

**Republic of Malawi Ministry of Health
National Malaria Control Program**

**Supervision Report for the Monitoring of Act and Malaria Control
Activities**

September 2009



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ACRONYMS AND ABBREVIATIONS

| | |
|-------|--|
| ACT | artemisinin-based combination therapy |
| ADR | adverse drug reactions |
| CHAM | Christian Health Association of Malawi |
| CMS | Central Medical Stores |
| DHMT | District Health Management Team |
| DHO | District Health Officer |
| IEC | information, education, and communication |
| IPTp | intermittent preventive treatment in pregnancy |
| ITN | insecticide-treated net |
| LA | lumefantrine-artemether |
| MOH | Ministry of Health |
| HMIS | Health Management Information System |
| HTSS | Health Technical Support Services |
| LMIS | Logistics Management Information System |
| MSH | Management Sciences for Health |
| NGO | nongovernmental organization |
| NMCP | National Malaria Control Programme |
| RDT | rapid diagnostic test |
| SP | sulfadoxine-pyrimethamine |
| SPS | Strengthening Pharmaceutical Systems Program |
| USAID | U. S. Agency for International Development |

EXECUTIVE SUMMARY

Malawi changed its malaria treatment policy in 2007 from sulfadoxine-pyrimethamine (SP) as the first-line medicine to lumefantrine-artemether (LA) following World Health Organization guidance. To monitor the implementation of the new treatment policy, the National Malaria Control Programme (NMCP) with technical assistance from the Strengthening Pharmaceutical Systems (SPS) Program, developed a supervision model which involves teams comprising members from NMCP, the zonal health office, and the district health office visiting at least two facilities per district once a quarter. So far, four supervision visits have been conducted.

SPS, together with the NMCP, conducted the fifth supervision visit between September 14 and 29, 2009, to monitor the implementation progress on treating malaria using LA and to provide on the job training in areas of case management and drug management. Fifty-two out of the 551 public health facilities (9 percent) were visited—they included 35 government health centers, 3 government rural hospitals, 3 district hospitals, 1 central hospital, 8 Christian Health Association of Malawi (CHAM) health centers, and 2 CHAM hospitals. The supervisory teams consisted of zonal malaria officers from the Government of Malawi's NMCP, staff from Management Sciences for Health's (MSH) SPS Program, district malaria coordinators, and pharmacy technicians. The same checklist (Annex I) used in the previous four supervision visits was used and information on malaria case management, drug management, intermittent preventive treatment in pregnancy (IPTp), and insecticide-treated nets (ITNs) was collected. In addition, supervisory teams mentored the staff on key weaknesses discovered during the visits and provided other support after the supervision, if necessary.

Availability of LA on the day of the visit has improved as compared to the last supervision. No facility was completely stocked out of LA. Reporting rates for the logistics management information system (LMIS) as well as awareness on what type of form to use for reporting is quite high even among the CHAM facilities. Basic storage procedures were properly being followed.

A number of challenges were observed during this supervision. Most of these are challenges that have been noted before.

- Some health workers have still not been trained in managing malaria using LA. Most of these health workers are actually stationed at the district health offices.

- The information, education, and communication (IEC) materials in the facilities are inadequate and the few IEC materials that are available are not in plain sight of patients and caregivers.
- Systematic and regular supportive supervision to facilities by pharmacy technicians and malaria coordinators not taking place.
- Staff managing medicines are not performing proper handovers.

As LA implementation progresses, other areas which initially were not a priority need to be monitored, i.e., LA treatment failure and incidences of suspected adverse drug reactions (ADRs) due to LA. The NMCP needs to provide clear guidance on how health workers should manage such cases, especially with LA treatment failure now that the second-line treatment is available in facilities with microscopes.

INTRODUCTION AND METHODOLOGY

Artemisinin-based combination therapy (ACT) was introduced in Malawi in December 2007 in all government and Christian Health Association of Malawi (CHAM) facilities as the first-line malaria treatment. Few facilities under some non-governmental organizations also benefitted from the supply from district health offices. The supportive supervision for the implementation of ACT started in March 2008, and so far five supervision visits have been conducted—March 2008, August 2008, January 2009, May 2009, and September 2009. The fifth supervision performed in September over a period of two weeks was conducted by five supervisory teams each comprising two central members and two district members. The central members were from National Malaria Control Program (NMCP) and Management Sciences for Health's (MSH) Strengthening Pharmaceutical Systems (SPS) Program. The zonal office staff members were not part of the teams this time around. When the central members arrived at each district, the malaria coordinator and pharmacy technician joined the team.

