

# Measuring medicine prices, availability, affordability and price components in Burkina Faso

**Autor :** **Dr SAOUADOGO Hamado**  
PharmD, MPH  
Ministry of Health, Burkina Faso  
Email:christdonaldh@yahoo.co.uk

## Executive summary

**Background:** A field study to measure the price, availability, affordability and price components of selected medicines was undertaken in Burkina Faso in July 19<sup>th</sup> to August 8<sup>th</sup> 2009 using a standardized methods developed by the World Health Organization and Health Action International (WHO/HAI).

### Methods:

The survey of medicine prices and availability was conducted in six health districts: Boulmiougou, Do, Dedougou, Tenkodogo, Boulsa and Orodara. Data on fifty (50) medicines was collected in thirty one (31) public, thirty four (34) private and forty two (42) mission sector medicine outlets, selected using a validated sampling frame. Data was also collected on public and private procurement prices. For each medicine in the survey, data was collected for the originator brand and lowest priced generic equivalent (generic product with the lowest price at each facility). Medicine prices are expressed as ratios relative to Management Sciences for Health International Drug Price Indicator Guide prices for 2008 (median price ratio or MPR). Using the salary of the lowest-paid unskilled government worker from the decree N°2006-655/PRES/PM/MTSS/MFB, affordability was calculated as the number of days' wages this worker would need to purchase standard treatments for common conditions.

The price components survey included two types of data collection: central data collection on official policies related to price components, and tracking specific medicines through the supply chain to identify add-on costs. Medicine tracking was conducted in two districts: Boulmiougou and Orodara. Six (6) medicines were tracked backwards through the distribution chains in each of the public, private and mission sectors to identify the add-on costs that contribute to final price.

## **Key results:**

### **Availability of medicines in the public and private sector:**

- Mean availability of generic medicines in the public sector was 73 %, indicating that some patients must purchase medicines in the other sectors. In this sector, the mean availability of originator brand was 0.20 %.
- Mean availability of originator brand and generic medicines in the private sector was 44 % and 63 %, respectively, indicating that originator brand and generic medicines had comparable availability in the private sector.
- Mean availability of originator brand and generic medicines in the mission sector was 02 % and 52 %, respectively, indicating that many patients must purchase medicines in the public and private sectors.

### **Procurement prices:**

- In the public sector, the procurement agency is purchasing medicines at prices comparable to international reference prices, indicating a good level of purchasing efficiency.
- In the private sector, there is no procurement agency. Medicines are purchased by private wholesalers from imported and then wholesalers sell to pharmacies. The wholesalers are purchasing medicines at prices higher than international reference prices, indicating a poor level of purchasing efficiency.

### **Public sector patient prices:**

- Final patient prices for generic medicines in the public sector are about 2,17 times their international reference prices.
- Public sector patient prices for generic medicines are 97.4% more than public procurement prices, indicating high mark-ups in the public sector distribution chain.

### **Private sector patient prices:**

- Final patient prices for originator brands and lowest priced generics in the private sector are about 21 and 3 times their international reference prices, respectively.
- When originator brand medicines are prescribed/dispensed in the private sector, patients pay about 466 % more than they would for generics.

- Generic medicines were priced 30.3 % higher in the private sector than in the public sector.

#### **Mission sector patient prices:**

- Final patient prices for lowest priced generics in the mission sector are about 2.78 times their international reference prices.
- Generic medicines were priced 22.8 % higher in the mission sector than in the public sector.
- Generic medicines were same priced in the mission and the private sectors.

#### **Affordability of standard treatment regimens:**

- In treating common conditions using standard regimens, the lowest paid government worker would need between 0.2 and 9.7 days' wages to purchase lowest priced generic medicines from the private sector. If originator brands are prescribed/dispensed, costs escalate to between 0.4 and 55.9 days' wages, respectively. Some treatments were clearly unaffordable, e.g. the treatment of ulcer with originator brand Omeprazole would cost 55.9 days' wages.

#### **Components of medicine prices:**

- Additional costs such as import fees, imposition, West African states economic (2.5%), margins, expenses of distribution, contributing substantially to increase the final price of medicines paid by patients in health facilities (final patient prices).
- In the public sector, additional costs represent 55% of final patient prices of lowest priced generic equivalent.
- In the private sector, additional costs represent 44% of the final patient prices of lowest priced generic equivalent.
- In the Public Sector, the cost insurance fret (CIF) represents 45% of the final price of the medicine. While other expenses of distribution and dispensing amount to

55% of the final price of the drug.

- In the Private Sector, the CIF price Ouagadougou represents 56% of the final price.

While other expenses of distribution and dispensing amount to 44% of the final price of the medicine.

