Evidence Action

Deworm the World Initiative

Independent Monitoring of National Deworming Day in Madhya Pradesh

February 9, 2018

REPORT

May 2018

Background

During each round of National Deworming Day (NDD), Evidence Action conducts independent monitoring, which includes process monitoring on NDD and mop-up day and a coverage validation post NDD through an independent survey agency to assess the planning, implementation and the quality of the program with an objective of identifying gaps and suggesting recommendations for improvements in future NDD rounds. Process monitoring is conducted to understand government implementers' preparedness for NDD and their adherence to the program's prescribed processes, while, coverage validation is an ex-post check of the accuracy of the reporting data and coverage estimates to verify government reported coverage (treatment) figures.

Madhya Pradesh observed the February 2018, on February 9; followed by mop-up day on February 15. Fieldwork for coverage validation in the state happened over a period of six days from February 21-28.

This extract is a summary of the broad findings from the state of Madhya Pradesh.

Methodology

A two-stage probability sampling procedure was adopted to select 250 schools and 250 *anganwadis* for monitoring visit during process monitoring on NDD and mop-up day and 640 schools and 610 *anganwadis*[1] for coverage validation. For process monitoring *anganwadis* nearby the sampled schools were selected. Through a competitive review process, Evidence Action hired an independent survey agency to conduct process monitoring and coverage validation. Evidence Action designed and finalized survey tools with approvals from the state government. One combined tool was used for process monitoring at schools and *anganwadis* on NDD and mop-up day and one each for schools and *anganwadis* for coverage validation.

Implementation

Prior to the survey, Evidence Action conducted a one-day comprehensive training of master trainers who further conducted a two-day training of 180 surveyors and supervisors (including buffer surveyors) which included a brief orientation on NDD, the importance of independent monitoring, details of the monitoring formats including CAPI practice, survey protocols and mock interview sessions. Each surveyor was allotted one school and one *anganwadi* for process monitoring on NDD and mop-up day and subsequently, five schools and five *anganwadis* for coverage validation. Surveyors were provided with a tablet computer, charger, printed copy of monitoring formats as backup, and a sample of albendazole tablet for demonstration during data collection. The details of sampled schools were shared with the surveyors one day before

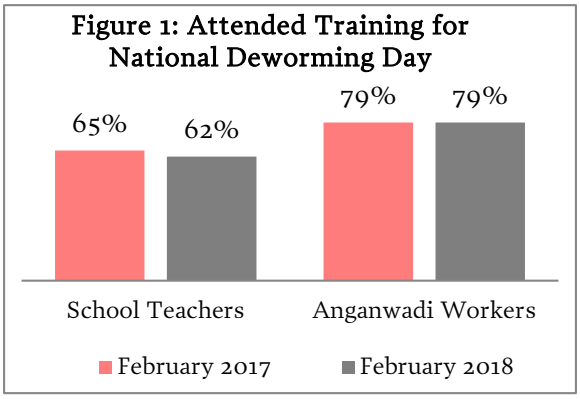
[1] *The sample covered for anganwadis was lower than the stipulated sample size due to the strike of anganwadi workers in some districts of Madhya Pradesh during the course of fieldwork. The same was compensated by covering a higher sample for schools.*

the commencement of fieldwork to ensure that they did not contact schools and *anganwadi s*in advance, as this could cause bias in the results.

Appropriate quality assurance measures were taken to ensure that the data collected was accurate, consistent and authentic. Some of the measures taken included taking a signed and stamped participation form the school and *anganwadi* staff to verify the visit. Further, surveyors took photographs of schools and *anganwadis* collected during data collection as an authentication of the location of the interview. Evidence Action reviewed all the data sets, shared the feedback to the agency for any inconsistencies observed. All the analysis was performed using STATA and Microsoft Excel.

Key Findings

Training



Prior to each NDD round, teachers and *anganwadi* workers in the state are trained on the processes and protocols of the program to ensure effective implementation. Integrated distribution of drugs and IEC materials is an integral part of the trainings. The survey findings show that 62% of schools and 79% of AWWs attended the training for the February 2018 NDD round. The training attendance is similar to that of the February 2017 round for both schools and *anganwadis* (Annex Table PM1).

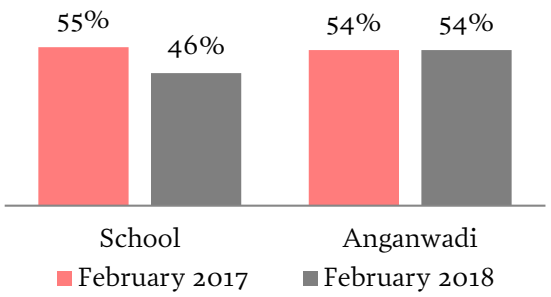
Lack of awareness of the date and time of training was cited as the main reason for not attending NDD training by 45% of schools and 40% of AWWs. Further, 64% of trained teachers provided training to all other teachers in their schools. Roughly 60% of schools and *anganwadi* workers reported to have received an SMS for the current round of deworming in the state. This is lower than the February 2017 round, when 68% of school and *anganwadi* workers had reported receiving an SMS for deworming (Annex Table PM1).

