RATIONAL USE OF MEDICINES
Is it worth the effort?

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Problem 1
Waste areas

Figure 5-1. Inefficiency and Waste in the Supply of Drugs from Budget Allocation to Consumer

- Inadequate buying practices: $90
- Quantification problems: $76
- Inefficient procurement: $49
- Inefficient distribution: $30
- Irrational prescription: $15
- Non-compliance by patients: $12

Source: WHO and World Bank data.

Problem 2
Waste in use

• Many studies have shown most common drug use problems as being:
  – Over-prescribing,
  – multi-drug prescribing,
  – misuse of drugs,
  – use of unnecessary expensive drugs
  – overuse of antibiotics and injections
Is RUM worth the effort?

Impact on economic indicators:
- Time
- Money
- Human intellectual capital
- Therapy success
- Other resources
10 national strategies to promote RUM

1. Evidence-based standard treatment guidelines
2. Essential Drug Lists based on treatments of choice
3. **Drug & Therapeutic Committees in hospitals**
4. Problem-based training in pharmacotherapy in UG training
5. Continuing medical education as a licensure requirement
6. Independent drug information e.g bulletins, formularies
7. Supervision, audit and feedback
8. Public education about drugs
9. Avoidance of perverse financial incentives
10. Appropriate and enforced drug regulation

Source: WHO Policy Perspectives no.5
<table>
<thead>
<tr>
<th>Jan 2000</th>
<th>May 2004</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>47 cough preps</td>
<td>12 cough preps (Gone down to 8)</td>
<td>Better stock control, saving money for institution</td>
</tr>
<tr>
<td>16 amoxicillin brands</td>
<td>2 amoxicillin brands</td>
<td>Antibiotic control-saving a key resource</td>
</tr>
<tr>
<td>Ad-hoc purchasing</td>
<td>Streamlined and planned purchasing i.e. Minimal stock holding &amp; guaranteed availability</td>
<td>Saving money, better service, better financial control</td>
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<tr>
<td>Uncontrolled medical rep activity</td>
<td>Regulated Med-rep activity</td>
<td>Improved human capital use</td>
</tr>
<tr>
<td>No drug assessment - anything bought</td>
<td>Drug assessment with written down criteria</td>
<td>Ensures quality, legality, saves money, better health outcomes</td>
</tr>
</tbody>
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## Selected D/PTC achievement (institution 2)

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>OUTCOME</th>
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<tbody>
<tr>
<td>Reduced inventory holding levels</td>
<td>Better financial management</td>
</tr>
<tr>
<td>Reduced cost of care</td>
<td>Money saved for patient</td>
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<tr>
<td>Tendering enabled sourcing of drugs at competitive rates</td>
<td>Savings for the institution</td>
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<td>CME sessions organized for hospital staff</td>
<td>Improvement of the human capital</td>
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<tr>
<td>Audits sensitized prescribers e.g. costs per prescription reduced by 20%</td>
<td>Cost reduction, benefit to patient and institution</td>
</tr>
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Selected D/PTC achievement (institution 3)

Comparison of the % of Encounters with Any Antimalarial Injectable Prescribed for Treatment of Malaria, Among Catholic DTC Hospitals

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Baseline</th>
<th>Endline</th>
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</thead>
<tbody>
<tr>
<td>St. Anthony's Hospital</td>
<td>73%</td>
<td>43%</td>
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<tr>
<td>St. Dominic's Hospital</td>
<td>17%</td>
<td>7%</td>
</tr>
<tr>
<td>St. Francis Xavier Hospital</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>St. Patrick's Hospital</td>
<td>21%</td>
<td>0%</td>
</tr>
<tr>
<td>West Gonja Hospital</td>
<td>7%</td>
<td>10%</td>
</tr>
</tbody>
</table>
Why did these examples work

• Interventions ensured cooperation across organizational and institutional capabilities i.e. multi-stakeholder involvement

• Clear mandate, terms of reference, management support and performance review
Summary: It is worth it!

- Decrease in drug expenditure without decreasing quality of service (cost effective therapy) - money, therapy
- Decrease in morbidity and mortality – better health
- Decrease in length of stay in hospital, an issue of economic impact for patients- time and money
- Reduces cost of inventory- money and time
- Non-financial benefits but of economic impact e.g. saving antibiotics, better prepared and competent staff, sustainable livelihoods – human capital, other resources
BUT...

It needs to be guided by a National framework on Rational Use of Medicines
Thank you!

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The Ecumenical Pharmaceutical Network
www.epnetwork.org