



Medicine Price Monitor

Nov - Dec 2006

Key Findings: Overall

1. Medicines were more available in the private sector health facilities than in the public and mission sectors. All surveyed medicines in all sectors were on the National Essential Medicines List for Tanzania (NEMLIT).
2. Prices of medicines in health facilities in the private and mission sectors were generally higher than in the public sector.
3. Antiretroviral medicines (ARVs) were more available in public than in private and mission health facilities.

1. INTRODUCTION

The majority of Tanzanians cannot easily access the medicines they need; a major reason for poor access is the price of medicines. To understand more about what people pay for medicines in Tanzania, the Ministry of Health and Social Welfare in collaboration with the World Health Organization (WHO) and Health Action International (HAI) Africa conducted a countrywide survey on medicine prices in 2004¹. Following the dissemination of results of this survey, it was recommended to conduct medicine price monitoring twice yearly in order to generate further evidence for effective policy decisions. This is the first price monitoring report, presenting the findings of the survey from November - December 2006.

Forty key (regularly prescribed and dispensed) medicines were selected for prices survey (for the lowest priced medicines) and their availability in a total of 96 rural and urban facilities in four regions namely Dar es Salaam, Mwanza, Mbeya and Mtwara which are well placed in the Medical Store Department (MSD) zones and good representative of the country in disease pattern. All medicines surveyed were on the current National Essential Medicines List (NEMLIT)². The facilities surveyed included regional and district hospitals and Health Centres, located in rural and urban areas. They included public, private and mission (NGO) facilities.

2. AVAILABILITY OF MEDICINES

Key findings: Overall

In all the three sectors, medicines were relatively more available in health facilities in the urban areas as compared to the rural areas.

1. 8 medicines were available in more than 75% of the public sector facilities.
2. The ARVs surveyed, Stavudine/Lamivudine/Nevirapine (d4t/3TC/NVP) 30mg and 40mg / 150mg / 200mg were available in 53 % of the public health facilities.
3. Sulphadoxine/Pyrimethamine (SP) was available in more than 80% in all the three sectors. The newly introduced first-line antimalarial medicine Artemether/Lumefantrine (ALu) 20/120mg was not available in the public sector but was available in the private sector (47%) and mission sector (31%). At the time of survey, distribution of ALu in public was in progress but had not reached the remote public health facilities.

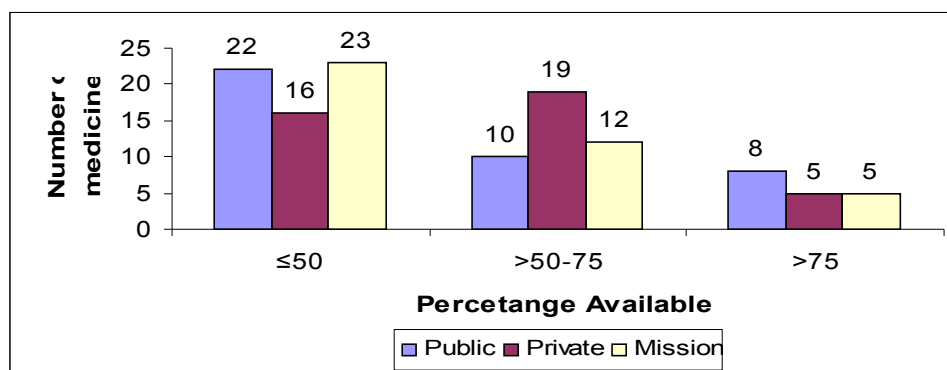
Table I: Availability of medicines in the three sectors.

Sector	No. of Facilities	Median availability
Public: Overall	32	47%
Urban	16	59%
Rural	16	25%
Private: Overall	32	56%
Urban	16	81%
Rural	16	31%
Mission: Overall	32	47%
Urban	16	56%

Rural	16	50%
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The overall availability of medicines in all the three sectors was as follows.

Figure 1: Percentage availability of 40 medicines in the three sectors.



Of the 40 medicines surveyed, 23 were available in ≤50% of public health facilities while 16 and 23 were available in ≤50% of the private and mission sectors respectively. 9 medicines were available in more than 50% of the public health facilities while 19 and 12 were available in the private and mission health facilities respectively. 8 medicines were available in more than 75% of the public health facilities while 5 and 5 were available in the private and mission health facilities respectively.

3. MEDICINE PRICES

Key Findings: Medicine Prices

For similar pairs of medicines surveyed,

- Prices in the private and mission sectors were 50% higher than the public sector.
- Prices in urban and rural public health facilities were the same. Similarly, the same was observed in urban and rural private health facilities.
- Prices in the urban mission health facilities were 40% higher than in the rural while those of the rural private and rural mission facilities were the same. The prices of the urban mission facilities were slightly higher than the urban private facilities.

