

The Intertwining of Formal and Informal Medicine Distribution in South Cameroon

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RÉSUMÉ

L'approvisionnement en médicaments et leur distribution constituent pour le Tiers Monde un problème qui suscite de nombreuses discussions. Ce qu'on connaît moins, c'est que le réseau parallèle de distribution des médicaments qui se développe dans de nombreux pays est intimement lié au réseau officiel, dans le sens que le premier sert les intérêts du second. La situation décrite pour le sud du Cameroun peut s'appliquer à de nombreux autres pays.

The provision of medicines to and their distribution within the third world has increasingly become a subject of discussion (see for example, Gish and Feller 1979; Muller 1982; Melrose 1982; Bühler 1982). There is, however, still a number of misunderstandings, especially in connection with the fact that medicine distribution in the third world is not subject to the controls which exist in the West. In this article I will describe the informal system of medicine distribution in Cameroon, and I will emphasise that this informal trade is closely connected to the formal institutions of drug distribution. Although Cameroon will be taken as a case study, it is clear that similar situations exist throughout the third world.

After a short discussion of the research methodology and a presentation of the research area, I will describe the formal and informal sectors of medicine distribution. I will then discuss the products which are distributed by the informal sector and the way it caters to the needs of the population. Finally, I will show that the formal and informal sectors are interwoven.¹

I Background and Research Methods

It is possible to divide most social science research which is directed to medical problems in non-western societies into two groups. Anthropologists have been especially concerned with medical phenomena which are radically different from those in their own societies. Undoubtedly, exoticism, which is characteristic of so much anthropological work, has played a role in this bias. Practically speaking, this means that most medical-anthropological work has been focused on traditional medicine, especially its religious aspects, which have practically disappeared from western medicine. The second group, generally consisting of medical sociologists and epidemiologists, has done research into the functioning of existing *modern medical services*, the prevention and spread

of disease, frequencies of infant mortality, etc.² This research has usually been highly quantitative, being based on surveys among health workers and/or patients. It is the reports of these researchers which play an important role in the evaluation and planning of government health policy. It is also these data which end up in the international reports of the World Health Organization.

Between these two areas of research there is, however, a large fallow area: *informal modern health care*. Medical anthropologists have little bothered with this area because it is, after all, modern medicine. The fact that it is informal was not enough to attract their attention, although they are generally interested in deviant and marginal phenomena. On the other hand, the medical sociologists have not bothered with this area because they found it to be too informal. Perhaps they did not even notice it. It could not be revealed by surveys and, apparently, it was not very important for general policy. It was to this subject that my research was directed.

The research was carried out in the Division of Ntem in the extreme south of Cameroon. Ntem has an area half that of the Netherlands, but the population is only 140 000, which gives a population density of nine people per square kilometres. The area falls within the rain forest zone. Agriculture is by far the most important means of subsistence. The main town is Ebolowa with 20 000 inhabitants. It is not only an important administrative centre but also a centre of trade, education, medical care, and other infrastructural services. The majority of the population lives in the villages.

The health situation in the villages leaves much to be desired. There is a shortage of clean drinking water and sanitary facilities. Pigs, goats, and other domestic animals wander freely around; refuse disposal is insufficient; and the housing is often of bad quality (Amat and Cortadellas 1972, 342-356). Certain food habits, such as that whereby the best food is reserved for the adults, especially the men, form an extra threat to child health and are a cause of infant protein deficiency. Recent research (R.U.C. 1978) has shown that twenty percent of the children under five years of age in the tropical rain forest area of Cameroon are malnourished and that fifty percent are anaemic.

According to Ministry of Health statistics (M.S.P. 1978), malaria and intestinal helminthiasis are the most common diseases for which the people in Ntem consult the medical services (respectively, fifteen and ten percent of all reported diseases). They are followed by skin diseases (eight percent), colds and influenza (eight percent), rheumatic complaints (eight percent), bronchitis (five percent), and gonorrhoea (three percent). According to the same statistics, measles is by far the most important cause of death among children, but the actual cause of death is always a complication such as pneumonia, malaria, or encephalitis. Weanling mortality in Cameroon as a whole is estimated to be one hundred and fifty per thousand and infant mortality eighty-six per thousand.

In the Ntem division there are three hospitals with a total of 450 beds. The two largest, with a total of four hundred beds, are both situated in the capital Ebolowa, about five kilometres apart. In addition to this, there are forty-five health centres and only one officially recognised pharmacy. Other facilities, especially primary facilities such as herbalists, traditional midwives, informal medicine sellers, neighbourly help, and of course self-help, cannot be expressed in figures.

