RATIONAL USE OF DRUGS

Incorporating "Guidelines on equipment donations"
INTRODUCTION
The rational use of drugs demands not only that the appropriate drug be prescribed, but that it be taken in the right dose, at the right intervals and for the right length of time. Few, if any, would disagree with such a definition. So does this mean that medicines are prescribed, dispensed and taken in a rational way? On the contrary, most studies demonstrate that inappropriate drug prescribing by physicians and health workers, and inappropriate use of medicines by the general public are growing problems in both the public and the private sectors of developed and developing countries. Many obstacles exist to the rational use of drugs, but a great deal has already been achieved. This issue of Contact hopes to inspire its readers to take the action even further.

However, the action needs to come not only from individuals and groups within countries but also from national governments and international organizations. Contact therefore includes a report on the work that the World Health Organization (WHO) is doing with national ministries of health, and provides an update on CMC’s own pharmaceutical programme, which works mainly with church organizations.

The lobbying group, Health Action International (HAI), has also played an important part in efforts to achieve the rational use of drugs. Its viewpoint on drug promotion, and an indication of the action that can be taken at all levels to reduce promotion that is misleading, is also included in this issue.

Readers of Contact can make an important contribution towards a more rational use of drugs in their communities. Many are already promoting the concept, and finding a sense of empowerment in the process. Health workers find that they are able to build a greater social awareness into their prescribing patterns, and consumers learn to become defenders both of their own health, and of safe, effective, efficient and reasonably-priced drugs and medicines.

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PROMOTING RATIONAL DRUG USE

Richard Laing, who is coordinating the International Network for the Rational Use of Drugs (INRUD) for Management Sciences for Health, Boston, introduces the concept of rational drug use and the strategies which help change irrational drug use behaviour.

Drugs are an essential component of any health system. When people become ill, they hope to receive a medicine which will cure them. In many cases, drugs are available that may be effective. However, in many situations drugs are used irrationally.

In 1975, World Health Organization (WHO) stated: “The rational use of drugs requires that patients receive medicines appropriate to their clinical needs, in doses that meet their own individual requirements, and at the lowest cost to them and the community.” In summary, this means:
- the right drug;
- the right indication;
- the correct route;
- appropriate patient information;
- appropriate cost.

The irrational use of drugs is a world-wide problem. In different countries and cultures the drugs given or the conditions mistreated may be different, but the underlying problem of the wrong drug or the wrong patient or the wrong route remains.

In developed countries, examples of irrational drug use include excessive use of long-acting sedatives and failure to use effective drugs in treating hypertension. In other cases, expensive broad-spectrum antibiotics, such as ciprofloxacin or third generation cephalosporins, are used where a narrower spectrum, cheaper drug would be more appropriate.

Developing countries
A similar pattern of irrational drug use has been reported in many developing countries. Common examples of misuse include the use of antibiotics for simple diarrhoea or viral infections, use of inadequate dose of chloroquine, excessive use of injections, polypharmacy (too many drugs), failure to give iron to pregnant women, and so on. Another common problem is giving too short a course of therapy; this may lead to relapse in the patient’s condition or the emergence of resistant organisms within the community.

A serious problem exists in countries where injectable chloroquine is used for treating malaria. The common 5 ml dose normally given only contains 200 mg, while the correct 4 tablet initial dose contains 600 mg. This practice constitutes under-treatment and has led, in Ghana, to a condition called “Go slow malaria.” Injectable chloroquine should only be used in a hospital setting for complicated malaria such as cerebral malaria.

The reasons for this irrational use of drugs by prescribers are multiple and varied. In some situations, the prescriber may not know the correct treatment, but in many cases the prescriber may have correct knowledge and exhibit inappropriate behaviour. This may be because of pressure from drug representatives, peers, patients, or for financial reasons.

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Promoting rational drug use
Many national and international organizations have been active in promoting rational drug use. The Drug Action Programme of WHO is involved in many countries (see page 17). Management Sciences for Health (USA), where the author works, has for many years been active in all aspects of drug management, and in 1989 coordinated the establishment of the International Network for the Rational Use of Drugs (INRUD). This network comprises groups in eight countries of Africa and Asia (Ghana, Nigeria, Tanzania, Uganda, and Zimbabwe in Africa; Bangladesh, Indonesia, and Nepal in Asia). It also includes support groups at the Drug Policy Group, Harvard Medical School, Boston; the WHO Action Programme on Essential Drugs and Control of Diarrhoeal Diseases Programme, Geneva; the Department of International Health Care Research (IHCAR) at Karolinska Institute, Stockholm; and the Department of Clinical Pharmacology, University of Newcastle, Australia. The University of Amsterdam Medical Anthropology Unit and Health Action International (HAI) have also been active, particularly in relation to consumer aspects of drug use. (Addresses of WHO, Management Sciences for Health, and HAI on page 24).

Learning about the problem
When INRUD was formed in 1989 it soon became clear that there was no standard method for measuring or assessing drug use in developing countries. To remedy this situation, INRUD members in Indonesia, Bangladesh, Nepal, Nigeria, and Ghana worked together with support groups in Boston, Sweden, and Geneva to develop simple indicators and methods for measuring drug use in health facilities. These indicators and methods have now been published by WHO in a manual, “How to investigate drug use in health facilities: selected drug use indicators” (details on page 24). The indicators selected are shown in Table 1.

The data for a basic descriptive survey can be obtained from 30 prescriptions or patient encounters in at least 20 facilities. For measuring the impact of interventions, larger sample sizes are required. Surveys have been undertaken in 17 countries. The results are shown in Table 2.

Within any survey there is likely to be considerable variation. For example, in a survey in Tanzania the average antibiotic use was 39%, though at three of the 20 facilities antibiotic use was over 60%. When intervening to change inappropriate drug use, it is important to target those facilities which need the most improvement.

Understanding irrational drug use
As mentioned above, there are many reasons for inappropriate prescribing. Before deciding on an intervention to improve drug use, it is most important to understand the reasons for the behaviour. There are a number of methods (commonly called qualitative methods) which can be used to investigate such behaviours.

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Table 1: WHO drug-use indicators

Prescribing indicators
1. Average number of drugs per encounter
2. Percentage of drugs prescribed by generic name
3. Percentage of encounters with an antibiotic prescribed
4. Percentage of encounters with an injection prescribed
5. Percentage of drugs prescribed from essential drugs list or formulary

Patient care indicators
6. Average consultation time
7. Average dispensing time
8. Percentage of drugs actually dispensed
9. Percentage of drugs adequately labelled
10. Patients’ knowledge of correct dosage

Facility indicators
11. Availability of copy of essential drugs list or formulary
12. Availability of key drugs
Table 2: Results of indicator studies 1990-1993

<table>
<thead>
<tr>
<th></th>
<th>Indonesia</th>
<th>Bangladesh</th>
<th>Uganda</th>
<th>Tanzania</th>
<th>17-country average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of facilities</td>
<td>20</td>
<td>80</td>
<td>42</td>
<td>20</td>
<td>27</td>
</tr>
<tr>
<td>Prescribing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>) Average no of drugs per prescriber</td>
<td>3.3</td>
<td>1.4</td>
<td>1.9</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>) % generic</td>
<td>59</td>
<td>78</td>
<td></td>
<td>82</td>
<td>2.2</td>
</tr>
<tr>
<td>) % antibiotic</td>
<td>43</td>
<td>25</td>
<td>56</td>
<td>39</td>
<td>40</td>
</tr>
<tr>
<td>) % injections</td>
<td>17</td>
<td></td>
<td>48</td>
<td>29</td>
<td>22</td>
</tr>
<tr>
<td>) % formulary drugs</td>
<td></td>
<td></td>
<td></td>
<td>88</td>
<td>46</td>
</tr>
<tr>
<td>Patient care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>) Average consultation time (mins)</td>
<td>3.0</td>
<td>1.0</td>
<td>3.0</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>) Average dispensing time(s)</td>
<td></td>
<td>23</td>
<td>78</td>
<td>90.1</td>
<td></td>
</tr>
<tr>
<td>) % patient knowledge of dose</td>
<td>81</td>
<td></td>
<td></td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>) % drugs dispensed</td>
<td>27</td>
<td>82</td>
<td></td>
<td></td>
<td>77</td>
</tr>
<tr>
<td>Facility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>) % drugs in stock</td>
<td>54</td>
<td></td>
<td>72</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>) % impartial information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
</tr>
</tbody>
</table>

References are available on request.

