INTRODUCTION

1985 commemorated the tenth anniversary of the idea of essential drugs. It was in 1975 that the WHO Director General outlined possible new drug policies (1), and the World Health Assembly requested that advice be given to Member States on the selection and procurement of essential drugs (2).

Technical work started shortly after, and the first WHO "model list" of basic, indispensable, and necessary medicines appeared in 1977 (3) as a result of which the international health community became enthusiastic. And in 1978, the Alma-Ata Conference highlighted the importance of essential drugs and their availability (4).

Consecutive WHO resolutions in 1978 and 1979 recommended the initiation and establishment of a special programme for this purpose (5, 6), and the administrative structure of the WHO Action Programme on Essential Drugs was formulated in 1981.

Since then, the work intensified, many countries were advised and assisted, WHO was joined by UNICEF, other UN organizations and by various institutions both public and private.

The WHO model list was revised in 1979 (7), and 1983 (8) taking into account progress made in the medical and pharmaceutical areas. Several countries adopted the "WHO "model list" to their national needs and situations and national lists of essential drugs came into force.

After ten years, we may say that the idea of essential drugs has been universally accepted, and the programme has shown the means to success. However, good sufficient drug supplies will need a continuous attention from the part of interested countries.

Description of Essential Drugs

In spite of the fact that the history of essential drug is ten years old, there is sometimes insufficient understanding of their nature and their characteristics. Some people tend to believe that essential drugs are those which are simple, cheap and primitive, as opposed to highly effective, modern, sophisticated medicines.

This opinion is totally false. Where does it come from? From the misinterpretation of the true and correct statements that essential drugs are those that satisfy the health care needs of the masses, that they are a component of primary health care. In reality, essential drugs are the best, the most effective and the most sophisticated medicines that exist. They are suitable equally to primary and highly specialistic health care, in developed and developing countries, for rich and poor.

We call them "essential" not because they are the least valuable, modern or sophisticated but because they are the best available.
The key to the problem is the number of drugs
The contemporary world is flooded by pharmaceutical preparations. To counter this deluge, health authorities in developed countries licence the pharmaceutical manufacture and trade. They put limits on the number of medicines. However, health policies differ considerably in various countries. The list of specialities in one country accounts for 10,000, in another 20,000 or 30,000. In the USA, there are over 300,000 preparations (9).

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All of them are allowed for export. Consequently, developing countries are exposed to the invasion of hundreds of thousands of pharmaceutical products. Very good, good and mediocre. The lists of essential drugs have been proposed to help doctors, health managers, supply agencies, in their responsible work, to help in choosing the items of highest priority.

The current WHO "model list" (8) indicates 239 pharmacotherapeutic agents. For a layman, it is a lamentable scarcity when compared with hundreds of thousands. A layman does not know all the worldwide commercially marketed drugs contain 2,500-3,500 pharmacotherapeutic agents. Commercial products are various trade marks of the same compounds or their combinations. They account together for hundreds of thousands of commercial possibilities but from the pharmacological point of view they only represent a few thousand.

The number of 239 compounds on the list compared with the number of 2,500 compounds on the market still makes poor impression on a layman. He does not know that among 2,500 pharmaceutical entities there are dozens' of congeners or substitutes.

For instance, there appear 35 benzodiazepines on the world market. Are they all essential? No; their anxiolytic action is similar. Not identical but similar. There is no one doctor in the world prescribing all of the 35 benzodiazepins. Why should they detract the attention of health workers in developing countries from what is absolutely necessary?

For instance, beta blockers. 29 congeners are marketed. Should a poor developing country buy all of them while no developed country does?

Reducing the figure 2,500 by the number of needless congeners, we are left with a few hundred pharmaceuticals that are really necessary.

The selection made by the WHO expert Committee should not be reproached. It is a specialized work of real professionals who are well aware of the modern pharmacotherapy.

The target is to have the selected drugs available everywhere. Sound purchasing may help us to achieve our target sooner.

Economic nature of goods and buying policies
WHO or national lists of essential drugs do not impose a ban on other pharmaceutical products. They only indicate the most important.
Most countries are using and will continue to use other WHO and national recommendations on essential drugs, should abandon the use other drugs too. According to individual preferences of their physicians.

Purchasing in the public sector is centralized. One governmental agency deals with medical supplies. Purchases are made through tenders. Traditionally, all the products have been listed alphabetically. Given that the sole essential drugs, including various dosages and presentations, represent about 400 items, we can imagine the length of the list of the products required. Buying them takes one year, two or more. Nowadays, the supply workers, who really wish to follow WHO and national recommendations on essential drugs, should abandon the use of one common list. Essential drugs should be excavated from this pharmaceutical mine and given total priority.

When essential drugs are purchased and their continuous availability is secured, one can then start discussing other drugs.

