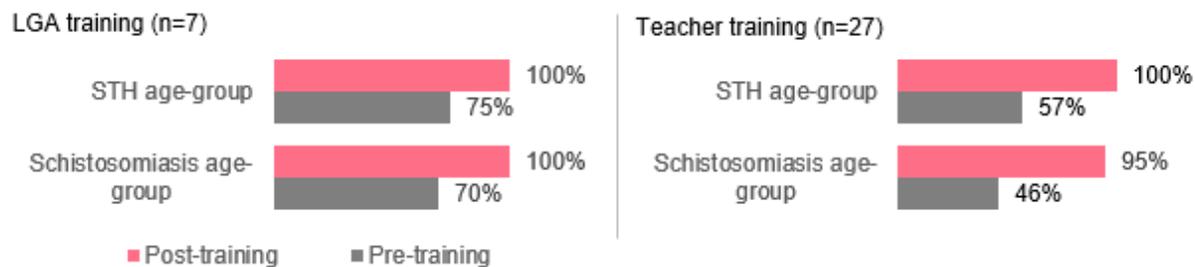
¹³ The current LGA teacher training surveys do not capture information on the number of expected attendees. These will be included in the next round of surveys.

¹⁴ This is 10 percentage points below the program target of 75% for timely attendance



Post-training interviews revealed that 98% of participants at the teacher training could cite the type of worms being treated, up from 62% pre-training. Additionally, 96% of respondents at teacher training could cite at least one way a child can get infected with worms, up 16 percentage points from pre-training interviews. All (100%) trainers at the LGA and 96% at the teacher training respectively covered the target group, which consists of all enrolled and non-enrolled children aged 5-14 years. Pre- and post-training knowledge levels of attendees at both training types are shown in Figure 2 below.

Figure 2: Pre- and post-training knowledge of the correct age-group



Trainers are also obligated to provide information on the exclusion criteria for treatment. This includes any sick children, children with a history of certain health conditions, under-age children and those shorter than the tablet pole for schistosomiasis treatment. These messages are key to minimizing the incidence of SAEs. Coverage of this criteria in both the LGA and teacher training is provided in Table 3 below.

Table 3: Training coverage of other non-eligibility criteria for treatment

	LGA Training (n=7)	Teacher Training (n=27) ¹⁵

¹⁵ These statistics are comparable with those from the last round: sick children (100%), history of certain health conditions (74%), children under 5 years (81%). For comparison purposes, these numbers were added to establish if coverage of content areas has improved. No comparable statistics are available for LGA training as 2020 was the first year of monitoring.

Sick children during deworming day	86%	96%
Children with a history of certain health conditions (SCH)	57%	74%
A child shorter than 94cm (SCH)	57%	-
Any child under 5 years (SCH)	100%	85%

Post-training, while none of LGA participants said that they would deworm sick children present during the MDA, 8% of teachers said they would deworm sick children, which is a potential concern.

4.2.2 Drugs and Drug Administration

Coverage of key messages about drug administration was higher at LGA training. Individual messages under this topic were covered in at least 86% of LGA training compared to at least 70% of teacher training sessions - (Table 4).

Table 4: Messages on drug administration covered during the trainings

MDA practice	Percent (Completely and partially covered)	
	LGA training (n=7)	Teacher training (n=27)
Schistosomiasis drug is praziquantel	100%	100% (n=23)
Dosage for schistosomiasis is one to five tablets, depending on height	86%	100% (n=23)
Ensure that the child has eaten prior to administration of praziquantel	100%	100% (n=23)
STH drug is mebendazole	100%	100% (n=8)
One mebendazole tablet to be given to each child	86%	100% (n=8)
Under the program, all drugs are free, safe and effective	100%	93%
Register enrolled children prior to deworming day and non-enrolled children on deworming day, prior to treatment.	100%	85%
Drugs must be stored in a clean, safe, dry and cool location	100%	81%
Under no circumstances should a child be forced to swallow the medicine	- ¹⁶	78%
Facilitate hand washing prior to treatment	-	70%

From post-training interviews, all (100%) participants in the LGA training knew the correct drugs for STH and schistosomiasis. Post-training knowledge of drugs used to

¹⁶ Information on these topics is part of LGA training, but observations were not collected during monitoring of LGA training in 2020 due the volume of information that is covered at the training. These will be collected during the next round of deworming training.

treat STH and schistosomiasis was also high (97% for both) among teachers. Similarly, all (100%) participants from the LGA training knew the correct dosages for STH and schistosomiasis. Post-training knowledge on correct dosage for STH and schistosomiasis was also high among teachers, with 97% and 95% respectively.

Apart from knowing the drug type and dosage, it is important to carefully follow certain drug administration steps. Each individual drug administration step was described in at least 41% of teacher training sessions. **Table 5** lists steps, in the correct order, as completely or partially covered during training. Five of the eleven steps were not covered in at least 15% of training.

