The process of Malaria Drug Policy Change: Practical Realities in Implementing Novel Treatment Strategies

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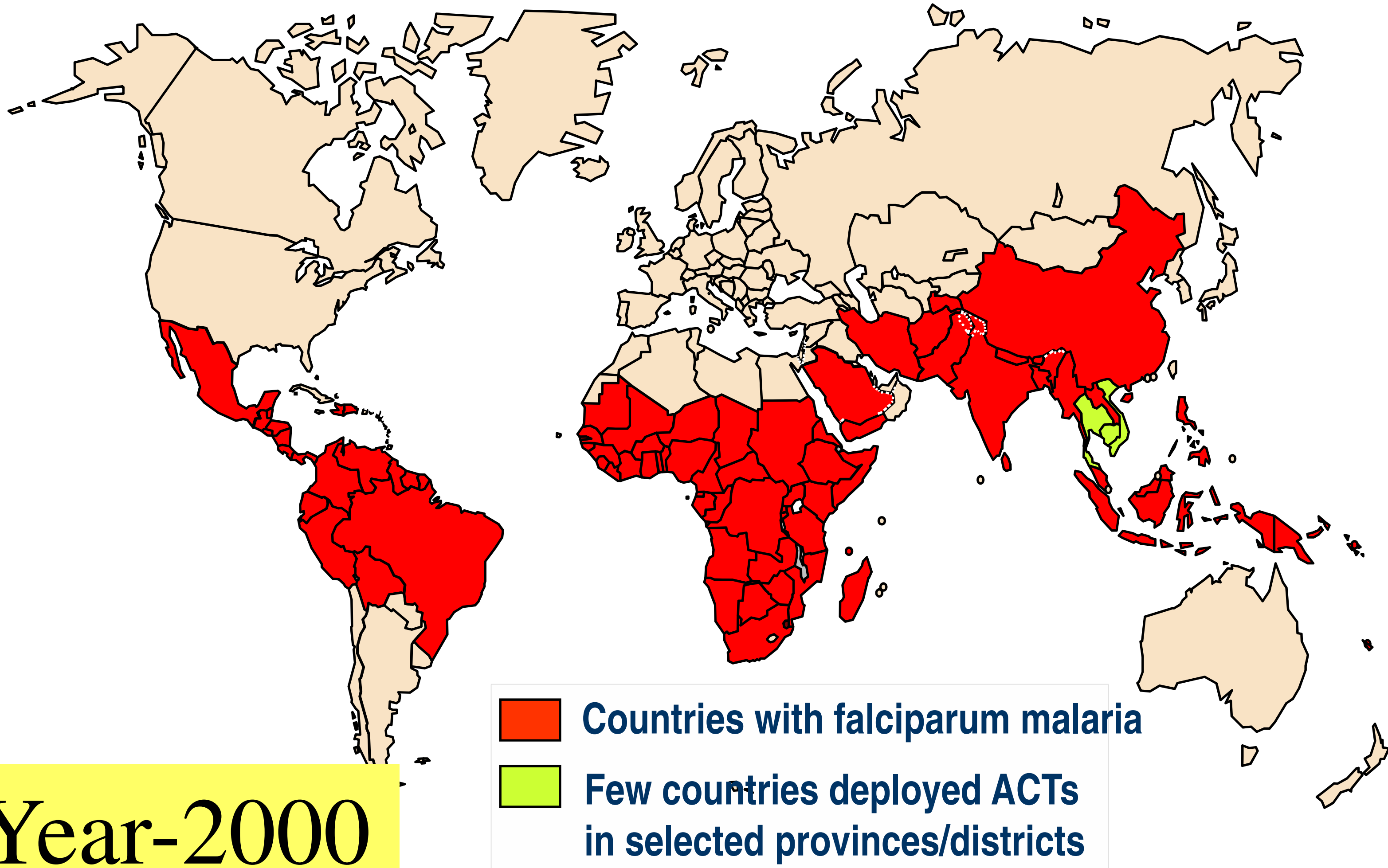
Evolution of ACT as first-line treatment



Year-2000

January 2004- Researchers and public health experts turned into activists in a Lancet View point……

WHO, the Global Fund, and medical malpractice in malaria treatment.