These include:

**Observation:** In this method the investigator observes what happens in a health facility or drug shop. A development of this method is the use of a surrogate patient. Here an investigator posing as a patient or parent of a patient goes into a drug shop or pharmacy and says, for example, “My child at home has diarrhoea” (or some other condition). “What should I do?” The investigator records what he/she is told and purchases the advised drugs. Then a different investigator goes into the facility and asks, “If a parent came with a child complaining of diarrhoea, what would you do?” The answer given may not match the actual prescription given to the surrogate and thus provides an illustration of the difference between knowledge and behaviour.

**Focus Group:** In this method a group of prescribers or patients discuss the reasons underlying different behaviours.

**In-Depth Interview:** In this method a few prescribers or patients are interviewed at length about what they do and the background and reasons for the behaviour.

**Structured Questionnaire:** With this approach prescribers and patients are interviewed using a set of standard questions.

Whenever possible, different methods should be combined to ensure that the findings made are consistent across different methods.

The INRUD network members in Ghana, Nigeria, Bangladesh, and Indonesia are working on a manual, “Qualitative Methods to Investigate Drug Use Behaviours.”

Once you have identified what the priority drug use problems are and what the underlying reasons for these behaviours are, you can choose an intervention or a combination of interventions to address the problems.

**Changing drug use behaviour**
Interventions are commonly divided into educational, managerial, and regulatory approaches. In developed countries considerable experience exists in which interventions have been tested using control groups. In developing countries less experience exists to show strict testing of different interventions. Thus, the advice given below has been based

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on developed country experience, and developing country experience where it exists.

Whichever intervention is selected, it is important to focus the message and target the audience. Trying to educate or supervise all prescribers to improve all aspects of prescribing is likely to fail to have any impact. Targeting the 20% who use injections or antibiotics the most with a clear message: "Reduce injections" or "Reduce antibiotics" is likely to have a significant impact.

Educational strategies
  . Training
WHO/DAP are currently producing a practical manual, "Guide to Good Prescribing" (see page 25 for details). The draft has been tested in both developed and developing countries in Europe, Africa, Australia, Asia, and the US, and has been shown to improve prescribing knowledge and ability. This manual is suitable for use in training schools or medical schools. Drug seller training: A programme in Kenya and Indonesia has trained pharmacists and drug sellers in better management of diarrhoea in children. The intervention resulted in increased use of oral rehydration therapy (ORS) and reduced the use of antibiotics. A manual describing the methods and materials used is available from the WHO/CDD Programme. Small group or large group training: A recent study in Indonesia compared the impact of training a small group, versus training a large group, versus giving no training to a third group.

In this study, the same lectures, with the same materials, were either given at each health centre or at a central venue. When the prescribing patterns were compared, groups who had received training, either in small groups or large groups, had changed prescribing behaviour significantly compared to the control group. The cost per person trained was much cheaper for the small group training (US$0.72) as compared to US$3.00 per person in the large group. Studies in the United States have shown that face-to-face meetings between a drug retailer/educator and a prescriber are effective in changing prescribing.
  . Influencing opinion leaders
Doctors' prescribing is frequently strongly influenced by a few key opinion leaders. In a study in the US, a professor of obstetrics was approached about which cephalosporin was used for Caesarean sections. Once the professor was convinced of the need to change, he made sure that all staff complied with his practices.
  . Printed materials in the form of posters, charts, newsletters, and manuals, may change prescriber knowledge but are unlikely to change behaviour significantly as shown in controlled studies.
  . General lectures, unfocused discussions, and standard continuing education presentations have very limited, if any, impact.

Managerial strategies
Managerial approaches to changing drug use are the most demanding of the different strategies, though potentially they are the most rewarding.
  . Standard treatment guidelines/drug lists
These have been widely used with very mixed results. What has become clear, however, is that participation of prescribers in the process of development or revision is critical for the process of acceptance. Health workers at all levels can be involved in the process of development. Combining experts with grassroots practitioners improves the quality, acceptability, and widespread usage of the guidelines. This is the approach that was successfully used in Zimbabwe and Malawi. The standard treatment guidelines can be focused on priority conditions. Also, they may be used as the standards with which practices can be
Patient notes made by prescribers can later be collected and reviewed, and the results related to the standard.

compared when practices are audited (described below).

. Drug supply kits: Where drugs are supplied in kits, the kit contents can be adjusted to reflect quality prescribing. For example, injectable drugs can be reduced or removed from kits and replaced with oral equivalent preparations.

. Morbidity-based procurement: Where standard treatments are in place and are followed, drugs can be supplied in type and quantity related to the reported pattern of illness. For example, in a South Asian country tetracycline syrup was widely used for the treatment of acute respiratory infections, though nowhere in the standard treatment guidelines was it recommended. This drug could easily be replaced with co-trimoxazole.

. Structured drug prescribing forms: In hospitals it is useful to have antibiotic prescribing forms which structure and advise prescribers on frequency and duration of therapy.

. Audit and feedback/supervision: In this approach, prescribers agree on "standards" for clinical practice. Such standards could be: "IV rehydration should only be used if a child is more than 10% dehydrated," or "injectable chloroquine should only be used in inpatients with cerebral malaria," or "generic names will be used for all prescribing." Patient notes or records are then collected and anonymously reviewed, and the performance related to the standard is assessed. These results are then fed back to the prescribers describing their performance and how it compared to other prescribers or facilities. This is a very effective though demanding way of changing behaviour which has been used very little in developing countries. In developed countries, audit and feedback are widely used. Such methods can be used to structure supervisory visits.

. Financing mechanisms: Financing mechanisms can be used to promote rational drug use. For example, charging for a full course of therapy rather than per tablet or injection may encourage patients to follow a complete course of therapy. Charging less for generic drugs may encourage generic drug use. Charging a capitation fee (set charge per patient) rather than a drug fee may help prevent over-prescribing.

Regulatory strategies

These approaches revolve around rules, regulations, and punishments designed to force a specific behaviour. A regulatory strategy may often have an unexpected and/or undesirable outcome, quite different from that desired.

. Banning undesirable drugs: While removing ineffective drugs from the market would appear beneficial, often the drugs which are used as substitutes may cause other problems. For example, when anti-diarrhoeal drugs were banned in India and Bangladesh, the use of metronidazole was reported to increase. The lesson here is that when a drug is banned, strong prescriber education efforts should occur to suggest desirable alternative prescriber behaviours.

. Changing registration status: Some drugs which are safe can be sold by drug sellers, such as tetracycline eye ointment, while other drugs can be designated as prescription only. The major problem with using registration as a tool is that enforcement is required. Frequently enforcement is non-existent, weak, or corrupt.

. Limiting numbers of drugs prescribed: A three-drug rule is frequently used to restrict excessive drug use. Unfortunately, what often occurs is that two prescriptions are issued. Restricting the number of days of treatment, for example a three-day rule, may have adverse effects, such as development of antibiotic resistance.

Combination approaches

Whenever possible, better results are obtained when different approaches are combined. An
Table 3: Combined intervention strategies in prescribing for acute diarrhoea, Mexico City

<table>
<thead>
<tr>
<th>Study Physicians</th>
<th>Control Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline Stage</td>
<td>0%</td>
</tr>
<tr>
<td>After Workshop</td>
<td>20%</td>
</tr>
<tr>
<td>Peer Review</td>
<td>40%</td>
</tr>
<tr>
<td>Follow-up</td>
<td>60%</td>
</tr>
<tr>
<td>Total</td>
<td>80%</td>
</tr>
</tbody>
</table>

% Cases treated in line with algorithm


excellent example of such a combined approach occurred in Mexico (see Table 3). In this activity to improve diarrhoea case management, a standard treatment protocol was developed (managerial approach), a training course was held for prescribers (educational approach), and then case notes were regularly reviewed with feedback given (managerial). What is particularly useful about this study is (1) there was a control group, and (2) there was follow up for 18 months after the peer review. At the start, only 24% of cases were correctly treated; after training, this improved to 51%; after peer review, it reached 71%; and after 18 months, it was still 69%.