At least two facilities were visited in each district in a day except for Mwanza District which was not visited. At the facility, the supervisory team was divided into two groups—one for case management, intermittent preventive treatment in pregnancy (IPTp), and insecticide-treated nets (ITN); and the other for drug management. Data on case management was collected from the health management information system (HMIS) register and dispensing registers. Clinic and dispensary observations and interviews with malaria patients or their guardians (if available) were conducted during the time of visit. Data on drug management was collected from stock cards, delivery notes, dispensing registers, and observations of drug management practices. Health workers were interviewed on reporting and documentation practices. Feedback was given to the in-charge of the facility and the District Health Officer (DHO) or representative at the end of the visit. Because the visits were usually completed late in the day, the district malaria coordinators and pharmacy technicians were responsible for briefing the DHOs.

A total of 52 health facilities were visited between September 14 and 19, 2009. The facilities visited included 35 government health centers, 3 government rural hospitals, 3 district hospitals, 1 central hospital, 8 CHAM health centers, and 2 CHAM hospitals. The facilities visited are listed in Annex 1. The positions of the interviewed health workers are shown in figure 1.

KEY FINDINGS

Training and Communications

In all the facilities visited, 25 percent (146/595) of the health workers were not trained in ACT. Most of these untrained health workers worked in the four district and central hospitals as follows (table 1).

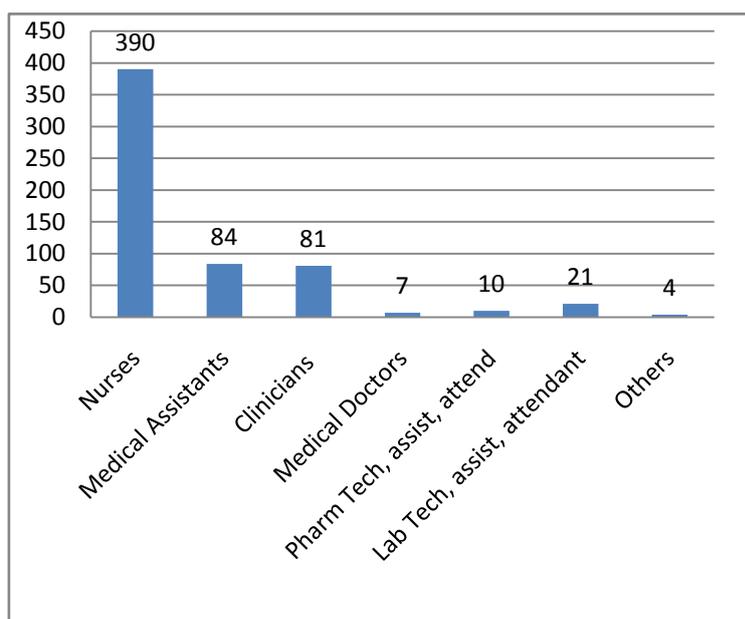


Figure 1. Categories of trained health workers in facilities visited

Table 1. Number of Untrained Health Workers from Hospitals

| Hospital | Health Workers Untrained, N | Health Workers Trained, N | Total Number of Untrained Workers, % |
|----------------|-----------------------------|---------------------------|--------------------------------------|
| Nkhata-Bay DHO | 14 | 35 | 29 |
| Salima DHO | 36 | 171 | 17 |
| Machinga DHO | 30 | 61 | 33 |
| Zomba Central | 20 | 165 | 11 |
| Total | 100 | 465 | 19 |

The total number of untrained health workers from the district and central hospital represents 68 percent of the untrained health workers.

Figure 1 shows the numbers of the different cadres of health workers trained from the facilities visited during the September supervision.

Having information, education, and communication (IEC) materials available to support the launch of the new treatment policy has been a challenge. The results of the supervision indicate that the developed IEC materials were not adequately distributed. Two years into implementation, it is expected that all facilities should have received the LA poster for patients, that it should be prominently displayed within the facility, and that most patients should understand it. However, 71 percent (36/51) of the facilities had received the LA poster and in 86 percent of those facilities (31/36), the poster was visible. Only 41 percent of the patients interviewed had seen the LA poster and out of these, 55 percent understood it. The majority of these were men.