The table below shows a summary of the comparisons of medicine prices within and between the three sectors.

Table 2: Median of MPRs - comparisons between and within sectors

	overall private/ public	overall mission/ public	puburb/ pubrur	privurban/ priv rurl	misurb/ misrurl	privurb/ misurb	privrur/ misrurl	privurb/p uburban	PrivRura/ PubRural
No. of times more expensive	1.50	1.50	1.00	1.00	1.40	0.88	1.00	1.50	1.50
No. of pairs compared	27	28	12	19	29	31	18	18	11

Table 3: Prices of selected medicines across all the sectors in unit price in Tanzanian shillings

	UNIT PRICE (TSHS)		
	PUBLIC	PRIVATE	MISSION
Amoxicillin 250mg	33.30	33.33	47.50
ALu (20 + 120)mg	n/a	416.67	412.48
Doxycycline 100mg	35.7	50.00	50.00
Sulbutamol inhaler 100ug/dose	n/a	n/a	n/a
Glibenclamide 5mg	n/a	50.00	30.00
Metformin 500mg	37.50	100.00	100.00
Captopril 25mg	47.50	100.00	80.00
Atenolol 50mg	100.00	90.00	50.00

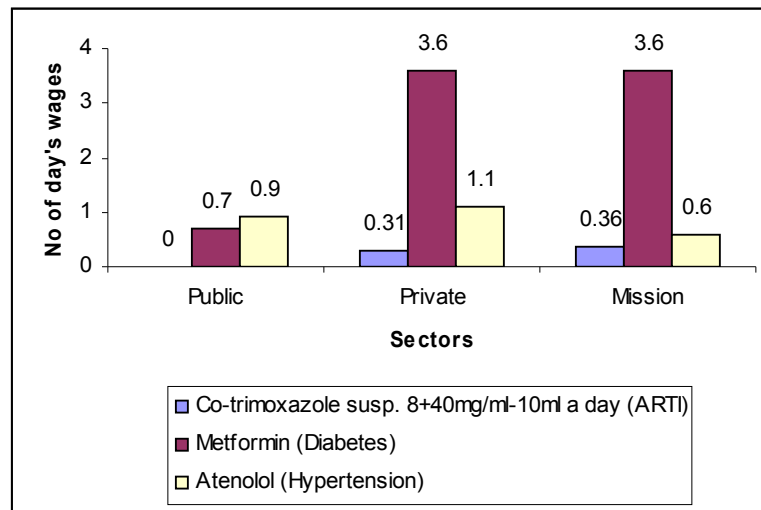
Ranitidine 150mg	n/a	n/a	n/a
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4. AFFORDABILITY

Affordability is calculated in terms of the days the lowest paid government worker would have to work to pay for one treatment course of an acute condition or one month's treatment of a chronic condition. The daily wage of the lowest paid government worker is Tshs. 2,532.67.

The cost for the treatment of acute cases of pneumonia in an adult with amoxicillin was 0.4 day's wage in public and private and 0.6 day's wage in the mission sectors. Treatment of malaria with the currently introduced first-line antimalarial medicine ALu was 4 days' wages in both private and mission sectors. In the public sector they had only started distributing the subsidized ALu and so it was not counted as being used by patients.

Figure 4: Affordability of treatments for chronic diseases, adult hypertension and diabetes and for pediatric acute respiratory tract infection.



The results reveal that the treatments were higher in the private and mission sectors than they were in the public (See figure 4 above). For a family with a father having diabetes and hypertension and a child having acute respiratory tract infection it will take 1.6 days wage in the public sector, 5.01 days wages in the private sector and 4.6 days wages in the mission sector.

5. Discussion:

The government changed the first line treatment for malaria from SP to artemisinin combination therapy (ACT) in November 2006. The distribution of the ALu 20/120 mg to all public sector health facilities especially from the rural areas had not been completed when this survey was conducted. Consequently, this medicine was not available in the facilities surveyed. This medicine will be subsidized in the public sector to make it affordable to the majority of the patients. As for the private and mission sectors, ALu is not affordable as it takes 3.95 and 3.91 days' wage respectively to pay for treatment. However, SP continues to be highly available (>80%) in all sectors.

ARVs were more available in the public sector than in the private and mission sectors. ARVs were only available in facilities approved by the Ministry of Health and Social Welfare. These centers facilities were accredited due to their capacity to handle patients in terms of counseling, testing, care and treatment. They include public, private and mission hospitals/clinics. The ARVs are provided free of charge.