Countries with very limited financial resources must implement austerity measures. The quantities required by national health services should be reduced. In this dramatic situation, we look closely at the cost of particular items. We do not reduce the quantities of all the products proportionally. With the help of preliminary costing, we discover that many strategic items, first of all 22 medicines for primary health care like Chloroquine, Aspirin, Iodine, etc. are very cheap. There are dozens of remedies which cost a few dollars per one thousand tablets. A few thousand dollars are enough to buy millions of tablets. The poorest country can afford to buy them.

How can one explain the fact that in countries that are not poor, a shortage of Chloroquine is frequent? 'This is due to ignorance of its cheapness, due to lack of proper buying policies on the part of responsible committees and commissions.

After having completed the specification of goods to be purchased, several buying agencies apply a uniform commercial technique irrespective of the economic nature of the product. They publish one tender and wait a few months for the offers. Then they place orders, one product after another.

Considerably better results are achieved by buyers who realize the complexity of purchased goods and adjust the commercial procedure accordingly. There are on the list very modern drugs, recently developed, protected by patents, e.g., Praziquantel, Doxorubicin, Naloxone, etc. They are one-source products. The prices are administered by the manufacturer, thus price competition does not exist. What benefit may we expect from consecutive tenders? However, a buyer-seller long term agreement may result in very substantial bonuses. In the frame of this agreement, one calls for staggered lots of drugs when necessary. Of course, the agreement must bear a clause of cancellation when competition appears; then the price may drop considerably.

Similarly, there are products which are old, not protected by patents but still one-source commodities. For instance, indispensable tropical medicines like Pentamidine, Melarsoprol, Suramin. Mefronate, Sodium Stibogluconate, etc. They are uninteresting for manufacturers due to very little demand. Tendering to reduce the price is useless. However, an agreement in advance,
with optional quantities for periodical instalments may help the maker to plan his production better, and lower the cost. Buyers may benefit in two ways: by paying less and by not detracting their attention from commercially important items.

Another group of drugs with a particular nature is antidotes For instance, Deferoxamine, Dimercaprol, Methylthioninium, Naloxone, Penicillamine, Protamine, Sodium Calcium Edetate, Sodium Sulfate, Sodium Thiosulfate, Atropine. They are a necessity; they are potentially lifesaving. But in practice, we use them so rarely. Our needs are very limited. Their value in money term is low. We should tend to separate them, to lay emphasis on the central stock, on the skills of replenishing it without delay, but when the demand occurs.

The time, our working hours, should never be wasted. Our attention and energy have to be oriented towards areas of unlimited saving possibilities, i.e., competitive products. There are many. We buy them in huge quantities. Every cent saved in the price is important.

One example is convincing. Aspirin (Acetylsalicylic Acid) may cost on the international market anything from 1.20 dollars to 3.00 dollars per one pack of 1,000 tablets. Country's needs are dozens of thousands of packs. Therefore, by the judicious buying of one item, thousands of dollars can be saved.

There are numerous "aspirins" on the list of essential drugs. For advantageous buying, we must have time to perform properly our commercial, to study the market, to learn about goods sources of supply.

**Sources of supply**

Items available only from one source create no problem on where to obtain the goods. However, multi-source items do. A good knowledge of sources of supply and an active approach to them is of primary importance. Several buying agencies correctly follow governmental instructions concerning tenders and buying procedures but do not always buy to their advantage. The reason is very simple. They practise a passive approach to suppliers. They do not take into account that the world market is very large. Publishing a tender in a local newspaper does not necessarily mean that the message reaches all the most important manufacturers. Rather the opposite.

They do not realize that the system of tenders is convenient for buyers but not for sellers. When submitting an offer, the seller undertakes serious obligations. He must keep up his production capacity free, his price unchanged, within the period of the offer's validity. Sometimes, several months. The buyer, when publishing a tender, undertakes no obligation at all. So tenders are not the favourite form of selling. Many good reliable manufacturers do not appear among competitors for hundreds of tenders published throughout the world.

Instead, it is noticeable that many unreliable limits appear. Because of the absence of reputable companies, they often win. The price (not legally but commercially) is in question, so is the quality. Sometimes, deliveries are not effected.
One should emphasize that governmental rules on tenders do not forbid an active approach to suppliers. Apart from publishing a tender, direct invitations to bid can be sent to the most reliable and competitive suppliers. First of all, invitations are sent to the lowest bidders recorded on previous purchases as well as to suppliers who had not participated in previous tenders but have been known to be significant sources of supply.

Purchasing officers who are not aware of good sources of supply should consult helpful colleagues purchasing officers in other countries, supply workers in international organizations dealing with drugs (UNICEF, WHO) and manufacturers' associations in exporting countries. An active approach to suppliers increases the number of reliable bidders, results in lowering costs and lessening the probability of failure (non-delivery, poor delivery).