Table 5: Drug administration steps covered during teacher trainings (n=27)¹⁷

Drug administration step	Completely covered	Partially covered	Not Covered
Step 1: Arrange the drug distribution site	48%	15%	37%
Step 2: Ensure necessary materials are available and are in place	52%	41%	7%
Step 3: Provide orientation to the children	67%	19%	15%
Step 4: Organize children accordingly	41%	26%	33%
Step 5: Let the child wash his/her hands	48%	22%	30%
Step 6: Register the child if non-enrolled	85%	11%	4%
Step 7: Use of tablet pole to measure children's height (n=23)	61%	35%	4%
Step 8: Administer the mebendazole drug	100%	-	-
Step 9: Administer the praziquantel drug (n=23)	83%	9%	9%
Step 10: Complete registration in the treatment register	81%	19%	-
Step 11: Observe the child for any side effects	67%	11%	19%

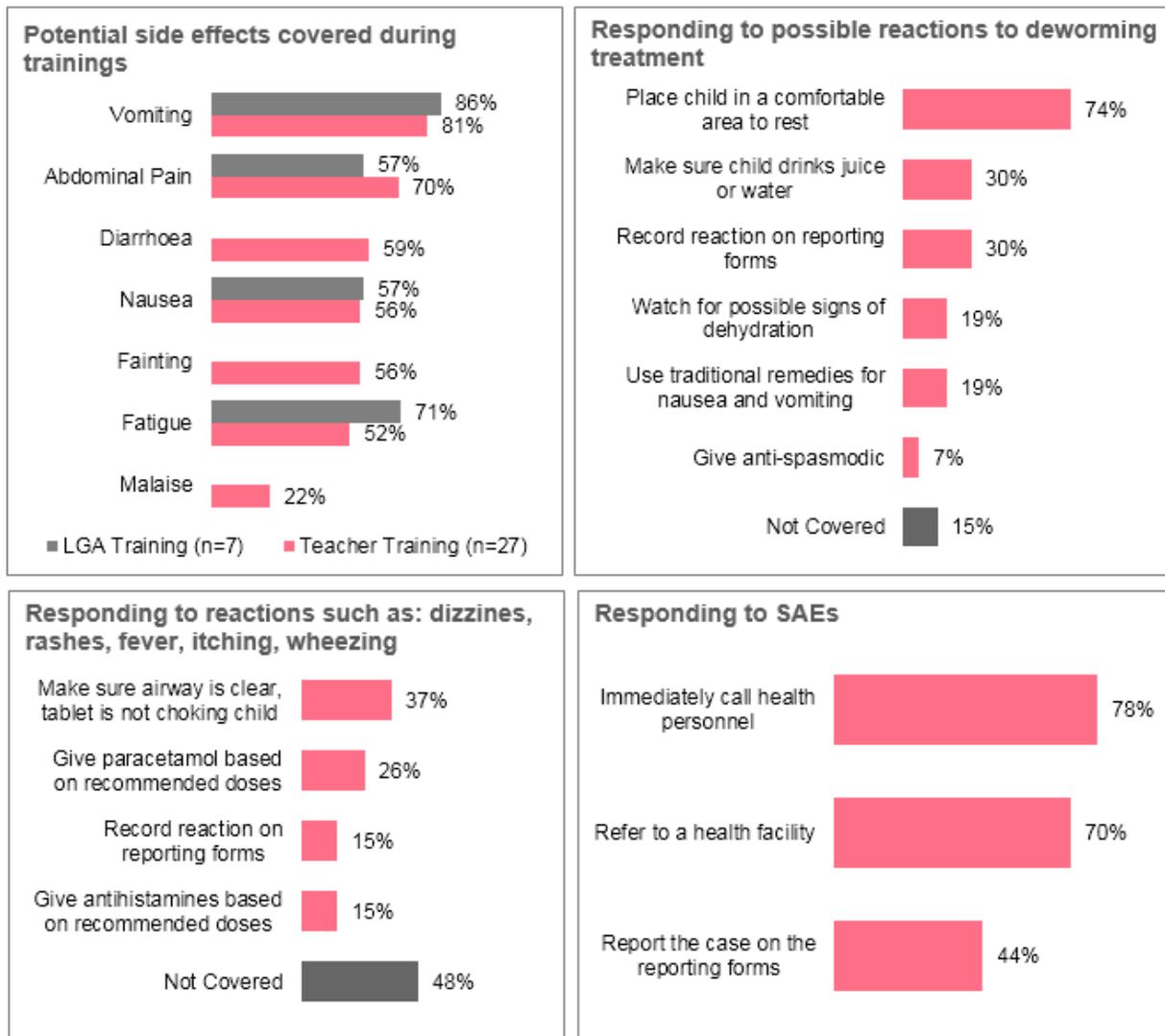
4.2.3 Side effects

Trainers provided information on potential side effects and SAEs to prepare teachers to manage such situations. In both training types, vomiting was most covered while malaise, fatigue, fainting, and nausea were least covered. All (100%) LGA trainings provided participants with steps to take in the event of SAEs, and this information was cascaded in 93% of teacher trainings (**Figure 3**).

Post-training, 90% of LGA attendees and 87% of teachers indicated that they would ensure children have eaten prior to administering praziquantel so as to minimize potential side effects. Additionally, 98% of the participants in teacher training could mention at least one side effect of schistosomiasis up from 67% in pre-training. Further information on knowledge of the potential side effects and SAEs covered in both LGA and teacher trainings, as well as the responses covered in teacher trainings is reflected in the **Figure 3** below.

¹⁷ Compared to 2019, six of the eleven steps in 2020 registered increases (complete or partial), with a range of increases of 8-24 percentage points.

