

Philippines

Components of medicine price

Medicine prices matter

Rapidly rising costs of health care and high medicine prices are a growing concern worldwide, especially in developing and transitional countries where patients often have to pay the full price of medicines. This brief report about the components of selected essential medicine prices in the Philippines summarizes the results of a medicine price survey carried out using a standard survey methodology developed by the World Health Organization and Health Action Internationalⁱ.

This survey was conducted between December 2008 and February 2009 by Health Action International with the endorsement of the Ministry of Health.

The survey found that in the Philippines:

- There is a lack of transparency in the pricing of generic and originator brand medicines in the private sector.
- For generic products mark-ups ranged from 5% - 355% at the retailer level, and 18 - 117% at the distributor level
- Mark-ups on originator brand products were usually of the order of 5% – 8% at private retail pharmacies
- VAT adds significantly to the price of medicines and has a larger effect than expected when applied on VAT-inclusive prices earlier in the supply chain
- Public pharmacies tend to charge fixed retail mark-ups of up to 30%.
- The senior citizen's discount has been minimized by price increases and is essentially paid for by patients
- Discount schemes and patient assistance programmes exist which may lead to irrational medicine selection by patients and/or their physicians
- The market structure, market segmentation and low confidence in generics perpetuates the observed pricing structures and lower than desired use of low-priced generic medicines

The Philippines

The country has 17 regions, 81 provinces, 136 cities, 1,494 municipalities, 41,995 barangays (end 2007). The population of the Philippines is estimated at 92.23 million in 2009. The Philippines is classified by the World Bank as a lower-middle-income economy which has a per capita GDP of \$3,383 (2007; PPP-adjusted).

Expenditure on health is around 3.3% of GDP and per capita government spending on health is \$88 (PPP-adjusted). Much of health care in the Philippines is provided through the private sector with around 60% of spending on health care coming from out-of-pocket payments. In 1992, health services were devolved from central government to local government units (LGUs) i.e. provincial and city/municipal authorities. The Department of Health (DOH) is responsible for policy development, implementation and regulation, and directly oversees the operations of selected hospitals (72 DOH-retained hospitals). With the devolution of health care, procurement of medicines was largely made the responsibility of local government units, with DOH-retained hospitals performing their own public bidding. The DOH undertakes limited central procurement of medicines for vertical programmes. PITC Pharma, a public corporation, performs some centralized procurement of essential medicines e.g. for the Botika ng Barangay (BnB) program and the P100 projectⁱⁱ.

Over 16,000 pharmaceuticals are registered with the Bureau of Food and Drugs. At the end of 2008, there were 275 licensed pharmaceutical manufacturers and 448 drug traders producing or importing medicines and 4,165 licensed pharmaceutical wholesalers (distributors). Medicines are supplied to about 30,000 retail outlets, of which roughly 21,000 are private drugstores, 1,700 are hospital pharmacies (private and public) and the remainder are community drug stores (e.g. Botika ng Barangay). Inefficiencies in delivery of primary care, and market dominance by a few companies in wholesale and retail sectors, results in almost 90% of medicine sales (by value) occurring through private retail outlets with the remainder through hospitals (70% by value through private facilities)ⁱⁱⁱ.

A survey in 2005 using the WHO/HAI methodology found, among other things, that prices of originator brand medicines sold from private retail outlets were on average 15 times greater than the reference price, while the lowest priced generic equivalents were more than 6 times the reference price. The situation in public facilities was essentially the same. These long-standing concerns, that the prices of medicines are high in the



Philippines relative to other countries in the region and of similar economic status resulted in the commissioning of this study to describe and analyze price components along the supply chain for selected essential medicines.

The pharmaceutical market is highly segmented with richer Filipinos utilizing private drugstores and hospitals and tending to use originator brands and 'branded-generics', middle classes following suit but with some use of public facilities and the poor who obtain their medicines from drugstores, public facilities and community outlets and who rely to a greater extent on lower priced generics. Reasons underlying this market segmentation and dominance of expensive originator brands and 'branded-generics' are^{iv}:

- Inadequate assurance of quality of generics by the Bureau of Food and Drugs (BFAD)
- Strong marketing by dominant manufacturers and distributors and support of their products by the prescribing physicians
- Lack of competition from public and NGO outlets which concentrate on provision of lower-priced generics to the poor
- Information imbalance with patients relying on physician advice and lacking knowledge of competing products.

