Availability and use of medicines in rural Thailand
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1 Modern Medicines in Developing Countries

Anthropological studies since the 1980s have consistently reported three major patterns of how modern drugs are used and channeled to the people. They are: first, modern pharmaceuticals, especially the prescription-only ones, are dispensed mostly without professional advice; second, the informal commercial sector predominates the ways the modern medications reach the people and; third, self-treatment with modern medicines is the major form of health care. (Hardon and le Grand 1993; Hardon et al. 1991; Van der Geest et al. 1996).

This chapter reviews the situation and characteristics of drug distribution and use in the developing countries aiming at providing backgrounds as well as a conceptual framework that guide the organization of this study.

Distribution

Modern medicines in the informal drug sector

The selling and buying of modern pharmaceuticals taking place at various informal sources in the developing countries, according to Van der Geest et al. (1996: 161-164) had been established practices long before researchers studying health-related behaviors came to notice them. Anthropological studies in drug-related issues have later given rise to a better understanding of these phenomena especially these three related points: one, there are various kinds of informal drug distributors making modern drugs reach the people; two, a wide range of modern drugs including the prescription-only ones are available in these sources; and, three, the existence of both the informal and formal drug sectors are an inseparable phenomenon.
Types of informal drug providers

Analytically, the term 'private drug sector' could have different faces. Within the private sector, there can be both non-profit and commercial actors; for the activities that make drugs available to the public, some are formal (sanctioned by the state), the rest are not (unregistered or illegal). In addition, public sector staff may be actively involved in the informal sector (Streefland and Hardon: 1998: 373).

Drug providers in the informal sector are of various kinds. As "bridging agents of the medical and business sectors of society" (Ferguson 1991:22), the informal drug distributors could mean:

- **First**, the personnel working in government (public) health service facilities who privately run clinics or informally sell medicines;
- **Second**, the unqualified or unlicensed sources who (illegally) sell drugs alongside other commodities or who specialize in the medicine trade; and
- **Third**, the indigenous practitioners whose services include the use of modern drugs.

The ‘informal’ practice of the ‘formal’ health personnel (i.e. doctors, nurses, and other paramedics) as drug providers is reported a common phenomenon in the developing world. Studies from many countries (Van der Geest 1991b:336; Van der Geest et al. 1996:163-164), including Thailand (Weisberg 1984; Reeler 1996) report that the government health workers usually privately provide medical services alongside their official work either in their workplaces, at home, or in their clinics. The illegal sources, the drug vendors, have been found almost everywhere, from the markets and bus terminals to the remote villages. They, as Van der Geest (1987b:296) describes, could appear in various forms:

> Some are merely merchants, while others add some medical practice to their trade, for example giving injections; some specialize in pharmaceuticals and tend to have a substantial assortment of drugs, while others sell only a few of the most needed together with other essentials for daily life such as bread, rice, cigarettes, sardines and batteries; some have a fixed place for their trade, a shop or a booth, others are mobile and travel from village to village.

The emergence of these drug vendors, in many contexts, appears to be influenced by the shortage and inaccessibility of drugs and medical services in the
public sector as well as by people’s demand for drugs. However, there is no doubt that their increased role coincides with the expansion of the drug industry in developing countries. The invention of pre-packed pharmaceutical products makes the vendor’s business much easier as medicines can be included as a kind of basic commodity. The poor enforcement of drug control measures which appears to happen in most developing countries makes these unlawful activities possible. Their economic, social, and psychological advantages- buying drugs from a shop or vendor saves time, inconvenience and embarrassment- contribute to their being preferred by the people and make their existence socially accepted and tolerated (Van der Geest 1991:337).

The traditional practitioners who combine modern drugs in their treatment services are the third category (Ferguson 1991:21). In Sri Lanka, the use of modern medicines by Ayurvedic practitioners was found being a part of both the innovative and survival strategies of those healers in the commercial context of health care (Wolffers1991).

Drugs distributed in the informal sector

The norm, not the exception, is that various kinds of modern pharmaceuticals including the prescription-only ones are obtainable at informal channels and that the prescription-only drugs are usually purchasable without a doctor’s prescription at pharmacies.

Many studies on community drug use have consistently given an impression that there are various kinds of modern pharmaceuticals available in the private drug sector. Yet, very few of them can provide detailed accounts (e.g. types and quantity) of such availability from a systematic numeration, especially from a large-scale survey or from representative samples. In line of which, a study by Van der Geest (1987a:302-303) is one. In his Cameroon study, he counted 70 different drugs including pain-killers, antibiotics, drugs for respiratory problems, laxatives, vitamins, anthelmintics, anti-anemia drugs, and anti-malaria drugs from informal distributors.