The methods used in this research are varied, and some can be characterized by Douglas' (1976) pleonasm, "investigative research." By this term, Douglas means a detective-like approach to the gathering of information, whereby the researcher assumes that the most relevant information is being withheld while that which is said is meant to conceal what is really happening. Obviously, such concealment occurs when direct answers would be threatening to the informants. This was certainly the case for some unlawful practices in the field of drug distribution. In many interviews I paid special attention to contradictions and subtle reactions which could reveal the more hidden aspects of drug distribution. In order to discover such contradictions, it was necessary to interview a large number of informants on the same subject. In addition, many reports, minutes, accounts, and letters — some of which were confidential — were studied.

I will view the problem of informal medicine trade within the perspective of the concepts of "informal sector" (Bremas 1976; McGee 1978; Van Dijk 1981) and "articulation of modes of production" (Van Binsbergen and Geschiere 1985). This latter concept implies that certain weak sectors in the economy (and the social formations which are connected to them) are not destroyed by the dominant sector but are preserved because they are useful to the latter. In this contribution, I hope to make clear that this also applies to the medicine trade in Cameroon. The informal trade is intrinsically connected to the formal trade, but this connection has a hierarchical character. By this I mean that the informal sector is subservient to the interests of the formal sector.

II The Formal Sector

Before proceeding it is necessary to point out that what I will be describing is the *formal* sector; that is to say, what that sector looks like on paper, for example in the *organogrammes* which one finds at the Ministry. It is therefore a description of what the formal sector should look like. When, however, we turn to the question of what it actually looks like, it becomes difficult to distinguish between formal and informal sectors.

In discussing medicine distribution it is possible to distinguish three channels:

1. Public institutions,
2. Private non-profit institutions, and
3. Private commercial institutions.

The public institutions are all state-owned facilities concerned with the distribution of medicines. These mainly include hospitals and health centres. These institutions distribute medicines freely. All hospitals and health centres have their own pharmacies, and patients are given prescriptions and referred to them, where they receive the necessary medicines. These medicines are distributed to all institutions by the Pharmacie Centrale d'Approvisionnement, a department of the Ministry of Health. Hospitals are allowed, within certain limits, to order the medicines which they require. The smaller centres receive a standard supply once a year, and they have to make this last for the whole year. In anticipation of the argument which follows, it will be useful at this point to remark that this system functions only with great difficulty. All public institutions are short of medicines, and the idea of an adequate supply of free medicines is nowhere near to being realised. This fact is partially illustrated by the existence of a large number of private institutions.

The private, non-profit institutions are church-related hospitals, health centres, and primary health care projects. The most important difference between the church-related and public institutions is that medicines and medical care in the former are not free of charge. Medicines are distributed in the same way in both types of institution. The patient receives a prescription which he can exchange for medicine, but in the church-related institutions the medicines must be paid for. Although these religious institutions do not have a profit motive, they are forced to make large profits on the sale of medicines in order to finance their activities. Private institutions receive almost no financial assistance from the state whereas the public institutions are totally financed.

All church-related institutions receive their medicines from one communal buying agent, La Fondation Ad Lucem, in Douala, which may only supply religious organizations. Ad Lucem allows various pharmaceutical companies in Europe to apply for the provision of the required medicines. The company which charges the lowest price receives the order. Because very large orders are involved, Ad Lucem is able to purchase for very low prices. Following WHO (1977, 1979) directives, Ad Lucem attempts to purchase medicines which are no longer patented and can therefore be produced more cheaply under their generic instead of their brand name. It is important to note that this economizing policy has been efficiently applied by only a handful of developing countries (Lall and Bibile 1978; Gish and Feller 1979; Melrose 1982; Muller 1982).

The private commercial institutions which distribute medicines in the formal sector are the recognised pharmacies run by pharmacists with a university degree. According to the most recent statistics (1983), there are only seventy-six of these pharmacies, and thirty-four are in the two largest cities, Douala and Yaoundé. The remaining forty-two pharmacies are situated in smaller cities. All pharmacies are therefore situated in urban areas. The reason for this is obvious. Pharmacists are commercial entrepreneurs, and they settle in the areas with the

highest purchasing power. This is why most pharmacists would jump at the opportunity to open a business in one of the two largest cities. It is also the reason that many small rural towns apply in vain for the establishment of a pharmacy; no pharmacist is prepared to move to such a commercially uninteresting location.

The fact that a country, almost twice as large as Great Britain, with a population of 7.5 million, has so few pharmacies does not, however, necessarily imply a small turnover. In 1977 the fifty-two private pharmacies sold approximately the same amount of medicines (in value) as the seventy-two state hospitals and 277 public health centres together distributed to their patients. A year later, in 1978, the value of medicine distributed by the commercial sector was fifty percent greater than the public sector (see Van der Geest 1981, 140). It is quite likely that this tendency has continued.