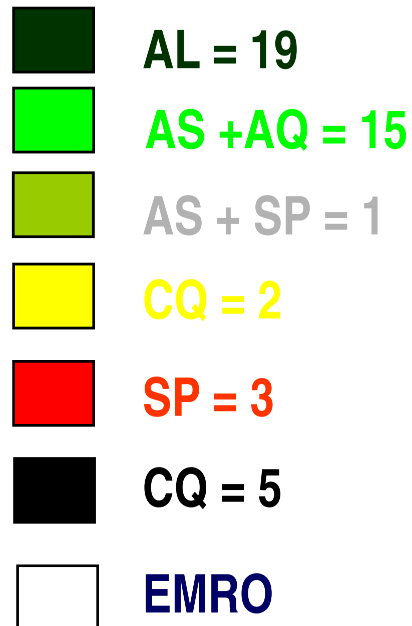
Attaran A, Barnes KI, Curtis C, d'Alessandro U, Fanello CI, Galinski MR, Kokwaro G, Looareesuwan S, Makanga M, Mutabingwa TK, Talisuna A, Trape JF, Watkins WM.

By January 2005 ….unprecedented AMDP change

GFATM fund-catalyst

Later others:

BMGF, PMI, WB



But new drugs and new policies are just part of the solution…….

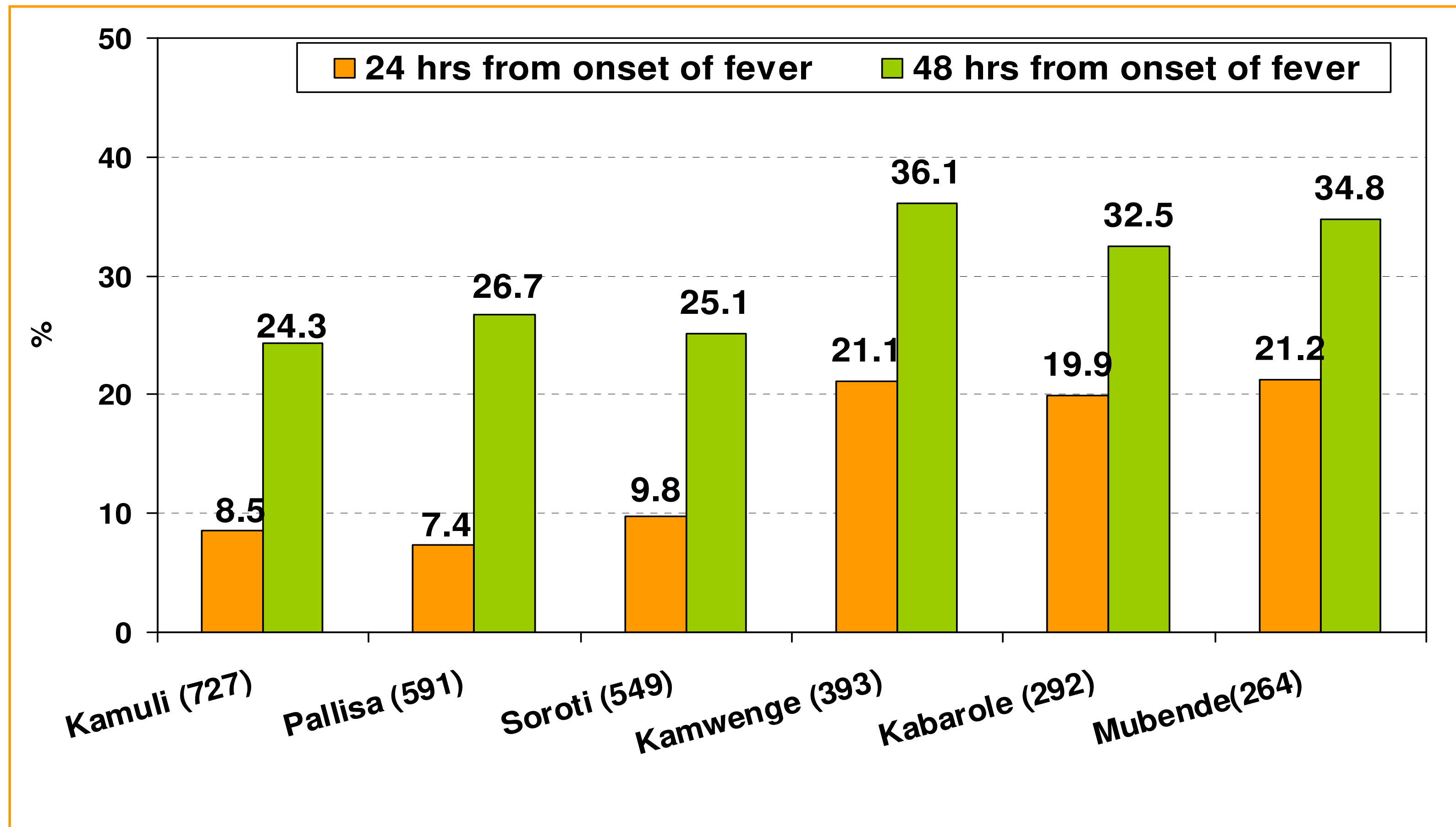
DNDi

Drugs for Neglected Diseases initiative

Improving access to effective antimalarials

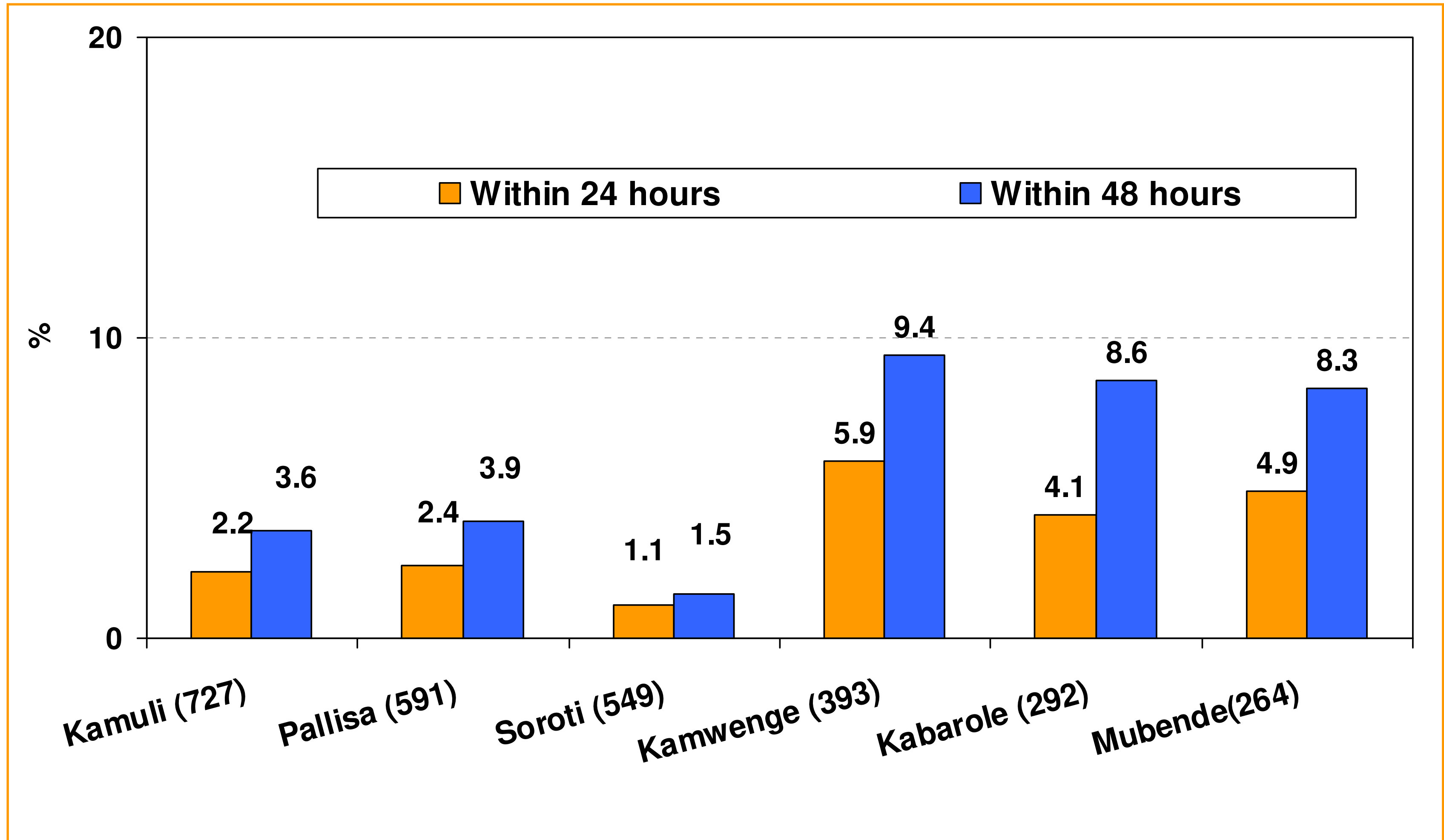
- As close to homes as possible
- Where are we compared to the Abuja and revised RBM targets?