Figure 3: Messages on side effects¹⁸

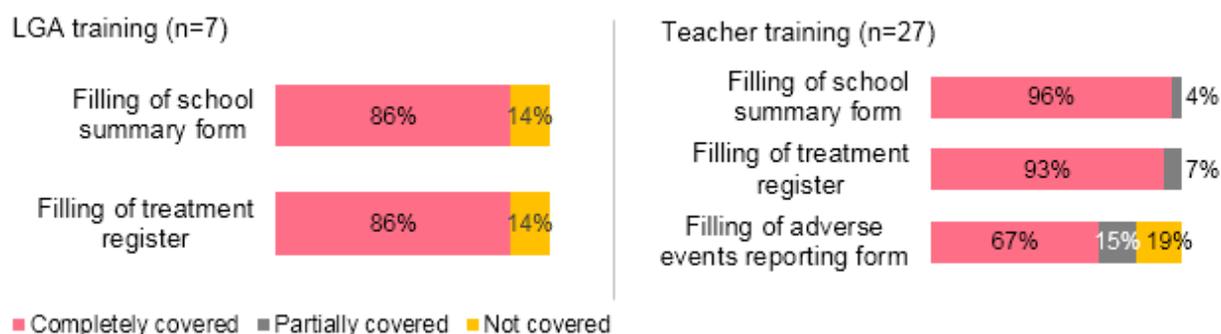


4.2.4 Recording and reporting forms

Teachers record the number of children treated at class and school levels, which emphasizes the need for the trainer to comprehensively cover this aspect. Trainers completely covered information on the school summary and treatment register forms in 86% of LGA and 93% of teacher training sessions. Practical sessions to fill both the treatment register and school summary form was held in all (100%) teacher training sessions monitored (Figure 4).

¹⁸ All messages were covered in both LGA and teacher trainings, although the observational tool for the LGA training omitted some of the highlighted messages

Figure 4: Messages covered under recording and reporting forms



From post-training interviews, 93% of teachers correctly identified the treatment register as the primary form they would use to record treatments. However, 58% of participants did not name it as the source document for the school summary form.

4.2.5 Roles and Responsibilities

Overall, individual teacher roles and responsibilities during deworming were covered in at least 85% of teacher training sessions, apart from mobilization of non-enrolled children (67%) and disseminating health education messages to children and parents (63%). The coverage of the roles of frontline health facility staff (37%-78%) and NTD coordinators (30%-44%) were not well covered, and decreased, on average, from the last round in 2019.¹⁹ Table 6 below provides details.

Table 6: Key MDA roles and responsibilities of various actors covered at the trainings (n=27)

Roles and responsibilities	Percent
Key teacher roles	
Organizing drug administration	89%
Form recording and reporting	85%
Mobilization of non-enrolled children	67%
Disseminating health education messages to children and parents	63%
Key FLHF staff roles	
Managing side-effects	78%
Managing, referring and reporting any children with SAEs	56%
Participate in community awareness creation	41%
To communicate the rationale of the intervention to community leaders	37%
NTD coordinator and educational secretary roles	
Receiving any unused drugs from the schools post-treatment	44%
Distributing appropriate quantities of drugs to teachers	37%
Compiling the treatment coverage report	30%

¹⁹ Range in last round in 2019: FLHF (60% - 76%) and NTD coordinator and educational secretary (32% - 48%)

From post-training interviews, 75% of teachers correctly identified the role of FLHF staff in the management of SAEs.

4.3 Distribution of drugs and materials

Trainers should receive key materials before training (drugs, reporting forms, tablet poles in schistosomiasis focused trainings) to aid in teacher training sessions, as well as to pass on to teachers.

In most teacher training sessions (81%), drugs for both STH and schistosomiasis treatment were available before the sessions began, and were distributed during all (100%) training sessions. Most sessions had tablet poles (78%) before training started, with distribution to 87% of the teachers from schools in attendance²⁰. Distribution of reporting forms was also high, with both the treatment registers and school summary forms distributed in all (100%) training sessions. A teacher training handout was present and distributed in all (100%) of the training sessions.

On deworming day 97% of schools had all the required drugs, reporting forms, and tablet poles, which points to a good supply chain for these key materials (Figure 5). Unfortunately, 23% of schools did not use the reporting forms to record treatment (though this is an improvement from 33% in the last deworming round).

Figure 5: Availability of all key materials across the implementation cascade²¹



From post-deworming interviews with head teachers, 97% indicated sufficiency of the initial drugs available. All the schools that did not have sufficient drugs on deworming day were able to contact the LGA Coordinator or LGA Educational Secretary to procure sufficient medicine to treat all children. Eighty-seven percent (n=30) of schools reported having a drug surplus post-deworming. Of these, 50% returned their surplus immediately, 46% planned for a mop-up before returning drugs to the LGA, and 4% planned to distribute them to teachers.

4.3.1 Community sensitization materials

Before the teacher training began, 93% of training sessions had posters available, and 93% of those had distributed them at the end of the session. On deworming day, 97%

²⁰ As most schools already had tablet poles, only schools that need a replacement were provided with poles.

²¹ All key materials include: drugs, reporting forms (treatment registers and school summary form) and tablet poles in schistosomiasis treating schools.

of schools had posters available, while 77% had the posters pinned, with head teachers reporting an average of 2 posters per school.