**Quality**

The good quality of a drug is more important than its price. Money paid for bad quality medicine means money lost. Very often, defective drugs result in damage to human health and sometimes even in one's death. The problem of quality is not easily solved in developing countries where there are no adequate control laboratories. WHO has compiled the directives "Good practices in the manufacture and quality control of drugs" (10) as well as a "Certification scheme on the quality of pharmaceutical products moving into international commerce" (11).

WHO recommendations are doubtlessly of value but ought not to be overestimated as sufficient protection against substandard drugs. Procurement agencies must constantly see that these recommendations are strictly adhered to. A certain amount of safety may be assured by a careful choice of suppliers. When buying drugs, the highest priority should be given to manufacturers supplying their home markets. Manufacturing for one's home-country gives indirectly a guarantee of the national health authorities supervision and quality control. Manufacturing for export only, which is often the case, does not incur any independent control.

Irrespective of the careful choice of suppliers a random quality control is indispensable. However, some buyers in developing countries do not have access to control laboratories. Analysis is costly. The purchasing agency must find a constructive solution to the problem. The cheapest and quickest solution is in international co-operation. Why? Because individual analytical tests are very expensive, and the same tests carried out in mass are very cheap.

One pays nowadays for one drug analysis, in an European reliable control laboratory, 200.00-300.00 dollars. We have hundreds of essential drugs and thousands of batches for testing. One would have spent hundreds of thousands of dollars. This is unrealistic.

The cost is quite different, very low, when we test dozens of samples of the same drug. Therefore, groups of purchasing agencies should get together and co-operate. They may decide which drug will be tested in a particular laboratory. Then, this laboratory receives hundreds of samples of the same drug and performs the control at a cost of a few dollars per test.

The most economical solution is to make tests in our own control laboratories. To set them up, we need sophisticated, costly equipment, and highly trained personnel. The solution is again in
international cooperation. The group of friendly agencies decides: which agency will buy the apparatus for dissolution tests and check all the tablets from the co-operating countries, who will do this, who will do that. This would result in an enormous amount of control work being done at an insignificant cost.

Until this kind of co-operation becomes a fact, we may arrange courtesy agreements with some of our suppliers. Several trust worthy manufacturers will not refuse analytical services, free of charge. There is a great awareness in the pharmaceutical world of quality problems.

Any solution is good which relies on laboratory control, and not on the declaration of good manufacturing practices only.

Quality safety can be strengthened by the use of pharmacopoeas in our commercial practice. Any contract, any purchase order, should contain a strict definition of the quality requirements set up in a pharmacopoea. This system has insufficient popularity in the Third World countries due to lack of professional staff members and scientific literature.

However, even if there is no pharmacist or any pharmacopoea, it does pay to define properly the quality requirements. It compels the supplier to control his product properly before delivery. In case of a dispute on the quality after delivery, an independent arbitration laboratory has a legal right to an indisputable methods of testing and an unimpaired verdict.

Referring to pharmacopoeas is not always easy. Pharmacopoeas describe mainly pharmaceutical substances-see: The International Pharmacopoea, European Pharmacopoea and various others. Testing ready made drugs is more complicated and necessitates additional monographies. Nevertheless, most monographies corresponding to essential drugs are available in existing literature, for example, in the British Pharmacopoea, the US Pharmacopoea.

Small national agencies which do not have a suitable advisory service for this purposed may call for advice from the WHO Regional Office, Medical Supply Officer.

Shipping

Since developing countries are often far from their pharmaceutical supply sources, delivery of goods is usually complex and costly.

Shipping deserves appropriate attention. To be successful in shipping decisions, one must have good quick contacts with dozens of forwarding agents, shipping firms, airlines, etc. This is not simple in a developing country. The buyer often has to rely on his suppliers and entrust them with shipping decisions buying C & F or CIF instead of FOB. However, it is very helpful to consult from time to time a shipping specialist. To the buyer's advantage, a specialist is able to find surprising solutions; for instance, to negotiate an extra favourable airfreight rate by grouping various consignments from several suppliers and countries at one airport in Europe for dispatching air cargo to the final destination. Delivery cost drops sometimes by 50-75% compared to the regular rate. Or delivery time lessens by 50-75% compared to the time of sea transportation.
A general rule nowadays is to abandon maritime transportation for costly and delicate drugs, the quality of which may suffer during a long journey, and especially during transshipments in hot and humid climatic conditions.

CONCLUSIONS
Presented remarks on the purchasing of essential drugs show the existence of the considerable saving possibilities for buyers.

However, complexity of the supply work makes the full exploitation of these possibilities difficult, all the more so as necessary data for this type of work is not available from literature but only through experience.

Therefore, in the good interest of the national health service, friendly and frequent exchanges of experience amongst supply officers from various developing countries are called for.

REFERENCES