

Use and Misuse of Pharmaceuticals: Anthropological Comments

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In 1984 a mother in a Filipino village took her child to a doctor. The child had diarrhoea. The doctor prescribed five medicines, the total cost of which equalled one week's salary. Hardon (1987), who reported this case, comments that it was an ordinary diarrhoea which could have been treated with a simple salt solution. It would have cost her nearly nothing. The doctor, however, prescribed an anti-vomit medicine, an anti-diarrhoea medicine, an antibiotic, a multivitamin product and a pain-killer. The prescription was harmful, not only in a financial sense (waste of money) but also medically; the anti-diarrhoea medicine contained a substance which should not be given to children below the age of three.

Senah, who did field work in a coastal village in Ghana, provides the following case of a woman called Dedei:

Dedei had been complaining of persistent bodily weakness, headache, cold, catarth, and feeling feverish. She diagnosed her problem as malaria and began to treat it accordingly. For four days, she took two tablets of chloroquine each morning, afternoon and evening. These tablets were purchased from the village drug store. When her condition did not improve, her husband advised her to take a combination of *Fansidar* and *camoquine*—two tablets each morning, afternoon and evening. However, a few days later, Dedei's friend advised that Dedei's ailment was in fact a new form of malaria popularly known as 'Go-slow' and that the medication for this was a concoction of pharmaceuticals popularly known as 'Mixture'. Dedei quickly procured this. As I learned later, Mixture is obtained from a combination of tetracycline and penicillin capsules, b-Complex, chloroquine tablets and *Valium*. A few days later, when Dedei's problem persisted, she finally went to the hospital. Later, I was informed,

she had been admitted with *asratridii* (jaundice). She recovered after about three weeks (Senah 1994: 96).

In her study of long-term benzodiazepine use by 50 women in The Netherlands, Haafkens (1997: 57) describes the case of a woman who at the age of 23 became an unwed mother:

When she was one month pregnant with her second child, at the age of 25, the father with whom she was living suddenly died in a traffic accident. Three months after the baby was born, she was given a daily dosage of 10 milligrams of benzodiazepam because she could not sleep... She was afraid of losing the custody over her children if she showed any weakness to professional helpers, or for that matter to any outsider, and did not dare to discuss her anger and sadness about the death of her boyfriend with anyone. She wanted to be 'one of those rare unwed mothers who was not making a mess of her life, and who could be a role model for an article in "Parents Today"', which is a Dutch journal on child raising. Soon after she got her first benzodiazepines, she felt benzodiazepines were helping her to achieve this. She began to take a higher dosage every six weeks. Like her problems she did not want to discuss her benzodiazepines with anyone either, not even with close friends: 'I was avoiding people, because they might discover I was taking pills. I pushed people away. Looking back, I avoided outsiders because I didn't want to admit to myself that I was taking pills.'

During my own research on birth control in a Ghanaian rural community, I came across many instances of self-medication for the purpose of abortion. Overdoses of anti-malaria pills or painkillers were some of the favourite ones. The following case involves another pharmaceutical. A young woman:

After my first child I became pregnant again. The child was still very young and I did not want to have another child so soon, so I decided to remove it. My husband agreed. The pregnancy was only one month old. I took six *Alophen* pills, three consecutive days two pills, and after four days it came. Much blood came with it, but it was later that I felt sick and went to the clinic for treatment (Bleek 1978: 108).²

These four cases present four very different examples of dubious medicine use. In the first case, we see a medical doctor who makes a mother buy an expensive but quite useless prescription to treat a simple diarrhoea. The context of this incident is dominated by an incompetent and uncertain medical practitioner with a commercial attitude toward pharmaceuticals. By increasing the amount of prescribed medicines the doctor increases his confidence and income. The poor mother trusts him and makes a double mistake: she is wasting her precious money and runs the risk of causing medical harm to her child.

The second case portrays people outside the formal sector of health care, in a Ghanaian household. People without medical training, but with extensive practical experience, discuss the sickness of one of them. They take decisions which imply the use of several pharmaceuticals, which are purchased in a local drugstore. These medications are quite irrational from a biomedical point of view, but make sense to them. The context is the setting of a poor rural household, popular medical knowledge, and the absence of formal medical facilities.