The shortage of medicines in public hospitals and health centres forces the people to go to the pharmacies. Doctors and nurses in these institutions often write prescriptions for medicines which are only available in the private pharmacies. Sometimes patients or family members must travel for hours in order to reach a pharmacy which has the required medicines. To give an impression of this situation, the Division of Ntem, where I did my research, is a large area. Travelling is difficult due to lack of transport and poor quality of the roads, particularly in the rainy season. With some bad luck it may take villagers a whole day (of waiting) to travel a distance of forty kilometres. The fact that there is only one pharmacy in this whole area is bound to cause problems. The same situation exists in the two neighbouring divisions.

III The Informal Sector

Next to and (as we shall see) within this formal sector exists an informal medicine trade which has ramifications into the farthest corners of the region. There are five categories of informal medicine sellers. The most important are the shopkeepers who sell general provisions, including medicines. In the capital, Ebolowa, there are approximately seventy-five shops where one may purchase at least one or two medicines. The second group consists of market vendors who also sell medicines alongside other products. The third group can best be referred to as "hawkers." They travel from village to village during the cocoa harvest when the villagers have extra money at their disposal. These hawkers provide a variety of articles in addition to medicines. The fourth group consists of traders who are specialised in the sale of medicines and have a much larger assortment than the previously mentioned three groups. In Ebolowa, I found four such traders. They not only sell medicines but may also give medical advice when asked. One of them even gave injections. The fifth group consists of the personnel of medical institutions. They privately sell the medicines which should be provided to the patients free of charge.

After having shown who is involved in the informal retail trade in medicines, the questions which arise are: where do these people get their products; and what is the nature of the informal wholesale medicine trade? There are three types of wholesalers who supply the informal sector with medicines: those who sell smuggled medicines from Nigeria, official pharmacists, and personnel from medical institutions.

The smuggling of medicines from Nigeria has taken on enormous proportions, but it is impossible to discover the exact extent of this trade. The import and sale of medicines is much freer in Nigeria than in Cameroon. In Cameroon unqualified sellers may not import medicines, and they are therefore forced to import their products illegally from Nigeria. The medicines are transported by taxi or van and are allowed to pass by customs officials who have been bribed. According to some informants, large amounts of medicines are carried over the border by foot or in boats along the coast. In west Cameroon there is a large number of depots where the medicines are stored and from where they are later distributed throughout Cameroon and even neighbouring countries such as Gabon and the Central African Republic.

The second group of wholesalers consists of legally recognised pharmacists. Here it is necessary to mention that the laws governing the exercise of the profession of pharmacist (RUC 1980) are very rigorous. According to these laws, only qualified pharmacists may sell medicines. (This of course is absurd when one considers the fact that there are so few pharmacists and that these are concentrated in the urban centres.) In any case, the laws do not change the fact that almost all medicines can be purchased in large quantities and without a prescription in the pharmacies. Informal medicine sellers make use of this opportunity to purchase their supplies from the pharmacies. They pay the normal retail price for these medicines, and this means that they sell them in the villages for a price which is a good deal higher.

The third group of wholesalers consists of hospital and health centre personnel. As I have already mentioned, these institutions receive medical supplies from the Ministry at regular intervals, which they should provide to patients free of charge. I estimate that approximately thirty percent of these medicines do not reach the patients, at least not directly, but are appropriated by the health workers themselves.³ The health workers then distribute them to relatives, sell them to patients whom they treat at home, or sell them to informal medicine sellers (Van der Geest 1981, 61-98; 1982). It is this last possibility which makes them wholesalers in the informal medicine trade. It is impossible to say what is the extent of this "wholesale trade."

IV The Products

In the division of Ntem, I noted seventy different medicines which are sold in the informal sector.⁴ The most common were analgesics (thirteen sorts), antibiotics

(twelve sorts), remedies for coughs and colds (eleven sorts), laxatives (eight sorts), vitamins (six sorts), remedies for worms (five sorts), remedies for anaemia (five sorts), and anti-malarials (three sorts). Most medicine sellers were quite prepared to allow me to interview them about their trade even though it was illegal. Research was easiest at the markets where the medicines were prominently displayed. In the larger shops I was often forced to explicitly ask if medicines were sold. This sometimes caused suspicion.