This market segmentation and the distribution channels which operate in the Philippines' pharmaceutical sector affects access to essential medicines and pricing structures e.g. if low-priced generics are not carried by chain pharmacies or private hospitals, or the public sector market share not increased, then the majority of the population will continue to lack access to them.

Originator brands, 'branded-generics' and generics

In this report, an originator brand product is generally the product that was first authorised worldwide (normally as a patented product); usually with the same brand name, although this can vary sometimes between countries.

All other medicines are considered "generics" i.e. equivalent products containing the same active ingredient which are usually produced by competitors when the patent on the originator brand expires or is not enforced (the originator brand parent company or a subsidiary may also produce generics of their product). These generic equivalents may be marketed under a brand name (often called "branded generics") or the generic name of their active ingredient. In the Philippines, certain generic equivalents made by some pharmaceutical companies are viewed as being of superior quality to similar generic products and have higher demand and are sold at higher prices - these are referred to as 'branded-generics' in this report.

Medicine price component study

The objective of this study was to describe and analyze the price components along the supply chain of a small number of essential medicines commonly used by Filipinos. The WHO/HAI price component methodology investigates price components through case studies of a small selection of essential medicines. Starting at the point of sale in a retail outlet, the price data is traced back through wholesalers/distributors, importers and government agencies through invoices and interviews to determine the components which go to making the final price. The components are divided into 5 stages (Figure 1).

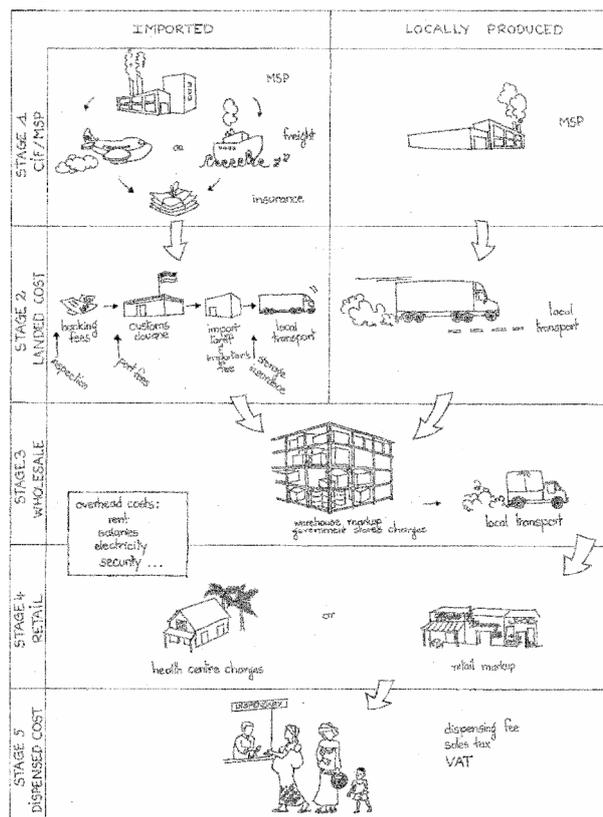


Figure 1. Stages in the components of medicine price

Price components of the originator brand and generic equivalent of six medicines were examined in three regions – Region I (to the north extremity), National Capital Region (NCR) and Region VII (to the south extremity).

Six medicines of public health importance (listed in the Philippines National Drug Formulary – PNDF) likely to be available at the type of facilities to be surveyed and requiring a prescription were selected. Atorvastatin 20mg tablets were selected as a product still under patent with no competitors in the market even though not listed in the PNDF (Table 1). For each medicine the originator brand and a generic equivalent (preferably the lowest-priced on the day) were assessed although in some cases both may not be present at the facility.

Table 1. Medicines surveyed

Medicine	Dosage form	Strength	Originator brand name
amlodipine	cap/tab	5mg	Norvasc
atenolol	cap/tab	50mg	Tenormin
atorvastatin	cap/tab	20mg	Lipitor
co-amoxiclav	cap/tab	500 + 125mg	Augmentin
co-trimoxazole	cap/tab	400 + 80 mg	Bactrim
glibenclamide	cap/tab	5mg	Daonil
paracetamol ^v	cap/tab	500mg	Panadol

To address the variety of retail outlets from which patients may obtain their medicines and which could influence price components, four different types of outlets were surveyed: public health facility; chain pharmacy (one company with multiple branches); privately-owned independent pharmacy; and Botika ng Barangay (BnB; a village pharmacy authorised to carry a limited range of medicines).