- Add-on costs contribute a substantial amount to the final price of medicines, ranging from 64.24 % to 107.32 % for individual medicines. Total add-on costs varied by sector and by product type.
- Components with the largest contribution to final price are dispensed price 63.06 % of final price and medical store 49.79 % of final price.

## Conclusions:

### Availability

- The availability of originator brand medicines is very low if not zero in the public hospitals and health district hospitals where emergency medications exist primarily in specialty hospital (essential hospital originator brand). But the availability of generics is higher. The consequence is that some patients are forced to pay more essential hospital originator brands in the private sector where prices are not administered by the state. Some specific essential hospital originator brand are not available in the private sector (Magnesium Sulfate inject. solution)
- There is no local production of pharmaceuticals.
- Generic drugs are more available in all areas, including in rural areas indicating that the policy of essential generic medicines is a success.

## Prices

- The government purchase price of the medicines is quite acceptable for generic medicines.
- The purchase price of the originator brand medicines are very high indicating the need to negotiate better prices CIF Ouagadougou with pharmaceutical companies.
- The final patient prices of originator brand medicines is very high in private pharmacies. One action would be that prices of these medicines are administered within specific private pharmaceutical sector development policy in rural and semi-urban areas of the country.
- The final patient prices are sometimes similar in the mission and private sectors for lowest price generics. Some mission sector medicine outlets distribute free medicines or lower priced medicines. Overall, the mission and private sectors have the same final patient prices. It is necessary to strengthen the administration of essential medicine prices in the private and mission sectors.
- The price difference between generic and originator brand is very important, confirming the need to continue the policy based on promoting the essential generic medicines.

## Affordability

- Affordability is reasonable for treatment with lowest priced generics for the diseases studied using standard treatment regimens (equivalent to a day's pay minimum wage).
- A study by the World Bank and WHO in 2007 to understand the impact on households when faced with the direct purchase of medicines found that direct

purchases of medicines ( "out-of-pocket") makes households vulnerable to unexpected illness and can have catastrophic consequences. It is therefore essential to establish a national policy to ensure price affordability to essential medicines in Burkina Faso. Also the creation of prepayment funds will facilitate the sharing of health risks in rural areas and improve financial accessibility to essential medicines.

- Finally, the implementation of national development policy of the hospital pharmaceutical system will enable health to be most efficient.

## RECOMMENDATIONS

Based on the results of the survey, the following recommendations can be made for improving the availability, price and affordability of medicines in Burkina Faso:

### To the government of Burkina Faso

1. To develop sufficient safety nets as prepayment system because of the out-of-pocket payments for medicines make households vulnerable to future expenses;
2. To realize a dynamic research approach to determine what programs would best shield the negative impact of low wages for essential medicines affordability;
3. To create hospital pharmacy retailer (*Pharmacie Centrale des hôpitaux du Burkina*);
4. To develop price survey, and improve the prescription and dispensing of generics;
5. To set the price of essential originator brand products in all the three sectors;
6. To use the national essential medicines list for setting prices of medicines in the private and mission sectors.

## References

Ministère de la santé. Guide de stratégies de diagnostic et traitement des affections prioritaires pour le premier échelon. Ed°2008. UNICEF.OMS, Ouagadougou, 2007

Vidal. Memo Vidal 2000. Ed° Vidal, 2000

The World Bank. World development indicators. 2008. Washington, 2008 : P19

<http://siteresources.worldbank.org/DATASTATISTICS/Resources/WDI08supplement1216.pdf>

Mbaye A.M. Foulon G. Fiscalité des médicaments, consommables et équipements médicaux dans les pays membres de l'UEMOA. Direction santé - Département du Développement Social. 2ème Colloque international sur le financement de la santé dans les pays en développement. Clermont Ferrand, 2005

Ministère de la Santé. Ministère du Commerce et de la Promotion de l'Entreprise. Arrêté N°2009-098/MCPEA/MS portant fixation des prix de vente au public des médicaments essentiels génériques (MEG) sous dénomination commune internationale (DCI) au Burkina Faso

Ministère de l'économie et des finances. Tableau de bord de l'économie du Burkina Faso au deuxième trimestre 2009. Comité de prévision et de conjoncture. INSD. Ouagadougou, 2009

Ministère de l'économie et des finances. Analyse des résultats de l'enquête annuelle sur les conditions de vie des ménages en 2007. Institut national de la statistique et de la démographie. EA/QUIBB 2007. Ouagadougou, 2007 : p75-95

World Health Organization. Coping with out-of-pocket health payments: application of engel curves and two-part models in six african countries. Discussion paper number 7 2007. Department health system financing. Geneva, 2007 : P13