The third example is situated in Dutch society where access to prescription medicines is strictly controlled, but where people still find ways to circumvent or cheat the gatekeepers to obtain the medicines to which they have become attached. Medical doctors are manipulated to achieve that goal. Once they have been prescribed tranquilisers, women are able to continue using them by having their first prescription renewed every time without the doctor checking this properly. The actual use of the medicines is carried out in secret. Doctors who prescribe the drugs lose track of them and join the women in an apparent conspiracy to avoid the topic of their (too) long use. Haafkens (1997: 148) concludes that most women she spoke with used the implicit rule 'Keep quiet about problems related to benzodiazepine use!' It demonstrates, in her words, 'the ambiguity of the very notion "prescription" drug.'

The last case is also an example of secrecy. The woman who wants to terminate her pregnancy is doing something which is publicly censored, but condoned in private. The main difference with the previous case is that the medicines which she applies are not meant to be used for that purpose. The context is characterised by medical ignorance, secrecy, and poverty; she cannot afford a safe abortion. No doctor is directly involved. The pills are bought in drugstores which operate largely outside the law.

Twenty years ago, when, as an anthropologist, I started to take an interest in the use of Western pharmaceuticals in 'non-Western' cultures, very little was known about this topic. There was one standard phrase which was copied over and over again in books and articles on health care in developing countries, namely that more than 70% of the population had no access to proper health care. By 'proper' was meant 'Western'.

During research in 1973 in Ghana, I had seen 'proper' pharmaceutical products in the most remote places I visited. Vermifuges, anti-malaria tablets, antibiotics and painkillers were being sold in small kiosks and from tables along the roadside. There was, however, hardly any sign of this phenomenon to be found in the literature.

A few years later, when I was making preparations for research on the distribution and use of pharmaceuticals in Cameroon, doctors who had worked there as-

sured me that in Cameroon there was no selling of pharmaceuticals outside of hospitals or pharmacies. They must have been blind when they did their shopping at the local market. More likely, they never visited the market.

By now, we know that pharmaceuticals are indeed widely sold and used outside the formal medical context everywhere in the 'developing' world. Anthropologists and researchers from other disciplines have done valuable work to document these practices, but we are still grappling with a number of questions. Some of these are: How should we appreciate self-medication? How far does our understanding and acceptance of local medical rationalities go which clash head on with biomedical reason? Must we attempt to intervene to improve (according to our criteria) the quality of medicine use, and if so, how?

In this contribution I cannot tackle all these questions. The most difficult one, concerning rationality, I shall only touch upon. Although I am aware that there is more to pharmaceuticals than chemical-therapeutic substance, I shall here take the biomedical position on the dangers of pharmaceutical 'abuse'. Pharmaceuticals present a hard test to the anthropological doctrine of cultural respect and relativism. They are indeed charming examples of cultural creativity but the harm they produce is too evident to ignore.

I shall briefly sketch the cultural and infrastructural context of medicine use and then discuss three cultural processes which impinge on people's way of perceiving and taking pharmaceuticals. In the conclusion I shall offer some suggestions as to how the use of pharmaceuticals can be improved.

Throughout this paper I shall concentrate on situations in 'the South' which are most familiar to me, but, as Haafkens' research suggests, people in 'the North' are also busily engaged in self-medication practices which contradict biomedical precepts.

Supply of pharmaceuticals

Some years ago, a research team evaluating the WHO's Action Programme on Essential Drugs in a number of developing countries reported that they had not attempted to assess the implementation of the programme (Evaluation 1989, Kanji et al. 1992). By 'implementation' they meant making essential drugs available to the population. That question, they wrote, was too complex to be investigated within the allotted time and with the limited means available.

Although few exact data exist about the availability of pharmaceuticals in developing countries, some of the main problems of their supply have been extensively described and analysed (e.g. Melrose 1982, Silverman et al. 1982, Chetley 1990).

These studies mention acute shortages of essential drugs and widespread inessential drugs. The authors attribute the situation to the dubious role of pharmaceutical companies and exporting countries as well as to bad management, irrational drug policy and lack of funds in the importing countries. To give an example, Chetley (1989: 5), who studied the marketing of cough and cold remedies in developing countries, reports that 91 such 'medicines' were being used in Africa and that almost half of them contained potentially harmful ingredients.