Appointments were made in advance with the various retail outlets and data on their procurement and selling price of the originator brand and a generic equivalent of the six medicines were entered into standard data collection forms. Semi-structured interviews were also conducted about the make-up of any margin or mark-up. Retail selling prices were obtained from price lists where available or price tags on boxes. Procurement prices were obtained from supplier invoices. The details of the supplier were noted and the supplier then approached to participate in the survey where a similar process was used, with price data being validated from invoices and/or delivery notes. Many distributors and manufacturers/importers were either suspicious of the survey or did not wish to divulge information. This lack of transparency in the private sector due to suspicion of the acts of competitors and the government and a desire to preserve commercial secrets restricted data collection and the resultant analysis and discussion.

Findings

The findings are presented in reverse order of the stages identified in the WHO/HAI methodology.

Cost to the patient (stage 5)

There are no fixed dispensing fees for pharmacy services added to the cost of the medicines. However, VAT is charged at a rate of 12% which the patient has to pay. However, the original VAT is incurred at the first stage of the supply chain and distributors and retailers often charge their mark-up based on the VAT inclusive price rather than the cost excluding VAT. This has the effect of increasing the price paid by the patient.

Through the Senior Citizen's Act and associated regulations, senior citizens are allowed to avail of a 20% discount on the retail price of medicines. This should be provided by all outlets which are theoretically able to offset some of the cost of this

(7%) through their VAT returns. However, since there is no specific budgetary provision for this, the remaining 13% is largely borne by the retailers who increase their mark-ups on medicines as a result so as to not make a loss. The end result is an increase in the price of medicines for all patients, although some retailers make the distinction between medicines which senior citizens are more likely to use (e.g. medicines for arthritis, dementia) and apply differential mark-ups. Many small drugstores and retail outlets refuse to give senior citizen discount and refer patients to the chain drugstores which they believe are more able to bear the financial cost of this discount. This means that the latter have a higher patient burden of senior citizens which impacts on their price setting.

Many multinational companies offer special scheme to get patients started on (and to stay on) treatments with their originator brands. An example is the Silit Card of Pfizer whereby patients can receive 25-50% discount. These schemes are usually run in conjunction with Mercury drugstores and sometimes other chains, but not with independent pharmacies. Generally speaking, drugstores do not offer discounts on large sales, although there is always the opportunity for negotiation with independent outlets.

Retailer's resale price (stage 4)

When interviewed, most retailers claimed to make small mark-ups (around 5-8%) on originator brands and larger mark-ups on generics. However, from the case studies, it is evident that there is variation depending on the product.

Originator brands

At independent drugstores, retail mark-ups on originator brands varied from 4.6 – 8.0% except that the pharmacy in NCR charged 60% on originator glibenclamide (apparently to match the price at the chain pharmacy which also applied the same mark-up). The chain pharmacy mark-ups on originator brands varied from 2.2 – 60% and were specific for each product.

The chain pharmacy operated central pricing (which appears to be common for all major chains) and determines the price based on achieving an overall margin, not a product-specific margin. This allows it to build in increased margins for medicines largely used by senior citizens or to have loss leaders which are offset by higher margins on other products. The chain pharmacy which participated aimed for a gross margin of 13-15%.

Public pharmacies tend to use consistent mark-ups (range 0-30%) across all items regardless of cost (with a few exceptions). The public hospital in NCR added on 20% to originator brand amlodipine when private drugstores added 2.8 – 6.5%. However, due to a preferential price to the hospital, the product was still retailing at a lower price than the drugstores. Some of the public facilities visited, compared their prices to

those of nearby private retail pharmacies and adjusted their mark-ups so as to be just below the prevailing market price but this was not consistent and there was sometimes a lack of awareness of private retail prices and almost always a lack of awareness of prices at other public facilities.

Generics

Retail mark-ups on generic products ranged from 5.1 - 355% (median 25%, inter-quartile range: 8.5 - 31.6%). Public hospital pharmacy mark-ups were about 10 - 25% depending on their policy. Independent pharmacies charged 5.1 - 321% with no clear pattern while the mark-up in the chain pharmacy was 3.3 - 12.8%.

Botika ng Barangays showed some of the highest mark-ups (25 - 355%) even though they are supposed to have a regulated 30% mark-up. Some of the high mark-ups were a result of the BnB having a minimum selling price of PHP 1 per tablet/capsule (thus high mark-ups on medicines costing much less than this) and one BnB increased its price of fast-moving items to recover losses due to expiry of slow-movers (BnBs have no control over the range of products initially supplied and cannot return expiring products for a refund).