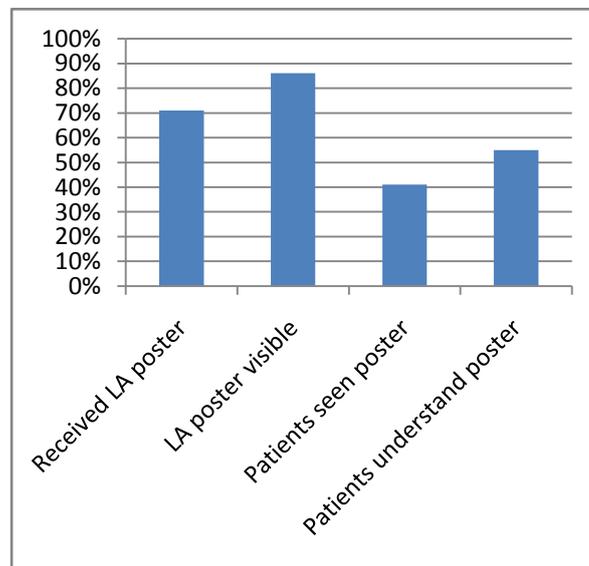


Figure 2. Availability and patient understanding of LA poster

Forty-four percent (22/50) of the facilities visited had received the treatment chart and this was visible in only 66 percent of these facilities. Although 96 percent (48/50) of the facilities had a trained health worker on duty on the day of the visit, only 62 percent of the facilities indicated that they had received the treatment guidelines. These guidelines are given to each health worker who has undergone training in the new malaria treatment policy. The drug poster developed for health workers managing medicines at the facility level was found in 2 percent of the facilities visited (1/51).

One of the IEC materials produced by the NMCP was a patient leaflet on LA. Most of the facilities had received these patient pamphlets. On the day of the visit, only 5 percent, (2/44)

of the facilities still had the patient leaflets in stock and only 24 percent (12/51) of the facilities indicated that they had ever received the patient leaflets.

Malaria Cases and LA Consumption between April and August 2009

Malaria cases reporting at health facilities were collected from HMIS register for the months of April through August. These are summarized in table 2 below.

Table 2. Malaria Cases in the Facilities Visited

| | April 09 | | May 09 | | June 09 | | July 09 | | August 09 | | Total | |
|--------------------------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|--------------|----------|
| Facilities with Data, N | 49 | | 49 | | 50 | | 47 | | 45 | | Total | |
| | N | % | N | % |
| Under Age 5 Cases | 41,154 | 51 | 38,786 | 52 | 39,241 | 52 | 23,114 | 53 | 20,268 | 52 | 162,563 | 52 |
| Over Age 5 Cases | 39,030 | 49 | 36,384 | 48 | 36,857 | 48 | 20,529 | 47 | 18,919 | 48 | 151,719 | 48 |
| Total Malaria Cases | 80,184 | 49 | 75,170 | 49 | 76,098 | 50 | 43,643 | 47 | 39,187 | 45 | 314,282 | — |

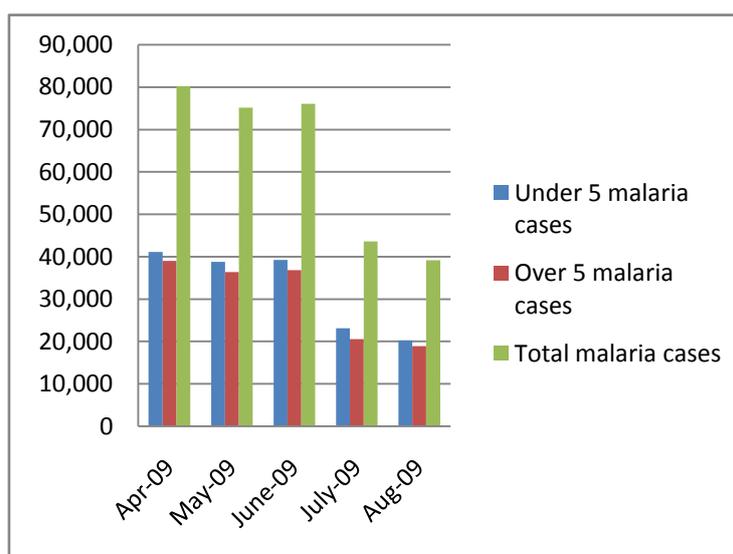


Figure 3. Reported malaria cases for April through August 2009

The proportion of under age five malaria cases has remained almost the same in the five months in which data was collected even though there is a down ward trend in the total number of malaria cases over the five months. Figure 3 shows a graphic representation the malaria cases.