Areas requiring attention

As described above, we now have a good idea how to measure, investigate, and intervene at primary care outpatient level in public facilities. We know very little about inpatients or about private sector prescribers. We know more about private sector drug retailers. The NGO/Mission sector is another neglected area. There is a widely held belief in many countries that mission hospitals provide a better quality of care, but this may not be true of rational drug use. For example, in Malawi, mission facilities tended to prescribe a considerably higher average number of drugs, injections, or antibiotics than equivalent government facilities. Further work needs to be done in these areas.

The future

Many changes are occurring in health care provision in developing countries which may impact on rational drug use. Cost recovery programmes may mean that patients may not be able to purchase drugs they need. Alternatively, if health worker incomes depend on drug sales, as occurs in Japan, over-prescribing may occur.

There have also been efforts to privatize government services. This may lead to brand-name or profitable drugs being prescribed rather than generic, cost-effective equivalent preparations.

As quality of care issues in health services become more important, the rational use of drugs will become more significant. We know how to measure and investigate drug use and have many ideas as to how to intervene to change drug use.

The stage is now set to move from interesting surveys and studies to implementing activities focused on rational use as a routine part of health service delivery.

Sources:


BOLIVIA: BUILDING A CAMPAIGN NETWORK

Bolivia, like many other countries in the Third World, is struggling to set up a sound and coherent drug programme, according to Oscar Lanza of Accion Internacional por la Salud (AIS), Bolivia. His organization is helping in the process by ensuring that the population understands the importance of rational drug use.

The first effort to rationalize the use of drugs in Bolivia took place in 1977. A pilot programme in Montero, Santa Cruz, offered essential drugs and also trained health promoters in the proper use of the drugs. In 1979, the first national initiative took the form of a drug supply service to health facilities in rural areas.

Then, in the early 1980s, when Bolivia was caught in a spiral of runaway inflation and the price of drugs became prohibitive, health workers, with the support of the Medical College of Bolivia, called on the government to take action. The response included the development of the first National Therapeutic Formulary, and the start of central purchasing and distribution in 1983. The government’s objectives were to avoid buying expensive, brand-name drugs, and to introduce a range of generic and essential drugs. Direct importing would cut out the middle-men, and local production - including use of Bolivian raw materials - would create local employment.

This National Drugs Programme initiative also included the launch of a public sector body to supply drugs and other medical supplies, competing on equal terms with the private sector. The programme was financed by a revolving fund and donations from abroad.

The government also tried to work with the private sector on a national drug plan for drug importation, for manufacture of generic drugs, and for patenting or licensing of proprietary medicines. However, the pharmaceutical industry showed little interest in such discussions. They were highly critical of the National Drugs Programme and reacted by creating artificial shortages of drug supplies. Some commercial enterprises even refused to supply their products to the pharmacies which kept drugs produced within the National Drugs Programme. The government was forced to open “institutional pharmacies” and “popular (people’s) pharmacies” in order to sell supplies of the Programme’s drugs.

Some of the criticism of the National Drugs Programme was justified. The Programme offered only a very limited number of drugs, and was unable to supply all the products included on the “essential” listing. There were also accusations of corruption, and quality controls were sometimes found to be inadequate. The packaging of the generic products imported by the Programme looked cheap in comparison with the proprietary brands. Those who opposed the Programme said that this suggested that the quality of these cheaper medicines was also poorer. This created a lack of confidence in the Programme’s drug supplies.
Finally, in 1985, a new government liberalised trade and lifted all restrictions on imports. Although not officially acknowledged, this effectively put an end to the Programme.

Information campaign required
In response to the collapse of the National Drugs Programme, a small group of health workers and professionals in Bolivia decided to meet regularly to discuss the health policies adopted in Bolivia. The group decided that one of the main reasons why the National Drugs Programme had failed was because it had received far too little public promotion. A wide-ranging information campaign would have ensured that health workers and doctors would have started prescribing more intelligently, and that the general public would have become more aware of their needs as consumers. A high level of social awareness and commitment on the part of both the health workers and the consumers would have created a strong defence.

The group therefore decided to document the experience of the National Drugs Programme, and to plan a programme of information and community education. As the work became known, similar groups formed extending the work to almost all regions of the country. In 1987, inspired and encouraged by Health Action International (HAI) network, the Bolivian group joined up with groups in other countries in the region to establish the network Health Action International - Latin America and the Caribbean (HAI/AIS - LAC).

AIS Bolivia
The work of AIS Bolivia currently centres on a wide range of activities in community education and information. These include the broadcasting of daily radio programmes which reach all parts of the country; the monthly information bulletin, AIS, and the twice-yearly *Carta Medica de AIS Bolivia* (Medical Letter from AIS Bolivia). AIS Bolivia also produces handbooks on the rational use of drugs for health workers and promoters, and other materials for illiterate populations and rural schools. Research publications are also published each year.

The organization takes part in academic events, but also organizes talks in base communities. For example, discussions take place in rural areas, among groups living in peri-urban areas of the city, and among students. It maintains a constant dialogue with trade unions, particularly the Trade Union Federation of Health Workers of Bolivia, and with the Medical College of Bolivia.

Ongoing dialogue is maintained with the national authorities and international bodies, including WHO, UNICEF, HAI, International Baby Food Action Network (IBFAN), the International Organization of Consumers' Unions (IOCU), as well as with national and local institutions. It advocates and supports initiatives towards full implementation of the National Drugs Programme through government agencies, such as the Central Office for Health Supplies and Services of the National Health Department (CEASS), and through non-governmental organizations, such as Essential Medical Supplies (IME).

AIS promotes the rights and obligations of both patients and consumers through its Committee for Consumer Protection (CODEDCO). This
committee is also active in environmental conservation. As part of the IBFAN network, AIS Bolivia is also involved in the promotion of breastfeeding.

**Progress to date**

Making information about the advantages of a drugs policy available to everyone (democratization) has produced a positive effect.

Over the past two years, some of the issues involved in promoting a National Drugs Programme have been revived for new discussion. For example, the government drug purchasing agency (CEASS) has met for talks with the non-governmental group, IME. The government has also recently approved the country's first law on medicines, and the National Therapeutic Formulary has been revised. Consumers are now included in the National Pharmacological Commission. There has also been an increase in social controls on the non-ethical promotion of drugs and the setting up of a Multi-sectoral Committee for the Promotion of Essential Drugs (COMPROMESE).

The information campaign has also helped produce a growing social involvement in the defence of the Programme. Health professionals, health workers and students are again debating the subject. Efforts are also receiving more backing from countries and organizations abroad. WHO's Regional Office for the Americas (PAHO/WHO) has assigned a permanent adviser on essential drugs to Bolivia.

Despite all this, however, the pharmaceutical market in Bolivia is still flooded with more than 8,000 brand products. The cost, safety, efficiency and efficacy of many of them is questionable. An enormous challenge therefore lies ahead, and the tasks required are not always easy, nor are they without their threats and dangers. However, the compensation for the efforts lies in caring for human life, a precious gift which we all must cherish.
MAKING SAVINGS IN A KENYAN HOSPITAL

A paper presented by consultant paediatrician, F Mugo Ng'ang'a, at the annual conference of MEDS, Kenya's Mission for Essential Drugs and Supplies, showed that even the most qualified medical professionals can waste money and time simply because they have not been exposed to a particular aspect of "Rational Use of Drugs". The evidence came from a study at the Provincial General Hospital Nakuru which revealed that substantial savings in both money and staff time could be made by training health workers in the appropriate management of acute respiratory infections.

Acute respiratory infections (ARI) are a leading cause of childhood morbidity in the developing world. The effect on small children is particularly devastating, killing about four million children under five years of age in Asia, Africa and Latin America each year. Pneumonia is the most serious ARI for children, and accounts for nearly all the ARI deaths. Children also may die of bronchiolitis, croup and complications of upper respiratory infections.