Amongst private schools, training attendance for NDD February, 2018 was very low. Only 23% of private schools reported to have attended the February 2018 round of NDD training (Annex Table PM7).

Integrated Distribution of NDD Kit Including Drugs

Although mandated in the NDD guidelines, integrated distribution was sub-optimal for both schools and *anganwadis.* The survey results show that only 46% of schools and 54% of *anganwadis* reported receiving drugs and IEC materials during the training. Though the figure for *anganwadis* has remained unchanged from the previous round, there has been a decline in the figure for schools compared to the previous NDD round.

Figure 2: Integrated Distribution



Of the total schools and *anganwadi* centers surveyed, 90% of schools and 84% of AWWs reported that they received *albendazole* tablets. The corresponding figure for posters/banners was 93% for schools and 89% for *anganwadis* and for handouts/reporting forms it was 94% for schools and 89% for *anganwadis* (Annex Table PM4).

Source of Information about the Recent Round of NDD

Training followed by SMS were the most salient sources of information about the current round of deworming in the state. Thirty-eight percent of school teachers and 52% of AWWs mentioned that they received information about NDD through training, whereas 44% of schools and 42% of AWWs reported to have information about NDD via SMS. Information about the February 2018 round of NDD, was shared via WhatsApp by 32% of school workers compared to 19% of *anganwadi* workers (Annex Table PM1).

About 27% of school teachers and 29% of *anganwadi* workers received information about the NDD round from other school teachers/ AWWs Thirty-one percent of school and 24% of *anganwadi* workers mentioned newspaper and 29% of school and 25% of *anganwadi* workers mentioned television as the source of information for the current round of deworming (Annex table PM1).

NDD Implementation

From the coverage validation survey findings, 82% of schools and 94% of *anganwadis* dewormed children during the February 2018 round of NDD and mop-up day (Annex Table CV1).

The coverage figures are further corroborated by the observations made during process monitoring, which reported that 82% of schools and 94% of *anganwadis* covered in the survey had observed deworming either on NDD or on mop-up day. Compared to the previous round, for *anganwadis* coverage has gone up marginally from 91% in February 2017 to 94% in the current round. However, for schools there is a sharp decline in coverage from 95% in February 2017 to 82% in the current round. Lack of information (mentioned by 73% school and 50% *anganwadi* workers) and unavailability of drugs (mentioned by 21% school and 9% *anganwadi* workers) were the key reasons reported for not observing NDD (Annex Table CV1).

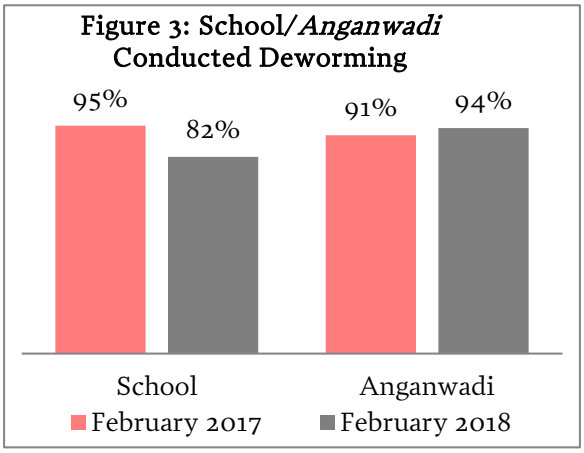


Figure 3: School/*Anganwadi* Conducted Deworming

Amongst the private schools, 50% of schools observed deworming either on NDD or mop-up day. (Annex Table CV1)

Adverse Events – Knowledge and Management

A ajority of school teachers and *anganwadi* workers (64% of school teachers and 71% of AWWs) knew that adverse events could occur during the process of deworming (Annex PM6). Among those who were aware of adverse events, there was basic knowledge of potential adverse events that can occur during deworming. Interviewed school teachers, including headmasters, principals, and *anganwadi* workers were able to accurately name at least one symptom of an adverse event. Vomiting was the most salient adverse event recalled by 88% of school teachers and 83% of AWWs. Mild abdominal pain was the second most salient adverse event mentioned by 74% of school teachers and 77% of AWWs (Annex PM6). Further, 60% of school teachers and 65% of AWWs were aware that they needed to make a child lie down in an open, shady place in case of any adverse symptoms. Over half of schools (64%) and *anganwadis* (70%) were also aware to give ORS/water to a child experiencing symptoms. Further, a high percentage of schools and *anganwadis* (80% and 92% respectively) had the phone numbers of the nearest MPW/ANM/PHC/ Health officials (Annex PM6). Accredited Social Health Activists (ASHAs) are the frontline worker in *anganwadis* and in 70% of the *anganwadis* they were present and assisting in deworming activities (Annex PM6).