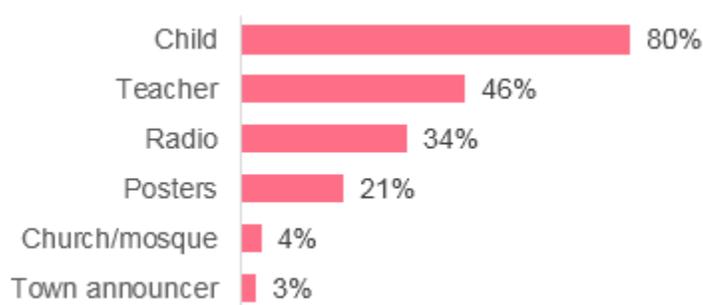
4.4 Community Sensitization

Community sensitization prior to deworming day is an evidence-supported factor critical for MDA success. On a deworming day, monitors held interviews with 83 parents (59 of enrolled children and 24 of non-enrolled children) within the community to gauge their awareness of MDA, as well as their sources of MDA information.

4.4.1 Implementation of community sensitization

Children (80%) and teachers (46%) were the most common sources of deworming day information cited by parents (Figure 6).

Figure 6: Sources of deworming day information cited by parents



4.4.2 Community knowledge

Prior to deworming day, 89% of all parents (equal to the last round of deworming), 100% of enrolled children and 63% of the non-enrolled children, were aware of deworming day. Generally, awareness among parents to non-enrolled children has levelled off over the past four monitoring rounds (Y3R2 - 62%, Y3R1 - 44%, Y2R1 - 63%, Y1R1 - 63%). More parents of enrolled children had taken their children for deworming in the past, compared to those of non-enrolled children (56% vs 29%).

Knowledge of other key deworming aspects was generally low among parents aware of deworming day²². Only 60% (10 percentage points lower than the last round of deworming) of the parents of enrolled children were aware of the target age-group for schistosomiasis, similar to the 55% (up from 52% in the last round of deworming) of parents aware of the STH target age-group. Sixty-seven percent of parents were not aware of the type of worms being treated, up 21 percentage points from the last round of deworming. Additionally, 98% of parents aware of deworming day indicated

²² Only 63% of teacher trainings described the dissemination of health messages to children and parents as a key teacher role. It is not far-fetched that teachers that attended the other 37% of trainings did not cascade this information to parents. This may hypothetically explain the low parental knowledge of these deworming aspects. While it is likely that these key aspects were conveyed in other sensitization channels, they might have been missed

receiving messages encouraging them to feed their children before deworming, with 96% of these parents reporting that they complied.

At the end of these interviews, 72%²³ (21 percentage points lower than last round of deworming) of all of the parents that were aware of deworming day indicated that they would be sending their children for deworming (93% of parents of enrolled and 21% of parents of non-enrolled). Of the 28% of parents that reported that they would not be sending their children to be dewormed that day, 26% cited a lack of awareness, 26% a fear of side effects, 13% that the child was unwell, 13% that children were not enrolled, 13% that the children will be dewormed later and, 9% that the children are healthy.

As part of the survey, parents were asked for their preferred methods of receiving future communication on deworming. Radio (69%), teachers (62%), and children (52%) emerged as top preferences, which correlates with the top sources of deworming day information cited by parents - **Figure 6**. It should also be noted that while the reach by other sources like religious and town announcers was low, their continual usage strengthens the confidence and trust of parents to allow their children participate in the deworming exercise. The experience from the program team is that parents place a lot of trust in their religious and traditional leaders and are more likely to participate in an intervention sanctioned by either parties.

Ninety-six percent (96%) of household interviews were conducted with strict adherence to [COVID-19 protocols](#) with only 4% of household (3 out of 83) interviews stopped or replaced due to safety concerns of the pandemic.

4.5 Deworming day

Thirty schools were monitored on deworming day, of which 85% were primary level, 5% were junior level, and 10% included both levels. By school type, 17% were public while 83% were private.²⁴ The purpose of the visit was to assess MDA procedures and interview the deworming team to assess their knowledge and capability to deliver the MDA.

4.5.1 Preparedness for Deworming Day

Eighty-four percent (84%) of head teachers interviewed at schools that were monitored had made plans to deworm, and all (100%) head teachers at schools that had made plans to deworm reported that either they or a teacher from the school had attended a training within a month of the MDA.

Monitor observations of school infrastructure revealed that 10% of schools lacked hand-washing facilities and 20% of schools did not have a toilet facility.

²³ Program target is 90%

²⁴ The random sample of schools for DD monitoring was not stratified by public/private school types, and the list schools participating in the deworming activity was majority private.

4.5.2 Deworming day delivery

Of the 30 schools that were originally sampled for deworming day monitoring, eight schools were replaced due to various challenges. Three did not attend the deworming training, two were not aware of deworming, parents did not give consent to have children dewormed in two, while the other one was not in session.

Of the originally sampled schools that were in session and had parent consent for deworming, 22 out of 27 were conducting deworming on the designated day, for a rate of 81%, an increase from just 70% in the previous round of deworming. The eight schools that were not conducting deworming were replaced to bring the total number of schools monitored on deworming day to 30.

4.5.2.1 Adherence to MDA procedures

Adherence to recording treatment procedure was generally high (for example 77% were using the correct treatment form). All (100%) schools gave the correct dosage of the mebendazole tablets to children and 83% of teachers requested children to chew the tablet - Table 7. A relatively high adherence (at most 97%) was noted for pre-deworming preparations. Instances of children being given drugs without asking if they were under medication were noted in 17% of schools, which is down from 27% in the previous round of deworming.

