Medicine prices matter

Rapidly rising costs of health care and high medicine prices are a growing concern worldwide, especially in developing countries where patients often have to pay the full price of medicines. This brief report about medicine prices and availability in the Philippines is one of a series of papers summarizing the results of national medicine price and availability surveys carried out around the globe using a standard survey methodology developed by the World Health Organization (WHO) and Health Action International (HAI)\(^1\).

This survey, conducted by the Institute of Philippine Culture at Ateneo de Manila University in 2005, uses a group of 21 medicines, with pre-set dosage forms, strengths and pack sizes that are relevant to the global burden of disease, plus 13 selected medicines of national importance.

This survey found that in the Philippines:

- Medicine prices obtained through public procurement are high both for generics and originator brands compared to international reference prices.
- The availability of essential medicines in public sector health facilities was poor.
- Prices of medicines in both public outlets and private pharmacies are high and treatments can be unaffordable to low income groups.
- It is difficult to judge exactly how taxes and mark-ups along the supply chain contribute to final prices that patients have to pay in the different sectors, but removal of taxes may significantly reduce prices.

Philippines medicine price and availability survey

The Philippines is an archipelago of 7,107 islands stretching from the south of China to the northern tip of Borneo. The current population of the Philippines is estimated at 83 million\(^2\), around 30-40\% of which is estimated to be below the poverty threshold. Inequalities in health access between the urban and the rural areas, and between the poor and the rich persist. The burden of both communicable and non-communicable disease hinders the country’s social and economic development.

The Philippines is classified by WHO as among the countries where less than 30 percent of the population has regular access to essential medicines. Pharmaceuticals are expensive in the Philippines in comparison to neighbouring countries. Since 1985, the price of medicines increased faster than the consumer price index. The implementation of the Philippine Generic Drug Act of 1988 requiring the use of generic labeling, advertising, and prescriptions has not resulted in increased penetration of generic medicines in the market, as generic medicines sales by value are still only around 5\%. This situation is mainly attributed to poor public perception of generic medicines by both consumers and providers reinforced by aggressive promotion of branded products.

The country’s public health care system has undergone far reaching reforms in the past 25 years including the devolution of health services. However, the devolution of health services is seen as one of the problems of the health care system, because local government units lack the necessary management and coordination skills needed to provide satisfactory health services, including provision of essential medicines.

In 2002, the estimated total pharmaceutical market was PhP 65.7 billion (approximately US $1.34 billion) dominated by the top 10 multinational companies (72\%) The rest of the pharmaceutical market (28\%) is shared by United Laboratories (23\%), and small Filipino owned and other multinational owned firms (5\%).

A total of 34 medicines were surveyed in May 2005, 21 from the WHO/HAI core list and 13 supplementary medicines whose prices are monitored by the Department of Health. Prices and availability were recorded for the originator brand product (OB), and the lowest priced generic equivalent (LPG) which was determined at each facility.

The survey was undertaken in four geographical areas. The sites for the survey were selected from the three major island groups of Luzon, Visayas, and Mindanao, as well as the National Capital Region (Metro Manila), since this is the most urbanized region in the Philippines.

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Public sector</th>
<th>Private sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordability</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Procurement price</td>
<td>✓</td>
<td>–</td>
</tr>
<tr>
<td>Price to patients</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Availability</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>No. of facilities visited</td>
<td>26</td>
<td>51</td>
</tr>
</tbody>
</table>


\(^2\) Bengzon, M.A. Balancing the scales: a review of the pharmaceutical markets of the Philippines, Thailand and Australia: Ateneo School of Government, 2000
Presentation of price information

The WHO/HAI survey methodology presents prices as median price ratios (MPR). The MPR is calculated by dividing the local price by an international reference price (converted to local currency). An MPR of 1 means the local price is equivalent to the reference price whereas an MPR of 2 means the local price is twice the reference price. The international reference prices used for this survey were taken from the 2003 Management Sciences for Health (MSH) International Drug Price Indicator Guide (median prices of high quality generics offered to developing countries by different suppliers). Use of reference prices facilitates international comparisons.

Interpretation of findings

Country specific factors such as pricing policies, market size, competition, national economic and other factors may influence prices. For the purposes of these surveys, in a low income developing country an MPR of less than or equal to 1 for both the public sector procurement price and the public sector patient price is considered to indicate acceptable (not excessive) prices.

Affordability

Affordability is calculated as the number of days the lowest paid unskilled government worker would have to work to pay for one treatment course for an acute condition or one month’s treatment for a chronic condition. At the time of the survey, the lowest paid Filipino government worker earned 254.1 Philippine Pesos (US$ 4.64) per day. Overall, a low-paid government worker would generally need more than one day’s wages to purchase standard treatments in public health facilities (Figure 1).

