

Preliminary findings
Anti Malaria Drugs Treatment
Mystery Shopper Survey
conducted July 2008



Study Background

- Knowledge, behaviours and practices of drug sellers/providers play a big role in influencing the consumer's uptake of malaria medicines.
- Studies conducted in Tanzania have shown that most attendants in Duka la Dawa Baridi (DLDB) do not have proper training in the use of anti-malarial drugs.
- There was need for a mystery client survey to examine drug seller dispensing behaviour.

Research Objectives

Overall objective:

- To determine drug seller dispensing behaviour and practices for suspected cases of malaria in both adults and children

Specific Objectives

- Determine the questions asked to clients by drug sellers
- Determine the products stocked by drugs sellers for malaria treatment
- Determine the advice given by the drug sellers to those seeking care
- Determine the malaria brands sold and country of manufacture
- Determine the malaria dosage offered by drugs sellers

Research Approach

➤ Two approaches were used:

⇒ Mystery shopping

Mystery client surveys have been shown to be effective method of measuring sellers behaviour

⇒ Retail Audit

Mystery Shopping

- Three different scenarios were split equally across total sample and region
 - ⇒ Buying drugs for a pregnant woman- pregnancy in the first trimester
 - ⇒ Buying drugs for a sick child- 1-5 years
 - ⇒ Buying drugs for self (adult)

Scenarios

➤ Each of the scenarios were split equally across:

- ⇒ consumer who can afford to buy whichever anti-malarial offered
- ⇒ consumer who can not afford to buy anti-malarials 200-500 Tshs below stated price

Scenarios, continued

- Age of the child and pregnancy was not given to drug seller unless asked for
- Trained mystery shoppers visited the outlets
- A mystery shopping form was filled immediately after

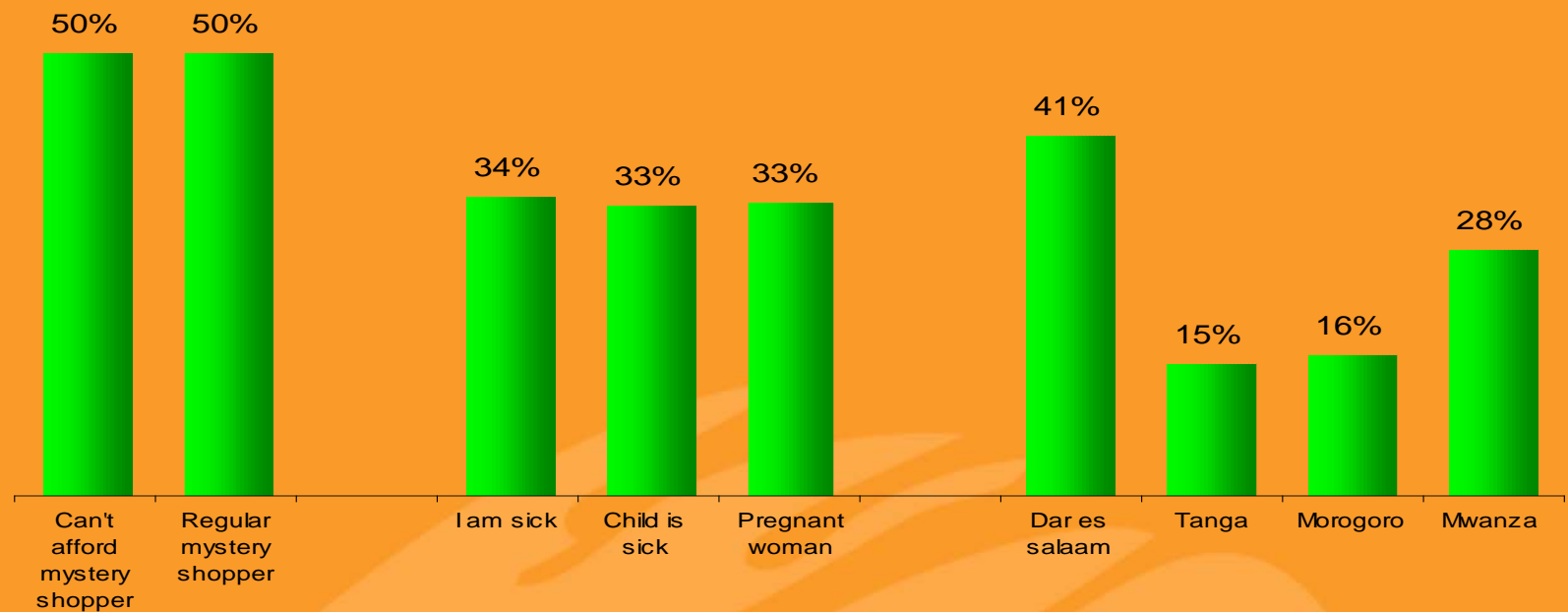
Sampling

- Systematic random sampling
- A list of ADDOs and DLDB across the regions and districts was obtained from Tanzania Food and Drugs Association (TFDA).
- Target sample of 1200 DLDB and 200 ADDOs
- Achieved sample was 1175 DLDB and 232 ADDOs
- Sample was allocated using probability proportion to population size (PPPS)
- Square root of transformation was used to narrow the margin between Dar and other areas

Distribution of Mystery Client Scenarios

ADDOS sample was only done in Morogoro.
No DLDBs were observed in Morogoro

N=All drug sellers visted (N=1407)



Main Findings

- Questions asked by drug sellers to clients to ensure that they have appropriate information on the drugs sold

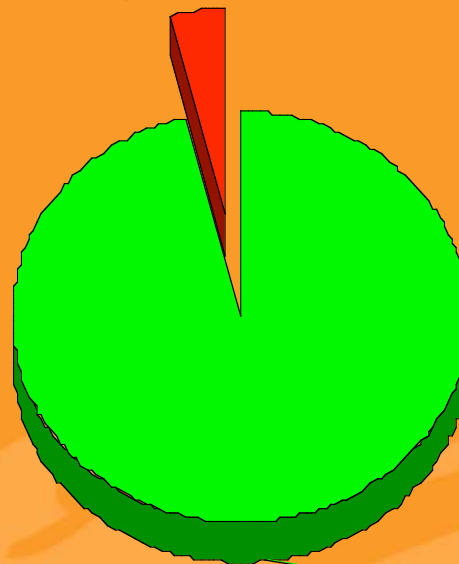
Information Requested by Drug Sellers

96% of all drug sellers asked the mystery shopper for information

Did the drug seller ask you any questions after you asked for a malaria drug?

N= All drug sellers visited (1407)