6. Conclusions:

The MSD continues to distribute medicines to public facilities across the country but the availability of the essential medicines in the facilities is low. Most of the facilities visited receive their supply at the beginning of the month, while the data were collected at the end of the month when the stock was low. The private and mission facilities charge high prices unaffordable to the majority of the population where 30% and 50% live below a dollar a day in urban and rural areas respectively³.

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ANNEXES

Annex 1 Characteristics of the Facilities Included in the survey

Public sector	Private Sector	Mission Sector
Teaching Hospital (3) Regional Hospitals (3) District Hospitals (7) Sub-district hospitals (4) Heath Centers (8) Dispensaries (7)	Retail Pharmacies (16) Medical store - Duka la Dawa Baridi (16)	Teaching Hospitals (2) Hospital (11) Health centre 8) Dispensaries (9)

Annex 2: Availability of Medicines in the public sector

Percentage Availability	Medicines	
23 medicines were found in 50% or less of Facilities	Aciclovir tab 200 mg Amitriptyline tab 25 mg Amodiaquine paed syr Arthemether +Lumefantrine tab 20+120mg Artesunate 100 mg tab Atenolol tab 50 mg Beclometasone inhaler 50 mcg/ dose Captopril tab 25 mg Carbamazepine tab 200 mg Chloramphenical 0.5 % eye drops	Ferrous sulphate 200 mg tab Fluconazole cap / tab 150mg Furosemide tab 40 mg Gentamycin inj 80mg/ml Gentamycin eye/ear drops 1% Glibenclamide tab 5 mg Griseofulvin tab 500mg Metformin tab 500 mg Nifedipine retard 20mg Omeprazole caps 20 mg Ranitidine tab 150 mg Sulbutamol inhaler 0.1 mg(100 mcg/dose)
10 medicines were found in over 50 - 75% of facilities	Albendazole tab 200mg Co-trimoxazole paed susp. (8+40) mg/mL Diazepam tab 5 mg Diclofenac tab 50mg Doxycycline cap 100mg	Erythromycin tab 250 mg Ceftriaxone inj 1 g powder Nevirapine/Lamivudine/Stavudine 30 Nevirapine/Lamivudine/Stavudine 40 Phenytoin tab 30 mg
8 medicines were found in over 75% of the Facilities	Amoxicillin caps/tab 250 mg Benzyl penicillin 5mega units Ciprofloxacin tab 500 mg Folic acid 5 mg tab	Metronidazole tab 250mg Prazequantel tab 600 mg Pyrimethamine with sulfadoxine (25+500) mg Quinine inj 300mg/ml

Annex 3 Availability in private sector

Percentage availability	Medicines	
16 medicines were found in 50% or less of Facilities	Aciclovir tab 200 mg Amitriptyline tab 25 mg Arthemether +Lumefantrine tab 20+120mg Artesunate 100 mg tab Atenolol tab 50 mg Carbamazepine tab 200 mg Ceftriaxone inj 1 g powder Beclometasone inhaler 50 mcg/ dose	Ferrous sulphate 200 mg tab Glibenclamide tab 5 mg Nevirapine/Lamivudine/Stavudine 30 Nevirapine/Lamivudine/Stavudine 40 Nifedipine retard 20mg Phenytoin 100 mg Prazequantel 600 mg tab Ranitidine tab 150 mg
19 medicines were found in over 50 - 75% of facilities	Benzyl penicillin 5mega units Captopril tab 25 mg Chloramphenical 0.5 % eye drops Ciprofloxacin tab 500 mg Co-trimoxazole paed susp. (8+40) mg/mL Diazepam tab 5 mg Doxycycline cap 100mg Erythromycin tab 250 mg Folic acid 5 mg tab Fluconazole cap / tab 150mg	Furosemide tab 40mg Gentamycin inj 80mg/ml Gentamycin eye/ear drops 1% Griseofulvin tab 500mg Metformin tab 500 mg Metronidazole tab 250mg Omeprazole caps 20 mg Quinine inj 300mg/ml Sulbutamol inhaler 0.1 mg(100 mcg/dose
5 medicines were found in over 75% of facilities	Albendazole tab 200mg Amodiaquine paed syr Amoxicillin caps/tab 250 mg	Diclofenac tab 50mg Pyrimethamine with sulfadoxine (25+500) mg