Most information on distribution deals with pharmaceuticals which are provided in hospitals and health centres. The situation in the informal market is still more chaotic. I counted 70 different drugs in a small Cameroonian town. A local physician gave as his opinion that 41 of them were useful and that 24 others should be withdrawn because of their risk. Asking how many of them could be classified as 'essential' made no sense because the information for correct use was not available from the person selling them. Wrongly used essential drugs can no longer be termed 'essential'. Ironically, more than half of the drugs the physician wanted to remove did indeed belong to the list of 'essential drugs' (Van der Geest 1987: 302-3). When we discuss the 'irrational' use of drugs, we should not lose sight of the fact that in most cases the medicines from which people have to choose constitute an irrational lot in themselves.

Use and misuse of pharmaceuticals

If so little is known about the supply of pharmaceuticals, what about their use? After all, rational use of drugs is the ultimate objective of the essential drugs programme. Kanji and Hardon (1992: 98) remark that 'despite the millions of dollars spent on formulating and implementing essential drugs policies world-wide, the impact of these activities depends a great deal on how rationally drugs are being used, and this has not been systematically evaluated.' Policy-makers and physicians often assume that once the proper drugs are available, people will use them in a correct and profitable way. That assumption, however, is overly optimistic. Studies of the use of anti-malarial drugs, for example, show that even when the drugs can be obtained, proper use is not guaranteed. Foster (1991b, 1995) provides an overview of studies describing the problematic use patterns of antimalarials. Bleek (1978) and Senah (1997) report that antimalarials in Ghana are used to induce abortion.

Several case studies are now beginning to fill the blank spots of our knowledge of actual use of pharmaceuticals in developing countries. Hardon (1987, 1989) has produced valuable data on drugs use based on her fieldwork in both rural and urban communities in The Philippines. The results of a more recent four-country research

project on community drug use are now appearing. Case studies of Uganda (Odoi Adome et al. 1996) and Pakistan (Rasmussen et al. 1996) have been published.³ To give one example: in northern Pakistan 409 instances of medicine use were studied; 61% were found to be incorrect according to biomedical criteria (Rasmussen et al. 1996: 75).

We may still not have adequate data to make sound general statements about the use of pharmaceuticals in developing countries, but we do have sufficient fragmentary insights based on anthropological and other case studies to assemble some kind of overall picture. Two main impressions arise: 1) Modern pharmaceuticals are extremely popular among the majority of the population; and 2) their use by sick people is rarely guided by the medical profession. What drugs are being used is mainly determined by what drugs happen to be available, by people's financial possibilities and constraints, and by their perception of illness and drugs.

Popularity of pharmaceuticals

The 'pharmaceuticalization' of health and health care is a world-wide phenomenon, which is particularly pronounced in the developing world. Pharmaceuticals are seen as the essence of health care. Without them, the entire system loses its meaning. Health centres which run out of drugs also run out of patients. Medical treatment which does not include medication is nearly unthinkable. It is so in the eyes of the patients, and it has often also become the opinion of the health workers, who have learned otherwise. Community health workers lose their credibility as health educators when they have no drugs to dispense.

What has made pharmaceuticals so popular? Four aspects seem particularly relevant to answer that question. The first is that pharmaceuticals are tangible substances – a quality they share with 'traditional' medicines such as herbal drugs and amulets. Medicines are *things* which through their concreteness help people to come to grips with their health problems. They play a crucial role in making the inchoate experience of not feeling well graspable. Their concreteness is as it were contagious, they make concrete what is touched by them. The psychological relief brought about by a medical substance is that one can do some-*thing* against some-*thing*. This therapeutic reassurance is probably the main explanation for the universality of the use of substances in cases of illness (cf. Van der Geest & Whyte 1989).

Apart from this psychological factor, which applies to all types of medicines, modern pharmaceuticals have proved to be exceptionally effective. Antibiotics in particular have worked miracles in societies which were visited by a plethora of infectious diseases. The spectacular effects of injections added to the fame of Western pharmaceuticals (Wyatt 1984).