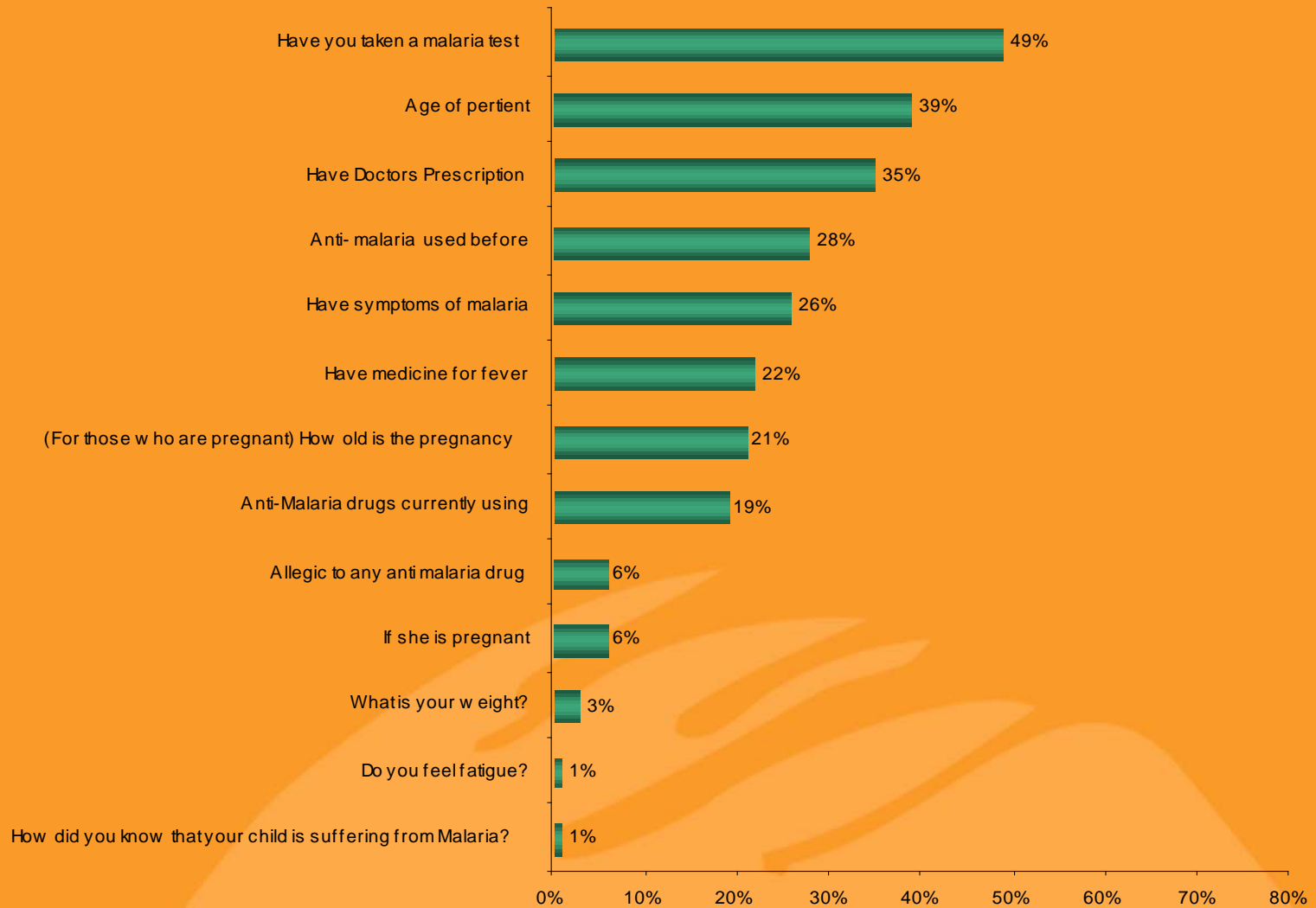
No, 4%



Yes, 96%

Questions Asked by Drug Sellers -Total

Malaria test and age are the most frequent question

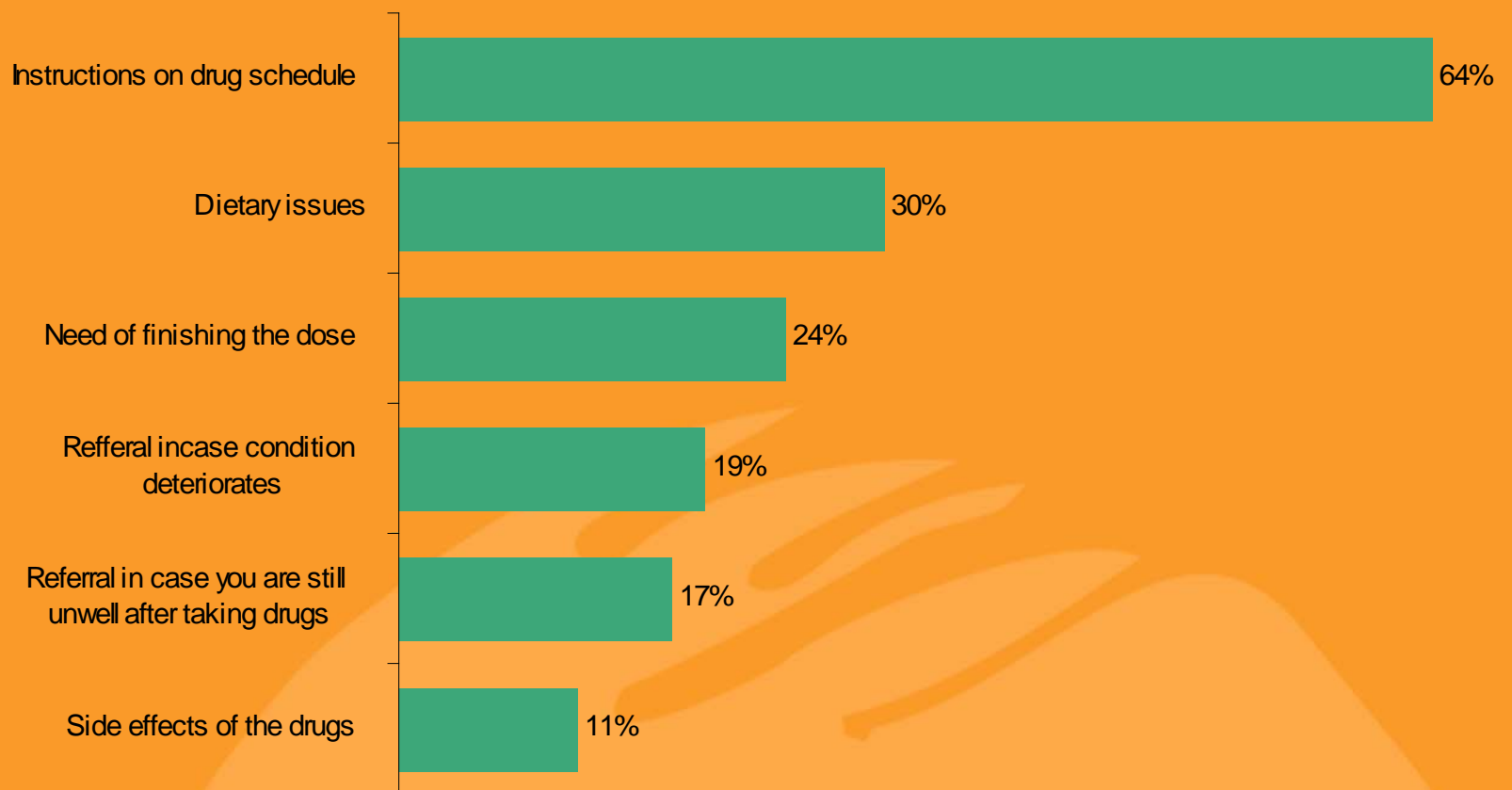


Advice Given - Total

- Generally drug sellers give advise on drug schedule
- However, 36% of mystery clients were not given drug schedule - therefore danger of over dose or under dose