Because ARI are extremely common, they place an economic burden on developing countries. On average, a child in an urban area may have from five to eight episodes of ARI annually. In rural areas the number of episodes is somewhat lower. Inappropriate drugs are often used for children with ARI. At the same time, helpful drugs are overused by being given to children when they do not need them. Thus, large amounts of money are spent by families, hospitals and governments without real benefits.

The main pillars in Kenya's national ARI programme and training are to sensitize health workers in:

1. Identifying pneumonia as early as possible by use of simple, and the most reliable, clinical signs, such as chest indrawing and respiratory rate.
2. Giving the appropriate, cost-effective antibiotics for treatment of pneumonia. Co-trimoxazole tablets are the first choice prescription. Others being amoxycillin and procaine penicillin.
3. Decreasing the inappropriate use of antibiotics and cough medicines for the treatment of ARI.

Standard case management of ARI, which includes rational use of drugs, is not only cost effective, it is also labour saving. A 10-day trial in the treatment of ARI in under fives at Provincial General Hospital (PGH) Nakuru shows the cost-effectiveness of ARI programme and training.

The study experience
2,116 children under five years old were treated in the OPD (outpatients department) of
GUIDELINES ON EQUIPMENT DONATIONS

A guide for those accepting and making donations. It is also useful for those planning to buy equipment.

Donations of equipment are made for a number of reasons including:
- a genuine desire to help, to do something good
- financial gains for the donor, such as tax deductions
- in response to requests from the recipient.

Why do both recipients and donors need guidelines on the donation of equipment? Because although donations of equipment and materials may improve the efficiency of health facilities, some donations may not be at all helpful. Recipients should therefore develop clear policies on their equipment requirements. These should be shown to donors who should respect them. Before a donation is agreed, donors and recipients should make a thorough evaluation of the requirements of both parties. The final choice of equipment will be limited by cost, environmental and operational conditions, the availability of supplies of spare parts and the quality of maintenance services.

Summary

Recipient

- **Standardize equipment**
  This ensures a greater likelihood of:
  - economical purchasing, storage of equipment and spare parts
  - availability of instruction manuals
  - availability of local expertise in operation and maintenance procedures
  - selection of appropriate equipment.

- **Involve technical departments**
  Technicians can be asked to consider and advise upon:
  - installation, operation and maintenance requirements
  - staff and training requirements for users and technicians
  - the essential spare parts required
  - appropriateness of equipment in terms of running costs and technical design.

- **Specify clearly items to accompany the equipment**
  These should include:
  - a full set of technical documents in a specified language
  - an agreed quantity of spare parts and supplies
  - a document of warranty (guarantee) for the replacement or repair of faulty equipment.

- **Make a check-list** (see over) including all the above.
  This ensures that the donor receives enough information to make an appropriate response.

- **Communicate alternative preferences**
  For example, if a financial contribution would be more appropriate than a donation of equipment from abroad, make this clear to the donor.

Donor

- **Communicate with the recipient**
  Make sure that the potential recipient has provided a comprehensive description of the equipment required.

- **Supply fully functional equipment**
  Test the equipment and make sure all necessary spare parts and supplies are included in the package before making shipment. Do not supply worn-out, broken or redundant equipment.

- **Supply all technical documents**
  Installation, operation, maintenance and repair manuals and diagrams should be made available in a language understood by the users and the technicians.

- **Supply enough consumables and spare parts to last at least two years**
  Include a complete list of spare parts and indicate the name and address of the authorised dealer.

- **Ensure proper packaging and shipping**
  - use strong, sturdy and easy-to-handle packing materials
  - include a comprehensive packing list
  - supply shipping documents promptly.

- **Offer technical assistance**
  This should include promoting, recommending and providing training for users and for maintenance personnel.

- **Investigate the import regulations in the recipient’s country**
  Make sure that the recipient is able to cover the costs of custom duties and any other charges associated with importation.
GUIDELINES ON EQUIPMENT DONATIONS

Introduction
Experience provides many examples of how equipment donations can end up causing the recipient more problems than benefits. Problems arise for a number of reasons. For example:
- People who become involved in donating medical equipment may have no background in health issues, no understanding of the structure of health services of the recipient (usually based in a developing country), and no recognition of the need to seek the advice of experts.
- Companies, hospitals or private doctors often donate outmoded, outdated equipment either because it provides them with tax exemptions or as a means of getting rid of redundant equipment.
- Potential donors may have patronizing attitudes towards recipients, regarding them as beggars who are desperate for any equipment. Such people would not consider it worthwhile to consult the recipients. The recipient may compound this problem by feeling obliged to accept any help, even if the equipment is not required, and even if charges, such as import taxes and transport costs, are involved.

What can be done?
The donor and the recipient must get together as equal partners to work out how the effort and goodwill involved in making a donation can be put to best use. Recipients should have clear policy on their equipment requirements which should be known to their staff as well as their donors.

The right to give and receive a «No, thank you» should be used, appreciated and accepted. A refusal (or acceptance) that is justified by a comprehensive statement of requirement is often much appreciated by the donor.

To help build a comprehensive statement of requirement, the following list of criteria and practical points may be useful. By working through the list of points for the recipient, it may make it easier to decide whether or not to accept a donation (or to make a purchase). By working through the list of points for the donor, it should make it easier to decide whether or not to make a particular donation. However, each partner needs to understand what is expected of him or her and what is expected of his or her counterpart.

RECIPIENT RESPONSIBILITIES

1. Standardize equipment
There is more involved in equipping a medical unit than simply obtaining the equipment. Maintenance is very important, and maintaining a vast array of different equipment can be a particular problem.

In some countries, service centres have been set up to provide technical support for health services. These centres may have compiled a national Standard Equipment List so that the number of different makes of equipment is kept to a minimum. This list is useful because:
- a) equipment included on the list can be fully supported in terms of spare parts, maintenance and operating instructions
- b) there will be simplified installation and operation arrangements for users, and maintenance procedures for technical personnel.
- c) lower prices due to bulk purchasing are likely to be available and there will be economies in storage due to the limited range of spare parts required.

Before making a request, check whether the equipment requested is on the national standard equipment list.

If no national standard equipment list is available, it would be useful to begin one either for the unit or hospital, or working as a team with related group of hospitals. Associations or coordinating agencies may make a list for their members. Such cooperation encourages sharing of resources and experiences.

Important issues to consider with regard to standardization include:

- Staff numbers, experience, and training required for installation, operation, and maintenance. Consider both the clinical staff and the service level staff required in order to use the equipment
- Location for the equipment including site accessibility and the space available
- Climatic and environmental conditions, such as heat (temperature), humidity, dust, ventilation, etc
- Utilities available including power supply (electric, gas, generator, fossil fuel, wood fuel, solar, windmill, bio-gas, etc), reliability of supply (fluctuating power, interruptions, rationing, etc), type of power (voltage, frequency, phase, AC/DC), type of water (polluted, salty, hard, soft, etc) and the means of delivery (piped, stored, well, river, rain, etc).
- Skills and support services required for operation, procedures, and clinical use of the equipment. Keep in mind that modern equipment may offer a wide variety of operational modes and may simplify the performance of certain procedures but it is often very expensive, and may need both health specialists and a manufacturers' service network for maintenance and repair. Even when these are available, spare parts and special maintenance
tools that are costly may be required. Sophisticated equipment often has very sensitive parts. Also remember that sophisticated modes offered by the equipment are often not utilized!

- **Maintenance** in terms of the expense of spare parts, downtime during normal servicing and level of expertise of technical staff required

- **Availability of working materials**: Some equipment may require working materials which are not available locally, for example, special papers, films, filters, etc. These are recurrent cost items and their assured availability must be considered.

- **Other specific requirements** related to the equipment. For example, whether a new addition will conform with existing equipment, whether a cold room is required for computerised equipment, or especially solid walls for X-ray machines, or a boiler for autoclaves, or power stabilizers for electronic equipment, etc

- **Experience of others** with similar equipment, brands, or sources. Check whether equipment is manufactured locally or imported on a regular basis.