The price of standard treatments in most cases were above one day’s wage when purchased in private retail pharmacies depending on the condition. Among the most expensive treatments were:

- depression: one month fluoxetine, 32.8 days’ wages for originator brands
- ulcer: one month ranitidine, 8.5 days’ wages for originator brand and 3.1 days’ wages for cheapest generic product
- hypertension: one month captopril, 6.1 days’ wages for originator brand and 2.4 days’ wages for generic product.

Costs of these treatments, when purchased in public sector facilities, were only marginally lower.

Public sector prices

The data for public procurement came from the hospital procurement data of a tertiary government hospital in Manila. Procurement price data were available for 17 originator brand medicines and 4 generic equivalents, showing that public procurement heavily favours these brand products, in spite of their higher cost. The median MPR calculated for the branded medicines was 14.19 while for the lowest price generic was 5.14. The MPRs for the originator brand medicines ranged from 1.80 to 60.16, while that of generics ranged from 3.06 to 56.17 (Table 2). These MPRs show that the public sector is purchasing most medicines at prices several times higher than international reference prices, indicating very inefficient public procurement procedures.

Table 2. Number of times more expensive: public sector procurement prices compared to international reference prices

<table>
<thead>
<tr>
<th></th>
<th>Originator brand</th>
<th>Lowest priced generic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median MPR (interquartile range)</td>
<td>14.19 (6.9 - 28.3)</td>
<td>5.14 (3.6 - 18.9)</td>
</tr>
<tr>
<td>Minimum</td>
<td>1.8</td>
<td>3.06</td>
</tr>
<tr>
<td>Maximum</td>
<td>60.16</td>
<td>56.17</td>
</tr>
<tr>
<td>No. of medicines</td>
<td>17</td>
<td>4</td>
</tr>
</tbody>
</table>

The patient prices of available medicines were similarly high in the public sector as the procurement price, with an approx. 22% mark-up added on (however it must be remembered that procurement data were only collected from one hospital).
Table 3. Number of times more expensive: patient prices in the public sector compared to international reference prices

<table>
<thead>
<tr>
<th></th>
<th>Originator brand</th>
<th>Lowest priced generic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median MPR</td>
<td>15.31</td>
<td>6.4</td>
</tr>
<tr>
<td>(Interquartile range)</td>
<td>(8.1 - 32.4)</td>
<td>(3.2 - 10.6)</td>
</tr>
<tr>
<td>Minimum</td>
<td>3.11</td>
<td>1.52</td>
</tr>
<tr>
<td>Maximum</td>
<td>79.89</td>
<td>19.49</td>
</tr>
<tr>
<td>No. of medicines</td>
<td>12</td>
<td>18</td>
</tr>
</tbody>
</table>

Public sector availability

There were 26 outlets (hospital pharmacies, dispensaries) surveyed in the public sector. Table 4 shows the availability of the 34 surveyed medicines in this sector. As in the case of public procurement data, only lovastatin was not listed in the Philippine National Drug Formulary.

Table 4. Availability of surveyed medicines (n=34) in the public sector (26 outlets)

<table>
<thead>
<tr>
<th></th>
<th>Originator brand</th>
<th>Lowest priced generic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median availability</td>
<td>7.7%</td>
<td>15.4%</td>
</tr>
<tr>
<td>(Interquartile range)</td>
<td>(3.8 - 18.3%)</td>
<td>(1 - 33.7%)</td>
</tr>
</tbody>
</table>

Private sector prices

Prices for medicines in private retail pharmacies in the Philippines are often extremely high both for generics and originator brands (Figure 2). For example, doxycycline, and older anti-infective agent, was priced at 184 times the international reference price for the originator brand. These excessive medicine prices were often found for products that are no longer under patent and generally available at much lower prices on international market. The median MPR for the originator brand medicines was 17.28 while that of the lowest priced generic equivalent was 5.64 (Table 5). Looking at the MPR range, the originator brands ranged from 3.33 to 184.09 while that of the cheapest generics were 2.32 to 26.10. As seen in the public sector, patients are buying medicines from the private sector at many times their international reference price.

Table 5. Number of times more expensive: patient prices in the private sector compared to international reference prices

<table>
<thead>
<tr>
<th></th>
<th>Originator brand</th>
<th>Lowest priced generic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median MPR</td>
<td>17.28</td>
<td>5.64</td>
</tr>
<tr>
<td>(Interquartile range)</td>
<td>(10.1 - 41.6)</td>
<td>(3.8 - 15.2)</td>
</tr>
<tr>
<td>Minimum</td>
<td>3.33</td>
<td>2.32</td>
</tr>
<tr>
<td>Maximum</td>
<td>184.09</td>
<td>26.10</td>
</tr>
<tr>
<td>No. of medicines</td>
<td>29</td>
<td>23</td>
</tr>
</tbody>
</table>

Private sector availability

Overall availability of surveyed medicines was higher in private retail pharmacies, although hydrochlorothiazide and isoniazid were not available at all.