Children under 5 with fever in last 2 weeks who received any antimalarial, Uganda 2007



Source: Baseline studies from MoH/MMV pilot study

Children under 5 with fever in last 2 weeks who received ACT, Uganda, 2007



Source: Baseline studies from MoH/MMV pilot study

Market share of ACTs, Uganda 2007

- 164 antimalarials were found on the market
- 182 antimalarial medicines listed on the May 2007 register
- 35 medicines on the register were not found on the market
- 17 medicines were found which were not on the May 2007 register

	Register		Not found (#)		On the market in the 6 districts	
	#	%	on register	on market	#	%
AQ	12	7%	2	2	12	7%
Artemisinin monotherapy	33	18%	3	5	31	19%
ACT	27	15%	0	11	16	10%
Chloroquine	30	16%	11	4	37	23%
Quinine	33	18%	1	4	30	18%
SP	35	19%		7	28	17%
others	12	7%		2	10	6%
Total	182		17	35	164	

Source: Baseline studies from MoH/MMV pilot study

Relative costs and affordability of different anti-malarial medicines, Uganda 2007

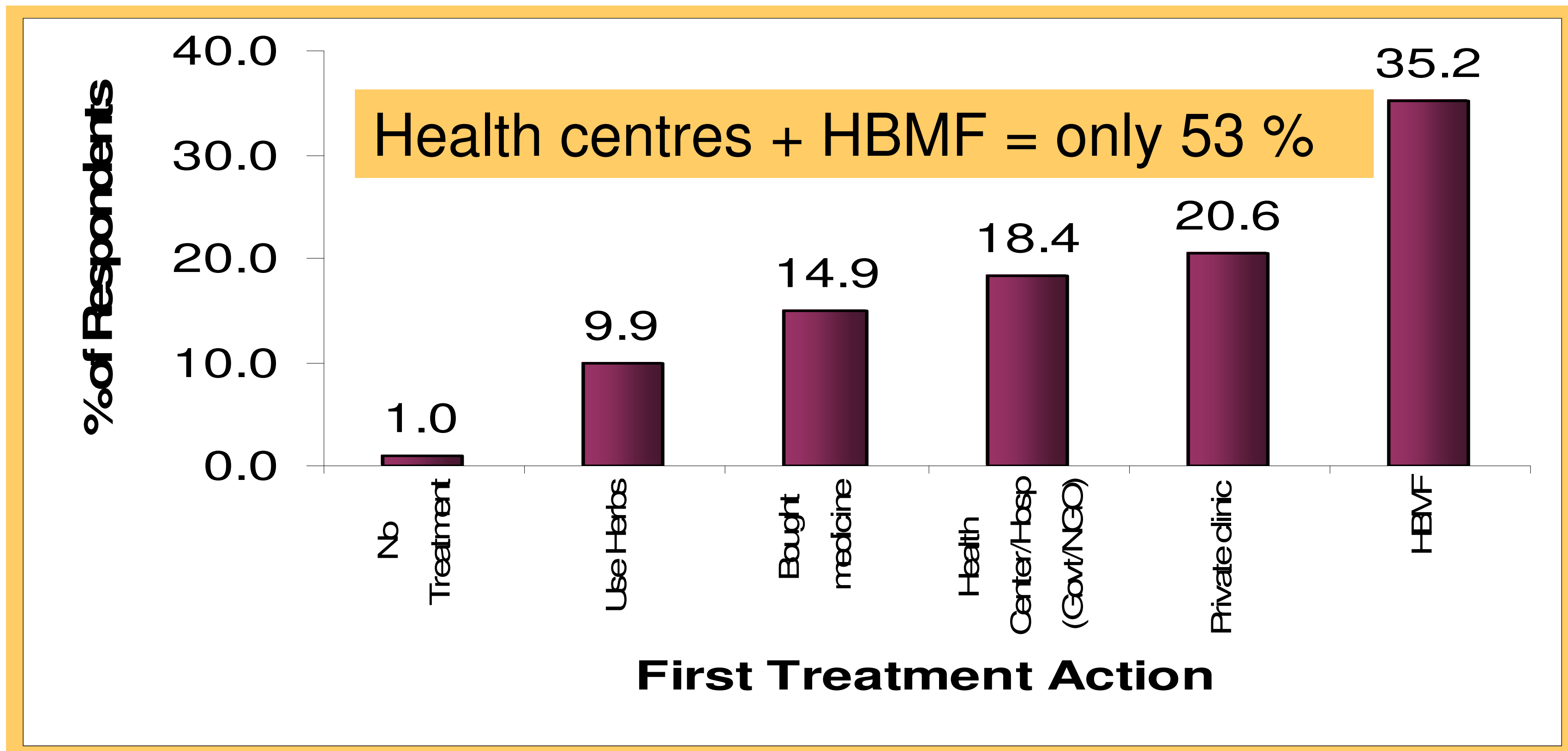
Across all sectors and districts	Price/unit (Ush)	Cost/course (Ush)	Amount of work for low paid Govt worker
Amodiaquine tablets	50-80	400-640	1-2 hours
Chloroquine tablets	23-28	230-280	< 1 hour
Chloroquine injection	76-100	3,200-4,200	1 day
Quinine injection	550-630		
Quinine tablets	76-100	3,200-4,200	1 day
SP	133-221	400-663	1-2 hours
ACT	200-2,333	10,000-15,000	3-5 days
Artemisinin monotherapy - oral	500-5,000	5,500-35,000	2-12 days
Artemisinin monotherapy - injection	1,250-3,250	9,000-23,000	3-8 days

Source: Baseline studies from MoH/MMV pilot study

Going Beyond Public sector-Why?