This list may not be exhaustive. It aims simply to provide some criteria to help define equipment that is technologically and clinically appropriate to the intended use. By following this list, the final choice of equipment is likely to be of high quality, solid and robust and of a standard that will withstand both environmental and operational conditions.

2. **Involve technical departments**

Whether preparing the standard equipment list or ordering equipment, the technical personnel must be involved in all steps of the procedure. As experts, they will consider and advise upon:

- all aspects of the requirements for installation, operation, and maintenance

- essential spare parts and other special requirements, their availability, and costs

- availability of technical personnel, staff required, and level of training required

- estimated lifespan of the equipment based on the model, year of manufacture and whether it is new or reconditioned.

3. **Specify clearly items to accompany the equipment**

- All equipment must be provided with a full set of technical documents. That is, documentation for installation, for user operation, for repair and maintenance (manuals), a list of spare parts and diagrams and technical data. (Indicate clearly the language in which documents should be made available. Most developing countries use either English, French, Spanish or Portuguese as a second language. If documents cannot be made available in the local language, insist that these are made available in whichever of the above four main languages is most appropriate).

- All equipment must be accompanied by a reasonable quantity of spare parts and consumable items. It is necessary to take into account the "lead period" (i.e., time between placing an order and receipt of spare parts). If the lead period is two years then spare parts and consumables are needed to cover that period.

- All new equipment must be accompanied by documents of warranty (guarantee). Get a legal expert to read and interpret the conditions if necessary.

4. **Make a check-list**

Compiling a check-list will include consideration of all issues discussed above. It will ensure that the donor receives all the information required in order to make an

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**An example of an equipment check-list**

1. **Item of equipment**
2. **Description of equipment**
3. **Equipment type included on national Standard Equipment List (SEL)**
4. **Technical specifications**
5. **Functions required**
6. **Special requirements**
7. **Staff available for:**
   a) Installation
   b) Operation
   c) Maintenance
   d) Other (specify)
8. **Location**:
   a) Site
   b) Size
   c) Accessibility
   d) Type of building
   e) Other factors (specify)
9. **Climate**:
   a) Temperature range
      - Day
      - Night
   b) Humidity
      - Maximum
      - Minimum
   c) Ventilation system
   d) Other factors
10. **Utilities**:
    a) Power supply
    b) Fuel type
    c) Voltage
    d) Frequency
    e) Phase
    f) Other issues
    g) Water system
    h) Water type
11. **Any other comments**
appropriate donation. If a financial contribution to allow local or regional purchase would be more appropriate/cheaper/easier, state this information clearly. Issues on which the donor is unable to comply can then be discussed. The solution should be agreed upon by both parties. The donors then understand the reasons for a particular choice. As a result, they will not substitute items believing that such alternatives would be equally suitable. If donations of equipment that are not needed are received, inform the donor immediately. It is also advisable to contact a national coordinating agency.

DONOR RESPONSIBILITIES

Donated equipment will only be useful if it is properly installed, operated, and maintained, and if it is appropriately used.

1. Communicate with the recipient
Before supplying any equipment, request a comprehensive description of the equipment required by the recipient (including their check-list). Ensure that the conditions that cannot be fulfilled are communicated to the recipient. An agreement on all conditions should reach before shipping the equipment. This ensures that the equipment supplied is clinically, economically, environmentally, and technologically appropriate.

2. Supply fully functional equipment
Whether the equipment is new or reconditioned, it should be tested and all essential parts, accessories and working materials included before shipment. A basic list of all components must be provided to the recipient. Second-hand equipment should be fully rebuilt or reconditioned, it should be established that the manufacturer continues to produce spare parts, and some indication of the "life-expectancy" of the equipment should be indicated.

Old, broken, outmoded, and redundant equipment for which spare parts and consumables are no longer available, or equipment which is no longer supported by the manufacturer, is as useless in the developing country as it would be in the industrialised country. If it is difficult for the donor to service the equipment, it will be impossible for the recipient. Do not supply such items, it is kinder to send them to the junk yard.

3. Supply all technical documents
These include all installation, operation, maintenance, and repair manuals. It is particularly important to include technical diagrams as the symbols used are usually international. The technical documents should be supplied in the language of the permanent employees of the recipient enterprise. The need for these documents applies even if expatriate staff are provided to help in the initial stages. Expatriates have a habit of leaving just before the equipment develops problems, and local maintenance personnel will find that the documents are most valuable!

4. Supply an initial requirement of consumables and spare parts
Recipients often face lengthy and complicated procurement procedures. Equipment should therefore be supplied with an initial consignment of consumables and spare parts expected to last at least two years (or as requested), and a full list of spare parts. The list must clearly indicate the part name and number, full name and address (including phone, telex, and fax numbers, if possible) of the manufacturer or authorised dealer. Vagueness over the description and source of spare parts can cause months of delay in an already long process.

5. Ensure proper packaging and shipping
The consignment is likely to endure long periods in ships, aeroplanes, trains, motor vehicles, bicycles and even on animal backs or by hand. The packaging must therefore be strong and sturdy enough to withstand rough handling and to minimise damage during transportation. It should also:
- include a clear packing list identifying all components
- be of a size that can be handled by simple mechanical devices and manual labour.

6. Supply shipping documents promptly
Consignments have been known to remain at ports for months, facing possible damage and accumulating demurrage charges (penalty for delayed action) due to late submission of shipping documents. Prompt submission of documents is essential and should be sent by express insured mail. If possible, send advance copies by fax.

7. Offer technical assistance
Where possible, promote, recommend and provide training for the use and maintenance of the equipment. On-site training is usually very useful.

8. Understand import regulations of the recipient country
There may be regulations which restrict who can receive donations, and which indicate taxes and other charges. It is important to know about these conditions. It is also important to assess the ability of the recipient to pay the accompanying local costs.

If you have difficulties in developing equipment specifications, there are organizations which can help you. For further information on this or on any other issue involved in developing equipment guidelines, please contact:
CMC - Churches' Action for Health, World Council of Churches,
150 route de Ferney, 1211 Geneva 2, Switzerland.

14 Contact

October 1994
Provincial Government Hospital Nakuru in February and March 1993. Forty-eight per cent (1,014) of the children had acute respiratory infections (ARI). The cases of these children with ARI were classified as:

- Cough and cold: 91% (923)
- Pneumonia: 4% (40)
- Severe pneumonia and severe diseases: 5% (51)

**Treatment**
Treatment was administered by experienced, paediatric-trained, clinical officers. However, these doctors had not been trained in standard case management of ARI. Of the 923 children who had coughs and colds, 84% were given antibiotics. Of the 40 children who had pneumonia, 32 received antibiotics and the other eight were admitted to hospital. All 51 children with severe disease, including severe pneumonia, were also admitted to hospital.

**Expense**
Cough and cold: KSh 44,745 worth of antibiotics were prescribed (inappropriately) to patients with coughs and colds. The antibiotics were largely co-trimoxazole followed by ampicillin, amoxycillin and procaine penicillin. Cough syrups are not prescribed in PGH Nakuru.

Pneumonia: 32 children were put on antibiotics and eight admitted. The cost of antibiotics was particularly high due to the heavy use of ampicillin syrup, and to a lesser extent, co-trimoxazole. Amoxycillin and procaine penicillin were used very little. The total cost of the antibiotics was KSh 14,470.

**Potential financial savings**
With training on standard antibiotic use in ARI case management, only KSh 7,150 worth of antibiotics would have been necessary to treat these cases.

If PGH Nakuru had been using cough syrups, the expenses would have been even higher, and potential savings even greater. This is because syrups are usually more expensive than tablets. For example, a five-day co-trimoxazole treatment for one child would cost KSh 58 in syrup form and KSh 13 in tablet form. In a nearby sub-district hospital, Molo, 346 prescriptions of cough mixture were issued to under-five children with ARI during the course of one week in March 1993. The estimated cost of these prescriptions was KSh 10,400.