Recording Protocol

As per coverage validation data, 58% of schools and 59% of *anganwadi*s followed the correct recording protocol (single and double ticks) after giving the tablets to children. 10% of schools and 15% of *anganwadis* followed partial recording protocol whereas 32% of schools and 26% of *anganwadis* did not follow any protocol (Annex CV3).

As recommended in NDD guidelines, awareness of retaining one copy of the school/*anganwadi* report form before submission was high both among school teachers (84%) as well as

anganwadi workers (90%) (Annex PM2). Further, it was observed that the reporting form was available in only 67% of schools and 64% of *anganwadis* (Annex CV1).

ASHAs are required to prepare a list of out-of-school/ unregistered children and submit it to AWWs. However, the coverage validation data suggests that the compliance on this metric was rather low with just 41% of *anganwadi* workers having the list of unregistered children (1-5 years) and out-of-school children (6-19 years) respectively (Annex CV1).Only 17% of ASHAs who were available in *anganwadis* at the time of monitoring visits reported receiving incentives for the February 2017 round.

Coverage Validation

Coverage validation provides an opportunity to assess the accuracy of reported data and verify government-reported treatment figures. Verification factors[2] are common indicators to measure the accuracy of reported treatment values for neglected tropical disease control programs.[3] Coverage validation also gives us an idea about record keeping and data management at the service delivery point. The verification factor was estimated on the basis of the availability of a copy of reporting forms at schools and *anganwadis*. The state-level verification factor for school-enrolled children was 0.56, indicating that on average, for every 100 dewormed children reported by the schools, fifty-six were verified either through single or double tick through available documents at the schools. Similarly, the overall state-level verification factor for children dewormed at *anganwadis* was 1.19, indicating that on average, for every 100 dewormed children reported by *anganwadis,* one-hundred and nineteen were verified through available documents (Annex CV3).

Category-wise verification factors for registered (1-5 years), unregistered (1-5 years) and out-of-school (6-19 years) children were 0.86, 2.76 and 1.68 respectively for *anganwadis*. (Annex CV3). The data suggests under reporting of coverage figures particularly for unregistered and out-of-school children in *anganwadis*, therefore, highlighting a need for proper record keeping. Despite challenges in reporting and documentation of NDD coverage data, based on child interviews, the majority of the children present at schools on NDD or mop-up day received (96%) and consumed (98%) the albendazole tablet on either NDD or mop-up day.

Against the state government reported 90% coverage in schools and 92% coverage for 1-5 years registered children in *anganwadis*, attempts were made to understand the maximum number of children that could have been dewormed in the schools and *anganwadis* through coverage validation data. The NDD treatment coverage in schools was estimated considering the maximum attendance of children on NDD dates. Coverage validation data showed that 82% of schools conducted deworming on either NDD or mop-up day (Annex-Table CV1), a

[2]A verification factor of 1 means the schools reported the exact same figures that they recorded on deworming day. A verification factor less than 1 indicates over-reporting, while a verification factor greater than 1 indicates under-reporting.

[3]WHO (2013), Data Quality Assessment tool for Neglected Tropical Diseases: Guidelines for Implementation December 2013.

maximum of 88% of children were in attendance (Annex-Table CV3), 96% of children received an albendazole tablet, and 94% of children reported to consume the tablet under supervision (Annex-Table CV4). Considering these factors, 65% (0.82*0.96*0.88*0.94) of enrolled children could have been dewormed in the schools. Since interviews of children are not conducted in *anganwadis*, the verification factor of 1-5 years registered children from coverage validation data is applied to government reported coverage data for the same category. It was estimated that around 79% (0.86*0.92) of registered children in *anganwadis* could have been dewormed. The calculation of verification factors is based on only those schools and *anganwadis* where a copy of the reporting form was available for verification. Therefore, adjusted coverage in schools and *anganwadis* based on verification factors needs to be interpreted with caution.

Recommendations:

Following are the key recommendations for program improvements that emerged from the process monitoring and coverage validation exercise in the state.

1. The participation of school teachers and *anganwadi* workers in training for the February 2018 NDD round is almost similar to the February 2017 round. The overall training attendance of school teachers was relatively low due to less participation of private schools in training (Government schools= 71% vs. Private schools = 22%). Additional efforts need to made to improve training participation among private teachers to ensure high training attendance in upcoming rounds. The participation of the teachers irrespective of government and private schools, and *anganwadi* workers need to be leveraged in the next round of NDD to ensure successful implementation of a high quality NDD program.