Most important was the work which I did among the three specialised medicine sellers. Because a large number of unknown medicines were involved, the research required long discussions and extensive notetaking. This took place between sales. I was afraid that this situation would be inconvenient, but the three sellers cooperated fully. They did not object to my pulling up a chair and carefully noting all the names, ingredients, prices, and instructions for use of the medicines. They patiently answered all the questions which I put to them about the uses of the various medicines. At my request they allowed me to see receipts for medicines which they had purchased elsewhere. One of them regularly asked me to purchase medicines for him during my travels. Because these enquiries were so successful, I was able to gather extensive data on the seventy medicines which I had encountered in the informal sector. It would be beyond the scope of this article to give an exhaustive exposition of the medical aspects of these findings. However, in order to understand the informal medicine trade, it is necessary to make a few general remarks.

The reactions of western trained doctors and pharmacists to the list of seventy medicines may vary. A pharmacist who gives priority to the norms concerning the preservation and prescription of medicines which he has learned during his training and which are applied in most western countries will perhaps disapprove of their free availability. But anyone who takes the actual health situation in Cameroon into consideration will probably be less critical. The informal medicine sellers are often the only available "representatives" of modern medicine, and when there is some knowledge as to the correct use of medicine, then self-medication with remedies bought in the informal sector is probably the best alternative in the absence of modern medical care.

Expert opinion on this matter is only useful if it is realistic; and in order to be realistic it must take the whole social and medical context into consideration. With this in mind, I presented the list of seventy medicines to a doctor who worked in the research area and was reasonably aware of the health situation. His opinion was that forty-one of the listed medicines were useful or at least harmless when freely available, but he thought that twenty-four of the medicines should no longer be sold. Because of a lack of data, he could not form an opinion about the remaining five medicines.

The forty-one medicines which the doctor considered to be harmless can be divided into two groups. The first group contains medicines which are extremely useful because they are effective against common diseases, they are

relatively safe, and their correct application is probably generally known. This group includes analgesics, anti-malarials, and remedies for intestinal helminthiasis and colds. The medicines which fall into the remaining group are of questionable value. The fact that these medicines are freely available is not problematic because they are generally not very potent. They are really superfluous. This category includes vitamins, remedies for anaemia, and a number of laxatives.

Of the twenty-four medicines which this doctor would like to see removed from sale, twelve are antibiotics. Opinions about the free availability of antibiotics are, however, varied. Opponents point to the fact that misuse can lead to resistance. They see self-medication with antibiotics as exacerbating the medical problem. The advocates argue that since doctors are often not available, the free sale of antibiotics is necessary. People living in isolated areas benefit from this sale. In addition, the advocates argue, people are generally well aware of how to apply the antibiotics in question. It seems that this subject will remain controversial for some time to come. Other medicines which this doctor would like to see taken off the free market are strong laxatives which may cause dehydration, especially among children, and a number of remedies which only repress symptoms, thereby leading to a postponement of consultation with a doctor and possibly detrimental consequences for the patient.

Here it is necessary to mention a number of additional considerations because they make the free sale of medicines problematic. One of these concerns the method of application. Injections, which are generally popular, can be dangerous. When they are given as self-medication, the needles are often not sterile. Storage and the age of medicines also constitute a problem. Because medicines are stored under unsuitable conditions (temperature, light, humidity, and atmospheric pressure), it is doubtful whether they will remain effective. The labels of a number of medicines state clearly that they should be kept cool, but I have never seen a refrigerator for medicines on the informal market, though I have for beer. Also, no attention is paid to the date of expiry. However, the most important problem is the lack of adequate information (Van der Geest 1983). Naturally, information which is normally contained in the doctor's prescription is lacking. But even the information on the package insert usually does not reach the client. There are various reasons for this. The most important is that the inserts are not sold with the medicines because the latter have been removed from the original packages and placed in various bottles and jars to be sold in very small quantities. In the rare case that a client does purchase medicines with an instruction leaflet, it is quite likely that the information will be misleading and inaccurate, as has been shown by careful research elsewhere (Silverman 1976; Silverman et al. 1982). Many of the medicines which are produced in Nigeria or in England for Nigerian firms immediately catch the eye because of their extremely tendentious advertising and sometimes misleading

directions for use which are displayed on the packing. Finally, almost all products which come from Nigeria have texts in English, which most people in the French-speaking part of Cameroon cannot read.

Lack of information leads unavoidably to wrong application. During my research I came across many cases of the wrong use of medicines, some with serious consequences. But even if there are no negative medical consequences, the non-medical consequences are bad enough. The fact that people in a poor society spend money on useless medicines means that a scarce resource is withdrawn from items which are necessary for the maintenance of health, such as food, housing, and good medicines. On a larger scale, this wrong use of medicines forms one of the greatest obstacles for the improvement of health in the third world. Finally, it should be noted that the ignorance of consumers makes deception by the manufacturer and seller easier. Both types of deceit were seen during the research and both led to wrong use.