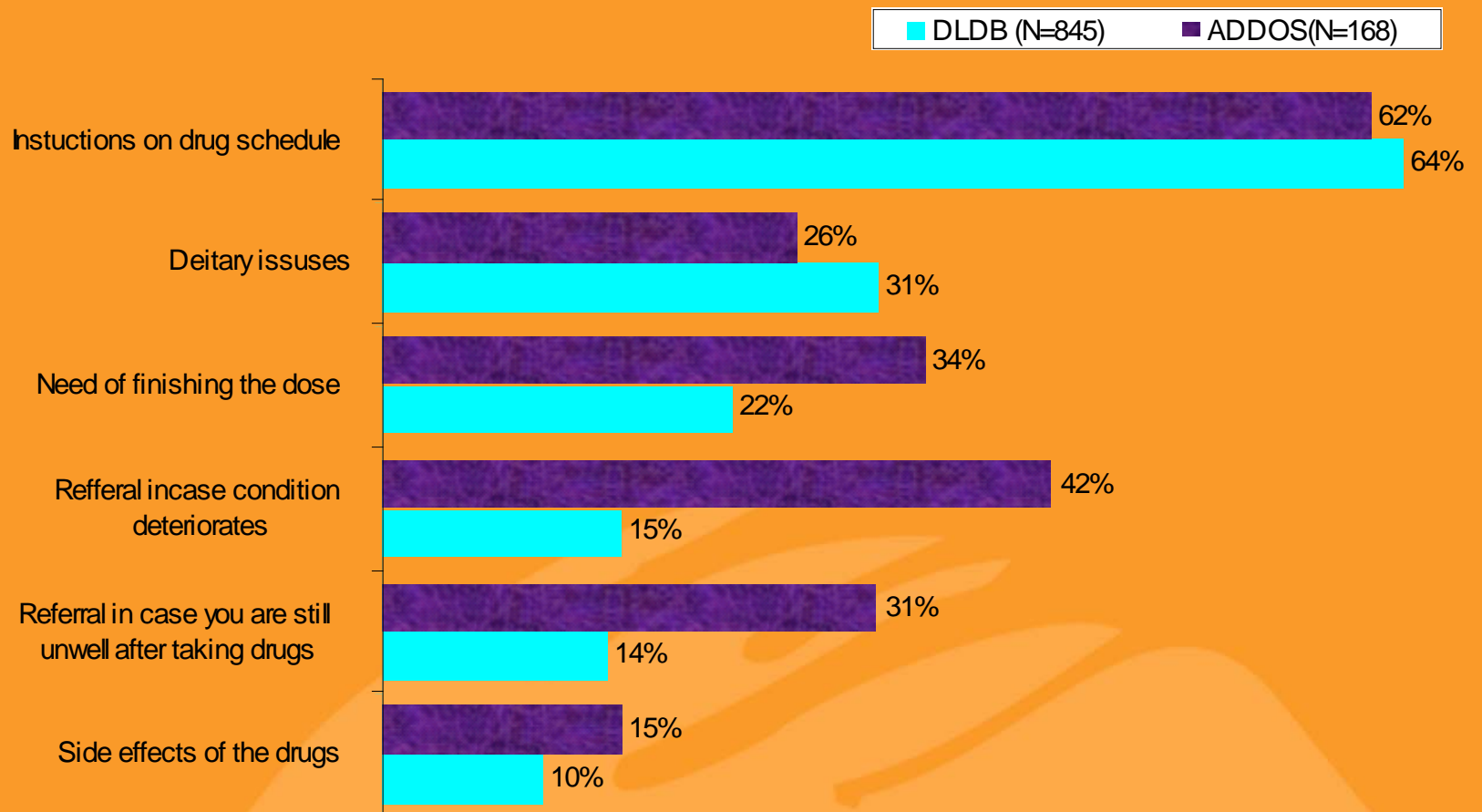
Were you asked the following questions?

N=All those who bought drugs



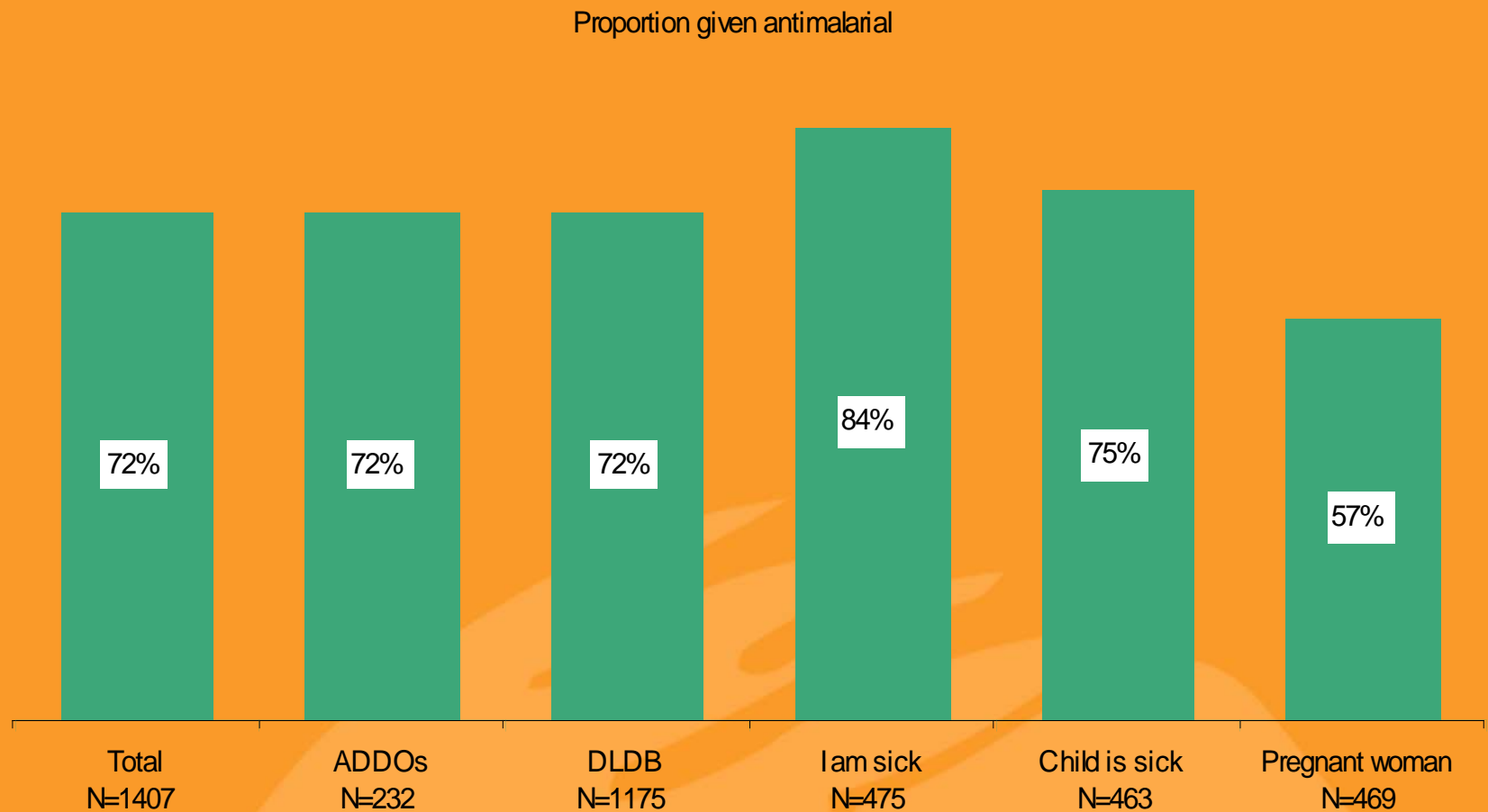
Advice Given by Drug Seller, DLDB vs. ADDO

- Advice on drug schedule is the same across the sellers
- ADDOS more likely to refer and counsel on need to finish the dose than DLDBs