Annex 4 Availability in mission sector

Percentage availability	Medicines	
23 medicines were found in 50% or less of Facilities	Aciclovir tab 200 mg Amitriptyline tab 25 mg Arthemether +Lumefantrine tab 20+120mg Beclometasone inhaler 50 mcg/ dose Captopril tab 25 mg Carbamazepine tab 200 mg Chloramphenical 0.5 % eye drops Ferrous sulphate 200 mg tab Fluconazole cap / tab 150mg Gentamycin eye/ear drops 1% Glibenclamide tab 5 mg Gentamycin inj. 80 mg/ml	Atenolol tab 50 mg Metformin tab 500 mg Nevirapine/Lamivudine/Stavudine 30 Nevirapine/Lamivudine/Stavudine 40 Nifedipine retard 20mg Omeprazole caps 20 mg Phenytoin 100 mg Prazequantel 600 mg tab Ranitidine tab 150 mg Sulbutamol inhaler 0.1 mg(100 mcg/dose Artesunate 100 mg tab.
12 medicines were found in 50 - 75% of facilities	Albendazole tab 200mg Amodiaquine paed syr Amoxicillin caps/tab 250 mg Ceftriaxone inj 1 g powder Co-trimoxazole paed susp. (8+40) mg/mL Diazepam tab 5 mg	Doxycycline cap 100mg Erythromycin tab 250 mg Folic acid 5 mg tab Furosemide tab 40mg Griseofulvin tab 500mg Quinine inj 300mg/ml
5 medicines were found in over 75% of facilities	Benzyl penicillin 5mega units Ciprofloxacin tab 500 mg Diclofenac tab 50mg	Metronidazole tab 250mg Pyrimethamine with sulfadoxine (25+500) mg

Annex 5. Median Prices (Tsh) of Medicines in All Sectors

Medicine	Overall Public	Public Urban	Public Rural	Overall Private	Private Urban	Private Rural	Overall Mission	Mission Urban	Mission Rural
Aciclovir tab 200 mg	200			200	225		300	250	300
Albendazole tab 200mg	100	250	100	250	250	250	175	100	200
Amitriptyline tab 25 mg	7.5			50	50		20	20	15
Amodiaquine paed syr	10			12.1	11.67	13.3	13.33	13.33	13.33
Amoxicillin caps/tab 250 mg	33.3	33.3	33.32	33.33	33.33	35	47.5	50	40
Arthemether +Lumefantrine tab 20 +120mg				416.67	416.67		412.48	416.67	
Artesunate 100 mg tab	1000			625	541.67		975	1041.65	875
Atenolol tab 50 mg	100	75		90	100		50	80	42.5
Benzyl penicillin 5mega units	400	400	350	600	500		500	850	500
Beclometasone inhaler 50 mcg/ dose									
Captopril tab 25 mg	47.5			100	100		100	100	100
Carbamazepine tab 200 mg	26	23		100	125		80	105	65
Ceftriaxone inj 1 g powder	1025	1200		2500	2500		4250	6000	2700
Chloramphenical 0.5 % eye drops	550			600	500	800	1000	1000	1000
Ciprofloxacin tab 500 mg	100	100	100	150	150	150	150	150	100
Co-trimoxazole paed susp. (8+40) mg/ML	7			8	8	8	9	10	8
Diazepam tab 5 mg	15	12.5	15	10	15	10	13.33	15	10
Diclofenac tab 50mg	20	20	20	30	30	30	30	30	30
Doxycycline cap 100mg	35.7	35.71	33.33	50	50	50	50	80	35
Erythromycin tab 250 mg	33.33	33.33	33.33	50	50	50	50	60	45
Ferrous sulphate 200 mg tab	3.59			10			15	20	
Folic acid 5 mg tab	5	5	6.07	10	10	10	10	10	7.142
Fluconazole cap / tab150mg	750			700	650	1000	1000	1000	
Furosemide tab 40mg		7.14	10	15	12.5	20	15	20	10
Gentamycin inj 80mg/ml	200	200		200	200	400	325	650	300
Gentamycin eye/ear drops 1%				800	650	800	600	1000	500
Glibenclamide tab 5 mg				50	55		30	58.33	20
Griseofulvin tab 500mg	50	50		100	80	100	100	90	100
Metformin tab 500 mg	37.5			100	100		100	95	
Metronidazole tab 250mg	13.32	15	10	14	10	16	20	20	20
Nevirapine/Lamivudine/ Stavudine 30									
Nevirapine/Lamivudine/ Stavudine 40									
Nifedipine retard 20mg	30	25		100	100		50	100	50
Omeprazole caps 20 mg	100			100	100	90	125	150	100
Phenytoin 100 mg	11.11						15		
Prazequantel 600 mg tab		200	229	300	300	300	400	400	350
Pyrimethamine with sulfadoxine (25+500) mg							183.33	200	100
Quinine inj 300mg/ml									325
Ranitidine tab 150 mg									
Sulbutamol inhaler 0.1 mg(100 mcg/dose									

References: ¹Survey of the medicine Price in Tanzania 2004

²The TEML (2007) is the most current national EML in print.

³ MKUKUTA (2005)