It is difficult to generalise about the prices which are charged and the profits which are made in the informal sector. Sales policy is capricious and can vary from one seller to another and from one day to another. Some prices are lower than those in the official pharmacies, but most are higher. It should be noted, however, that in the informal sector much smaller amounts are sold, and thus the consumer only spends a small amount of money in each transaction.

The data on the profits of medicine sellers are no less difficult to determine. It was possible to compare the purchasing and selling prices which applied to nineteen products sold by one trader. The profit varied from fifty to 1150 percent. The average was about three hundred percent. This may appear to be high, but it should be remembered that the turnover of most traders is very limited. Medicines are sold in extremely small quantities, sometimes only one or two tablets at a time. In spite of the profit margin, most medicine sellers only have a meagre existence. The medicine vendors at the markets in the big cities form one exception. But in the rural areas the trade only flourishes in the cocoa season when the people have more money to spend. During this season many cocoa farmers travel to the city to purchase supplies and fill their medicine chest.

V The Informal Sector's Right of Existence

The informal sale of medicines satisfies the needs of the people and the pharmacists. This section is concerned with the benefits for the population. The relation with the pharmacists and the formal sector are discussed in the next section.

One of the medicine vendors described his function as “dépanner les petits problèmes.” The south Cameroonians have a long tradition of self-medication. In the past they used only herbs which grew in the vicinity, but pharmaceutical

products are being increasingly used. This development is made possible by the medicine vendors who bring the most popular of these products as far as the most isolated villages.

In four respects the medicine vendors have more success in satisfying the needs of the average Cameroonian than the pharmacists; all are related to availability and attainability. First, the medicine vendors are financially more within reach, even though their products are relatively more expensive, because the pharmacists only sell medicines in the standard packing while the vendors in the informal sector can sell exactly the amounts which are demanded. This makes it possible for a client to obtain medicines which he urgently needs, such as analgesics, cheaply. This is what the medicine vendor meant when he described his work as “dépanner les petits problèmes.” This would not be possible in a pharmacy.

Second, the vendors are literally more within reach. It is always possible to find a medicine vendor without having to travel more than a few kilometres, whereas one may have to travel fifty or a hundred kilometres, or sometimes even further, to reach a pharmacy.

Third, the vendors are available day and night. They only close when everyone has gone to bed, and even after that it is still possible to purchase medicines. If someone urgently needs medicine during the night, he will not hesitate to wake the vendor. The pharmacies maintain European working hours, to which they strictly keep. It is unthinkable that someone, who does not have some form of personal relationship with the pharmacist, would be sold medicines when the pharmacy is closed.

This brings us to the fourth factor, social distance. The difference between the pharmacist and the vendor can probably best be illustrated by two quotations from my fieldnotes:

28 June 1980

I spent two hours at the market with a medicine vendor, a Nigerian boy of about fifteen. It was Saturday afternoon. I noted the country of origin, price and, if present, instructions for use for forty-two medicines. The boy was very helpful; he knew all the prices by heart and showed me all the medicines about which I enquired. He apparently found it quite normal that I wrote everything down. While I was there many people came and purchased medicines. I did not have the impression that they were disturbed by my presence. A lot of *Folkologo* (the local term for Tetracycline, an antibiotic) was sold. People kept asking: “Have you got anything for worms?” or “What’s that for?” People who do not know very much about medicines but who do not want to reveal their complaint may be able to find the right medicine in this way. It would be impossible to act like this in a pharmacy.

11 August 1980

I have just spent half an hour sitting with E., an old man who sells medicines at the market. While I was there he was visited by six clients.

A small boy comes and pays Fr. 25 and E. gives him three Quinacrine tablets (anti-malarial). These tablets actually cost Fr. 10 each, but E. explains that the boy is poor. Two youths. One of them buys six Tetracycline capsules for Fr. 50.

A young woman with a child dawdles around and finally purchases six Mintezol tablets (for worms) for Fr. 375. A man of about thirty-five, purchases without hesitation Nivaquin tablets (anti-malarial) and a vial of Bipeniciline (an injectable antibiotic). I ask him who is going to give the injection and he replies: "I am, I'm a nurse." He then goes on to say that he used to be an "infirmier journalier" (a very lowly qualified nurse) but that he lost his job, after which he became a planter. He now helps his neighbours when they have medical problems. However, he feels primarily responsible for the health of his own family.