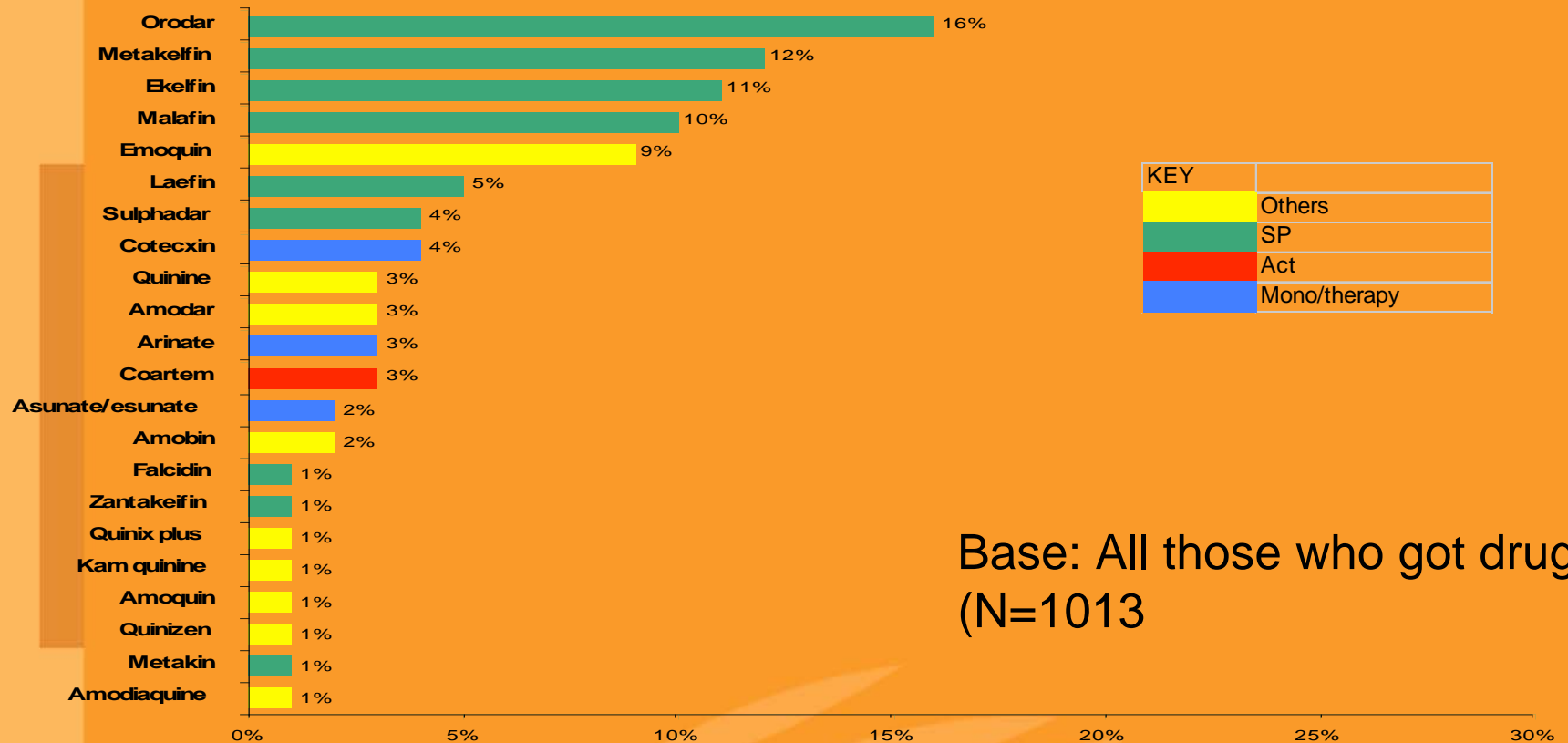
Offered Anti-Malarials

- Out of 1407 mystery clients, 72% got drugs, but 28% did not
- 57% of the pregnant women cases got anti-malarial drugs



Anti-Malarial Drugs Offered First - Total

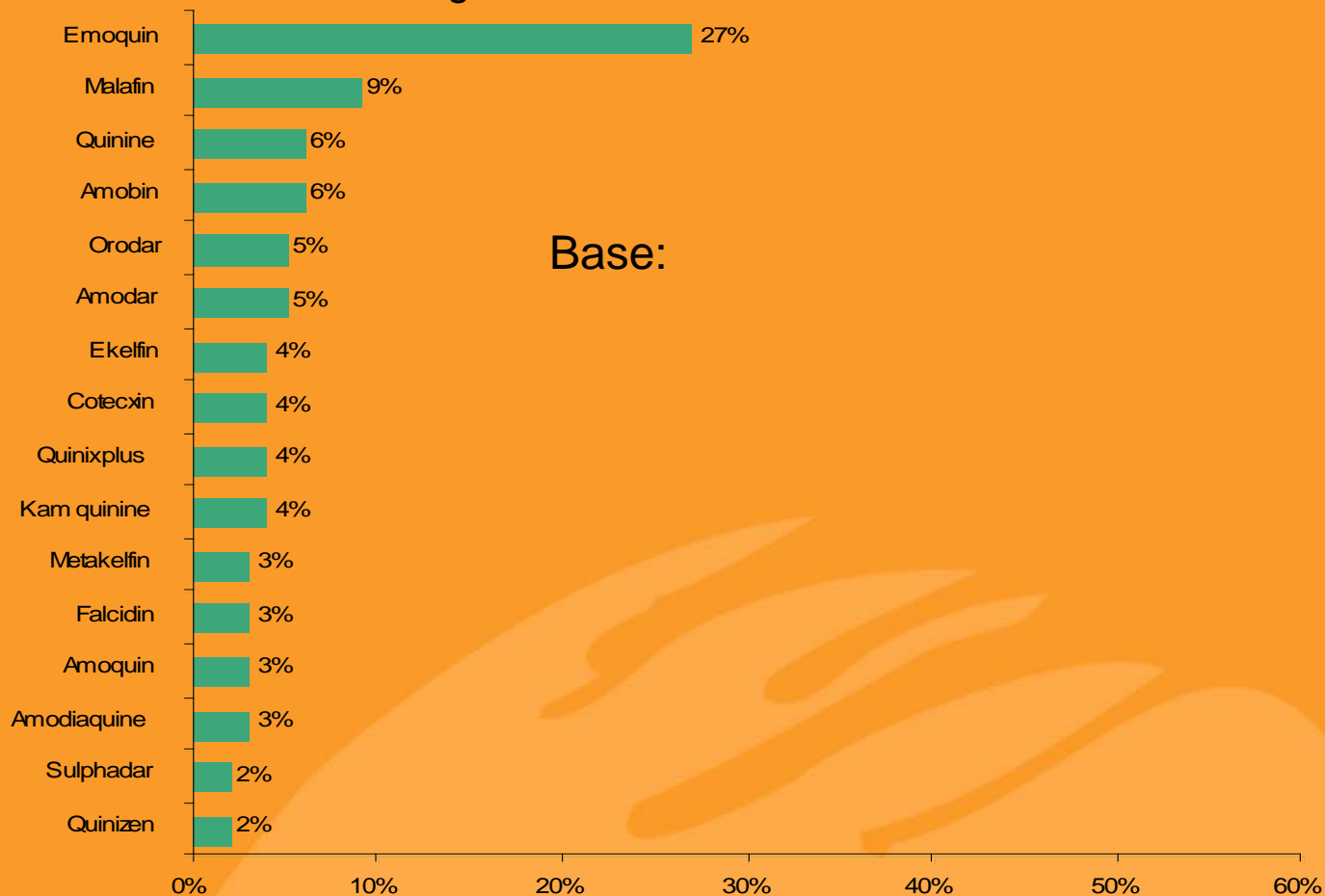
Overall Orodar , Metakelfin, Malafin and Ekelfin had the highest frequency



Base: All those who got drugs
(N=1013)

