

Introduction

As part of Process Monitoring and Coverage Validation for NSBDP Year 4, Evidence Action's Monitoring, Learning and Information Systems (MLIS)¹ team conducted coverage validation surveys across 13 counties that participated in Wave 1 of the national treatment. MLIS conducted the surveys in randomly selected schools one day after Deworming Day.

Purpose

The purpose of coverage validation was to validate program treatment coverage as reported on the treatment forms² from schools. Additionally, coverage validation surveys sought to collect data on reasons for not taking the deworming pills where applicable. By extension, the surveys validates enrolled children attendance on the day of treatment.

Methodology

The MLIS team administered coverage validation surveys at school level. The primary method of estimating coverage was by interviewing children in sampled schools. To check on the robustness of individual children interviews, the monitors also conducted group interviews in selected classrooms.

To determine the sample of schools to be surveyed, MLIS used a two-stage sampling approach. MLIS first stratified the schools by counties participating in (Wave 1 of) the program, then selected a proportionate sample within the counties. The sample aimed to meet a confidence level of 95 percent and a margin of error of 10 percent at the national level.

At school level, for individual interviews, the monitors randomly selected 3 streams.³ In each stream, the monitor interviewed every 5th, 10th and 15th child as indicated on the class register. That is a total of 9 children in every school. For group interviews, the monitors randomly selected 3 streams per school and conducted the interview with a full stream of children.

We defined surveyed coverage as the proportion of children who could correctly identify the correct deworming pill and the dosage offered.

Data Collection and Description

In Year 4, MLIS team made an unannounced visits to 142 schools randomly selected for coverage validation surveys. The team sought permission from the head-teachers before proceeding to selected classes to conduct the surveys.

Results

In the interviews conducted, 93 percent of interviewed children could identify both the correct deworming pill administered by the program and the correct dosage of the tablets offered. Therefore, the surveyed coverage was 93 percent.

¹ The MLIS team is a department of Evidence Action that is independent of Program Implementation. MLIS provides independent monitoring and data management support to Evidence Action programs, including the National School Based Deworming Programme (NSBDP).

² Treatment forms are filled by teachers on the day of deworming. The forms are aggregated at ward and at sub-county level via the program reverse cascade. The MLIS team verifies, enters and analyzes data from the treatment forms.

³ A typical full primary school has children in ECD and class 1 to 8. A class can be divided into more than 1 stream, if the population of children cannot fit in one stream.

While coverage among interviewed children was generally high, some surveyed children indicated that they did not receive or take the deworming pills. 5 percent of the interviewed children indicated that they were absent from school on the day of deworming. This was consistent with our findings on attendance rate on the deworming day via our process monitoring surveys which showed that 4 percent of children were not present in class at the time of the administration of the deworming pills. Other reasons interviewed children provided for not taking the deworming included insufficient drugs (2 percent of children) and refusal (1 percent).

It is important to note that surveyed coverage rate (93 percent) was significantly higher than reported coverage rates from the treatments forms (78 percent among all children, and 84 percent among enrolled children only). There were no specific reasons to explain this difference. However, a possible hypothesis could be that education officials over-estimate total children in school on planning forms hence understating reported coverage rate because of exaggerated denominator⁴.

Attendance of Enrolled Children

Process Monitoring and Coverage validation surveys also allowed us to estimate attendance of enrolled children on Deworming Day. During Deworming Day process monitoring, monitors checked for the number of children in the class register of randomly sampled streams. Monitors then conducted a head count of children present in the stream just before drug administration started. In Year 4, we found that 4 percent of children were absent from school on the Deworming Day. During coverage validation, we asked randomly selected children for reasons for not taking the drug in cases where they indicated they did not. 5 percent of the surveyed children indicated that they were absent from school on the Deworming Day, which validated the attendance rate estimated from the Deworming Day data.

Robustness Checks

During coverage validation, MLIS collected more data as part of checking the robustness of the coverage validation estimate above. The purpose of this additional data collection was to allow us to make comparisons against the formal survey coverage rate.

From the data, we found that when children were asked to indicate whether they received a deworming pill but were not asked to identify the correct pill or the correct dosage, 99 percent of children indicated that they were treated. This percentage dropped to 98 percent when the children were asked to identify the correct pill but were not asked to identify the pill. However, as per our formal definition of surveyed coverage, 93 percent of eligible children could identify both the correct pill and the correct dosage.

From the group interviews, 96 percent of the surveyed children could identify the correct deworming pill. 95 percent of children interviewed were able to identify the correct deworming pill and the correct dosage.

Limitation of data

A key limitation of coverage validation surveys for Year 4 was that they were school-based. This is a limitation because the NSBDP program targets both enrolled and non-enrolled children in targeted sub-counties. What this means is that our coverage validation findings provide useful

⁴ For reported coverage rate, the numerator is all children treated and the denominator are total children enrolled and an estimate of non-enrolled. Sub-county education officers provide the number of children enrolled on Form P during the planning phase of the Program.

insights on the success of the program in reaching enrolled children. The program will need to look at findings from process monitoring to assess the reach and participation of non-enrolled children.

Conclusion

The school-based coverage validation survey indicates high surveyed coverage rate of 93 percent. To boost the coverage rate further, the program will need to look into how increase children's attendance rate on the deworming day. As indicated in this report, absenteeism on the deworming day was at 5 percent and constituted the main reason children did not take the deworming pill. 100 percent availability of drugs at the schools on the day of deworming could also further boost adoption.