The 'power' of these medicines (Whyte 1988) is further increased by their foreign origin. Senah (1994) writes that pharmaceuticals in a coastal Ghanaian village are called *blofo tshofu* ('whiteman's medicine'). Things coming from afar are often considered to be better than those from home. Advertisements and packaging of drugs sometimes draw attention to this foreign origin by emphasizing their 'high tech' character (Tan 1989, 1996).

The aura of foreignness and high tech hovers especially around injections. More than any other pharmaceutical product, the injection demonstrates that it is from another world. Not the drug but the technical device by which it is administered forms the attraction (Reeler 1990, Bloem & Wolffers 1993). The injection is a metonym for the world of laboratories and scientific discoveries from whence so many other technical wonders originate. In some countries the needle and syringe have now become part of the medical self-help culture. Antibiotics, antimalarials, vitamins and other drugs are bought in drugstores and injected at home. The discussion below, which took place in a Ugandan shop, is a typical one:

A man came into a drug shop saying, 'I have a patient at home who is bleeding too much.' The dresser who operated the shop asks: '... Do you have a syringe?' The customer affirms that he does and is sold a vial of injectable ergometrine and 15 flagyl tablets.

The fourth aspect of pharmaceuticals contributing to their popularity could be termed their 'liberating' effect. In local medical traditions, the quality of healers is usually seen as the decisive factor in therapeutic success. It is the healer who diagnoses the problem, finds and prepares the right medicines, and gives the medicine its power through prayer, ritual action, or otherwise. Medicines – and the entire therapeutic event – depend on the healer's art and intervention. African medical traditions are thus social systems par excellence. In periods of illness, people are forced to submit to others (elders, priests, medical specialists) to get rid of their problem. Sickness is an occasion for social control. Treatment and the working of medicines are linked to moral instructions.

Modern health care, however, is much more detached from the personal capacity of doctors and nurses. Western pharmaceuticals are seen as inherently therapeutic. Alland (1970: 170), who did research in the Ivory Coast, pointed out that people were not so much after the professional help of doctors or nurses but after pharmaceuticals. Doctors were seen as people one usually has to pass in order to get medicines. Having direct access to pharmaceuticals, in shops and marketplaces, was preferable.

Western pharmaceuticals allow people to solve their medical problems without having to subject themselves to the regime of 'moral entrepreneurs' (Freidson's

term) such as lineage elders and priest-healers. In that sense, they are 'liberating' and become important vehicles of individualization (Whyte 1988).⁴

Lack of medical control

What has been called 'liberating' from the patients' point of view is regarded as 'lack of professional control' by medical people. What constitutes the attraction of pharmaceuticals (people's direct access to them) is a cause of concern to the medical profession. The risks of the wrong use of pharmaceuticals are indeed considerable.

The uncontrolled sale of pharmaceuticals in the informal sector is widespread. Many developing countries have a large informal circulation of drugs through pharmacies, stores, markets, itinerant vendors, etc. The medical situation can be described as a self-help culture, partly created by the poor functioning of government services which forces people to 'save themselves' and encourages health workers to privatize their activities in order to increase their income (Van der Geest 1982, 1988). Self-help is also a logical element in the overall process of individualization just presented. This may explain why informal self-medication also occurs in situations where the public system does provide pharmaceuticals: people may prefer not to depend on a doctor or nurse for their medicines.

Cultural processes

Focussing on the actual use of pharmaceuticals, I distinguish three closely related processes which impinge on the way people take their medication: commoditization, cultural reinterpretation and symbolization.

Commoditization

By 'commoditization' I mean that medicines, as 'saleable' items, become part of economic transactions and are thus diverted from the medically controlled distribution channels. Financial constraints as well as affluence affect people's buying and use of pharmaceuticals (cf. Igun 1987).

People with a prescription may not be able to have it filled or decide quite arbitrarily to buy some medicines and leave others. Or they may discover that certain drugs are out of stock and obtain only part of the prescribed medication, not necessarily the 'essential' part (cf. Sangaré & Kessels 1988, Isenalumhe & Oviawe 1988).

