Essential Drugs

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Meeting the pharmaceutical needs of a developing country

Zimbabwe is making advances in the selection, procurement, distribution, storage, management and use of pharmaceutical products. The periodic updating of the country’s essential drugs list is a vital part of this process.

A proposed list of essential drugs for Zimbabwe appeared in 1981. In 1984 an essential drugs list was published with guidelines on the treatment of common medical conditions. There has been a heavy demand for this publication both in Zimbabwe and abroad. It is now being revised to make it even more useful in developing countries. An effort has also been made to draw up an essential drugs list for the private sector, which, together with the original list, would make up a national formulary to serve as a guideline on imported drugs.

National policy

Zimbabwe is fully committed to the concept of a national health policy incorporating a drugs policy based on WHO’s Action Programme on Essential Drugs including vaccines. WHO is involved in developing a health care system to meet the needs of all sectors of the population, within the confines of the country’s financial resources. Because it has better drug control procedures than most other African countries, Zimbabwe has not experienced the plethora of brands and varieties of drugs seen elsewhere on the continent. A developing country with limited foreign currency cannot achieve rational drug use if it allows too many non-essential products on to the market.

Drug control

The powers of Zimbabwe’s Drugs Control Council will be greatly increased by new regulations currently being adopted by parliament. Drug control already encompasses decisions on advertising, efficacy, safety, quality and the need for particular products. Package inserts are also monitored to ensure that prescribers and dispensers are being informed of any
changes in dosing, adverse reactions and precautions. One wonders why submissions by reputable firms to the Drugs Control Council are often different from those prepared for developed countries.

Quality control

A national quality control laboratory under the Drugs Control Council is now operating to guarantee the quality of both imported and locally manufactured drugs. It may also serve other countries of southern Africa. We are continually being offered generic products of unknown quality. If drugs are used from companies not approved under the certification scheme on the quality of pharmaceuticals moving in international trade, added precautions are taken. Fortunately WHO now has a list of companies supplying reliable drugs, which is continually updated for use by all Drugs Control Councils.

This laboratory also gives advice on the use of old stocks of drugs. A country with limited foreign currency cannot afford to throw these away if they are still within the accepted potency limits and if no suitable substitutes are available. It is not economically or logistically possible to return drugs that have been held beyond their expiry dates to the manufacturers. Current research should make it possible to give advice on the storage of drugs in adverse environmental conditions.

It seems likely that most drugs kept beyond their expiry dates can continue to be used for a considerable time. Research in this field is needed in Third World conditions with a view to determining which drugs should not be used after expiry dates have passed. Tetracycline, for example, if held too long gives rise to toxic degradation products that cause the Fanconi syndrome and kidney damage.

We have found it advisable to question overseas exporters as to whether the drugs they supply are registered and used in the countries of origin. Some drugs have proved to be of inferior quality and are, in fact, no longer employed in these countries, yet they continue to be sent to the Third World. One has to be wary of such drugs and the companies that manufacture them, although it does not always follow that these products are unsuitable for Third World conditions.

Manufacture

Zimbabwe has good drug manufacturing facilities, and proposals exist for the production of the raw materials for some twelve drugs that are in high demand in Africa. At present, three manufacturers are capable of producing approximately 80% of the country's generic drug needs using imported raw materials. The largest company is 49% government-owned and its operations include a self-contained penicillin production unit. The second largest is also involved in large-volume production under licence from an overseas producer. There are several other manufacturers, one of them supervised by a multinational corporation. All of these companies manufacture proprietary products of their own, many generic products, and internationally known brands under licence for the home and export markets. Some multinational
corporations have been persuaded to manufacture in Zimbabwe; this allows the importation of equipment and the employment of experts to train national personnel, thus strengthening the infrastructure of drug production.

**Information**

The School of Pharmacy in the University of Zimbabwe’s Faculty of Medicine operates a national drug and toxicology information service, which supplies monthly updates drawn from about 150 journals indexed for both drugs and diseases. The service is maintained by an annual grant from the Ministry of Health. A grant from a multinational corporation made it possible to appoint a research fellow in information science for three years. This allowed the publication of a drug information bulletin to begin in 1984; it is sent to all doctors, dentists, pharmacists and nurses in Zimbabwe and will also be made available to all government medical facilities through the Ministry of Health. A full-time drug information specialist is now employed. The

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Service operates on a 24-hours-a-day, seven-days-a-week basis with an on-call rota system involving members of the pharmacy school faculty; it can also be contacted through a paging system via Harare Central Hospital. In addition, an answering machine is in use. Computers have been installed to provide database, word processing and desktop publishing facilities.

**Action programme on essential drugs**

Zimbabwe’s essential drug action programme is evaluating the country’s drug needs and providing personnel to train nationals in the selection, procurement, distribution, storage, management and use of drugs. The government’s medical stores network is being expanded to allow easier access to essential drugs in outlying areas. Distribution is being improved and medical personnel are being trained in the rational prescribing and use of essential drugs. The education of patients is taking place through television, radio and the printed page. Training manuals have been produced with the following titles.

- Abbreviated drug list for rural health centres
- Drug ordering and stock control
- Health centre administration and management
- Dispensing drugs
- Elements of primary health care
- History-taking and examination
- Paediatrics 1
- Paediatrics 2
- Acute medical conditions
- Chronic medical conditions
- Obstetrics
- Surgery for rural health centres
- Psychiatry
- Sexually transmitted diseases
- Malaria and schistosomiasis
- Government medical stores catalogue—1988
- Index of common generic drug names and trade/brand names.

A second edition of the essential drugs list for Zimbabwe, without therapeutic norms, has been published, in which a reduction in the number of drugs used in rural health centres from over 200 to less than 90 is indicated; specialties have increased from 89
to almost 200, suggesting progress towards
the desired national drug list for all sectors.
A third essential drugs list, published in
1988, includes revised therapeutic norms.
There is a commitment to regular updates,
something that is so important if the system
is to be effective. The lists are produced in
consultation with all sectors of the health
care system throughout Zimbabwe. Unlike
the original list, which was the work of the
National Drug and Therapeutics Policy
Committee, subsequent ones have been
compiled with the close collaboration of
health workers who are directly concerned
with primary and specialized care in both
the private and public sectors. With the help
of pharmacy students a study is under way
on total drug usage and the related
expenditure incurred by central and
provincial hospitals.

Drug residues in foods of animal origin

The biological significance of residues of veterinary drugs in foods
usually depends on the extent to which those residues are absorbed
when the food is ingested. In the absence of relevant residue data, it
should be assumed that all of the residue is bioavailable and that its
potency is equal to that of the most toxic component of the residue.

... Bioavailability studies assist in the assessment of the toxicological
impact of residues in foods of animal origin, and drug manufacturers
are encouraged to provide data from such studies for evaluation by
the Joint FAO/WHO Expert Committee on Food Additives.

— Evaluation of certain veterinary drug residues in
food. Thirty-fourth Report of the Joint FAO/WHO
Expert Committee on Food Additives. Geneva, World
Health Organization, 1989 (Technical Report Series,
No. 788), pp. 11–12.