Additional savings at PGH Nakuru could also have been made by applying standard ARI case management to chronic ear infections. Antibiotic use in chronic ear infections does not provide any benefit and is not recommended in standard ARI case management. However, during the course of one week in March 1993, 16 children with chronic ear discharge seen at PGH Nakuru's ENT (ear, nose and throat) clinic, were all put on antibiotics. Twelve received co-trimoxazole and two were prescribed ampicillin, which together cost KSh 780. Two patients received the expensive cephalosporin antibiotic which was not included in the total cost.
Church mission initiative in Kenya

Mission for Essential Drugs and Supplies (MEDS) was formed in 1983. At that time, Catholic and Protestant Church organizations decided to join together in bulk buying of drug supplies at reduced costs. These drugs could then be resold at reasonable prices to church health units. MEDS currently makes its services available to the 600 health units of Kenya Catholic Secretariat Medical Department and Christian Health Association of Kenya (CHAK).

Throughout its development, MEDS has worked closely with WHO Action Programme on Essential Drugs and with the Kenya Ministry of Health. Based on the Kenyan health ministry’s programme, MEDS is currently involved in training church health workers in rational use of essential drugs. A five-day residential seminar developed by the health ministry has been adapted to the needs of the churches. Initially, MEDS trainees were the enrolled nurses who were involved in most of the prescribing in the smaller health units. Later, more senior staff, as well as patient attendants, have been included in the sessions. So far, 1,969 personnel, out of a target of 2,000, have been trained.

This year, MEDS hopes to start on-site training programmes at different church hospitals. The training will complement the five-day residential training programme.

The MEDS programme provides a model in promotion and training for rational use of drugs. Although it does not yet include consumer education, it is nevertheless something from which other church groups can learn. “We hope that MEDS’s experience in the promotion of rational drug use is something that other countries can either link in with, or use as a basis for starting their own programmes,” says Eva Ombaka of CMC’s pharmaceutical programme.

Potential reduction in workload
At PGH Nakuru, the OPD deals with over 200 children daily. The components of this workload are as follows:

Non-ARI workload .................................. 52%
ARI: cough & cold .................................. 44%
ARI: pneumonia, severe pneumonia and severe diseases .................. 4%

Since 44% of the workload is coughs and colds, substantial savings in the workload could be made in the long term. Effective community education on home care management of coughs and colds could substantially reduce the number of children being brought to the hospital.
WHO ACTION PROGRAMME ON ESSENTIAL DRUGS: WHAT DOES IT DO?

The two main objectives of the Action Programme on Essential Drugs of World Health Organization (WHO) are to improve the availability of essential drugs to all the people that need them and to promote the rational use of drugs, according to WHO's Pascale Brudon-Jakobowicz. Here, she describes the work of the Programme.

Efforts to promote rational drug use should cover both prescribers and patients. This is because professional as well as lay knowledge is needed in the therapeutic encounter, and because levels of self-medication are high. The Action Programme on Essential Drugs is targeting improved prescriber and consumer education through a number of strategies. Some of them are described below.

Prescriber education

Training of health workers in rational use of drugs

Programmes have often started with the development of training materials, and in most cases, the training has concentrated on paramedical personnel in the public sector. Classic examples of WHO training have taken place in Guinea, Kenya, Uganda and Zimbabwe, and more recent efforts are taking place in Bhutan and Sudan. The few available studies on the impact of such in-service training have indicated that the lower the initial level of training, the greater the impact of the training.

Introduction of the concepts of essential drugs and rational prescribing into the undergraduate curricula of medical and pharmacy schools

The aim is to "immunize" the students against the many adverse influences to which they will be exposed during their professional life. A WHO manual "Guide to Good Prescribing" (for details see page 24) teaches undergraduate medical students problem-solving skills. Rote learning is inadequate when information is time-sensitive. Field testing on students at seven medical schools who have received training has indicated substantial and sustained learning gains as compared with control groups.

Provision of information

A medicine has been described as an active substance plus information. Yet in many parts of the world the important second half of this equation is either lacking or inadequate. In contrast to the large amount of commercial information, objective and comparative drug information is very limited in the developing world.

Country support provided by the Action Programme on Essential Drugs focuses on the development of therapeutic guides, formularies and standard treatment regimes, based on the concept of essential drugs. Experience has shown that if there is to be real commitment to the use of these materials, they must be developed nationally and be backed by an appropri-
ate training programme. Such in-country development should involve all relevant professional groups. WHO promotes and supports this integrated and collaborative approach which needs to take place within a national drug policy.

Development of methodologies, guidelines and research
This includes the development of the manual, "How to Investigate Drug Use in Health Facilities" (details on page 24). This manual contains a set of simple indicators that can be used as a supervisory tool for monitoring. The monitoring provides information on the prescribing pattern of a country or a region and a measurement of the impact of educational and other measures over time. These indicators will be integrated into a more general set of indicators in order to assess the drug situation and the implementation of the national drug policy.

Consumer education
Patient expectations can and do influence prescribing patterns. An informed dialogue between patient and prescriber is essential if the role of medicines, and how they should be taken, are to be properly understood. Furthermore, over 50% of medicines are bought directly from pharmacies or other outlets, including the informal sector. This figure can be expected to increase if the role of the public sector continues to shrink.

It is essential that public education becomes recognized as a fundamental element of rational drug use and policy. But effective education on the rational use of drugs is not easy, particularly in a developing country setting. This is because there is still resistance on the part of the prescribers to the empowerment of the consumer. Resources, both human and financial, for research and campaign development are also in short supply, and education campaigns are expensive and need to be repeated regularly.

The Action Programme's approach to public education work is to promote and assist countries to develop culturally appropriate and carefully tested materials and strategies that will take into account people's knowledge, attitudes and practices relating to the use of medicines and the practical realities of their national drug supply situation.

The Programme has supported research for the development of public education programmes in such countries as Kenya, Malawi, Myanmar, Nepal, Sudan, Thailand and Zimbabwe. Further projects are under development in Syria and Yemen.

Major public education campaigns, including support for the development of printed materials and work with the mass media, are taking place within the framework of country support to Bolivia, Colombia and the Philippines. Whenever possible, the Programme tries to involve a wide range of bodies and organizations in such work. This helps to maximize the impact and the dissemination of materials. The contribution of consumer organizations, in countries where these exist, is particularly significant.

In future, more attention needs to be paid to the user's perspective on drug use. More attention also needs to be given to those people - both prescribers and consumers - whose drug use patterns are in most need of change. Finding the most effective interventions to involve these people's behaviour is an important challenge for the future.
CMC’S PHARMACEUTICAL PROGRAMME

by Eva Ombaka
Pharmaceutical Adviser
CMC-Churches’ Action for Health

In many countries, particularly in sub-Saharan Africa, governments and church-related health institutions jointly provide health care. In some, the church-related institutions, which are often situated in remote rural areas and in poor urban areas, may account for up to 50% of total health services. National single denomination or ecumenical agencies coordinate the church-related health work. CMC-Churches’ Action for Health was set up by the World Council of Churches to counsel such institutions.

Since the 1970s, many health services have faced increasing difficulties in meeting the health needs of the community. This includes the regular supply of dependable, good quality, safe, effective and affordable drugs. The church-related health services are no exception. The reasons are many and include the economic injustice between and within nations, resulting in inequitable distribution of scarce resources. This is compounded by lack of adequately trained technical staff and inadequate national drug policies.

CMC therefore sees one of its roles as advocacy and extension of the WHO essential drugs concept, and the promotion of rational drug use in the church-related health institutions. Thus, the pharmaceutical programme was established by CMC in collaboration with both Catholic and Protestant donor agencies and church-related health services in the South. The initial group, which first met in 1981, has continued to meet as the ad-hoc pharmaceutical advisory group.

The main objectives of the programme are:

- to serve as an information switch-board between the church-related health services and other groups both at international level (eg with WHO, UNICEF, HAI); and at national level (eg with government and other agencies);

- to raise a prophetic voice on issues of equity and justice in this area.

Programme activities included in implementing its objectives are:

- Supporting the training of staff from church-related health institutions in management and pharmaceutical areas. This is done through support for short-term courses, workshops, seminars, study tours, refresher-courses and staff exchange. CMC also facili-
icates in the planning of training sessions, and in the identification of facilities and possible funding sources.