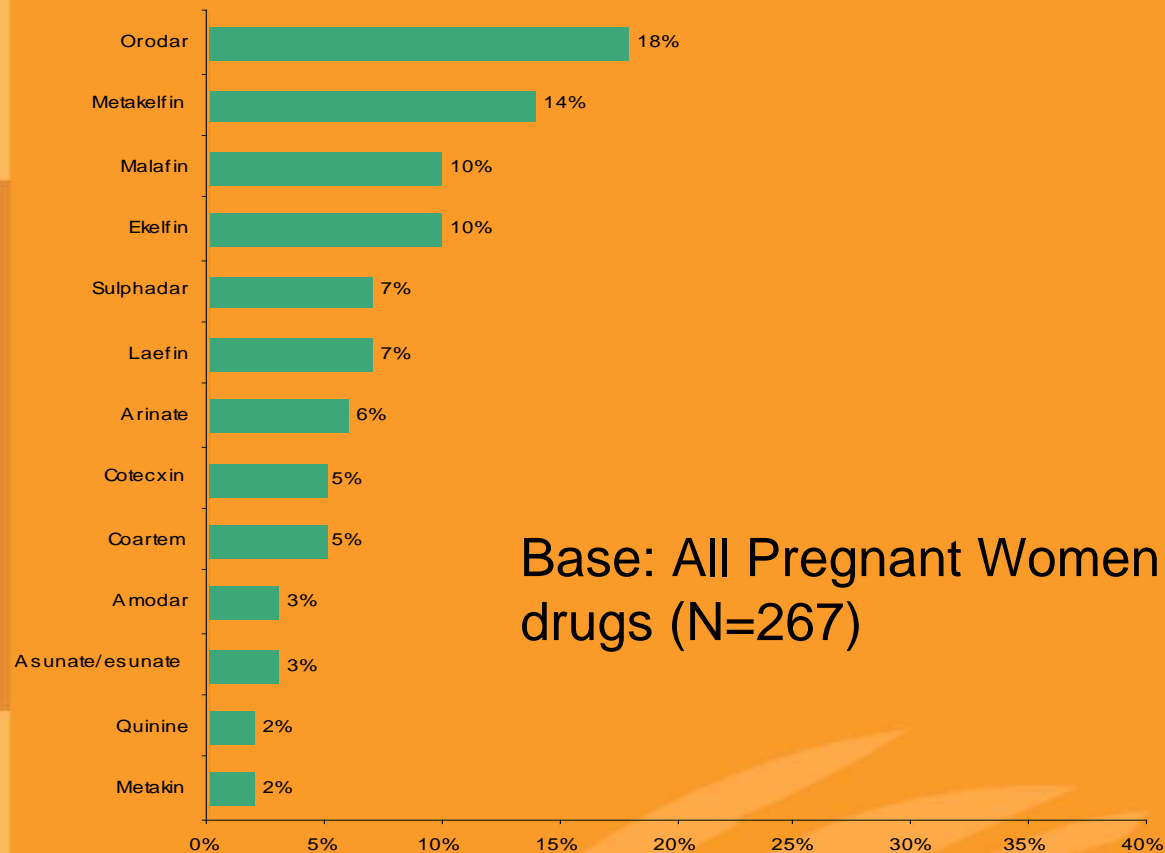
Drugs Offered for Sick Child

- Emoquin had the highest frequency
- All other had a frequency of less than 10%
- Although Quinine is a second line treatment drug 6% of the children cases were offered the drug over the counter



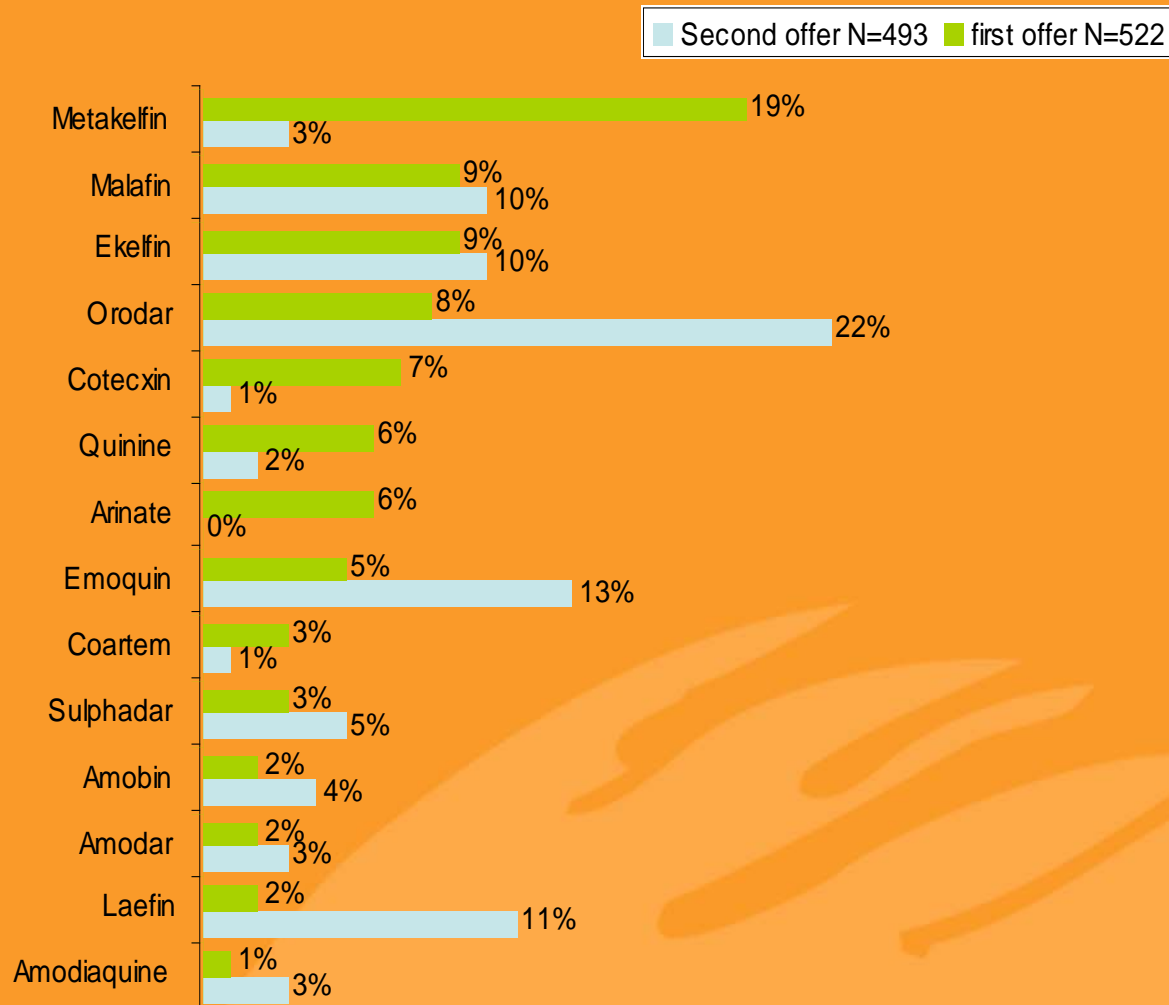
Antimalarial drugs offered first-Pregnant women