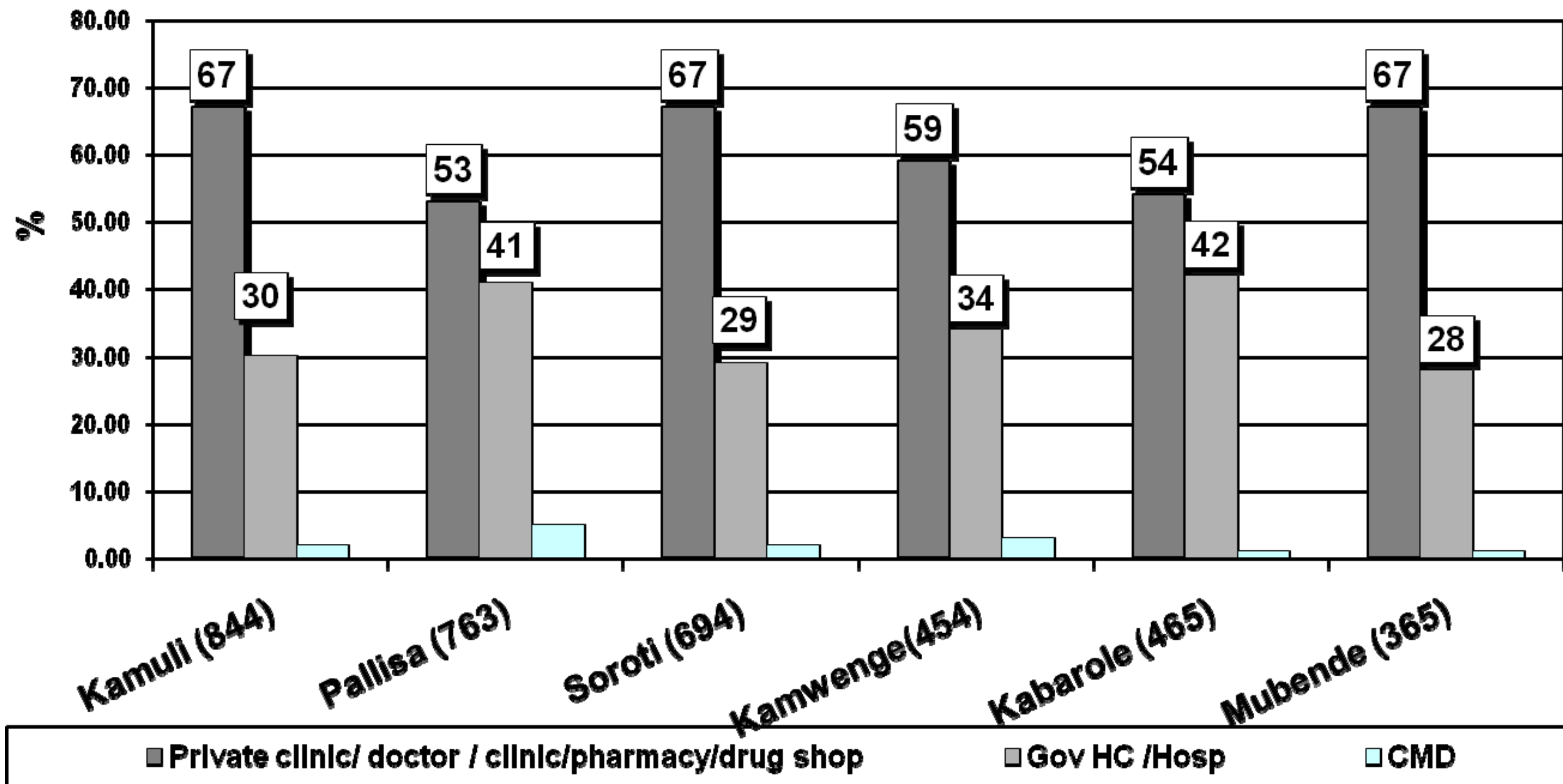
- Most patients access treatment outside public sector- get ineffective medicines
- Private sector provides back up stocks in case of stock outs in public sector

