Medicine Prices in Kuwait

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Introduction

• Medicine prices increasing more rapidly than prices of other consumer goods.
• Unaffordable medicines a major barrier to adequate health care for 1/3 of population.
• Little is known about the prices that people pay for medicines and how prices are set.
• Reliable pricing information needed by health care providers and policy-makers.
Background

- The World Health Organization (WHO) and Health Action International (HAI) initiated an international project to survey prices of widely used medicines in 2003.

- The WHO/HAI methodology allows international comparisons of prices of brand and generic medicines, affordability of common treatments.
Aim

- Public concern has been growing in Kuwait about medicine prices.
- How efficient is the public sector medicine procurement system in terms of obtaining medicines at low cost for the country?
- How do the prices of retail brand and generic products compare locally and internationally?
Kuwait

- Population 2.3 million – 45% expatriates
- Oil, oil, oil – GDP $16,240 (PPP) p.c.
- Public health system with national health insurance
- Private retail pharmacies and health centres
- Medicine price regulations
Method

- www.haiweb.org/medicineprices
- A total of 35 ‘defined’ medicines selected - 21 ‘core’ and 14 ‘supplementary’ to the WHO/HAI method.
- Clustered, random sampling was used to select a total 25 retail pharmacies.
- Availability and price of brand and generic versions recorded on the day.
- Procurement prices from Central Medical Stores, medicines ‘free’ in public sector.
## Medicine list

<table>
<thead>
<tr>
<th>Medication</th>
<th>Medication</th>
<th>Medication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetylsalicylic acid</td>
<td>Ciprofloxacin</td>
<td>Indapamide *</td>
</tr>
<tr>
<td>Aciclovir</td>
<td>Co-trimoxazole</td>
<td>Lisinopril *</td>
</tr>
<tr>
<td>Amitriptyline</td>
<td>Diazepam</td>
<td>Loratadine</td>
</tr>
<tr>
<td>Amoxicillin</td>
<td>Diclofenac</td>
<td>Metformin</td>
</tr>
<tr>
<td>Atenolol</td>
<td>Fluconazole *</td>
<td>Nifedipine Retard</td>
</tr>
<tr>
<td>Beclometasone</td>
<td>Fluoxetine *</td>
<td>Omeprazole *</td>
</tr>
<tr>
<td>Captopril</td>
<td>Gemfibrozil *</td>
<td>Paracetamol</td>
</tr>
<tr>
<td>Carbamazepine</td>
<td>Glibenclamide</td>
<td>Phenytoin</td>
</tr>
<tr>
<td>Carvedilol *</td>
<td>Gliclazide *</td>
<td>Ranitidine</td>
</tr>
<tr>
<td>Ceftriaxone</td>
<td>Human insulin neutral</td>
<td>Salbutamol</td>
</tr>
<tr>
<td>Cephalexin</td>
<td>Hydrochlorothiazide</td>
<td>Simvastatin *</td>
</tr>
<tr>
<td>Chlorpromazine</td>
<td>Ibuprofen</td>
<td></td>
</tr>
</tbody>
</table>

Each of defined dose, dosage form and preferred pack size

*Only available to GCC citizens in public sector at time of study
Analysis

- Unit price per tab/cap/ml/dose calculated
- International reference prices:
  - MSH (international tender prices); PBS (Australia)
- Median price ratios (MPR) determined:
  \[ MPR = \frac{\text{Median unit price}}{\text{Reference unit price}} \]
  - \( MPR = 2 \) indicates a price twice that of the reference price
- Affordability of model treatments calculated based on lowest paid unskilled government worker.
Public procurement prices

• Generic medicines purchase prices were similar to MSH prices (MPR=1.2)
• Brand medicines cost about 5 times more than MSH prices (MPR=5)

- Efficient public procurement
- Some unnecessary brands
- Some high price generics

<table>
<thead>
<tr>
<th>Medicine</th>
<th>MPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranitidine</td>
<td>0.1</td>
</tr>
<tr>
<td>Ciprofloxacin</td>
<td>0.8</td>
</tr>
<tr>
<td>Omeprazole</td>
<td>1.2</td>
</tr>
<tr>
<td>ASA</td>
<td>9.1</td>
</tr>
<tr>
<td>Diazepam</td>
<td>22.2</td>
</tr>
<tr>
<td>HCT (brand)</td>
<td>32.9</td>
</tr>
</tbody>
</table>
Private retail prices

- Compared to PBS prices:
  - Generic MPR = 1.9 (0.5 – 3.8) [n=13]
  - Brand MPR = 1.7 (0.6 – 5.0) [n=28]
- In general *procured* at 10 x public sector price
- Median availability = 84%; generic 0%
- Generic/brand price = 87%

- Prices higher than necessary
- Low generic penetration
- Small generic price differential

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Brand</th>
<th>Generic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loratadine</td>
<td>0.57</td>
<td>0.51</td>
</tr>
<tr>
<td>Metformin</td>
<td>0.84</td>
<td>0.77</td>
</tr>
<tr>
<td>Ciprofloxacin</td>
<td>1.19</td>
<td>1.08</td>
</tr>
<tr>
<td>Ceftriaxone inj.</td>
<td>2.65</td>
<td>2.32</td>
</tr>
<tr>
<td>Omeprazole</td>
<td>2.93</td>
<td>2.57</td>
</tr>
<tr>
<td>Diclofenac</td>
<td>3.95</td>
<td>2.65</td>
</tr>
</tbody>
</table>
International comparison –
private retail prices of selected generic medicines

![Graph showing the private retail prices of selected generic medicines in different countries for Captopril, Atenolol, Glibenclamide, and Ciprofloxacin. The x-axis represents the medicines, and the y-axis represents the MPR (MSH ref. price). The countries represented are Ghana, Peru, Lebanon, and Kuwait.](image-url)
International comparison – private retail prices: summary MPR
**Affordability** – lowest paid non-Kuwaiti government worker

- Calculated as no. of days wages needed to purchase model treatment
- >1 day = ‘unaffordable’
- Note: Kuwait has free public health services

<table>
<thead>
<tr>
<th>Condition</th>
<th>Medicine</th>
<th>Rx</th>
<th>Brand</th>
<th>Generic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthritis</td>
<td>Diclofenac</td>
<td>25mg bid x 30 d</td>
<td>5.2</td>
<td>3.5</td>
</tr>
<tr>
<td>Hyperlipidemia</td>
<td>Simvastatin*</td>
<td>10mg d x 30 d</td>
<td>10.8</td>
<td>-</td>
</tr>
<tr>
<td>ARI (adult)</td>
<td>Amoxicillin</td>
<td>250mg tid x 7 d</td>
<td>2.4</td>
<td>-</td>
</tr>
<tr>
<td>Ulcer (peptic)</td>
<td>Ranitidine</td>
<td>150mg bid x 30 d</td>
<td>17.8</td>
<td>13.3</td>
</tr>
<tr>
<td>Ulcer (duodenal)</td>
<td>Omeprazole*</td>
<td>20mg d x 30 d</td>
<td>22.0</td>
<td>19.3</td>
</tr>
</tbody>
</table>
Conclusions

- Public sector procurement is efficient
  - wider use of generics advocated
- Limited generic penetration of retail market
  - some medicines unaffordable to low-paid workers
- Generic price 10-15% below brand price
  - lack of competition and pricing regulation system
- If CMS purchases made available to private pharmacies could dramatically reduce prices.
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