A middle-aged woman who speaks in pidgin asks for a remedy for filaria. E. says that he doesn't have anything. He tells her to try the pharmacy. But she complains that she doesn't know which medicine to ask for. . . . Once again, I become aware of the fact that many people are inhibited to go to the pharmacy. You can't casually look around, pick up medicines, and ask: "Have you got anything for filaria?" There are all sorts of people who stare at you, and the people behind the counter are different from yourself. They are not patient and friendly. You do not feel at ease. It is a bit like a hospital.

Although the medicine vendor is more within the reach of most people and satisfies their needs better than the pharmacy, there are also many disadvantages connected with purchasing medicines from a vendor. The consumers are well aware that the vendor's products are usually of inferior quality, that they offer less choice, and that their knowledge of medicines is limited. The preference for the vendor should, however, be seen in the context of the whole health-seeking process. People who become ill first employ strategies which require very little extra effort — self-medication. Only when this does not succeed do they employ other strategies which require more effort and are more expensive. Now, within this "hierarchy of resort" (Romanucci-Ross 1977), self-medication and medicine vendors share the first place. It is only when this choice of therapy does not produce the required results that the above mentioned objections to the medicine vendors begin to play a role in the choice of further therapy.

VI The Interweaving of Formal and Informal Sectors

The relationship between the formal and informal sectors of medicine distribution has two important characteristics. First, both sectors are closely connected; even complementary. Second, this connection is unequal in nature.

The statement that the formal and informal sectors are intertwined and have common interests may be initially surprising. One is more likely to get the impression that both sectors are at daggers drawn, especially in the medicine trade. Let me give a few examples. In the law governing the exercise of the

profession of pharmacist (RUC 1980), it is emphasised that medicines may only be distributed by qualified persons, i.e., pharmacists. It is also forbidden to advertise medicines publicly. The law suggests that the utmost care should be taken to ensure that medicines are used properly. Distribution which does not take place within the formal sector as defined by law is contrary to the goals of the profession of pharmacist: the optimal distribution of optimal medicines to ensure optimal health.

Art. 48

The sale to the public of any medicament, product or accessory articles as defined under Section 6 above, by the intermediary of commission houses, groups of buyers or any other establishments owned or managed by persons who are not in possession of the diploma of pharmacist, shall be unlawful with the exception of those establishments mentioned under Section 32.

Section 32 refers to the so-called “propharmacies,” small pharmacies which, with special permission, are established near health centres and are run by nurses (Nchinda 1978; Van der Geest 1981, 98-107).

Art. 49

Any sale, display or distribution of medicaments on the highway, in fairs and markets, by any person, even in possession of the diploma of pharmacist, shall be unlawful.

It is not only the official legislation which gives the impression that the interests of the formal and informal sectors of medicine distribution are opposed. The reports and other publications of pharmaceutical firms have the same effect. This is done to give the impression that the pharmaceutical industry does its best to supply products which are as safe and as effective as possible. In the “International Code of Pharmaceutical Marketing Practice” compiled by the International Federation of Pharmaceutical Manufacturers’ Associations we read:

The pharmaceutical industry, conscious of its special position arising from its involvement in public health, and justifiably eager to fulfil its obligations in a free and fully responsible manner, undertakes:

- to ensure that all products it makes available for prescription purposes to the public are backed by the fullest technological service and have full regard to the needs of public health;
- to produce pharmaceutical products under adequate procedures and strict quality assurance.

And in connection with the way in which medicines are sold, the same code remarks:

Information on pharmaceutical products should be accurate, fair and objective, and presented in such a way as to conform not only to legal requirements but also to ethical standards and to standards of good taste. Particular care should be taken that essential information as to pharmaceutical products’ safety, contra-indications and

side effects or toxic hazards is appropriately and consistently communicated subject to the legal, regulatory and medical practices of each nation. The word "safe" must not be used without qualification (Health Action International 1982, 11-111).

On the basis of this type of statement, it is quite easy to form the impression that the formal and informal sectors have opposing interests. These strict rules, which the pharmaceutical industry applies to itself, seem to imply that the industry does its best to prevent pharmaceutical products, which are meant to be obtainable only on prescription, from being sold on the free market, not only without a prescription, but also without instruction leaflet. In the same vein, one would expect that doctors, nurses, and pharmacists in Cameroon would take measures to prevent the inexpert distribution of medicines. The reality is, however, completely different. It is true that the rules and statements of the representatives of the formal medicine trade are extremely negative in their judgement of the informal sector. But it has not been sufficiently realised that these rules and statements are mostly rhetorical. They are not applied literally, but rather veil the actual state of affairs or make it appear as if the informal practices occur against the will of the formal institutions. In reality, however, the informal trade exists with the approval of the representatives of the formal sector, and they have a direct interest in its existence.