- Orodar , Metakelfin, Malafin and Ekelfin recorded a frequency of 10% and above

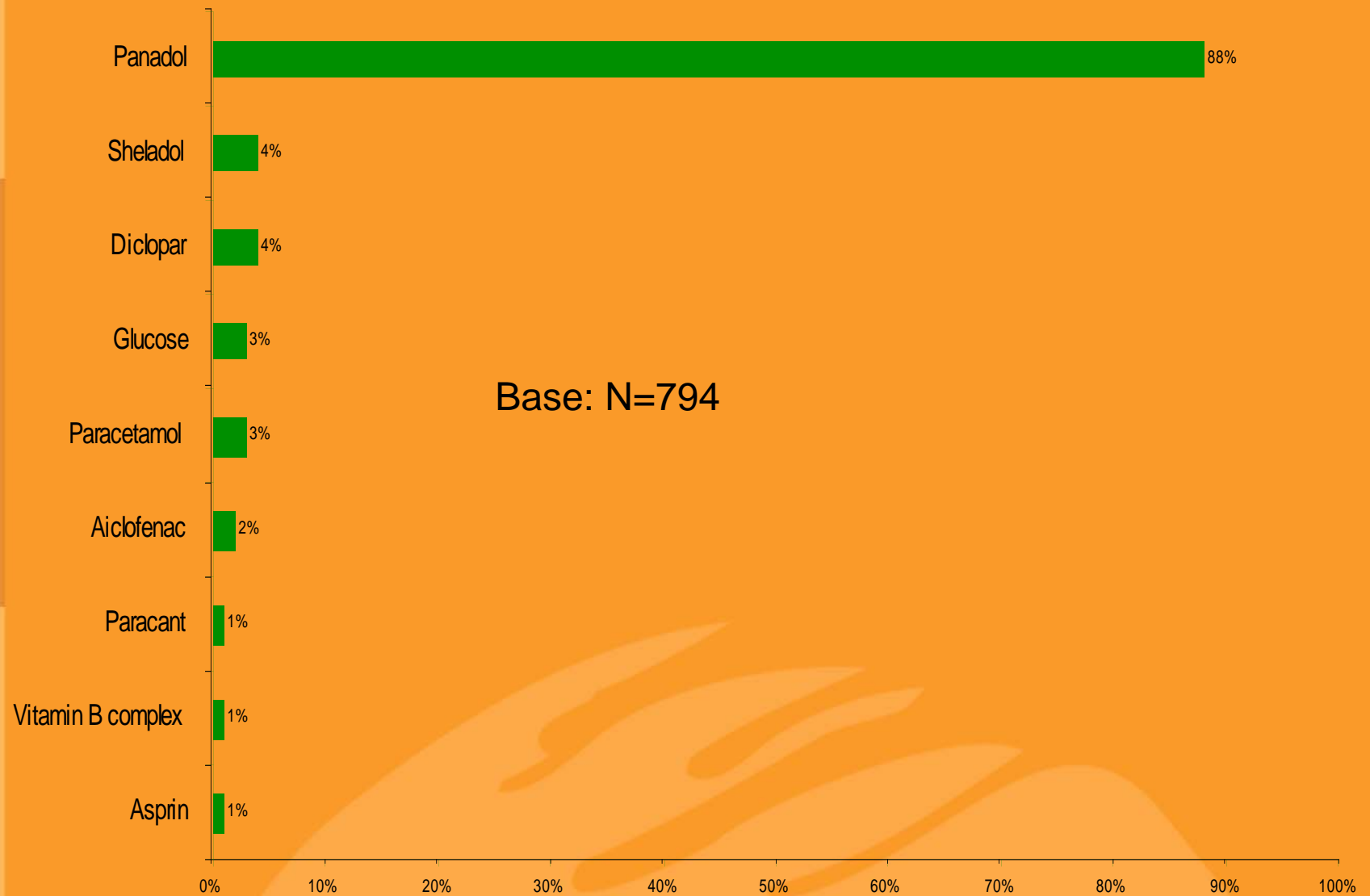


Alternative Drugs Offered to Those Who Could Not Afford ranged between 700-1000 Tsh

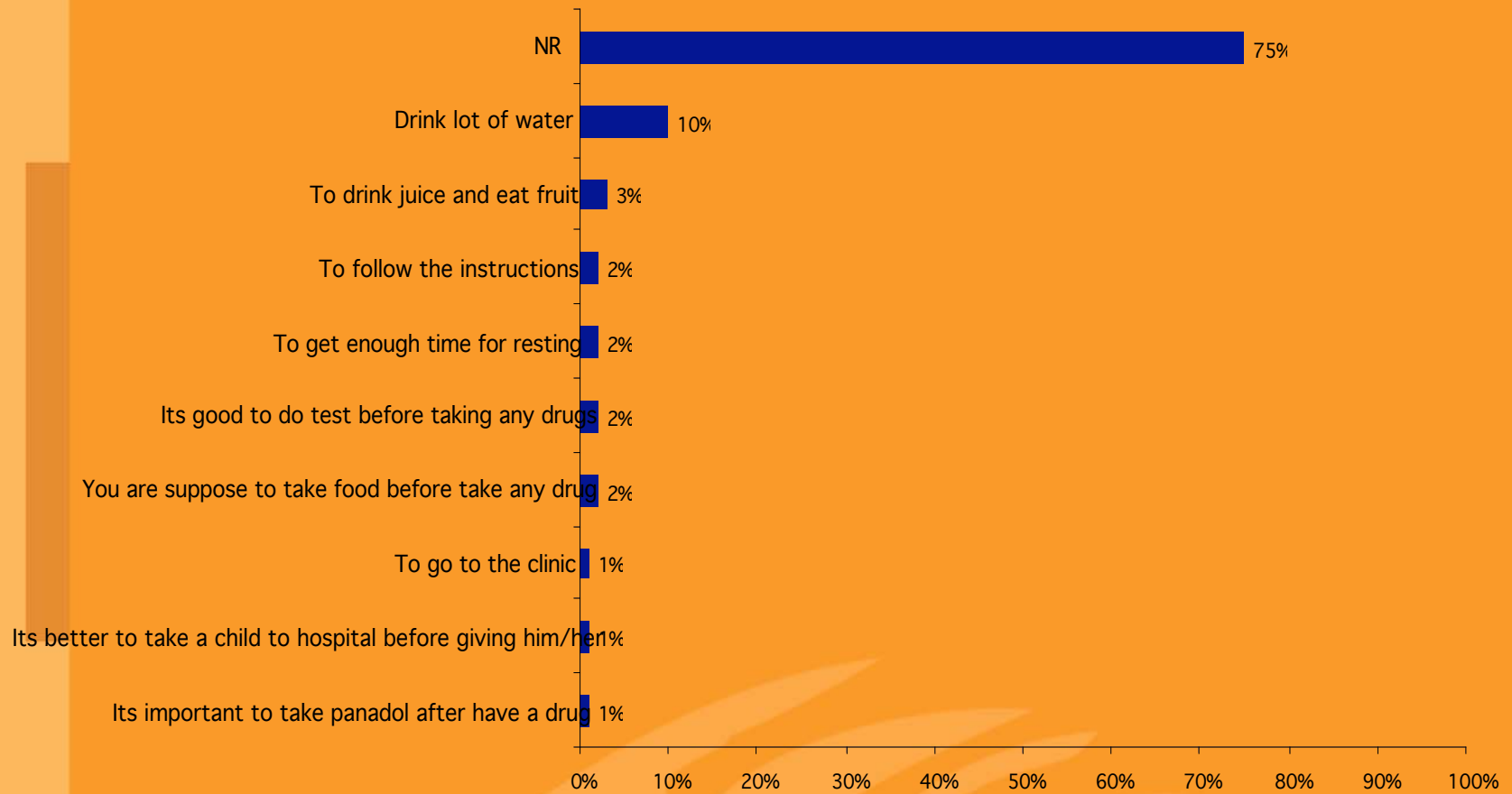
- Orodar, Emoquin, Laefin was an alternative
- Driver to recommend driven by margin



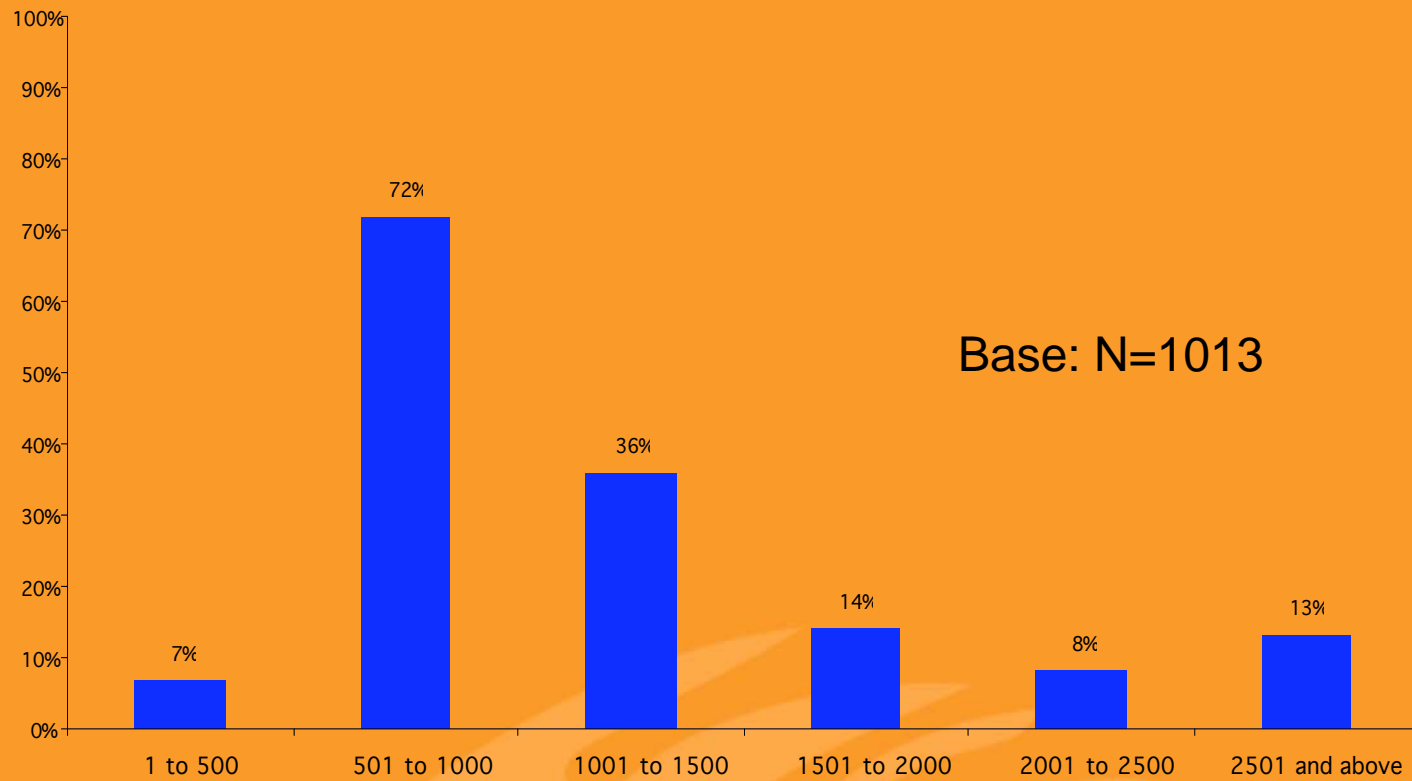
Which Other Drugs Were You Asked to Buy or Advised to Use with the Anti-Malarial Drug?