Table 7: MDA procedures observed by monitors during drug administration (n=30)

MDA practice	Percent
Pre-deworming preparations	
Deworming team comprised of two teachers	97%
Teachers ensured children washed their hands prior to treatment	63%
Health education messages were given to children prior to treatment ²⁵	57%
Drug Administration	
Teachers gave the correct dosage for mebendazole [1 tablet] (n=6)	100%
Tablet pole was used to determine praziquantel dosage (n=3)	100%
Teacher asked if child was sick or under medication before administering medicine	87%
Teacher asked child to chew the mebendazole tablet (n=6)	83%
Spoilt tablets were properly disposed (n=9) ²⁶	44%
Recording treatment	
All sections of the treatment register were filled out	77%
The teacher had transferred the names from the class register to treatment register prior to the deworming exercise	77%
The treatment register was used to record treatment	77%

²⁵ Previous rates: Y3R2 - 27%, Y3R1 - 17%, Y2R1 - 28%.

²⁶ Previous rates: Y3R2 - 88% (n=17), Y3R1 - 65% (n=20), Y2R1 - 88% (n=17).

Out of the 90% of schools that had handwashing facilities, only 63% ensured that children had washed their hands before deworming. However, compared to the rates noted in previous years, this is a big improvement which should be sustained in future rounds.

4.5.2.2 Management of side effects and referrals

In the sample of schools where Evidence Action monitors observed and collected data on deworming day, no incidences of side effects or SAEs were reported.

4.5.3 School coverage of eligible and non-enrolled children

All eligible children were treated in 17 out of 30 (57%) schools monitored. Thirteen schools experienced various levels of refusals by parents or by children which resulted in some children not being dewormed (exact number of refusals unknown). In 4 (13%) of the schools, there were reports of children being forced to swallow medicine against their wishes (Survey question: *NOTE: a teacher should only be considered to have used coercion if a punitive measure is applied to an attempt to make a child swallow a tablet, whether the punitive measure is physical or verbal.*). Sixty-eight percent of schools also took steps towards planning for absentees for treatment when they returned by recording their names on the treatment register.

While 70% of head teachers indicated that they had made plans to deworm non-enrolled children on deworming day, only 10% of the schools dewormed non-enrolled children, a statistic similar to the 10% noted in last deworming, the second round of 2019. Of the head teachers indicating that they did not have a plan to deworm non-enrolled children, 80% indicated non-enrolled children would not go to school while 20% cited not being informed during training to treat non-enrolled children.

5.0 Coverage Validation

Coverage validation was conducted in on randomly selected LGA within Ogun state – Ogun Waterside (treating for both STH and schistosomiasis), and one purposively selected LGA – Obafemi Owode (treating for schistosomiasis only). Obafemi Owode was purposively selected for coverage validation as requested by the program team, due to suspicion that the population denominator used for determining reported coverage is underestimated (one of the secondary purposes of CV).

5.1 STH Results

Table 8 shows coverage validation findings for STH. In Ogun Waterside LGA, 84% of SAC were offered deworming tablets (program reach), while 79% of SAC interviewed indicated that they had swallowed the drug (surveyed coverage). When comparing the surveyed coverage in Ogun Waterside (79%) to the government reported coverage (88%), the reported coverage is outside the surveyed coverage confidence intervals, but still within 10 percentage points of this interval, indicating that reporting systems

are working moderately well, but there is still room for improvement to guard against over-reporting. The surveyed coverage was above the WHO coverage threshold of 75%, indicating a successful MDA in this LGA.

Table 8: Coverage validation results for STH

Category	Program Reach			Surveyed Coverage			Reported Coverage	Number of children
	Mean (%)	95% CI lower bound	95% CI upper bound	Mean (%)	95% CI lower bound	95% CI upper bound		
Ogun Waterside	84%	82%	86%	79%	77%	82%	88%	1,170
Results by school type								
Public	88%	86%	90%	84%	81%	86%		998
Private	63%	54%	70%	59%	51%	67%		155
Results by enrollment status								
Enrolled	85%	83%	87%	80%	78%	83%		1153
Non-Enrolled	6%	0%	29%	6%	0%	29%		17
Results by gender								
Male	84%	81%	87%	79%	76%	82%		608
Female	83%	80%	86%	80%	76%	83%		562

5.2 Schistosomiasis Results

Table 9 shows the coverage validation results for schistosomiasis. The program reach in the two LGAs was above 80% - Obafemi Owode (81%) and Ogun Waterside (82%). The surveyed coverage in both LGAs (78% in both LGAs) also exceeded the recommended WHO coverage threshold of 75% for implementation success. The reported coverage in Ogun Waterside is outside the confidence bounds, but still within 10 percentage points of the surveyed coverage indicating that while the reporting systems are working moderately well, there is still room for improvement to guard against possible over-reporting.

On the other hand, the results in Obafemi Owode suggest issues with aggregation or calculation of treatment numbers, both because the reported coverage was outside the upper bound of the 95% confidence interval. This serves as confirmation of the suspicion that the denominator currently used to report treatment numbers is

underrepresenting the total population that is being targeted for treatment of schistosomiasis in Obafemi Owode.