- Raising awareness on issues related to essential drugs and pharmaceutical management. This involves presentations at general assemblies, conferences and other national and international meetings. It also includes the development of both the pharmaceutical donations guidelines (see Contact issue 107) and the guidelines on equipment donations (see pages 11-14 of this issue of Contact).

- Providing consultancy services in the pharmaceutical area either through direct participation or through the development and involvement of identified local experts.

- Advising partners on pharmaceutical matters through correspondence.

- Supporting the planning and setting up of systems to enable better management of pharmaceuticals, eg establishment of joint-procurement programme (centralised bulk buying).

- Providing a forum for discussion and exchange of information by organizing regular meetings between donor agencies, UN agencies and other bodies interested in this field.

A particularly exciting development arising as a result of the programme's activities has been the arrival of a report from Nigeria on drug use in church-related hospitals. Based on a study funded by CMC's pharmaceutical programme, the report confirms a suggestion, made by Richard Laing in our main article, that church hospitals are sometimes weak in rational drug use.

The study, which was supported by 11 mission hospitals in Imo State, Nigeria, used WHO drug use core indicators to assess prescribing in the hospitals. It showed that an average of 5.2 drugs were prescribed to each patient (Recommended target 1.5-2.0), and that the percentage of medications given in the form of an injection was 63.1% (Recommended target 15% or less). Only 61.9% of the drugs prescribed were generics compared with a target of 100%. However, on a more positive note, the study also showed that the average consultation time was adequate, and that the percentage of patients with adequate dosage knowledge was 89.1%.

Even so, Sally Uzoma, COHDAT's director of programmes and the author of the study, concluded: "The result shows that an intervention is needed to improve the present drug use situation." She has already listed her recommendations, and forwarded the results of the study to the management and staff of the 11 hospitals involved. The stage is therefore set for the implementation of a more rational use of drugs in mission hospitals in Imo State. At CMC, hopes are high that many other groups of hospitals will follow this important lead.
HAI: PROMOTING PILLS FOR EVERY ILL

The following article was provided by Health Action International (HAI), a global network of consumer, development and health organizations which aims to promote a more rational use of medicines, and health and drug policies which put consumers' interests first. It also monitors unethical marketing practice.

No one could honestly say that the more medicines you take, the better. However, throughout the world the most readily available information on drugs, for both consumers and health workers, is promotional. Its aim is to sell products. The pharmaceutical industry spends around 15-20% of its turnover on marketing and promotion, about two to three times as much as it spends on research.

What is drug promotion?
There are many types of promotion. Most promotion is directed at doctors and other health workers. It includes advertisements in medical journals, direct mail, visits by sales representatives, free samples and gifts, displays and exhibitions. Other less obvious forms of promotion are industry sponsorship of scientific meetings and supplements of medical journals, educational materials and even post-marketing studies designed to encourage doctors to prescribe a product rather than to gather useful information about it.

The industry also targets the general public, helping to reinforce the message that there is a "pill for every ill". They reach consumers through advertising in the press, displays in pharmacies, articles in popular magazines and newspapers, and sponsorship of television or radio programmes.

Misleading promotion
Arthur Yellen, of the US Food and Drug Administration's (FDA) division of drug advertising and labelling, says that "the vast majority" of promotional material submitted to the agency is "false and/or misleading" but the FDA can only take action on some 5% of cases because of a lack of resources.

Although the situation is bad in industrialised countries, it is generally much worse in developing countries. A 1990 survey found that only 29% of 1,131 advertisements by French companies published in six major journals aimed at French-speaking health workers in Africa...
conformed to the standards for advertising that applied in France.

An advertisement for Nootropil (piracetam) by UCB which appeared in Peru in 1991 implied that the drug could improve a child’s grades - a clear case of misleading promotion. Hoechst, a German company, advertised dipyrone's ample safety margin (amplio margen de seguridad) in Latin America in 1992, although dipyrone has been banned or severely restricted in many countries. It can cause deaths from a blood disorder, agranulocytosis, and anaphylactic shock, a severe allergic reaction.

A 1994 Dutch ad from Duphar and Upjohn shows a picture of a woman mopping a floor and implies that now that she is taking their antidepressant she no longer minds. The image is poignant (powerful). The advertisement breaks no code, except a vague suggestion that it should be "in good taste", but does the advertisement contribute to better health in any way, or to a society that people - especially women - might want?

Uncontrolled drug promotion can lead to irrational drug use. Irrational drug use can lead to treatment failure - including death - due to use of the wrong therapy, it can result in unnecessary adverse effects, increases in antibiotic resistance, and a waste of either the patients' and families' money or the scarce resources of a national health programme.

The pharmaceutical industry has its own self-regulatory codes for promotion. However, these are far from effective. Aside from the industry regularly ignoring its own codes, there are four main problems with self-regulation:
1. action is only taken after complaints are received, often long after a promotional campaign has been effective;
2. the results are often secret;
3. few if any meaningful sanctions are applied;
4. there is rarely any information published to correct misleading promotion.

What can be done to control drug promotion? Many national governments believe something needs to be done. At the May 1994 World Health Assembly, the member states of the World Health Assembly unanimously passed a resolution calling for stronger controls of drug promotion. This resolution recommends concrete steps to monitor promotion and implement national controls, based on a set of guidelines produced by WHO in 1988, "Ethical Criteria for Medicinal Drug Promotion".

Among other things, the WHO resolution said that:
. patients, pharmacists and prescribers should have access to appropriate and understandable information about drugs and their side effects;
. drug regulation should ensure not only safety, efficacy and drug quality, but also the accuracy of the information provided;
. promotion must be accurate, fair and objective, and conform to legal requirements and high ethical standards;
. claims should not be stronger than valid, up-to-date scientific evidence warrants (justifies);
Professional associations can set and enforce guidelines against members accepting gifts or bribes by threatening to withdraw licences to practise medicine, pharmacy or nursing. They can set conditions for sponsorship of continuing medical education and can make rational prescribing and critical analysis of scientific studies priorities for medical education. Regulatory agencies can encourage doctors to report offenses. The US FDA runs a free telephone line for doctors to call anonymously to report unethical promotion.

Medicines, whether they are prescription-only or over-the-counter products, should not be advertised to consumers. People need unbiased information about treatment options and about when medicines are and are not needed. This information should be independent of the industry and its need to sell drugs.

There is no single answer to solving the problem of inappropriate drug promotion. There is no doubt that it affects the health and well-being of people and their communities. Many steps - involving governments, health professionals, the media, consumers and industry - are needed to improve the situation. Above all, public accountability is needed. Decisions about controlling drug promotion need to be made in the open, with the full participation of the public.

The article is based on "Promoting health or pushing drugs" by HAI's Andy Chetley and Barbara Mintzes.

In Latin America, Hoechst, a German company, advertised that dipyrone had an "ample safety margin", yet dipyrone has been banned or severely restricted in many countries because it can cause a serious blood disorder.

Information for patients and prescribers provided in the manufacturing country should be supplied with exported drugs.

The last point intends to avoid double standards. For example, a recent study by US Office of Technology Assessment looked at the information provided with drugs from US companies in Brazil, Kenya, Panama and Thailand. It found that in at least half the cases, the information failed to provide doctors with what they needed to know in order to use the drugs safely and effectively.

Involving health workers and consumers

Many forms of unethical promotion depend on the willingness of doctors and other health workers to cooperate. For example, health workers need to be willing to accept bribes or other inducements, or to take part in bogus post-marketing studies, and sponsored meetings in exotic resorts.

Heath Action International (HAI)

believes that all drugs marketed should:
- meet real medical need
- have therapeutic advantages
- be acceptably safe
- offer value for money.

For details of local coordinating groups, please see Useful Contacts on page 24.
USEFUL CONTACTS

CMC - Churches' Action for Health
PO Box 2100
1211 Geneva 2
Switzerland

CMC can provide church-related hospitals with the names and addresses of non-profit organizations providing supplies of generic drugs.