2. Lack of awareness of the date and time of training was cited as the key reason of not attending the NDD training. Therefore, to improve the reach of information, contact information needs to be updated to include the phone numbers of all functionaries. Block level trainings should be planned and communicated in advance and tracked and monitored by the respective departments at the district and block levels. Delays or rescheduling should be avoided through effective planning.

3. While a significant decrease in integrated distribution is evident from the February 2017 to February 2018 in schools, it remained the same and low in *anganwadis.* Low integrated distribution of the NDD kit can be attributed to failure in delays in drug delivery and delays in the arrival of WHO supported drugs from the GOI. Timely printing of IEC materials should be ensured at the state—level to ensure integrated distribution at block level trainings.

4. ASHAs continue to have a key role to play in the success of the program. Although their presence in *anganwadis* on NDD has been encouraging, mobilizing out of school children and preparing lists of out-of-school/unregistered children is still low. Only

41% of *anganwadi* workers confirmed receiving the list of out-of-school/unregistered children on time. ASHA participation could be further strengthened by highlighting the role of ASHAs in the joint directive, encouraging their participation in training sessions, community mobilization, and sending reminder SMS to them with information on incentives.

5. Although adherence to correct recording protocols has improved from the February 2017 to February, 2018 in both schools and *anganwadis*, there is scope for further improvement. Greater emphasis on correct recording protocols through training and reinforcement messages will be helpful. Special attention on recording protocols need to be given during sub-district level trainings.

6. Coverage validation findings revealed improvement in the availability of reporting forms at schools and *anganwadis* from the previous round. Along with providing two copies of reporting forms during training, trainers should continue to emphasize the importance of maintaining a copy of reporting forms.

7. The maximum attendance observed in schools in February 2018 remains low leading to low NDD coverage among school-enrolled children. Emphasis should be given to maintain high attendance on NDD days by mobilizing children who are not in regular attendance in order to achieve universal NDD coverage.

Annexure

Table A: Sample Description including Number of Schools and *Anganwadis* Covered during Process Monitoring

Sample Details	Number
Total number of NDD districts in the state	51
Number of districts covered under process monitoring	51
Number of trained monitors deployed during process monitoring	125
Number of blocks[4] covered during process monitoring	125
Total number of schools covered	250
• Number of government schools covered[5]	202
• Number of private schools covered	48
Total number of *anganwadis* covered[6]	250

Findings from process monitoring

Table 1: Training and source of information about NDD among teachers/headmasters and *anganwadi* workers, February 2018

Indicators	School			*Anganwadi*		
	Denominator	Numerator	%	Denominator	Numerator	%
Attended training for current round of NDD	250	154	62	250	197	79
Ever attended training for NDD[7]	250	173	69	250	209	84
Never attended training for NDD	250	77	31	250	41	16
Reasons for not attending NDD training (Multiple Response)						
Location was too far away	96	10	10	53	3	6
Did not know the date/timings/venue	96	43	45	53	21	40
Busy in other official/personal work	96	13	14	53	6	11
Attended deworming training in the past	96	19	20	53	12	23
Not necessary	96	8	8	53	7	13
No incentives/no financial support	96	2	2	53	1	2
Trained teacher that provided training to other teachers in their schools						
All other teachers	154	98	64	NA	NA	NA
Few teachers	154	23	15	NA	NA	NA
No (himself/herself only teacher)	154	12	8	NA	NA	NA
No, did not train other teachers	154	20	13	NA	NA	NA

[4]These are sampled blocks selected from DISE data.

[5]These are the actual schools covered during NDD and MUD visits. Numbers given in subsequent tables (numerator and denominator) are weighted

[6]These are the actual anganwadis covered during NDD and MUD visits. Numbers given in subsequent tables (numerator and denominator) are unweighted.

[7] Includes those school teachers and *anganwadi* workers who attended training either for NDD February2018 or attended tanning in past.

Indicators	School			*Anganwadi*		
	Denominator	Numerator	%	Denominator	Numerator	%
Source of information about current NDD round (Multiple Response)						
Television	250	73	29	250	62	25
Radio	250	40	16	250	44	18
Newspaper	250	78	31	250	59	24
Banner	250	62	25	250	76	30
SMS	250	110	44	250	106	42
Other school/teacher/*anganwadi* worker	250	68	27	250	72	29
WhatsApp message	250	79	32	250	48	19
Training	250	94	38	250	129	52
Others	250	22	9	250	30	12
Received SMS for current NDD round	250	149	60	250	148	59
Probable reasons for not receiving SMSs						
Changed Mobile number	101	40	40	102	32	31
Other family members use this number	101	6	6	102	21	21
Number not registered to receive such messages	101	29	29	102	24	24
Others	101	26	26	102	25	25

Table 2: Awareness about NDD among teachers/headmasters and *anganwadi* workers, February 2018