Table 9: Coverage validation results for schistosomiasis

Category		Program Reach			Surveyed Coverage			Reported Coverage	Number of children
		Mean (%)	95% CI lower bound	95% CI upper bound	Mean (%)	95% CI lower bound	95% CI upper bound		
LGA	Obafemi Owode	81%	79%	84%	78%	75%	80%	93%	1,131
	Ogun Waterside	82%	79%	84%	78%	75%	80%	88%	1,170
Results by school type									
Obafemi Owode	Public	90%	88%	93%	87%	85%	90%		656
	Private	72%	68%	76%	67%	63%	72%		455
Ogun Waterside	Public	87%	85%	89%	82%	80%	84%		998
	Private	57%	49%	65%	55%	47%	63%		155
Results by enrollment status									
Obafemi Owode	Enrolled	83%	81%	85%	79%	77%	81%		1,111
	Non-Enrolled	0%	0%	17%	0%	0%	17%		20
Ogun Waterside	Enrolled	83%	81%	85%	79%	76%	81%		1153
	Non-Enrolled	6%	0%	29%	6%	0%	29%		17
Results by gender									
Obafemi Owode	Male	83%	79%	86%	80%	76%	83%		570
	Female	80%	76%	83%	76%	72%	79%		561
Ogun Waterside	Male	82%	78%	85%	77%	74%	80%		608
	Female	82%	78%	85%	78%	74%	81%		562

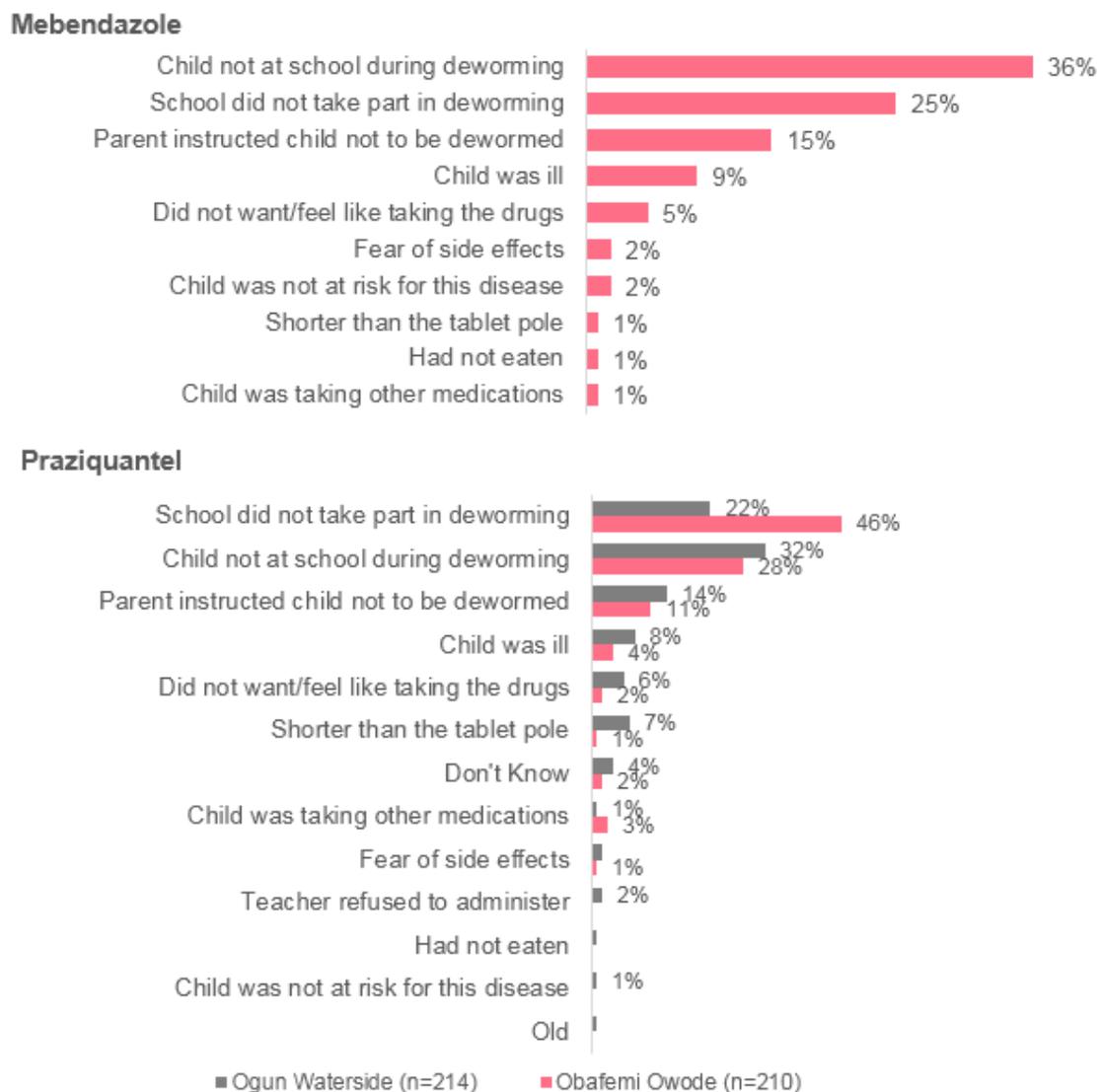
For both STH and schistosomiasis, the disaggregation, the disaggregation by gender and enrolment status are consistent with overall findings for both LGAs. On the other

hand, the program reached far fewer children in private schools in both LGAs, suggesting higher rates of refusal in private schools. In addition, the program reach and surveyed coverage were very low for non-enrolled children, though may be biased by the small sample size.