INRUD
Management Sciences for Health
International Network for Rational Use of Drugs
165 Allandale Street
Boston, MA 02130-3400
USA

University of Amsterdam
Anthropological-Sociological Centre
Oudezijds Achterburgwal 185
1012 DK Amsterdam, The Netherlands

World Health Organization
Action Programme on Essential Drugs and Control of Diarrhoeal Diseases Programme
1211 Geneva 27, Switzerland

Health Action International for Asia and the Pacific
IOCU/ARDA
PO Box 1045
10830 Penang
Malaysia

for Latin America and the Caribbean
Accion para la Salud
Aptdo. 126
Chimbote
Peru

for Europe and other regions
HAI-Europe
J V Leenepkade 334-T
1053 NJ Amsterdam
The Netherlands

WEMOS: Women and Pharmaceuticals Project
The International Group on Women and Pharmaceuticals is a Dutch pressure group concerned with the political aspects of the distribution of pharmaceuticals marketed especially for women. Contact address: Postbox 1693, 1000 BR Amsterdam, The Netherlands.

USEFUL PUBLICATIONS

Available from CMC
Previous issues of Contact have featured aspects of essential drugs and rational use of drugs. They are Contact 73, June 1983, Strengthening and regulating the supply, distribution and production of basic pharmaceutical products, and Contact 107, February 1989, Essential Drugs: A convincing concept. Please write to Fernande Chandrasekharan, CMC/WCC, PO Box 2100, CH-1211 Geneva 2, Switzerland, if you would like to receive copies.

Available from WHO
Availability, provision and use of drugs
This is the first in a five-volume series dealing with a particular health problem. Volume 1 deals with problems in availability, provision and use of essential drugs. It discusses four studies on this issue, which were carried out in four different countries: Ghana, Malawi, Mauritius and Zambia. For copies, write to: Joint Project on Health Systems Research, WHO SRO III, PO Box 5160 Harare, Zimbabwe.

The Malawi Standard Treatment Guidelines
These guidelines, now in second edition, are available along with the Malawi Prescribers Companion. If you interested in further details about these publications, please write to: The Drug Information Officer, Malawi Essential Drugs Programme, PO Box 30390, Lilongwe 3, Malawi. Tel/fax: (265) 784 062.

How to investigate drug use in health facilities: Selected drug use indicators
Guide to good prescribing has been produced in draft and will be published soon by WHO.

Essential Drugs List
The regularly updated list of essential drugs is available from WHO, CH-1211 Geneva 22, Switzerland.

Essential Drugs Monitor
WHO’s newsletter about essential drugs, rational use of drugs and national drug policies is available in English, French and Spanish (available in Russian shortly), free of charge. Write to: The Editor, Essential Drugs Monitor, Action Programme on Essential Drugs, WHO, CH-1211 Geneva 22, Switzerland.

Available from HAI
Problem drugs
This book by Andrew Chetley is a campaign and information pack for a more rational use of drugs. It was first produced in 1986. Since then, thousands of health workers, educators, pharmacists, journalists and activists have been using it. The first edition was translated into Spanish, French, Arabic, Bangla and Indonesian. The revised edition will be translated into Spanish and Bengali during the course of this year. It is available from HAI-Europe at a price of Dfl* 30, plus Dfl 5 for postage. A limited number of copies are available free of charge. Please write for details, address on page 24.

Promoting health or pushing drugs? A critical examination of the marketing of pharmaceuticals
This lively publication examines the way in which drugs are marketed by the pharmaceutical industry, and asks whether this contributes to better treatment or to sensible public health policies. It is available from HAI-Europe at a price of Dfl* 15 to individuals and non-profit organizations, Dfl 150 for private companies. Reduced rates are available to groups in developing countries. Please write for details.

Med-sense - a pill-box containing 12 leaflets
HAI says that the use of Med-Sense combats the “pill for every ill” mentality, and gives information about different drug categories as well as emphasising the need for the development of national drug policies. It is available from HAI-Europe, address on page 24.

Medicines and independence: Towards rational drug use in the Baltic States
A report of a seminar held in Latvia in 1993, this publication summarises the current situation in the Baltics and provides an excellent account of the major issues. It is available from HAI-Europe, address on page 24.

Several useful publications on women and pharmaceuticals and contraceptive methods are available from WEMOS, see WEMOS: Women and Pharmaceuticals Project in Useful Contacts above, and from Women’s Health Action Foundation, PO Box 94263, 1009 AG Amsterdam, The Netherlands.

Pharmaceuticals in communities
Recognising the importance of the consumer in the promotion of essential drugs programme, this book by Anita Hardon reviews studies on drug use and distribution, outlines the consequences for public health, and concludes that participatory evaluation and in-depth studies could improve the effectiveness of existing interventions for the rational use of drugs. The book is available (in English only) at a price of Dfl* 15 per copy. ISBN 90 6832 818 2. Write to: Royal Tropical Institute, KIT Press, Mauritskade 63, 1092 AD Amsterdam, The Netherlands.

Beyond the dispensary
This book provides the information that a well-trained community health worker needs in order to motivate the community. Published by AMREF, it is available at a price of US$3.60 plus postage and packing. Write to: AMREF, Book Distribution Unit, African Medical and Research Foundation, Wilson Airport, PO Box 30125, Nairobi, Kenya. It is also available at a price of £3.25 plus postage and packing from TALC, PO Box 49, St Albans, Herts AL1 4AX, United Kingdom.

* Dfl, 1.8 Dutch florin approximately = 1 US$.
LETTERS

US coordinating agencies
A former colleague writes:

I enjoyed seeing the picture of the staff and reading about the work of CMC - Churches' Action for Health in Contact 136 on "Coordinating agencies". I am writing to provide information on some ecumenical health activity in the United States.

There are currently three national ecumenical health coordinating organizations. One is a network of Christians doing health care among the poor in this country and called Christian Community Health Fellowship. The second, Christian Connections for International Health, is a body which links persons and organizations involved in health care in other countries. With about 200 members, the emphasis for the exchange of ideas and information is on international health ministries through an annual meeting and a newly-developed computer network. Finally, there is Health Ministries Association, a four-year-old organization, which is growing rapidly. Its network includes more than 2,000 parish nurses, health ministers and lay health advisers who are involved in congregational health ministries in the US. This network focuses on helping local congregations begin a health ministry.

I am currently a member of the governing body of all three of these organizations. This gives me an opportunity to promote CMC issues such as Justice, Peace and Integrity of Creation (JPIC), empowerment, and spirituality in health. We value the work of CMC and read Contact avidly.

Dave Hilton
Ecumenical Health Ministries
4162 Cimarron Drive
Clarkston GA 30021 USA

ANNOUNCEMENTS

We are delighted to announce the arrival of Théo, born to our former colleague, Marilu Fomeron. Marilu decided to leave CMC in order to have more time to spend with the new baby and her daughter, Christel. We miss her but wish her all the best for the future.

We were also sorry to say good-bye to Maria Victoria Carles-Tolra (Minnie) in July. Minnie, who had been with CMC for 11 years, has moved to Spain where she and her husband plan to continue their painting and writing.

Theology of Life

Ecumenical Institute plans to take "Theology for Life" as its theme for the 44th session of the Graduate School of Ecumenical Studies (15 October 1995 - 28 February 1996). For further information and conditions of admission, write to: Ecumenical Institute, Château de Bossey (Vaud), CH-1298 Céligny, Switzerland. Fax: (41 22) 776 0169.

CONTACT is the periodical publication of "CMC - Churches' Action for Health" of the World Council of Churches (WCC). It is published six times a year in English, French, Spanish and Portuguese. Selected issues are also published in Kiswahili in Kenya, and Arabic in Cyprus. Present production exceeds 32,000 copies.

CONTACT deals with varied aspects of the community's involvement in health and seeks to report topical, innovative and courageous approaches to the promotion of health and integrated development. A complete list of back issues is published in the first annual issue of each language version. Articles may be freely reproduced, providing that acknowledgement is made to CONTACT, the bimonthly publication of CMC - Churches' Action for Health, WCC.

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