Indicators	School			*Anganwadi*		
	Denominator	Numerator	%	Denominator	Numerator	%
Awareness about the ways a child can get worm infection	250	198	79	250	215	86
Different ways a child can get worm infection (Multiple Response)						
Not using sanitary latrine	198	105	53	215	105	49
Having unclean surroundings	198	156	79	215	167	78
Consume vegetables and fruits without washing	198	138	70	215	127	59
Having uncovered food and drinking dirty water	198	119	60	215	123	57
Having long and dirty nails	198	109	55	215	124	58
Moving in bare feet	198	125	63	215	145	67
Having food without washing hands	198	139	70	215	138	64
Not washing hands after using toilets	198	97	49	215	109	51
Awareness about all the possible ways a child can get a worm infection[8]	198	45	23	215	44	20

[8]Includes those who were aware that a child can get worm infection if she/he does not use sanitary latrine, have unclean surroundings, consume vegetable and fruits without washing, have uncovered food

Perceives that health education should be provided to children	250	233	93	250	241	96
Awareness about correct dose and right way of administration of albendazole tablet						
1-2 years of children (Crush the half tablet between two spoons and administer with water)	NA	NA	NA	250	191	76
2-3 years of children (Crush one full tablet between two spoons, and administer with water)	NA	NA	NA	250	125	50
3-5 years of children (one full tablet and child chewed the tablet properly)	NA	NA	NA	250	186	74
6-19 years of children (one full tablet and child chewed the tablet properly)	250	223	89	250	214	86
Awareness about non-administration of albendazole tablet to sick child						
Will administer albendazole tablet to sick child	250	46	19	250	63	25
Will not administer albendazole tablet to sick child	250	204	82	250	187	75
Awareness about consuming albendazole tablet						
Chew the tablet	250	236	95	250	248	99
Swallow the tablet directly	250	14	6	250	2	1
Awareness about consuming albendazole in school/*anganwadi*	250	242	97	250	244	98
Awareness about the last date (February 22, 2018) for submitting the reporting form	250	124	49	250	126	50
Awareness about submission of reporting forms to ANM	250	122	49	250	165	66
Awareness to retain a copy of the reporting form	250	209	84	250	224	90

Table 3: Deworming activity, drug availability, and list of unregistered and out-of-school children, February 2018

Indicators	School			*Anganwadi*		
	Denominator	Numerator	%	Denominator	Numerator	%
Albendazole tablet administered on the day of visit						
Yes, ongoing	250	128	51	250	156	62
Yes, already done	250	43	17	250	48	19
Yes, after sometime	250	30	12	250	23	9
No, will not administer today	250	49	20	250	23	9

and drinking dirty water, have long and dirty nails, moves in bare fee, have food without washing hands and not washing hands after using toilets.

Schools/*anganwadis* conducted deworming on either of the day[9]	250	208	83	250	232	93
Schools/*anganwadis* conducted deworming on NDD[10]	124	102	82	123	112	91
Schools/*anganwadis* conducted deworming on Mop-Up Day[11]	126	100	79	127	115	91
Reasons for not conducting deworming						
No information	42	22	52	18	10	56
Albendazole tablet not received	42	12	29	18	5	28
Apprehension of adverse events	42	1	2	23	-	-
Others[12]	42	7	17	23	3	13
Attendance on NDD[13]	19514	13212	68	NA	NA	NA
Attendance on Mop-Up Day[14]	22516	17661	78	NA	NA	NA
Anganwadis having list of unregistered/out-of-school children	NA	NA	NA	250	135	54
Out-of-school children (Age 6-19 years) administered albendazole tablet	NA	NA	NA	250	194	78
Unregistered children (Age 1-5 years) administered albendazole tablet	NA	NA	NA	250	183	73
Sufficient quantity of albendazole tablets[15]	211	198	94	236	216	92

[9]Schools/*anganwadis* administeredalbendazole tablet to children either on NDD or Mop-Up Day
[10]Based on the samples visited on NDD.
[11]Based on the samples visited on Mop-Up Day only.
[12]Others include 'children not present', 'Don't know' and 'owing to exams'
[13]Based on those schools conducted deworming on NDD
[14] Based on those schools conducted deworming on Mop-Up-Day
[15] This indicator is based on the sample that received albendazole tablet.