Limited income may also make people decide to stop a medication early – when the symptoms abate – to save money. Clients at a market in Cameroon bought very small quantities of drugs because they could not spend more. They rationalized their choice by adapting their opinion about medication to their financial means. A young man suffering from gonorrhoea only bought two tablets of penicillin since he did not have any more money. ‘Two is better than none,’ he explained (Van der Geest 1991). Whyte (1991) observed a similar phenomenon in Uganda. Customers put their cash on the counter and described the complaint for which they needed drugs: ‘Do you have tablets to stop diarrhoea? I want 60 shilling worth’ or ‘I want white capsules [chloramphenicol]. I have 80 shillings.’

The precarious financial situation in which many people find themselves can be a reason to avoid the formal services and resort to self-medication through the informal sector. Moore et al. (1985) observed that tendency in church-related hospitals in Kenya which had become too expensive for a part of the population. Poor patients stopped visiting the hospital and had to look for cheaper alternatives. A report by the Red Cross (1985) in Uganda writes that almost one-third of the people in rural areas go without any treatment when they are out of money.

In yet another way economic hardship is connected with the use of drugs. Particularly in hectic urban environments, such as Manila, Bombay or Bangkok, many people cannot afford the luxury of being sick or staying away from work to look after a sick child. In that situation people are inclined to symptom-oriented medication to keep going. An overuse of analgesics is the most likely result. Such people are also reluctant to use herbal medicines because they take too much time to prepare and are not strong enough.

Commoditization also works for those who are well to do. Medicines are often considered prestigious items, and people may buy and use them to mark their social status (cf. Tan 1997). I shall discuss this role of pharmaceuticals later on, under the heading of ‘symbolisation’.

Cultural reinterpretation

Pharmaceuticals also undergo a process of ‘cultural reinterpretation’: they move from one context of meaning to another. Produced within a biomedical framework, they are recast into another knowledge system and applied in a way which may be very different from that envisioned by the manufacturer. A well-known example is that local concepts of ‘hot’ and ‘cold’ are ascribed as qualities to Western pharmaceuticals. Bledsoe & Goubaud (1985) mention this reasoning in their study among the Mende of Sierra Leone. The same authors found that people paid attention to colour in their selection of medicines. One woman used a yellow anthelmintic drug

for malaria ‘... because she said, when you have malaria your urine is very yellow.’ She believed she could expel the sickness with a yellow tablet by ‘fighting fire with fire’. Illness and healing are often linked to colour symbolism. Ngubane (1977: 113), in her study of Zulu conceptions of medicine, writes:

Both black and red are used to expel from the body system what is bad and also to strengthen the body against future attacks. Ridding the body of what is bad and undesirable does not mean that a person is in good health. To regain good health white medicines are used.

The local medical perspective implies a preferential sequence of colours in medication. Red, which stands for transformation, comes first; black and white, which represent static conditions, follow. That sequence may also be preferred in the use of Western pharmaceuticals (see also Fabricant & Hirschhorn 1987).

People in Ghana relate many of their medical complaints to the bowels. Dirt should leave the body as quickly as possible. When it stays too long in the bowels, it starts to produce heat and affects the whole body. Their use of drugs often reflects that concern about dirt. People tend to be focused on cleaning the bowels and reducing excessive heat. Laxatives are very popular and – according to biomedical standards – overused. Analgesics are used as prevention against fever (heat). People take them early in the morning before going to work (Agyepon & Wondergem 1991, Senah 1996).

Etkin et al. (1991) noticed that the Hausa people in Northern Nigeria view illness as a process. A central feature of the theory that guides their selection of medicines is ‘... the understanding that symptoms of a disease – or even different diseases – develop sequentially, one eventuating from another’ (p. 921). They therefore use different medicines at different stages of the disease. Each medicine has specific qualities to fight the symptoms at that particular stage. The authors point out that this idea is now – very rationally – being applied in the use of Western pharmaceuticals. They are used in combination with herbal drugs and their use is stopped as soon as the target symptom has disappeared. The authors give a few examples (e.g. measles) in which Western pharmaceuticals are used according to traditional principles, entirely different from the biomedical ones.

A spectacular example of cultural reinterpretation is found in the use of injections, as we have seen before. Blood takes a central position in illness explanations in many African societies. The injection, which is believed to go directly into the bloodstream, is therefore seen as a highly effective way of curing almost any type of illness. Drips, which work the same way, are increasingly being used to maintain good health (Birungi 1994, Senah 1994).