Is There Any Other Advice You Were Given by the Drug Seller?



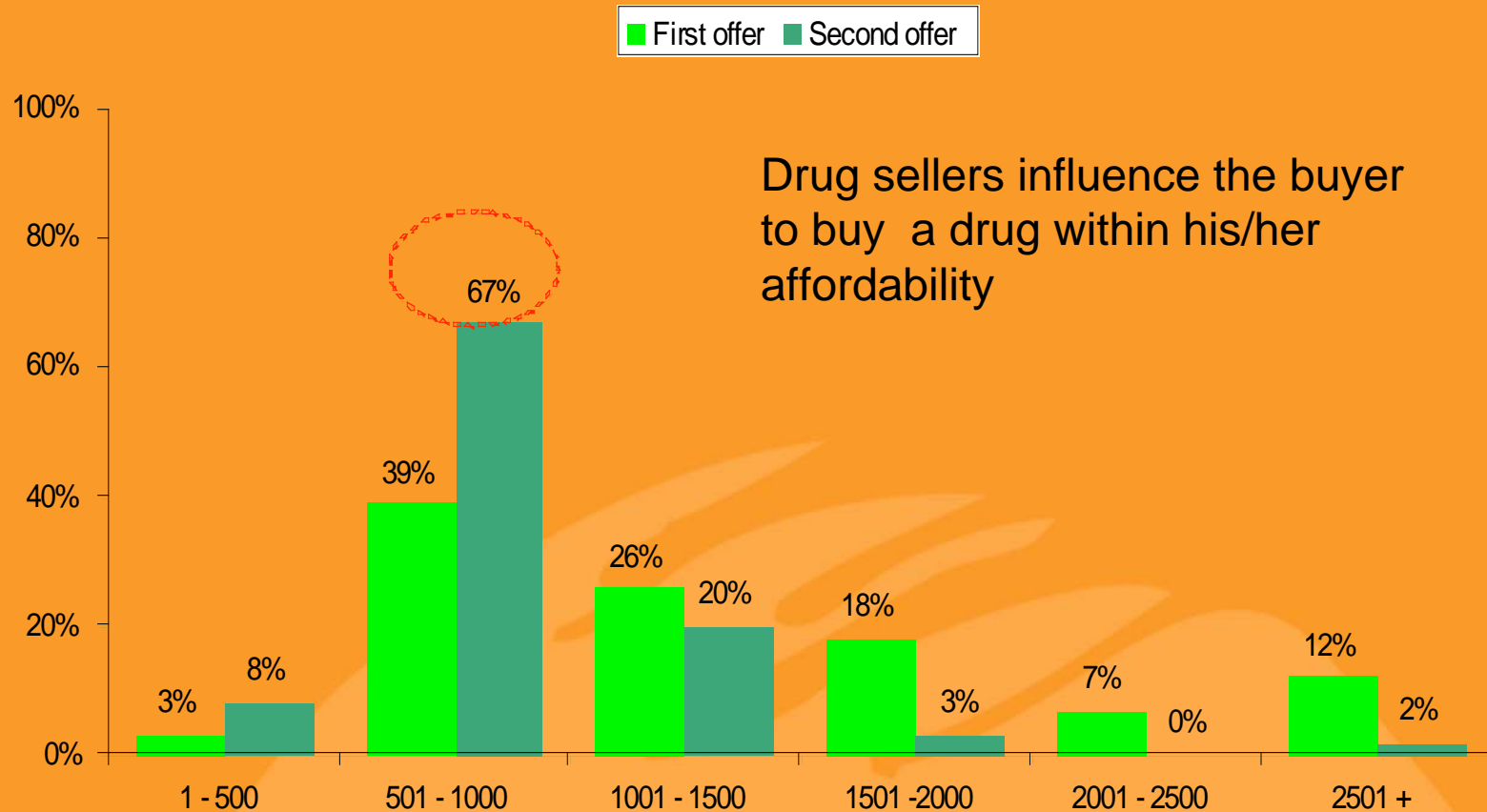
Price Paid for Anti- Malarial Drug



Drug Sellers Behaviour Towards Those Who Could Not Afford

	Base	702
Given an anti-malarial for less price	35%	
Advised to buy a cheaper drug	32%	
Advised to spend more for a better drug	10%	
No advice	5%	
Had only one anti-malarial	1%	

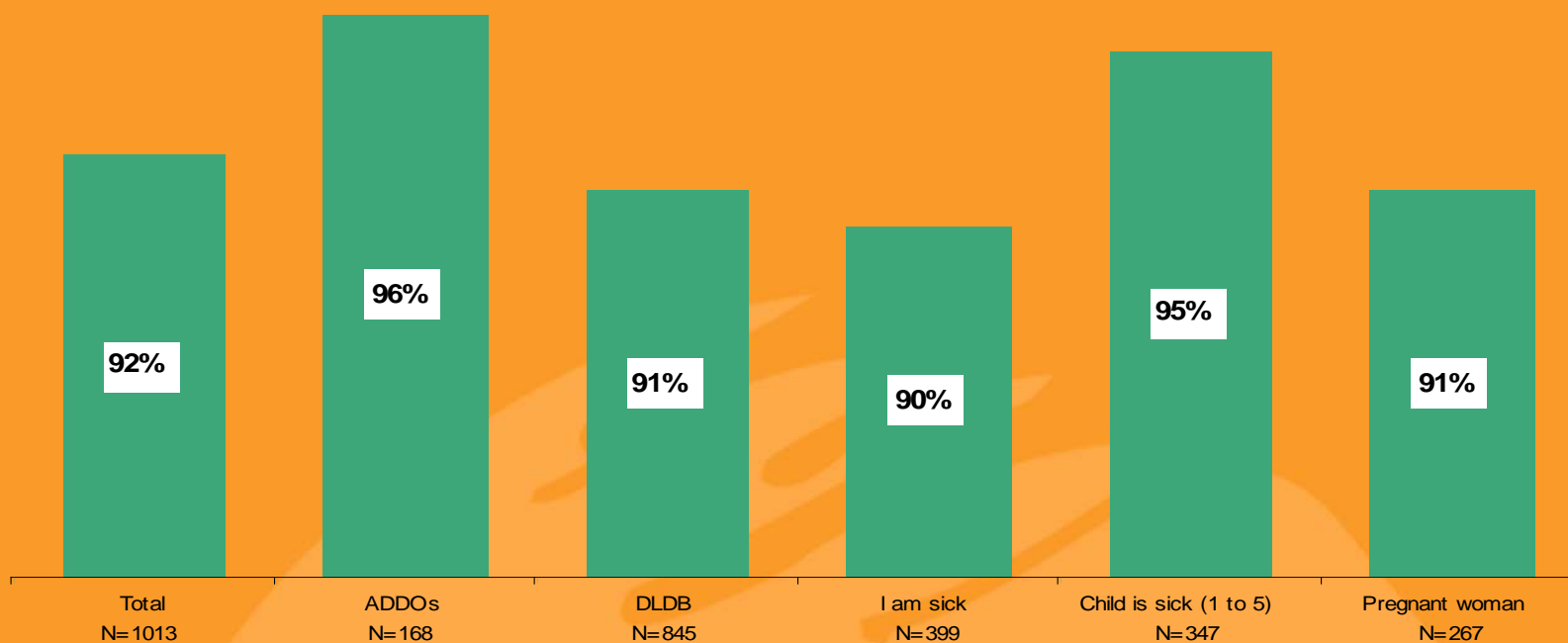
Base: Those who could not afford and got antimalarial