Consumption data for LA was collected from the dispensing registers as well as from the stock cards and compared with the malaria cases reported through HMIS (table 3).

Table 3. Comparison of Malaria Cases and LA Consumption

| | April 09 | May 09 | June 09 | July 09 | August 09 |
|---|----------|--------|---------|---------|-----------|
| Total Malaria Cases | 80,184 | 75,170 | 76,098 | 43,643 | 39,187 |
| LA Consumption (Dispensing Register) | 25,352 | 26,679 | 28,411 | 21,389 | 20,450 |
| LA Consumption (Stock Card) | 67,925 | 76,198 | 76,563 | 55,500 | 62,016 |

Although 82 percent (41/50) facilities indicated that they use dispensing registers, the LA consumption recorded in these dispensing registers is much lower than the malaria cases reported. There were a number of facilities that reported being without a dispensing register for a considerable period of time. The consumption reported through stock cards is closer to the number of malaria cases in the months of May and June. There is overconsumption in the months of July and August.

Case Management

Treatment Failure and Suspected Adverse Reactions to LA

Because of lack of a system for recording adverse drug reactions (ADR) at the facility level, information on ADRs was not readily available and the data provided depended on the experience of the health worker interviewed.

Forty-two percent (21/50) facilities reported suspected LA treatment failure. However, the failure of patients to respond to LA treatment was not given as one of the reasons why approximately 116 patients were switched from LA to quinine. This raises the question as to whether health workers fully understand what treatment failure is. Eight percent (4/50) of the facilities indicated that there had been 5 cases of suspected adverse reactions caused by LA.

All ADRs involved skin rashes. None of the facilities with a suspected ADR reported the incident to the DHO or anywhere.

Case Management at Clinics and Dispensaries

Using clinical symptoms still remains the most common diagnosing method (98 percent—46/47) of malaria cases. Thirty-one percent (15/48) also use microscopy in diagnosing malaria. Four percent (2/48) of the facilities—a CHAM rural hospital and a government district hospital—use rapid diagnostic tests (RDTs).

In facilities where it was possible to observe prescribing taking place, 74 percent (31/42) of the facilities indicated the patient’s body weight on the prescription and 90 percent (37/41) prescribed the correct dose for LA. In 38 facilities where dispensing was observed, it was noted that 100 percent of the facilities dispensed the correct dose and 82 percent (31/38) gave the correct message on how to use the medicines. The percentage of facilities that immediately recorded the medicines dispensed in the dispensing register is 63 percent (26/41).

Understanding of the key messages vary among the three groups surveyed— caregivers for children, adult female, and adult male patients (table 4).

Table 4. Awareness of LA Use among Caregivers and Adult Patients

| | Caregivers | | Adult Female Patients | | Adult Male Patients | |
|--|------------|-------|-----------------------|-------|---------------------|-------|
| | % | N | % | N | % | N |
| Correctly indicated # of times tablets taken per day | 83 | 30/36 | 83 | 15/18 | 100 | 13/13 |
| Correctly indicated that 3-day course must be completed | 81 | 29/36 | 83 | 15/18 | 85 | 11/13 |
| Understood message on poster | 56 | 14/25 | 38 | 5/13 | 70 | 7/10 |

Patients who are able to understand the message on the LA poster better understand how to use LA. Table 5 summarizes the key observations made in the management of malaria in the facilities.