Table 6. Availability of surveyed medicines (n=34), in the private sector (51 outlets)

<table>
<thead>
<tr>
<th></th>
<th>Originator brand</th>
<th>Lowest priced generic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median availability</td>
<td>33.3%</td>
<td>26.5</td>
</tr>
<tr>
<td>(Interquartile range)</td>
<td>(15.7 - 60.8%)</td>
<td>(4.4 - 46.6%)</td>
</tr>
</tbody>
</table>
Brand premiums in the private sector

In the private sector, 22 medicines were found both as originator brand and lowest priced generic (in at least four pharmacies). For these matched pairs, the median MPR for originator brand and generic medicines was 17.64 and 6.28 respectively. However strong price competition, i.e. generic price <30% of the originator brand price, was found only for chloramphenicol and doxycycline products.

Figure 3. Brand premiums: lowest generic price as a percentage of originator brand price

Price components

Price components and mark-up data were gathered from various secondary sources. Difficulties were encountered in collecting data from primary sources for specific medicines. Therefore, a hypothetical case was developed using the minimum and maximum figures collected from secondary sources. Cumulative mark-ups ranged from 87% to 273%. An import duty of 3.84%, national corporate taxes of 3-5%, and 12% VAT are applicable. The maximum figures collected for each stage are shown in Figure 4 as they contribute to the final price.

Figure 4. Maximum potential price components

Conclusions

Availability and access to medicines

• Most people, particularly those with no health insurance, have to pay out-of-pocket for medicines.
• Even if they are eligible for free treatment, due to the chronic shortages of essential medicines in public sector facilities, they still have to pay for medicines (in the private sector).
• Standard treatments with surveyed medicines generally cost more than 2 days’ wages and some medicines for chronic conditions were very expensive and clearly unaffordable for a low-paid unskilled government worker.

Public sector

• In the hospital surveyed, procurement of both generic medicines and originator brands was inefficient as procurement prices were many times higher than international reference prices.
• Originator brand products were much more frequently purchased than generics.
• Although public sector patient prices were slightly lower than private pharmacy prices, the benefit to patients was largely negated by low availability of medicines in public health facilities.

Private sector

• Overall medicine prices in the Philippines were very high in comparison with international reference prices, for originator brands and lowest priced generics.
• Originator brands were about 3 times the price of lowest priced generics.
• Availability was higher for originator brands than generics (probably due to the promotion of originator brands).
• Margins are moderately high but their cumulative application, given the often high manufacturer’s price, makes medicines unaffordable to many.
• Taxes, including VAT, contribute significantly to the final price of medicines.
Policy recommendations

Dissemination of survey results

• The results of the study should be disseminated to broaden the stakeholder base and start the advocacy process.

• Among the groups that should be made aware of the results of the study are: legislators interested in access to medicine issues, civil society groups involved in advocacy for affordable medicines, other government agencies involved in policy and programme development on essential medicines, consumer groups and the general public.

• Agencies procuring medicines at the international, national and local levels, and agencies monitoring or auditing the procurement prices of medicines, should use the evidence for programming or decision-making purposes.

Advocate for the utilization of survey results

• The methodology and survey data should be reconciled with the current price monitoring scheme for essential medicines conducted by the Department of Health.

• Other medicine pricing methodologies may be used by other institutions, so a common ground is needed when undertaking future studies.

• Regular surveying is proposed, to be implemented nationwide with data disaggregation at the regional level. The survey should include medicines that the health system defines essential for the population’s needs.

• The results of the survey should be used to advocate for policy and programme initiatives to lower the prices of medicines.

• The finding should inform legislative initiatives currently being discussed at the national legislature.

• Consumers and consumer groups should use the results to increase consumer awareness on the issue of high prices, low availability and poor affordability.

Policy Recommendations

• The National Drug Policy group in the Philippines needs to consolidate the findings of various medicine price surveys, and institute regular surveying in the country.

• The results of such surveys should be disseminated widely including the National Price Coordinating Council so that medicine prices and availability issues are discussed not only in the health sector but among the other agencies concerned with trade and welfare issues.

• The discourse on fair pricing, equity issues in access to medicines and the rights-based approach to development programmes should establish medicine prices as a human rights issue and therefore an integral part of one’s basic right to have access to basic health services.

• Procurement of high priced originator brands in the public sector requires further investigation, followed by appropriate action (e.g. pooled procurement, competitive tender with price transparency), to improve the efficiency of the public procurement system.

• New policies are needed to encourage the use of generic medicines, and to reduce their price in both sectors. This may require direct importation of generic medicines from outside the Philippines.

• Tax exemptions for medicines and regulated mark-ups should be explored as possible policy options for reducing medicine prices.
Further information

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