Table 4: Integrated distribution of albendazole tablets and IEC materials, February 2018

Indicators	Schools			*Anganwadi*		
	Denominator	Numerator	%	Denominator	Numerator	%
Items received by school teacher and anganwadi worker						
Albendazole tablet	250	211	84	250	236	94
Poster/banner	250	183	73	250	212	85
Handouts/ reporting form	250	187	75	250	203	81
Received all materials	250	169	68	250	190	76
Items verified during Independent Monitoring						
Albendazole tablet	211	204	97	236	229	97
Poster/banner	183	176	96	212	206	97
Handouts/ reporting form	187	182	97	203	198	98
Received all materials	169	160	95	190	178	94
No of school teachers/anganwadi worker attended training and received items during training						
Albendazole tablet	147	132	90	193	162	84
Poster/banner	134	124	93	175	155	89
Handouts/ reporting form	139	131	94	174	154	89
Received all materials	169	114	67	190	135	71
Integrated Distribution of albendazole tablet IEC and training materials[16]	250	114	46	250	135	54

Table 5: Implementation of deworming activity and observation of monitors, February 2018

Indicators	Schools			*Anganwadi*		
	Denominator	Numerator	%	Denominator	Numerator	%
Deworming activity was taking place	128	114	89	156	141	90
Albendazole tablets were administered by						
Teacher/headmaster	128	119	93	156	11	7
Anganwadi worker	128	3	2	156	128	82
ASHA	128	4	3	156	13	8
ANM	128	-	-	156	4	3

[16] Integrated distribution of NDD kits includes albendazole, banner/poster and handout/reporting forms and provided to schools and AWC during the trainings.

Student	128	1	1	156	-	-
Teacher/Anganwadi worker asked children to chew the tablet	128	121	95	156	153	98
Followed any recording protocol[17]	171	150	88	204	169	83
Protocol followed						
Putting single/double tick	150	114	76	169	111	66
Put different symbols	150	7	5	169	3	2
Prepare the separate list for dewormed	150	28	19	169	54	32
Visibility of poster/banner during visits	183	147	80	212	173	82

Table 6: Awareness about Adverse events and Its Management, February 2018

Indicators	Schools			*Anganwadi*		
	Denominator	Numerator	%	Denominator	Numerator	%
Opinion of occurrence of an adverse event after administering albendazole tablet	250	160	64	250	177	71
Awareness about possible adverse events (Multiple Response)						
Mild abdominal pain	160	118	74	177	137	77
Nausea	160	97	61	177	105	59
Vomiting	160	140	88	177	147	83
Diarrhea	160	44	28	177	50	28
Fatigue	160	40	25	177	52	29
All possible adverse event[18]	160	20	13	177	25	14

[17]Any recording protocol implies putting single tick (✓), double tick (✓✓), any other symbol or preparing separate list for all those children administered albendazole tablets on NDD or Mop-Up Day.
[18]Includes those who are aware that a mild abdominal pain and nausea and vomiting and diarrhea and fatigue can be reported by a child after taking albendazole tablet.

Awareness about mild adverse event management						
Make the child lie down in open and shade/shaded place	250	149	60	250	162	65
Give ORS/water	250	160	64	250	174	70
Observe the child at least for 2 hours in the school	250	57	23	250	58	23
Don't know/don't remember	250	45	18	250	24	10
Awareness about severe adverse event management						
Call PHC or emergency number	250	161	64	250	161	64
Take the child to the hospital /call doctor to school	250	136	54	250	143	57
Don't know/don't remember	250	27	11	250	12	5
Available contact numbers of the nearest ANM or MO-PHC	250	201	80	250	230	92
Asha present in Anganwadi center	NA	NA	NA	250	175	70

Table 7: Selected Indicators of Process Monitoring in Private Schools, February 2018

Indicators[19]	Denominator	Numerator	%
Attended training for current round of NDD	48	11	23
Received albendazole tablets	48	29	60
Sufficient quantity of albendazole tablets	29	26	90
Received poster/banner	48	24	50
Received handouts/ reporting form	48	24	50

[19]These indicators are based on small samples; therefore, precautions should be taken while interpreting the results as these are not representative of all private schools in the state

Received SMS for current NDD round	48	16	33
Albendazole administered to children	48	29	60
Reasons for not conducting deworming			
No information	19	11	56
Albendazole tablets not received	19	4	22
Apprehension of adverse events	–	–	–
Others[20]	19	4	22
Albendazole tablet administered to children by teacher/headmaster[21]	18	16	89
Perceive that health education should be provided t o children	48	43	90
Awareness about correct dose and right way of albendazole administration	48	42	88
Awareness about non-administration of albendazole tablet to sick child	48	42	88
Opinion of occurrence of an adverse event after takin albendazole tablet	48	22	46
Awareness about occurrence of possible adverse events			
Mild abdominal pain	22	17	77
Nausea	22	13	59
Vomiting	22	15	68
Diarrhea	22	9	41
Fatigue	22	4	18
Awareness about mild adverse event management			
Let the child rest in an open and shaded place	48	20	42
Provide clean water to drink/ORS	48	32	67
Contact the ANM/nearby PHC	-	-	-
Available contact numbers of the nearest ANM or MO-PHC	48	31	65

[20]Others include 'children not present' and 'owing to exams'
[21]This indicator is based on samples where deworming was ongoing.