The intertwining and mutual dependence of both sectors of the medicine trade in Cameroon becomes clear when we look at the origin of the products which are sold in the informal sector. The medicine vendors purchase their products from recognised pharmacies and from personnel in the formal health sector. The transactions in both cases involve mutual interests. The pharmacist increases his turnover by selling medicines to far-off villages through the vendor. Health care personnel increase their income by selling medicines which were meant to be provided free of charge to patients. The relationship is more complex in the case of medicines which are smuggled from Nigeria. In this case, the intertwining of formal and informal sectors is situated in Nigeria where the medicines are bought. My research did not extend into Nigeria but there are indications that the medicines are purchased from legitimate institutions there.

This intertwining of sectors is, however, not limited to the origin of the products. There is also a direct connection between both sectors in the distribution itself. The boundary between the two is not clear and they tend to merge. I will illustrate this with four examples. Hospital and health centre personnel are expected to supply the patient with the necessary medicines free of charge. Instead, they sometimes sell the medicines to the patient, either inside or outside the medical institution. So informal trade occurs within the formal health care institutions; but can we call this "informal trade"? The transaction may be carried out by an expert, perhaps even within the context of formal health care. The second example of the merging of the two sectors is the fact that patients purchase medicines from vendors in the informal sector and take

them along to the health centre when they go for treatment. This is very common in Cameroon because it is well known that the health centres often lack medicines.

I encountered the third example in the hospital where a large part of my research was concentrated. Patients sometimes have to wait a long time for the doctor, and treatment is not started until they have been examined. As a result, there is a demand for medicines, especially analgesics, which can be applied during the waiting period. For this purpose, they can turn to the medicine vendor who has set up his stand on the hospital grounds, right next to the polyclinic. The fourth example related to the pharmacies. In spite of the strict rules and the university education of the pharmacist, there are a number of striking similarities with the informal sector. They have in common the fact that clients can purchase, on demand, any medicine without prescription or expert advice. Moreover, the pharmacist is usually absent from the pharmacy and difficult to reach. The medicines are sold for him by employees who, as far as their training goes, can hardly be distinguished from the informal vendors. The question thus arises as to what extent one should view the pharmacies as part of the formal sector. These examples, to which others could be added, illustrate the nature of the connection between the formal and informal sectors. We shall now see that this relationship is an unequal one; the informal sector is subordinate to the formal sector.

Anthropologists who study politico-economic development in Africa are fond of the term "articulation of modes of production." This concept was launched by French Marxists when they realised that economic development in Africa could not adequately be described and analysed using the coarse concept of modes of production which had been derived from Marx and applied up until then. The term "articulation" implies that different modes of production can exist together and form a symbiosis in which one mode, the capitalist, dominates the other. P.L. Geschiere has used this conceptual framework in his study of the Maka society in Southeast Cameroon. He defines articulation as a situation in which:

...the capitalist mode of production has become dominant, but where the old, pre-capitalist relations retain some importance as subordinate modes of production. In their terminology, a mode of production is dominant when surpluses from the old production relations are used for its reproduction (i.e. its expansion). Concretely, according to these authors, capitalist expansion in Africa has not led to the immediate demolition of the old units of production; on the contrary, the old relations of production were very often consolidated to a certain extent and used for the further development of the capitalist sector (Geschiere 1978, 45).

The concept of articulation also seems to be applicable to the relationship between the formal and informal sectors of the medicine trade in Cameroon. At first glance, they appear to compete, but in fact they cooperate. But the formal sector is able to subordinate the informal sector to its interests. I will illustrate this phenomenon with two examples.

At the beginning of my research I was surprised to find that the local pharmacist, who was politically very influential, had not succeeded in eliminating the informal trade in medicines. I still assumed that they were competing. It was only later that I realised that the opposite was true. As we have seen, most clients usually only have sufficient money to purchase small amounts of medicines which are urgently needed. It would not be profitable for the pharmacists to sell to these "petty clients." This is also prevented, however, by legislation which forbids pharmacists to open the packing of medicines. Petty clients therefore cannot go to the pharmacy, but they can go to the numerous medicine vendors. These vendors purchase part of their supplies from the pharmacies for the normal retail price. The vendors are therefore, to a certain extent, retailers for the pharmacies. Through these vendors the pharmacist sells medicines to the poorer sections of the population without having to spend time serving them. A pharmacist was therefore quite right when he explained that it was not in his interest to get rid of the vendors because, as he put it, "they work for us."