5.3 Reasons drugs were not given and non-compliance

Compliance rates (proportion of children who were offered the drug that swallowed it) were high in both LGAs – 95% for STH in Obafemi Owode and 95% for either treatment (STH and schistosomiasis) in Ogun Waterside. Figure 9 presents the reasons drugs were not given.

Figure 9: Reasons drugs were NOT given



5.4 Unprogrammed deworming

Ten percent (10%) of respondents (13% in Obafemi Owode, 8% in Ogun Waterside) reported having been dewormed outside the scope of this MDA, within six months of deworming day. The majority took these from home (79%), while 16% took from a chemist and another 5% from a health facility.

6.0 Recommendations

The year 2020 had unprecedented challenges with the COVID-19 pandemic casting uncertainty on the implementation of the MDA. Working the Ministry of Health, Evidence Action supported the state with the provision of PPE such as surgical face masks, gloves, hand hygiene, waste management materials, and sensitization materials, as well as contextualized COVID-19 protocols. These efforts all contributed to making the MDA implementation and preceding activities a reality and should be celebrated.

6.1 What worked well

Training:

- Attendance rates have improved over time, with 82% of expected schools in attendance for teacher training, which was 15 percentage points higher when compared to the last round of deworming (67%).
- Trainees are not only receiving the key messages on worms, but also retaining the information post training; 80% of the training sessions covered (complete or partial) the three key messages (prevention of worms, transmission of worms (STH and schistosomiasis), and the negative impact of worms), and 98% of participants at the teacher trainings could cite the type of worms being treated, up from 62% pre-training. Additionally, 96% of respondents at teacher training could cite at least one way a child can get infected with worms, up 16 percentage points from pre-training interviews. In post-training interviews, more than 95% of participants correctly responded to questions under the three key messages stated above.
- Information on the target group is well disseminated; post-training interviews revealed that all (100%) trainers at the LGA and 96% at the teacher training covered the target group, which consists of all enrolled and non-enrolled children aged 5-14 years, over 95% understood which drugs to use and key considerations during drug administration, and over 98% of teachers could cite at least one schistosomiasis side effect .
- In most teacher training sessions (81%), drugs for both STH and schistosomiasis treatment were available before the sessions began, and were distributed during all (100%) training sessions. Additionally, 93% distributed posters and tablet poles were distributed to all schools that required them.

Deworming Day Observations:

- The interest and approval rate of parents to send their kids for deworming is good, with 72% indicating that they would send their children for deworming.
- The supply chain and procurement of materials is working well, as 97% of participating schools had all the key materials (drugs, reporting forms, and tablet poles in schistosomiasis-focused training) on deworming day.
- Of the parents aware of deworming day, 98% indicated receiving messages encouraging them to feed their children before deworming, with 96% of these parents reporting that they complied. This is an important finding and shows community sensitization and mobilization is beneficial to sharing knowledge with parents. From a monitoring and evaluation perspective, more questions can be added to the survey to capture topics parents should be aware of, such as that treatment is safe and effective with minimal side effects, that if side effects occur it is a sign that the deworming medicine is working, and prevention messages beyond treatment to minimize potential re-infection following treatment.
 - The program has focused on certain activities to continue improving knowledge sharing between teachers, parents, and children. This includes the active involvement of parent forums and school management committees in creating awareness and mobilization of parents at the school level, and active stakeholders at the community level as well to share information.
 - The program is also using bulk mobile messaging to share information.
- Required materials (reporting forms, tablet poles, and drugs) were available in 97% of observed schools on deworming day, a 14-percentage point increase from the last round of deworming. All the schools that did not have sufficient drugs on deworming day were able to contact the LGA Coordinator or LGA Educational Secretary to procure sufficient medicine to treat all children. Posters were also available to 97% of headteachers on deworming day.
- Key steps during drug administration and the recording of treatments on deworming day were generally well performed:
 - All (100%) teachers provided the correct mebendazole dose and also used the tablet pole for praziquantel dosing.
 - Children were asked if they were on medication prior to medicine administration (87%).
 - Names were transferred from class registers to treatment registers in 77% of schools prior to deworming.
 - Compared to the last deworming round, handwashing prior to the administration of treatment improved (63% from 17%), and 57% of the health education messages were given to children prior to treatment.
 - Post-deworming, 4% of schools with drug surpluses planned to give the drugs to teachers, inconsistent with the guidelines issued.
 - There were no reported incidences of side effects (2 incidences noted in the last round of deworming) or SAEs from the sampled schools that were

monitored by Evidence Action which indicates quality delivery of the MDA by all key stakeholders.

6.2 What can improve

Training:

- Although training materials were updated with COVID-19 guidelines and protocols were in place for the training sessions, only 11% teacher training sessions were observed to provide hand washing and sanitation facilities for trainees and ensured that all attendees were wearing masks correctly. The program team should look to see how they can improve adherence during training.
- Despite the teacher training materials being standardized across LGAs, not all information is shared equally, as some trainers skip over certain sections to save time or teachers do not attend all the sessions, as schools can not afford to let their teachers take time off for training (especially private schools). Therefore, teachers who attend late or only part of the full training miss certain topics. Advocacy visits to education stakeholders should take place before the next round to discuss the importance of attending the entire training.
- Information on drugs and what drug administration steps to follow needs to be covered completely. Each individual drug administration step was described in at least 41% of teacher training sessions, but the program team can look at priority steps (see below) to focus on the importance of the topic.
 - Although there was an increase in hand washing prior to the administration of treatment (63% from 17%), and 57% of the health education messages were given to children prior to treatment, it is important to discuss these steps in detail during training and on deworming day.
 - Hand washing is not only a measure to prevent the spread of COVID-19, but to minimize or prevent reinfection of STH. This is a simple behavior change and communication steps that should routinely occur.
 - Health education is a simple and effective step that is necessary prior and during deworming to increase compliance and reduce anxiety and possible treatment refusal.
 - Even though the screening of children for sickness was high (87%), it is essential that teachers do not treat a sick child, a child on medication, or a child with a history of seizures. Even though screening of children was conducted at a high rate, it is extremely important not to treat a sick child, a child on medication, or a child with a history of seizures. While deworming medicines are safe, treating one of these children is not, and therefore every child should be screened before being dewormed.