Treatment actions for febrile children in HBMF district, Rakai Uganda, 2006



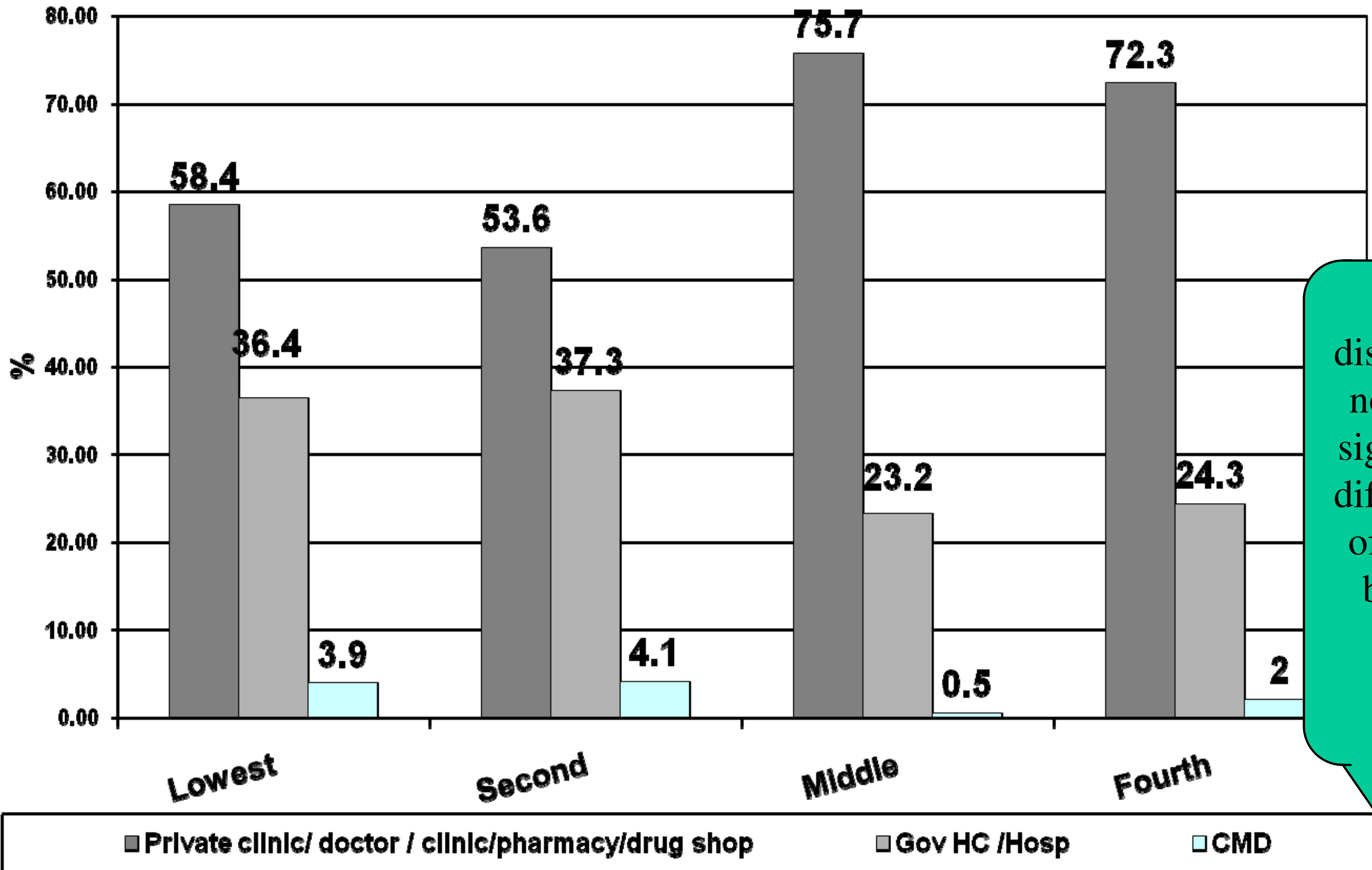
Mugaga et al, Mal J, 2007

Source of first treatment/advice at onset of fever- recent data, Sept 2007



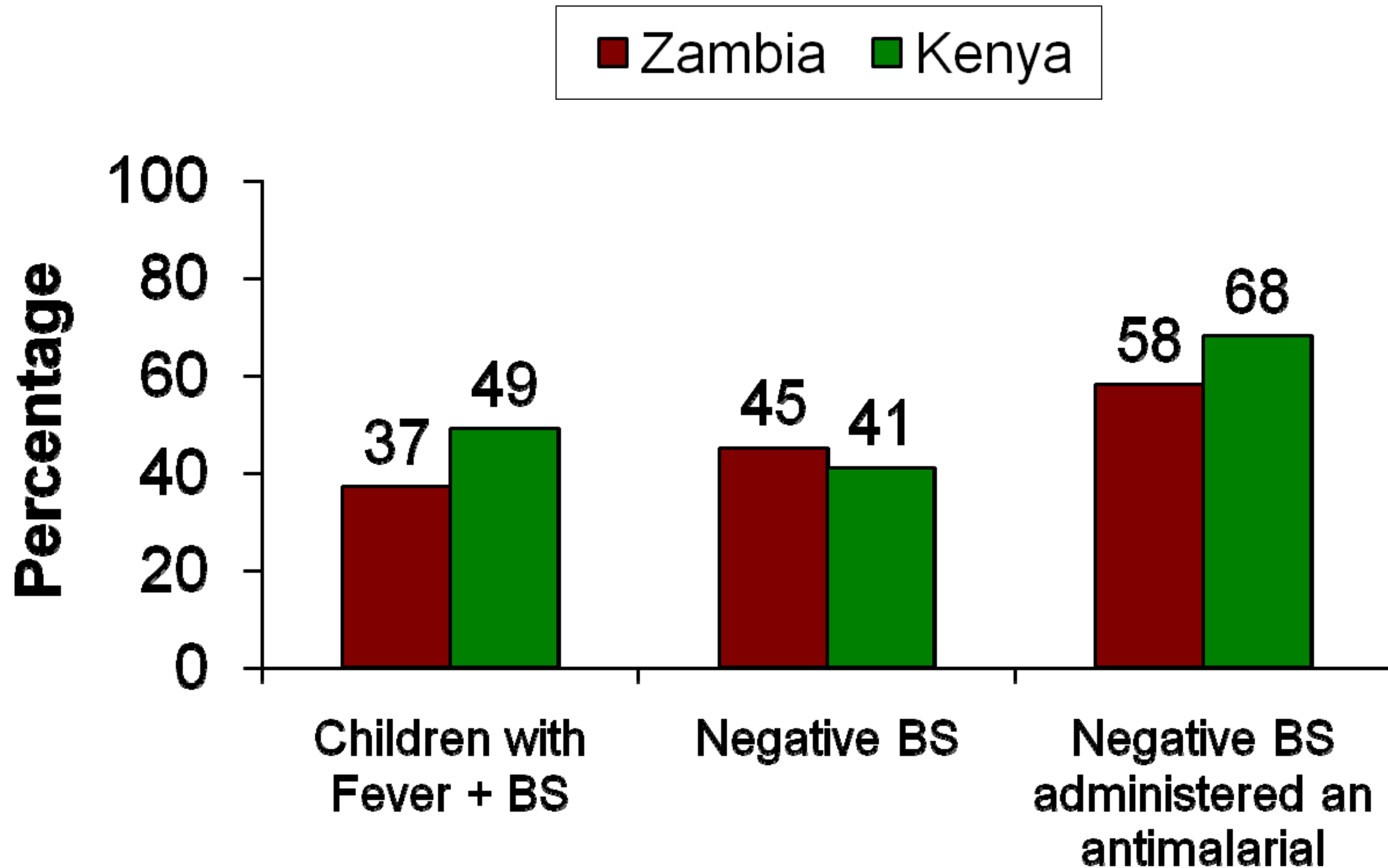
Source: Baseline studies from MoH/MMV pilot study

Source of antimalarials by SES, Kamuli, Uganda, 2007



Source: Baseline studies from MoH/MMV pilot study

Adherence to laboratory results by HWs



Zurovac et al, 2005, Ndhlovu et al, 2007s

Need new approaches……Why?

- New drugs or new paradigm-Combination therapy
- Relatively new strategies to Africa:
  - Pharmacovigilance and post marketing surveillance
  - Fighting counterfeits