Dosage

- **At least 90% gave the correct dose But: 9% of DLDB sold an incomplete dose- challenge of tablet formulation that is not a blister pack**
- **Children dosage are complete since most are in bottles that are pre-packed**

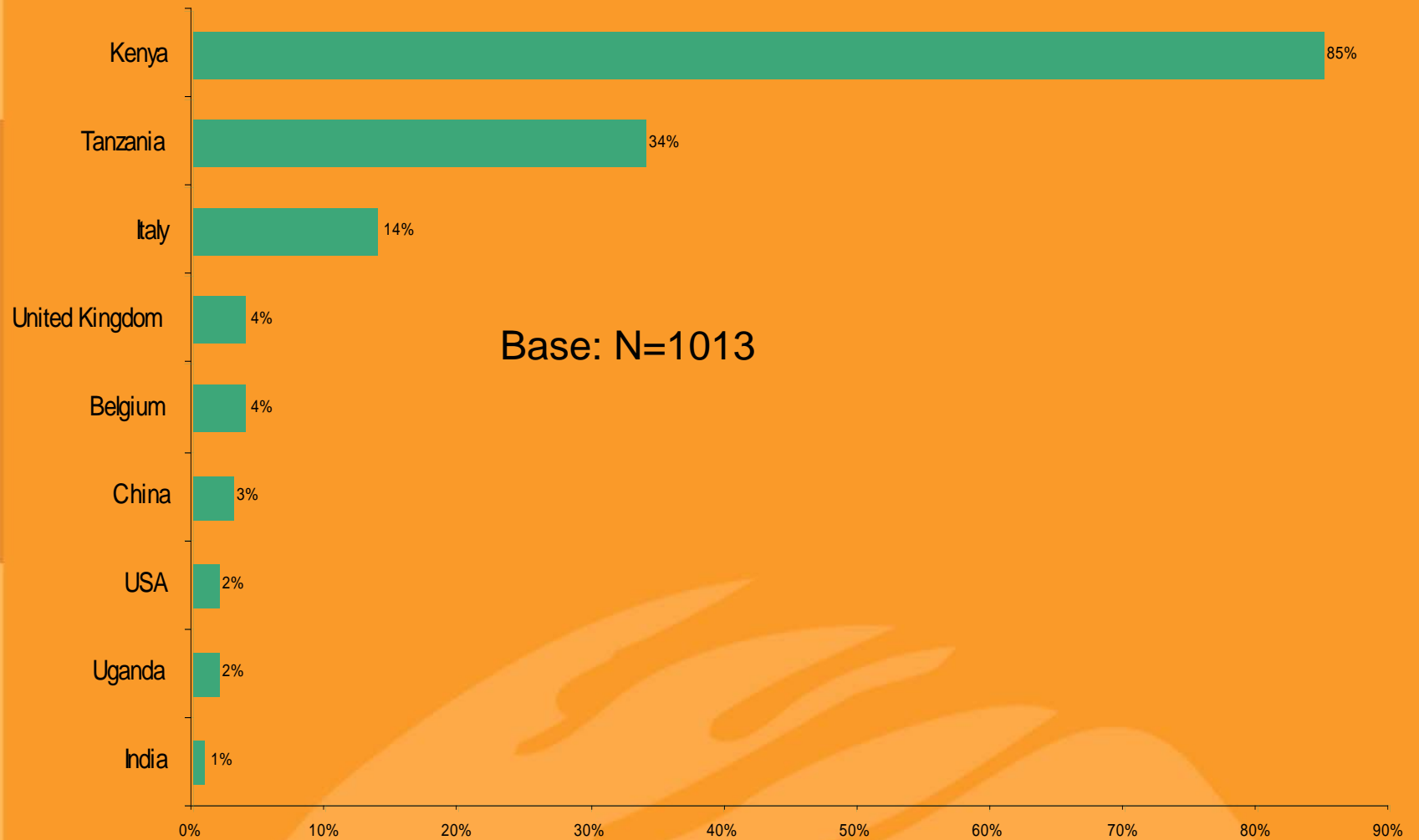
Proportion that got the correct dose



Reasons for Not Getting Drugs

- Total 331
- They had not taken anti-malaria test
- Pregnant women can not take anti-malaria until they get tested
- Don't have doctors prescription
- Because was pregnant

Country of Manufacture of Drugs Sold - Total



Summary

- Overall (SP's) continue to be most commonly sold (65%). mono-therapies is 10% while ACT continue to be rare even in ADDOS by 3% Other drugs which were sold especially AQ contribute to 22%.
- The behavior of drug sellers in relation to product choice and pricing as captured through mystery shoppers is indicated that margins are determinants of drugs issued.
- Of all mystery shoppers for three scenarios: 72% bought anti-malarial drugs. The anti-malarials commonly purchased by all mystery shoppers across all regions continued to be SP at 65% (mostly Orador; Metakelfin was bought mostly by shoppers who could afford)
- ACT accounted for only 3% of the drugs bought from ADDOS. ACT labeled "DUKA LA DAWA MUHIMU were bought from ADDOS and those not labeled were bought from DLDBs
- According to drug sellers, most consumers do not like ACTs because of drug burden (too many tablets to finish the course).

Summary, Continued

- **SP drugs were promoted most strongly – with 65% of mystery shoppers being offered SP first, most often Metakelfin and when money was an issue – 61% were offered Orodar**
- **The price paid by mystery shoppers for most products full adult doses of SP was between 700-1000Tsh. Other SP such as Metakelfin (Italy) was suggested as first choice but was only bought by those who could afford. Price range for metakelfin Tsh 2000-3000(it is higher in price compared to other SP's)**
- **In Mororgoro, where ADDOS were visited, ACT prices were almost constant and were mostly posted on the wall. 500Tshs for children and 1500 for Adult dose**
- **The largest drivers of product sales are price (affordability) and the recommendation of the drug seller.**
- **The profit margin in SP's is high to the point that a drug seller is flexible to reduce the price.**

Conclusions

- **Drug sellers are not asking the buyers adequate information to help them sell the appropriate drug**
- **ADDOS are more informed in selling drugs compared to DLDB**
- **Quinine is still sold in DLDB (Quinine is a prescription drug and second line treatment)**
- **A cheaper drug is recommended for those who presents a financial challenge**
- **Although the high percentage of drug sellers are giving correct doses, they still do not give schedule for their use**
- **Drug sellers mainly give advice on drug schedule; ADDOS more likely to advise than DLDB**
- **There is a gap on counseling the drug buyers particularly on importance of completing the dose, the need to see a doctor if condition does not improve or incase of adverse effects.**

Next Steps General

- **Work closely with TFDA to develop materials for drug sellers**
- **Design outreach initiative to Pharmacy Types I and II**
- **Continue retail tracking**