Basing ourselves upon a large number of case studies, we can safely conclude that very often the actual use of pharmaceuticals by patients – and patients-to-be in the case of preventive medication – diverges widely from biomedical rationality.

Symbolization

Lévi-Strauss (1972) in his famous article has argued that symbols are effective. They *work*. Thus, their concreteness makes pharmaceuticals attractive symbols by which people express emotions as concern, anxiety and love. Doctors show their dedication (or, interestingly, lack of dedication) to patients by giving them medicines. People do the same to their children. Reeler (1996) and Nichter (1989) write that Asian migrants receive medicines from home even though they can be obtained in the place where they are working. Pharmaceuticals are indeed popular gifts. In Uganda a medical assistant of a private clinic told Whyte (1991) that

... at least 50% of his customers are people coming on behalf of someone else. Often men come to get medicines for their wives. Men have the money, and they want to show their wives that they care for them...

In certain societies where women are restricted in their movements, men may always buy their wives' medicines (cf. Rasmussen et al. 1996). In Ghana, fathers often give medicine as a gift when a child is born. A favourite medicine for that occasion is *Milk of magnesia*, a laxative (Van der Geest & Whyte 1989: 351). Senah (1994) writes in his study of medicine use in a Ghanaian coastal village:

Oblefo [a woman] showed me her medicine kit. She explained that in the village, before a woman delivered, it is customary for a 'good' husband to buy certain things including pharmaceuticals as part of the preparations to welcome the expected baby. When I inspected the kit, I found bottles of cod liver oil, cough mixture, *Grycline*, *Abidec*, *Gripe Water*, *Milk of Magnesia* and *Castor* oil... some of the drugs were routinely administered to the child even when there was no need – some have been transformed into prophylaxes.

Like food and like the body, medicines are good to think with and to feel with. They facilitate human relations and mark people's identity. Medicines thus share the role of all commodities: they are not simply consumed; they are symbols of communication and social interaction (cf. Nichter & Vuckovic 1994, Sachs 1989).

The vast literature on the placebo effect tells a similar story. Thanks to their symbolic capacity pharmaceuticals are more effective than can be explained on the basis of their chemical constituents. They are reassuring, they produce confidence, security and hope, the best ingredients for restoring and maintaining health.

Pharmaceuticals are ritual objects. They take a central place in private healing ‘ceremonies’. Rituals, stereotypical practices which are carried out in the face of insecurity, help people to pass from one situation to another, from anxiety to tranquillity, from sickness to health, from insomnia to sleep (cf. Haafkens 1997, Uddenberg 1990).

Conclusions

North/South

My focus has been on drug use in developing countries. I have described conditions and processes which not only pose obstacles to the biomedically correct use of drugs but which also obstruct effective research and evaluation of drug use. The informal – and illegal – character of drug use makes a proper assessment of the phenomenon exceedingly painstaking. The little research that has been conducted, however, gives ample reason for concern. Poverty, poor management and lack of balanced information on appropriate drug use cause serious health problems.

This is not to say, however, that such problems do not exist in the industrialized world. Affluence, too, has its health hazards. It may lead to overconsumption of anything including pharmaceuticals. Self-medication flourishes everywhere, also in the shade of a strict control system of pharmaceuticals. Haafkens’ study on long-term benzodiazepine use is a telling example.

Rationality

Rationality is a tricky concept, certainly when it is applied to the use of pharmaceuticals. In anthropology there has been a long ‘rationality debate’. The centre of the debate was about how much cultural relativism is permitted in defining rationality. After all, rationality is not the prerequisite of Western discursive thinking. Evans-Pritchard’s classic in witchcraft, oracles and magic among the Azande in the south of Sudan convincingly argues that believing in the work of witches and the predictive capacity of oracles can be perfectly rational within the framework of the Azande world view. Having accepted the premise that witches exist (no-one has ever proved their non-existence to them) the Azande think not less logically than physicians in their consulting rooms or scientists in their laboratories.

In a similar vein I argue that using pharmaceuticals on the basis of their colour can be a rational thing to do; it makes sense in the philosophy of those who do so. However, the anthropologist’s statement does not necessarily imply that each rationality has equal value or is equally effective. Recognizing (and respecting) differ-

ent rationalities does not stop people from having their own preference. Anthropologists, too, are cultural beings who are inclined to stick to customs and beliefs which have proved beneficial and trustworthy to them. 'Anything goes' is not the motto of medical anthropology.