Followed correct[22] recording protocol	19	13	68

Findings from Coverage Validation Data – Madhya Pradesh, February 2018

Table A: Sample Description including Number of Schools and *Anganwadis* Covered during Coverage Validation[23]

Sample/Sites Detail	Number
Total number of districts in the state	51
• *Total number of NDD districts in the state*	*51*
• *Number of districts covered under coverage validation*	*51*
Number of trained surveyors deployed during coverage validation	125
Number of trained supervisors deployed during coverage validation	25
Number of blocks in the state	319
• *Number of blocks in NDD districts*	*319*
• *Number of blocks[24] covered through coverage validation*	*125*
Total number of schools covered	640
• *Total number of government schools covered[25]*	*451*
• *Total number of private schools covered*	*188*
• *Madarasa*	*1*
Total number of *anganwadis* covered[26]	610

Table CV1: Findings from School and *Anganwadi* Coverage Validation Data

Sr.No.	Indicators	Schools			*Anganwadis*		
		Denominator	Numerator	%	Denominator	Numerator	%
1	**Percentage of schools/*anganwadis* Conducted deworming[27]**	640	522	82	610	573	94
	Percentage of government schools conducted deworming	*452*	*428*	*95*	*Not Applicable*		
	Percentage of private schools conducted deworming	*188*	*94*	*50*	*Not Applicable*		
1a	Percentage of school and *anganwadis* administered albendazole on day of - **(Multiple Response)**						

[22]Correct recording protocol implies putting single tick (✓) on NDD and double tick (✓✓) for all those children administered albendazole tablets.
[23]Coverage validation in the state was conducted during February 21-26, 2018.
[24]These are sampled blocks selected from U-DISE data, 2016-17.
[25]These are the actual schools covered during Coverage Validation visits. Numbers given in subsequent tables (numerator and denominator) are weighted. The weights are used in order to generalize the findings at state level.
[26]These are the actual *anganwadis* covered during Coverage Validation visits. Numbers given in subsequent tables (numerator and denominator) are weighted. The weights are used in order to generalize the findings at state level.
[27]Schools and *anganwadis* that conducted deworming on NDD or mop-up day.

	a. National Deworming Day	522	484	93	573	545	95
	b. Mop-up day	522	380	73	573	456	80
	c. Between NDD and mop-up day	522	63	12	573	69	12
	d. Both days (NDD and mop-up day)	522	369	71	573	449	78
1b	**Reasons for not conducting deworming**						
	a. No information	118	86	73	37	18	50
	b. Drugs not received	118	25	21	37	3	9
	c. Apprehension of adverse events	118	4	4	37	4	10
	d. Others[28]	118	3	2	37	12	31
2	**Percentage of schools and *anganwadis* left over with albendazole tablet after deworming**	522	327	63	573	303	53
2a	**Number of albendazole tablets left after deworming**						
	a. Less than 50 tablets	327	254	78	303	236	78
	b. 50-100 tablets	327	40	12	303	48	16
	c. More than 100 tablets	327	33	10	303	19	6
3	**Copy of filled-in reporting form was available for verification**	522	350	67	573	368	64
	Copy of filled-in reporting form was available for verification in Government Schools	*428*	*301*	*70*	*Not Applicable*		
	Copy of filled-in reporting form was available for verification in Private Schools	*94*	*49*	*52*	*Not Applicable*		
3a	**Reasons for non-availability of copy of reporting form[29]**						
	a. Did not receive	143	49	34	172	65	38
	b. Submitted to ANM	143	66	46	172	82	48
	c. Unable to locate	143	21	15	172	20	12
	d. Others[30]	143	7	5	172	5	2
4	**Percentage of *Anganwadi* center where ASHA administered albendazole**	Not Applicable			573	464	81
5	***Anganwadis* having list of unregistered children (aged 1-5 years)**	Not Applicable			573	234	41
6	***Anganwadis* having list of out-of-school children (aged 6-19 years)**	Not Applicable			573	232	41

[28]Other includes 'Due to examination', 'Tablet not received' etc.

[29] In 29 schools and 33 anganwadis blank reporting form was available.

[30] Mostly includes kept at home, misplaced, don't know.