A similar relationship, though more subtle and more indirect, exists between the medicine vendors and the pharmaceutical industry. As we have seen, the pharmaceutical industry claims to do all within its power to ensure that medicines are safe and effective. The measures which the industry takes to ensure this include — not to mention a number of sad exceptions — guaranteeing the best quality and providing careful information. One would expect that the inapplicability of these measures, once the medicines reach the informal sector, would cause concern in the industry. One would also expect measures to be taken to prevent such developments, but that is not the case. The pharmaceutical firms consider these developments to be beyond their responsibility, and they continue to sell medicines to various countries even when they know that a large percentage of these products will end up in the informal sector, perhaps be wrongly used, and lead to detrimental consequences. I agree that it would be naïve to expect pharmaceutical firms to voluntarily reduce their sales because this would be better for public health. The point is, however, that this will obviously not happen which confirms the suspicion that the informal sale of medicines is in the interest of legitimate industries. Although the informal trade in medicines in Cameroon is not very large, in a number of developing countries such as India, Thailand, Indonesia, and Nigeria the informal sale of medicines has taken on gigantic proportions. It would be an enormous loss for the pharmaceutical industry if these markets were to disappear.

It is not necessarily the case that the pharmaceutical industry consciously supports the informal medicine trade. A conspiracy theory is not necessary to understand the developments which have been described here. There is a system with an internal logic which ensures that the interests of the strongest party are favoured.

VII Conclusion

The problem associated with the informal medicine trade is acute in many third world countries, but it is hardly known to those concerned with the formal aspects of health care. The formal and informal aspects of medicine distribution are closely interwoven. This applies to both the public and private sectors of the formal system of distribution. The formal, legal medicine trade makes use of the informal, illegal trade. The two cannot be separated. This means that the supply of medicines to official institutions probably implies that many of these medicines will end up in the informal circuit. This complicating factor in medicine distribution to developing countries is not fully realised by representatives of the pharmaceutical industry and official health-care institutions.

Furthermore, the use of medicines in the informal sector can be extremely detrimental to health because of insufficient knowledge and information (and sometimes pure deception) about the working of the medicine in question. In addition, scarce money is often spent on useless medicines instead of food and other means which really benefit health. It should also be noted, however, that the informal sector often provides useful medicines to sections of the rural population which would otherwise go without. Because of this, it can hardly be dismissed.

This means that practical suggestions to improve the current situation should not recommend the liquidation of the informal sector. Such a "solution" would not be attainable because of the indispensability of this sector, and it would rob part of the population of its only source of modern medicines. Realistic solutions should therefore aim at maintaining and improving the informal sector. Improvement could be realised by successfully excluding useless and dangerous medicines from this sector and increasing the knowledge of vendors and clients as to the proper use of medicines. These two conditions can only succeed if the country in question imposes limits on the importation of medicines. If the number of medicines was limited to approximately 250 essential and relatively cheap medicines, then it would become much easier to monitor the trade and make it possible for the layman to achieve sufficient knowledge to use them effectively. Still a number of "dangerous" medicines will undoubtedly be included among the 250 essential medicines which are admitted, but it should be remembered that the dangers decrease as knowledge of proper use increases. Suggestions for such limitations have already been made by the World Health Organisation (WHO 1977; 1979). It is probably because of resistance by vested interests, such as the pharmaceutical industry, physicians, pharmacists, and politicians (see Lall and Bibile 1978; Yudkin 1980), that this obvious political choice is only infrequently made by developing countries.

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2. It is only recently (since about 1978) that a larger number of anthropologists has taken interest in biomedicine. Hahn and Kleinman (1983, 305) call the exploration of biomedicine "a new frontier in medical anthropology." This interest shows itself in studies of both non-western societies (Comaroff 1981; Janzen 1978; Kleinman 1980; Lasker 1977; Nichter 1983; Ohnuki-Tierney 1984; Waxler 1984) and western societies (Chrisman and Maretzki 1982; Devisch 1983; Eisenberg and Kleinman 1981; Gaines and Hahn 1982; Helman 1984; Lock 1982; Moerman 1979; Stein 1983; Young 1980).

3. It should first be emphasized that the figure of thirty percent is indeed a guess and second that the incidence of unlawful private medicine use will vary extremely in different health institutions. The guess of thirty percent was suggested to me by some knowledgeable informants who also guessed. In one (church-related) hospital I was able to calculate the loss of medicines not accounted for. I found that about thirty percent of all medicines had not passed through the appropriate channels.

4. A distinction could be made between products confected and/or marketed by small Nigerian firms and products from multinational companies. The former are commonly called "patent medicines" in western Cameroon and tend to be rather harmless, often dubious and superfluous medicines. Many of the multinational products are dangerous "prescription-only drugs" which are also available without a doctor's prescription. This distinction is not further discussed in this paper.

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