By defending the rationality of different beliefs and practices, the anthropologist prepares the way for intercultural communication and understanding, which eventually may lead to a mutual improvement of reasoning. Intercultural communication offers alternative ways of explaining and solving practical life problems, problems of ill health, for example. Taking other people's reasons seriously leads to looking critically at one's own ideas. In the case of drug use, an open and respectful watch for 'inappropriate' practices prevents a dogmatic use of pharmacological knowledge. Medicines may work 'for the wrong reason', and we should be grateful they do. Blinkers would prevent us from reaping these pleasant surprises.

At the same time, we must watch for the dangers of inappropriate drug use. Pharmaceuticals may be consumed in a way which makes sense from an economic, social or symbolic point of view, yet they can be harmful. Fighting the harms of such inappropriate drug use is most likely to succeed if one comes to terms with the rationality of inappropriateness.

How to improve drug use?

My description of the social and cultural-symbolic context of drug use has made it clear that improving the logistics of drug distribution does not automatically lead to a more appropriate use of drugs (Foster 1991a). Even an effective implementation of the essential drugs list is not in the least a guarantee for the 'rational use' of pharmaceuticals (Bennett 1989, Van der Geest et al. 1990).

The most crucial step towards a more appropriate use of pharmaceuticals is informing consumers about 'correct' medication. However, my description of the drugs situation has made clear that such a step is extremely difficult. Medication practices are embedded in social symbolism and local concepts of illness and medicine. They are hard to change. Financial constraints and related factors add to 'irregular' drug use.

But there is also ground for cautious optimism. Consumers across the world are eager to learn about medicine use. Their self-medication culture is characterised by a continuous search for more information on medicines. Appropriate teaching materials should be developed, and the present enormous variety of drugs should be reduced to a small number of cheap and essential medicines. Then people will be better able to judge which medicines are appropriate and how they should be used. Visual aids for the correct use of the most important drugs could be displayed on

posters in pharmacies and drugstores and on drug packages. Research is needed to develop suitable symbols for effective instruction and information (cf. Ngoh & Shepherd 1994).

Information on drug use should be integrated in PHC activities. The credibility of community health workers depends to a large extent on their ability to prescribe and dispense drugs. Those who have the most needed drugs at their disposal will also be in a favourable position to dispense the knowledge which is required for appropriate use.

Even the implementation of the Bamako Initiative and the Structural Adjustment Programme and the privatization of state services may have some positive effect as this will most likely make people more aware of the importance of knowing which medicines they need and when and how they should be taken. The first objective of the Bamako Initiative was to render health care more sustainable by making people contribute to it financially. The programme has caused hardship for the indigent, but it also has turned people into more conscious consumers. The free giving of medicines has always had its drawbacks. It made those who received the drugs uncritical and powerless. As 'beggars' they had little to choose and accepted whatever was given to them. Once they have become buyers of medicines, they may be in a better position to voice their demands and complaints and to force health workers and policy-makers to listen to them. Moreover, paying money for drugs will also lead to paying attention to the quality of drugs which are purchased.

Finally, I would like to stress that the improvement of drug use should not be sought in destroying the informal distribution system or in discouraging self-medication. In the present situation in most developing countries, informal medicine distribution and self-care remain indispensable. Solutions for the problems of incorrect medicine use should be pursued in improving the quality of these two institutions and in changing the supply of medicines on the market. Patients should be made more knowledgeable about correct medication, and health workers,⁵ nurses, pharmacists and unqualified vendors of medicines should be encouraged to improve their sale and prescription practices and concentrate on essential drugs.

Notes

1 I thank Susan Foster and Pieter Streefland for their help and comments.

2 *Alופן*, I found out later, is a laxative.

3 For overviews of drug use studies, see: Hardon et al. 1991 and Van der Geest et al. 1996).

- 4 But after having been 'liberated' from moral entrepreneurs, people may get addicted to certain medicines and become their 'prisoners': freed from people, bound to pharmaceuticals.
- 5 The International Network for Rational Drugs Use (INRUD) is particularly active in promoting rational prescribing by doctors (see e.g. Laing 1990).

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