Table 5. Summary of Observations on Case Management

| Description | Observation |
|---|--------------------|
| Weighing scale available | 90% (43/48) |
| Patients' body weight indicated on prescription | 74% (31/42) |
| Correct does prescribed | 90% (37/41) |
| Correct dose dispensed | 100% (38/38) |
| Dispenser communication all key messages when dispensing LA | 82% (31/38) |
| Facilities with staff trained in microscopy | 10% (5/50) |

Drug Management

Reporting and Supply

The current resupply system for LA and all other essential medicines is based on reports that facilities send to the district health office using standard forms. Different facilities use different forms for reporting.

Ninety-seven percent (34/35) of government health centers are aware of the form to use when reporting at the end of the month. Of the CHAM facilities, 90 percent (9/10) are aware of the correct form to use when reporting. In the government rural hospitals, 66.6 percent are using LMIS-01A for reporting while 33.3 percent is using the LMIS-01B.

Eighty-seven percent (45/52) of the facilities submitted the previous months' LMIS report. Out of these, 78 percent (35/45) submitted the reports on time. Seven out of the 10 facilities that did not submit the report on time were government facilities. Seventy-six percent (35/46) facilities were resupplied by CMS in July. Three government facilities that did not submit LMIS reports were still resupplied while two CHAM facilities that submitted reports were not.

Availability of Antimalarial Medicines

On the day of the visit, 70 percent (35/50) of the facilities had all 4 LA pack sizes in stock. This is a great improvement from May supervision where only 49 percent of the facilities had all 4 pack sizes in stock. No facility had a complete stock-out of LA. Table 6 below shows a

comparison of the availability of the different LA pack sizes on the day of the visit between the May and September 09 supervision visits.

Table 6. Availability of the Different LA Pack Sizes

| | All 4-Pack Sizes Available | | 1-3 LA Pack Sizes Available | | All 4-Pack Sizes Not Available | |
|-----------------------------------|----------------------------|-------|-----------------------------|-------|--------------------------------|------|
| | % | N | % | N | % | N |
| On Day of Visit (May 09) | 49 | 25/51 | 49 | 25/51 | 2 | 1/51 |
| On Day of Visit (Sept. 09) | 70 | 35/50 | 30 | 15/50 | 2 | 0/50 |

Out of the 15 facilities that were stocked out of at least one pack size, 73 percent (11/15) were stocked out of one pack size; the most commonly out of stock was 6x3 pack size with eighty percent (12/15) of the facilities reporting a stock-out. This is similar to the situation in the May supervision.

Looking at the preceding five months (April, May, June, July, and August), 20 percent (10/49) of the facilities experienced a stock-out of 6x1 pack size, 44 percent (21/48) a 6x2 pack size stock-out, 65 percent (31/48) experienced a stock-out of 6x3 pack size (the highest rate), and 29 percent (14/49) experienced a stock-out of 6x4 pack size.

The duration of the stock-outs varied from 3 to 120 days. The average stock-out days for the different LA pack sizes is represented in table 7. The longest average stock-out period was 42 days and this was experienced with the 6x3 pack size. Eighty-four percent (26/31) of those facilities that experienced a 6x3 pack size stock had a stock-out duration of more than 30 days while 40 percent of those with a 6x1 pack size stock-out had a stock-out duration of more than 30 days.

Table 7. Facilities That Experienced a Stock-out of More than 30 Days Between February to April 2009

| | 6 x 1 | 6 x 2 | 6 x 3 | 6 x 4 |
|--|------------|-------------|-------------|------------|
| Average days of stock out between April and August 2009 | 8 | 25 | 42 | 11 |
| Facilities that experienced a stock out of more than 30 | 40% (4/10) | 57% (12/21) | 84% (26/31) | 36% (5/14) |

The stock situation of other antimalarial medicines is presented in table 8 below. Quinine tablets were stocked out in more facilities than the rest of the antimalarials (45 percent). Generally, the availability of the other antimalarials was good as compared to the situation in May.

Table 8. Availability of Other Antimalarial Medicines

| | Facilities Stocked Out on the Day of the Visit | | Facilities Stocked Out between April–Aug. 09 | | Average Stock-Out Period |
|--------------------------|--|-------|--|-------|--------------------------|
| | % | N | % | N | Days |
| Quinine Tablets | 45 | 21/47 | 49 | 21/43 | 30 |
| Quinine Injection | 2 | 1/49 | 11 | 5/46 | 3 |
| SP Tablets | 16 | 8/49 | 39 | 17/44 | 15 |

Documentation of Antimalarial Medicines

Among the documents required for proper management of medicines at the facility level are stock cards, delivery notes, and dispensing registers. The supervisors looked at the availability and storage of these documents as well as the accuracy of their data.