It is important that the above retail mark-ups are seen in the light of the actual values of the selling prices. Those attracting higher mark-ups are low-cost items, such that the monetary value of the mark-up is relatively small. The small mark-ups of the chain pharmacy are being applied to high cost 'branded-generics' and of a more substantive monetary value e.g. generic co-trimoxazole at a public pharmacy attracted a mark-up of 25% on PHP 1 (25c value), whereas the 3.3% mark-up of the chain pharmacy on a distributor price of PHP 5.08 was worth 17c.

Generally speaking, the benefits of any 'specials' offered by distributors e.g. rebates, volume discounts, early payment discounts, deals (3+1 [pay for 3, get 1 free], 15+1) are not passed on to patients but add to the operating margin of the pharmacy. However, the participating chain pharmacy claimed that they do pass on the benefits of deals (only) and also benefit from a 'data margin' (whereby they receive a benefit for making their sales data available).

Table 2. Retail selling prices of available generic and originator brand medicines from various retail outlets (unit selling price, Philippine peso)^{vi}

Medicine	Gvt. hospital	Indep. retail	Chain retail	Mercury retail
Originator brand				
atenolol 5mg tab/cap	-	31.50	32.45	33.50
Cotrimoxazole 860mg tab/cap	-	19.00	19.50	19.50
co-amoxiclav 625mg tab/cap	-	98.00	106.25	97.75
amlodipine 5mg tab/cap	-	44.50	44.75	46.25
glibenclamide 5mg tab/cap	-	-	15.95	16.00
atorvastatin 20mg tab/cap	-	76.00	75.75	78.25
Generic equivalent				
atenolol 5mg tab/cap	2.65	8.50	6.65	6.75
Cotrimoxazole 860mg tab/cap	1.25	3.00	5.25	9.50
co-amoxiclav 625mg tab/cap	29.00	67.00	70.00	44.25
amlodipine 5mg tab/cap	6.25	11.75	17.55	11.00
glibenclamide 5mg tab/cap	0.95	4.00	8.20	7.00
atorvastatin 20mg tab/cap	-	-	-	-

Wholesalers resale price (stage 3)

Generics

Very little information was available about the mark-ups and margins of distributors. Where data was available it was for generic products. The mark-ups included all costs and overheads as well as the profit margin and those observed were 18.2% and 53% (cotrimoxazole); 117% (co-amoxiclav); 87.5% (glibenclamide); 53.8% (paracetamol, two cases). The distributor for co-amoxiclav claimed they were able to have such a high mark-up on a relatively high-cost product because it had recently come off patent and there were not many competing generic products (the selling price of this product was lower than in the independent drugstores of the two other regions surveyed in spite of this mark-up and a higher retail mark-up).

Many medicines appeared to be supplied through multiple steps i.e. there was more than one distributor involved in supplying the medicine to the outlet. This was more common with generic medicines than originator brands (and 'branded-generics') which tend to use exclusive distribution arrangements with Zuellig Pharma, Metro Drug Corp. or their own distribution partner. However, there were cases noted when retailer-distributors downstream from the 'exclusive' distributor sold on the products to other retailers.

Such multi-stage supply chains can only be expected to add to the final selling price since each player will be

charging their own mark-up. It might be expected that such arrangements would be more common for remote regions where a regional distributor purchases the medicine from a distributor in the capital to sell to local drugstores or hospitals. However, 3 generic medicines from the independent retail pharmacy surveyed in NCR also were supplied through secondary distributors.

Originator brands

Although no validated data was available for specific originator brands, aggregated data was made available by the Pharmaceutical and Healthcare Association of the Philippines and one multinational company. These suggest that the major distributors which often have exclusive distribution arrangements with multinational companies for their originator products operate with a margin of around 5-6% but it could be as high as 11-13% for some companies.

Information made available from PITC Pharma was that their mark-up structure for add-on costs after procurement was:

- Warehousing and forwarding fee: 7%
- Territorial distribution fee: 6.5% (not applied to BnBs)
- Final VAT: 5%
- Administrative cost: 18%

Landed cost (stage 2)

No validated information was available on the landed cost. Based on data submitted by one multinational company, import duties on the finished product together with port clearance fees, BFAD testing charges and delivery to the warehouse probably add around 3-5% to the manufacturer's selling price. It was difficult to obtain information on what import duties would be from the Bureau of Customs. Batangan and colleagues reported import duties of 3.84% (there are no exemptions), together with finance/banking fees of 1.0 – 1.6%, quality control testing fees in the range 0.5 – 0.61% and national corporate taxes of 3.3 – 5.7%^{vii}. They also reported a transport fee of 20% which was not mentioned in any of the interviews of the current study, with all levels saying that transport (even from the port) was built into the applied mark-ups.