- Even though 83% of children chewed the tablet, every child should be instructed to chew the tablet with teachers/administrators checking each person's mouth to ensure that the tablet is chewed and fully swallowed to minimize any risk of choking.
- More attention needs to be given to covering all types of adverse side effects, as types of side effects received the lowest coverage, and the importance of complete filling of the adverse events reporting form was completed in only 67% of the teacher training sessions.
- Steps to take in the event of a SAEs should be emphasized in future training, as 7% of the teacher training did not provide participants with steps to take in the event of SAEs.
- While overall teacher training attendance increased from the previous round (82%, up from 67%), participant arrival on time at the LGA and teacher training was low (66% and 65% respectively). For teacher training, this is 10 percentage points lower than that noted in the last round of deworming. Communications to schools to release teachers early, as well as making prompt communication to those expected in attendance to make necessary preparations to attend the training should be emphasized. The program will continue to focus on training quality and ensuring attendance is high. Additionally, the program can look at the relationship between teachers attending training and knowing their roles and responsibilities which could lead to higher treatment coverage on deworming day.
- The program should review the overall training cascade which can affect the overall quality/level of mobilization within the schools and impact treatment coverage. It is important to review the need for schools/teachers to disseminate key deworming messages to students and parents prior to deworming as a priority responsibility (aside from the actual deworming day activities). Additionally, the program can review the key messages within the training materials to ensure all key messages are there and easy to reference and use in schools prior to deworming day. An option to be considered is that, teachers can share key findings during the next teacher training so teachers can see what an impact they have on the program (i.e. the importance of sharing key messages, health education prior to deworming to avoid refusals, decrease anxiety and SAEs, etc.).

Deworming Day Observations:

- At 13% of schools, teachers did not ask whether children were sick before administering deworming tablets. It is important to emphasize during the training cascade that teachers are to screen every child before they are treated. Children feeling ill or sick, taking medication, and children with a history of certain health conditions (epilepsy, sickle cell, and central nervous disorders), under-age children and those shorter than the tablet pole for schistosomiasis treatment should not be treated.

- The program should look at advocacy measures around increasing enrollment rates among non-enrolled children:
 - Teacher training sessions (85%) covered the importance of teachers on deworming day with specific topics such as mobilization of non-enrolled children (67% of trainings) and disseminating health education messages to children and parents (63% of trainings).
 - However, 70% of head teachers indicated that they had made plans to deworm non-enrolled children on deworming day, only 10% of the schools dewormed non-enrolled children, a statistic similar to the 10% noted in the last deworming round in 2019.
 - Of the head teachers indicating that they did not have a plan to deworm non-enrolled children, 80% indicated non-enrolled children would not go to school while 20% cited not being informed during training to treat non-enrolled children.
- Awareness of deworming day was at 88% among all parents interviewed. Additionally, children (11%-15%) who did not receive the drug indicated during coverage validation that the parent had instructed them not to be dewormed. These statistics point to challenges not only in deworming day awareness, but also to information about deworming and drugs. The program should look at the overall communication and mobilization strategy to see what modes should be prioritized. This should include radio messaging through appropriate channels, health education, and messaging from teachers to students/parents in a variety of cost-effective ways, while other methods such as town announcers, posters, and religious locations can be deprioritized.
- The program needs to continue to work with the teachers during training and on deworming day on the importance of filling out the treatment forms correctly, as 23% of schools did not use the reporting forms to record treatment (though this is an improvement from 33% in the last deworming round). This is a recurring challenge, as the teachers are focused on treating children and then returning to their primary duties rather than filling out the forms. Better planning and training with the state teams will help ensure teachers know the importance of the forms during training.
 - An additional challenge the program should review is the fact that many teachers responsible for filling the treatment forms were not the same teachers that attended the training and did not receive the capacity building that training provides. The program should consider emphasizing in training that the teacher who attends the training should be responsible for completing the treatment forms, or provide specific guidance to the teacher that is responsible.
 - Improving teacher motivation and engagement should be emphasized, as teachers consider the MDA as just an additional activity that does not fit into their mainstream teaching responsibilities.
- Reported coverage could not be validated for either treatment types, in either LGA surveyed. The program should continue efforts to increase reporting

quality to ensure that government treatment rates are accurate. In addition, reported coverage rates in Obafemi Owode for schistosomiasis treatment was at least ten percentage points greater than the surveyed coverage rates from coverage validation. This could confirm the program's suspicion that the population denominator used to calculate treatment coverage in Obafemi Owode is underrepresenting the true target population, and the program team should use this information to advocate for updated estimates from the state government.