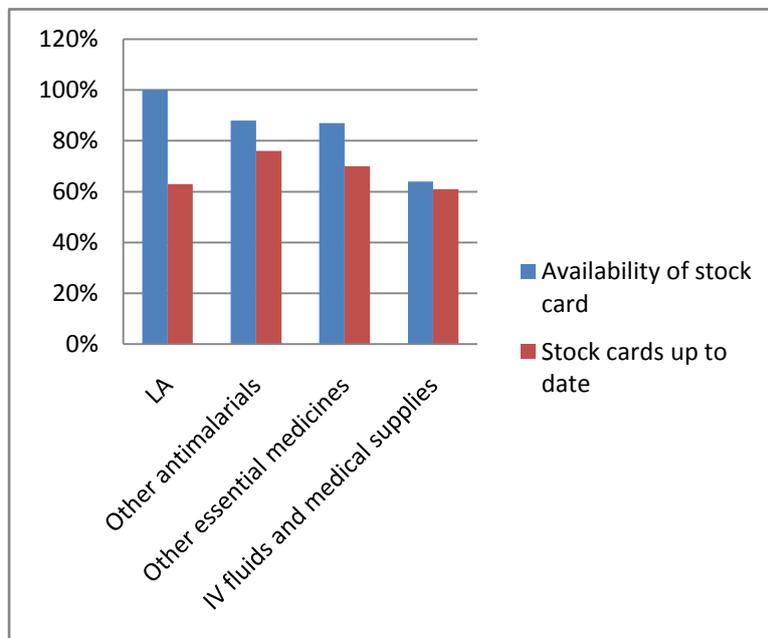


Figure 4. Record Keeping for Antimalarial Medicines and Supplies

Availability of stock cards was much higher for all the 4 LA pack sizes than for the other antimalarial medicines, essential medicines, IV fluids, and medical supplies. However, even though availability of stock cards is very good with LA, the information they contain is not accurate, i.e., there were discrepancies when the physical quantities on the shelf were counted and compared with entries on the stock. Sixty-three percent of the stock cards for LA were up-to-date, i.e. the physical count tallied with the balance on the stock card. This is not very different from the May supervision results.

Use of LA dispensing registers in the facilities is quite high. Ninety-two percent (45/49) indicated that they use LA dispensing register. However, only 44 percent (23/52) of the facilities indicated that they send copies of the dispensing register to the DHO.

At least 40 percent of the facilities are able to totally complete the dispensing register, i.e., enter the issues from the drug store, the total stock available on that page, the correct quantities issued, and the balance at the end of the page.

Storage Conditions of Medicines

Storage conditions for medicines remains one of the challenging components of medicine management at facility level as the delivery of public health programs is expanding. Most of the facilities are doing quite well in terms of storage procedures (table 9). Sixty-three percent (33/52) had cartons raised off the floor, 46 percent (24/52) had some sort of fire extinguisher, and 92 percent (47/52) had clean and tidy drugstores.

Table 9. Facilities' Adherence to Good Storage Practices

| Storage Condition | Yes | No | Yes, % |
|--|------------|-----------|---------------|
| Burglar bars on doors | 37 | 15 | 71 |
| Burglar bars on windows | 43 | 6 | 88 |
| Store kept locked when not in use | 51 | 1 | 98 |
| No cracks, holes, or other damage | 33 | 19 | 63 |
| Store room is dry, well lit, and ventilated | 47 | 4 | 92 |
| Medicines are stored neatly on shelves or in boxes | 37 | 15 | 71 |
| Cartons are raised off the floor | 33 | 19 | 63 |
| There are no supplies in direct sunlight | 46 | 6 | 88 |
| Fire extinguisher in place | 24 | 27 | 46 |

Intermittent Preventive Treatment in Pregnancy

In the 41 facilities that provided answers, 182 health workers were trained in focused antenatal care (FANC) and 275 health workers were untrained. There were 648 health surveillance assistants trained in community IPTp in 49 facilities. Ninety-four percent of the facilities had DOT equipment available on the day of the visit and 96 percent had an antenatal register available on the day of the visit. IEC materials on IPTp were available in 64 percent of the facilities. Figure 5 summarizes the IPTp findings.