While there is little validated information about import duties and other charges for importers, these appear to contribute relatively little to the price. However, because they are incurred at the start of the supply chain, they have a greater effect than might otherwise be apparent. However, if they were removed or reduced it would be difficult to ensure any savings would result in lower prices given the market structure.

Manufacturer's selling price (stage 1)

Little is known about the manufacturer's selling prices. AstraZeneca Philippines have three different selling prices depending on the distribution channel which the product is to move through – smaller chain pharmacies, Mercury pharmacies, or government pharmacies. Based on the data from AstraZeneca and the Pharmaceutical and Healthcare Association of the Philippines, the manufacturer's selling price contributes around 65 - 75% of the final selling price for originator brand products. For generic products, only one product had sufficient data to explore the contribution of the manufacturer's selling price – co-trimoxazole tablets sold in Region VII from an independent retail pharmacy (figure 2). In this example, the manufacturer's selling price contributed 33% of the final price with the retail mark-up contributing the largest portion of 56.7%. Note that in this example VAT was incurred on the manufacturer's selling price to yield the 'landed price', not presented as 12% of the final price since all mark-ups were based on the procurement price including VAT.

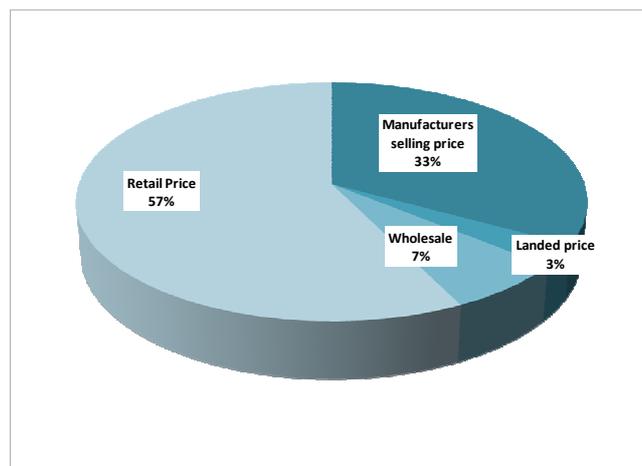


Figure 2. Percentage contribution to final patient price (locally produced generic co-trimoxazole tablets 480mg; private pharmacy)

Recommendations of the investigators

- Interventions are needed to improve medicine pricing mechanisms and affordability. The zero-rating of VAT on essential medicines and the use of regressive mark-ups at public pharmacies should be examined.
- Mechanisms to increase utilization of low-priced generic medicines need to be explored and enhanced. The development of a comprehensive and coordinated national medicines policy is encouraged.
- Improved monitoring and evaluation of regulatory interventions is called for. A reliable medicine price monitoring system should be established for essential medicines to monitor the effects of any policy or regulatory changes intended to affect medicine prices. The effects of current mandatory and voluntary patient discount schemes and assistance programmes on medicine prices and rational use of medicines

should be investigated and more appropriate and equitable means to address poor affordability of medicines implemented.

- Further study of the patient discount and assistance programmes is needed. This would determine the effect they have on appropriate medicine selection decisions and the access to essential medicines. Discounts, rebates and other marketing practices proven to have anti-competitive effects should be banned.

Further information, contact the survey manager

Dr Douglas Ball

Email: douglasball@yahoo.co.uk

The full survey report and data can be found at:
<http://www.haiweb.org/medicineprices>

ⁱ WHO/HAI. Measuring medicine prices, availability, affordability and price components, 2nd Ed., Geneva, World Health Organization, 2008; <http://haiweb.org/medicineprices/>

ⁱⁱ P100 programme was launched in 2008 by the the Department of Health (DOH) in conjunction with PITC Pharma under which PITC would make available designated packs of selected essential medicines available for a price of P100 or less inclusive of any mark-ups

ⁱⁱⁱ Kanavos 2002; Pharmaceutical & Healthcare Association of the Philippines, 2008

^{iv} Kanavos 2002; Pharmaceutical & Healthcare Association of the Philippines, 2008

^v Surveyed in Botika ng Barangays only

^{vi} data is based on Region I as most complete data set

^{vii} Batangan DB, Echavez C, Santiago AA, de la Cruz AC, Santos E. (2005) The Prices People Have to Pay for Medicines in the Philippines; http://www.haiweb.org/medicineprices/surveys/200502PH/sdocs/survey_report.pdf