Table CV2: Selected indicators based on ASHA's interview at *Anganwadi* Centre, Coverage Validation Data

Sr. No.	Indicators	*Anganwadis*		
		Denominator	Numerator	%
1	ASHA[31] conducted meetings with parents to inform about NDD	404	370	92
2	ASHA prepared list of unregistered and out-of-school children	404	232	58
3	ASHA shared the list of unregistered and out-of-school children with *angnawadis* teacher[32]	232	185	80
4	ASHA administered albendazole to children	404	369	91
5	ASHA received incentive for NDD Feb 2017 round	404	68	17

Table CV3: Recording protocol, verification factor and school's attendance

Sr.No.	Indicators	Schools/Children			*Anganwadis/Children*		
		Denominator	Numerator	%	Denominator	Numerator	%
1	Followed correct[33] recording protocol	328	192	58	573	340	59
2	Followed partial[34] recording protocol	328	31	10	573	86	15
3	Followed no[35] recording protocol[12]	328	105	32	573	147	26
	Followed correct recording protocol in Government Schools	*268*	*167*	*62*	*Not Applicable*		
	Followed correct recording protocol in Private Schools	*60*	*25*	*41*	*Not Applicable*		
4	State-level verification factor[36]	27679	15539	56	31,142	37,146	119

[31] Surveyors were instructed to call ASHA at *anganwadi* centers during coverage validation and collect relevant information. Surveyors could only cover those ASHA's who were able to join for interview because it was not mandatory for ASHA's to attend.

[32]Based on sub-sample who reported to prepare the said list.

[33]Correct recording protocol includes schools/*anganwadis* where all the classes/registers put single tick (✓) on NDD and double tick (✓✓) on mop-up day to record the information of dewormed children.

[34]Partial recording protocol includes schools/*anganwadis* where all the classes/registers did not follow correct protocol, put different symbols and prepared separate list to record the information of dewormed children.

[35]No protocol includes all those schools/*anganwadis* where none of the classes/registers followed any protocol to record the information of dewormed children.

[36]Ratio of recounted value of the dewormed children to the reported value. This calculation is based on only those schools (n=350) and *anganwadis* (n=368) where deworming was conducted and copy of reporting form was available for verification.

[12] Rest 194 cases are missing for 'school following protocol'

	(children enrolled/ registered)						
	a. Children registered with *anganwadis*	Not Applicable			23,042	19,877	86
	b. Children unregistered with *anganwadis* (Aged 1-5)	Not Applicable			3,411	9,414	276
	c. Out-of-school children (Aged 6-19)	Not Applicable			4,689	7,855	168
5	**Attendance on previous day of NDD (children enrolled)**	91918	72703	79	Not Applicable		
6	**Attendance on NDD (children enrolled)**	91918	72185	79	Not Applicable		
7	**Attendance on mop-up day (children enrolled)**	91918	70166	76	Not Applicable		
8	**Children who attended on both NDD and mop-up day (children enrolled)**	91918	61440	67	Not Applicable		
9	**Maximum attendance of children on NDD and mop-up day[37] (Children enrolled)**	91918	80910	88	Not Applicable		
10	**Estimated NDD coverage**[38,39]	65			79		
11	*Estimated NDD coverage for Government School*	*73*			*Not Applicable*		
12	*Estimated NDD coverage for Private School*	*42*			*Not Applicable*		

Table CV4: Description on children (6-19 years) interviewed in the schools (n=522) during coverage validation

Sr.No.	Indicators	Denominator	Numerator	%
1	**Children received albendazole tablets**	984	948	96
2	**Children aware about the albendazole tablets**	948	790	83
	Source of information about deworming among children (Multiple response)			
3	a. Teacher/school	790	782	99

[37]Maximum attendance refers to the total attendance of children who were exclusively present in school either on NDD or mop-up day and children who attended school on both days.

[38] This was estimated on the basis of NDD implementation status, attendance on NDD and mop-up day, whether child received albendazole and its supervised administration. Since no child interview is conducted at *anganwadis*; this has not been estimated for *anganwadis.*

[39]This was estimated by implying state-level verification factor on government reported coverage for 1-5 years registered children in AWC.

	b. Television	790	108	14
	c. Radio	790	68	9
	d. Newspaper	790	87	11
	e. Poster/Banner	790	132	17
	f. Parents/siblings	790	53	7
	g. Friends/neighbors	790	14	2
4	**Children aware about the worm infection**	948	673	71
5	**Children awareness about different ways a child can get worm infection (Multiple response)**			
	a. Not using sanitary latrine	673	475	71
	b. Having unclean surroundings	673	416	62
	c. Consume vegetables and fruits without washing	673	391	58
	d. Having uncovered food and drinking dirty water	673	339	50
	e. Having long and dirty nails	673	343	51
	f. Moving in bare feet	673	270	40
	g. Having food without washing hands	673	258	38
	h. Not washing hands after using toilets	673	154	23
6	**Children consumed albendazole tablet**	948	933	98
7	**Way children consumed the tablet**			
	a. Chew the tablet	933	896	96
	b. Swallow tablet directly	933	36	4
8	**Supervised administration of tablets**	933	877	94
9	**Reasons for not consuming albendazole tablet**			
	a. Feeling sick	15	9	57
	b. Afraid of taking the tablet	15	1	9
	c. Parents told me not to have it	15	4	28
	d. Do not have worms so don't need it	15	0	0
	e. Did not like the taste	15	1	6