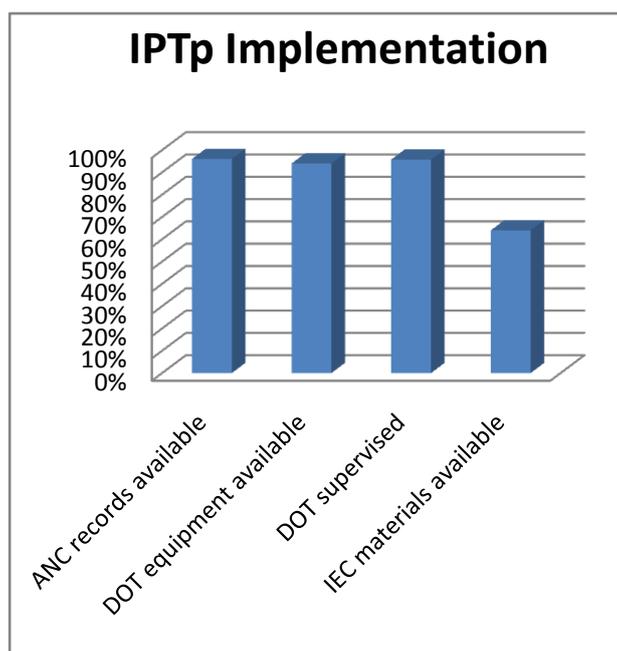


Figure 5. Key IPTp Indicators

Table 10 below shows the number of pregnant women receiving first and second doses of SP. The percentages have been calculated using the number of first ANC visit as the denominator.¹

Table 10. Percentage and Number of Pregnant Women Receiving SP

| | June 09 | | July 09 | | August 09 | |
|----------------------------|---------|-------------|---------|-------------|-----------|-------------|
| | % | N | % | N | % | N |
| 1st Dose SP (IPT 1) | 90 | 5,386/5,963 | 89 | 5,051/5,696 | 102 | 5,843/5,707 |
| 2nd Dose SP (IPT 2) | 70 | 4,159/5,963 | 68 | 3,893/5,696 | 68 | 4,324/5,707 |

Insecticide-Treated Nets

A total of 30,630 ITNS had been distributed to 50 health facilities in the months of June, July, and August. Seventy-four percent (37/50) of the facilities had ITNs in stock on the day of the visit. Availability of ITNS in facilities on the day of the visit was the same during the January and May 2009 supervisions. Ninety-six percent of the facilities had stock cards for ITNs while 94 percent had ANC client registers. Eighty-six percent of the facilities with ANC

¹ World Health Organization (WHO).2007. *Malaria in pregnancy: guidelines for measuring key monitoring and evaluation indicators*. Geneva: WHO.

client registers were completing the registers correctly. Twenty-six percent of the facilities reported experiencing a stock-out of ITNs in the past three months.

DISCUSSIONS AND RECOMMENDATIONS

Untrained health workers continue to be found in the health facilities. However, from the analysis of the figures obtained during this supervision, many of these health workers are found at the district hospitals. DHOs should explore alternatives for training these workers with no or minimal financial requirements, i.e., during morning meetings.

Availability of IEC materials for both patients and health workers is a challenge at health facilities. Although NMCP and its partners produced some IEC materials, distribution of these materials has not been systematic and, as such, some facilities still have not received IEC materials. IEC materials on LA for patients require a person to be able to read. Most of the care givers for children with malaria were unable to understand the LA posters and it was found that most of these could not read them or the leaflets provided. NMCP should make an effort to design some IEC materials that could be understood without having to read them.

Dispensing register provides a more accurate pattern in consumption; however, the importance of this tool is underestimated. Supplying these dispensing registers to facilities has been a challenge but the scarcity of registers is generally caused by district pharmacy technicians and malaria coordinators lacking the initiative to ensure that facilities in their districts have registers at all times. Pharmacy technicians and malaria coordinators do not remind facilities to send dispensing register copies together with the LMIS reporting form. Because there are no incentives or penalties if a facility returns or does not return a completed dispensing register, facilities do not see the need to send the dispensing register copies. Pharmacy technicians and malaria coordinators should include collection of copies of dispensing registers as part of their routine activities when they visit health facilities.