- More emphasis on surveillance, information and research, performance assessment/monitoring and evaluation

Need new approaches……Why?

- Changing areas of focus
  - More community involvement - Community training/dialogue strategies for mother coordinators
  - Private sector involvement-premium and non premium
  - Use malaria to fast track health systems development
  - Re-orient advocacy and social mobilization
  - Short shelf-life-More precise quantification and forecasting
  - Drug delivery models-HBMF, MFTs, subsidies
  - Parasite based diagnosis vs. Presumptive
  - Continued efficacy but more effectiveness monitoring

Conclusion- the challenge of changing treatment strategies

- Deciding new policy is arguably the easy part of a complex process
- Training or guidelines alone are not sufficient (Reyburn et al, 2007, Talisuna & Njama-Meya, 2007, Zurovac et al, 2006, WHO, 2001)
- Need other interventions to ensure good clinical practice
- AL alone is 4 different drugs – MFTs will introduce new PSM challenges

Coartem®
artemether/lumefantrine

Patient Dosage Card

Taking Coartem® to treat malaria.

You must take it exactly as recommended for 3 full days, otherwise the infection may return.

BODY WEIGHT	Day 1 (0hrs – 8hrs after)	Day 2 (morning – evening)	Day 3 (morning – evening)
5 to less than 15 kg	2x1 tablet	2x1 tablet	2x1 tablet
15 to less than 25 kg	2x2 tablets	2x2 tablets	2x2 tablets
25 to less than 35 kg	2x3 tablets	2x3 tablets	2x3 tablets
Adults & children 35 kg & above	2x4 tablets	2x4 tablets	2x4 tablets