Malaria is still diagnosed mainly through clinical symptoms. However, a number of facilities are using RDTs. Since a decision on the type of RDT to be used in Malawi was made, NMCP needs to communicate with health facilities and give guidance on this so that facilities that are able to purchase RDTs on their own can purchase the recommended type.

A substantial number (42 percent) of the facilities reported LA treatment failure. Because of lack of proper documentation and systematic way of handling these treatment failures, it is difficult to confirm the reports. There is need to develop procedures or if procedures are already available, to reinforce how health workers can recognize LA treatment failure, manage it, and report the failures. Now that second-line treatment is available at facilities with microscopes, efforts should be made at district level to have LA treatment failure properly recognized and managed if health workers as well as patients are to remain

confident of using LA.. The same should be done for management of ADRs. Health workers do not record suspected ADRs due to LA but recall incidences from memory. Because there is no formal documentation, suspected LA ADRs are not reported to the district health offices. The introduction of the pharmacovigilance system will help in the documentation of the suspected ADRs. DHOs should expedite the orientation of health workers in their districts in the system.

Facilities are aware that it is important to report in a timely manner through LMIS. The CHAM facilities that were visited are also aware of the reporting requirements. However, rural government hospitals are confused as to which form to use for reporting, so there is need to clarify and standardize those forms. Since facilities are now able to report and are aware of the importance of reporting on time, supervisors should start checking on the quality of the reports that are generated by facilities. Accountability on the quantities of LA that facilities receive should now become a priority during supervision visits. District health offices should enforce handover procedures at facilities.

The gains that have been made in the management of malaria and the medicines used for managing it can only be sustained by providing regular and systematic supervision to the facilities. What most facilities need is a word of encouragement and the knowledge that the district health offices care and appreciate their efforts.

ANNEX 1. FACILITIES VISITED BETWEEN SEPTEMBER 14–19, 2009

| Zones | Districts | Government Facilities | | CHAM Facilities | NGO Facilities |
|--------------------------|------------|-----------------------|-----------------------|----------------------|----------------|
| Northern | Mzimba (N) | Mzuzu HC | | | |
| | Mzimba (S) | Luwerezi | | | |
| | Nkhata Bay | Nkhata-Bay DHO | Chintheche R. Hosp | | |
| | Rumphi | Katowo R. Hosp | Mwazisi HC | | |
| | Karonga | Kasoba HC | Iponga HC | | |
| | Chitipa | Nthalire HC | | | |
| Central East | Dowa | Mbingwa HC | Chizolowondo HC | | |
| | Nchisi | Mzandu HC | Kangolwa HC | | |
| | Kasungu | Santhe HC | | Mziza HC | |
| | Nkhotakota | Benga HC | | Alinafe Com. Hosp | |
| | Salima | Salima DHO | Lifuwu HC | | |
| Central West | Mchinji | Mikundi HC | Chioshya HC | | |
| | Lilongwe | Malembo HC | | Likuni Hosp. | |
| | Dedza | Golomoti HC | | Kaundu HC | |
| | Ntcheu | Msiyaludzu HC | | Nsipe R. Hosp | |
| Southern East | Mangochi | Mamkumba HC | | Nkope HC | |
| | Balaka | Kwitanda HC | | Kalembo HC | |
| | Machinga | Machinga DHO | Namanja HC | | |
| | Phalombe | | | Chiringa HC | Sukasanje HC |
| | Mulanje | Chambe HC | Kambenje HC | | |
| | Zomba | Zomba CH | Namasalima HC | | |

Annex 1. Facilities Visited Between September 14–19, 2009

| | | | | | |
|--------------------------|------------|--------------------|------------------|--|--|
| Southern West | Blantyre | Chikowa HC | Bangwe HC | | |
| | Mwanza | Tulongkhondo HC | Kunenekude HC | | |
| | Nsanje | Nyamithuthu HC | Phokera HC | | |
| | Neno | Magaleta HC | Neno HC | | |
| | Thyolo | Nsabwe HC | | | |
| | Chikwawa | Chipwaila HC | Ngabu R. Hosp | | |
| | Chiradzulu | Namitambo HC | Nkalo HC | | |