Previous studies on the availability of drugs in the informal sector paid attention largely to the pharmacies (Van der Geest et al.1996: 162). Studies of the selling practice of the pharmacies in India (Krishnaswamy et al. 1985; Greenhalgh 1987), Ecuador (Price 1989) and Ethiopia (Sekhar et al. 1981) reveal that 47-82% of drugs were purchased from these sources without a doctor’s prescription. Wolffers’
(1987) study in Sri Lanka found that, in the 28 pharmacies researched, tetracycline, a prescription-only drug, could be obtained with no prescription required. The ‘informal’ practice of the ‘formal’ pharmacies is an aspect reported by previous studies. The routine operation of pharmacies in many cases is managed by untrained assistants/clerks without supervision. In addition, some of the pharmacy personnel are found giving advice and acting as doctors. (Ferguson 1991:29-30; Van der Geest et al. 1996:162; Senah 1997:118).

The formal and informal sectors as an indistinguishable part

The existence and function of the informal drug sector can not be separated from that of the formal sector. Van der Geest et al. (1996:163) conclude that at an informal level, the two systems are tightly intertwined and keep each other alive. This argument is supported by Ferguson’s observation in her El Salvador study (1991:31).

Van der Geest’s Cameroon study clearly substantiates this phenomenon. The flourishing of the informal sector was both the result and cause of the drug shortage in the public sector. The existence of the informal drug trade yielded enormous benefits to the formal sector. That was viewed as conducive to the approval of the existence of the informal sector by the formal sector. The mutual dependency and shared interest of the two sectors were observable at two levels: the origin of medicines and their distribution. In terms of the origin of drugs, the informal drug traders replenished their stocks with drugs from the formal sector especially the ‘authorized pharmacies’ and health personnel. Such a relationship subsequently contributed to the increase of the later’s turnover and extra income. From the distribution aspect, the intertwining of both sectors could be seen from different behaviors. In the formal health care institutions, medicines were found to be informally sold by health personnel while, at the same time, because of the scarcity of drugs in government health facilities, the patients brought drugs purchased from informal traders with them. In addition, the close link between the two sectors could also be viewed through similar practices of the unauthorized and authorized drug sellers (i.e. they both did not require a doctor’s prescription, they had similar ways of welcoming clients etc.) (Van der Geest 1991a:142-143).

In Thailand the growing economy during 1980-1990 brought a rapid growth of the private health sector including the drug industry. At the same time, the rising
income also increased people’s demand for health services and, of course, drugs (Bennett and Viroj 1994:5). Informal drug sellers meet people’s demands for drugs at the community level by obtaining drugs from this expanding commercial drug sector. The existence of the informal sector does not necessarily mean a shortage of drugs in the formal sector. In fact, drugs available in both sectors are characterized as plentiful. This situation can be compared to that of the Philippines (Tan 1996).

The proliferation of the informal pharmaceutical sector in most developing countries is not a simple phenomenon. Its existence seems to lie in the complex relationships between economic, political and socio-cultural factors, nationally and internationally¹. As Van der Geest et al. have pointed out, the failure of the state’s policy is usually one cause. Flaws in the health services management leading to the people’s inaccessibility to professional services, chronic drug shortages, and low paid health workers result in a situation that will ‘force people into a self-help culture of medicine and create space for the development of an informal medicine market’ (Van der Geest et al. 1996: 163-164). However, one can not view the failure of the state’s policy in most developing countries in a vacuum. The irrefutable role of the pharmaceutical multinationals in the shaping of drug policy in developing countries is too obvious to be unnoticed (Tan 1988; Mamdani 1992: 10-11; Kanji 1992:71-74). The fact that, for example, the Essential Drug Policy, although it has been welcomed globally, has not been successfully applied in the private sector is undoubtedly supporting the above conclusion (Kanji and Hardon 1992:92-93). Perhaps, Van der Geest’s remark (1991a:145) is very suitable to put here:

"The informal sale of medicines is in the interest of the legitimate industry. The informal medicine trade in Cameroon may not be very large, but in some other 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".

Van der Geest’s reference to Thailand proves to be very relevant. As we will see in Chapters 3, 4 and 5, the value of pharmaceuticals sold through pharmacies and village stores in Thailand is remarkable. The market value of the over-the-counter (OTC) drugs only, for instance, was estimated as high as 1.5 billion baht (60 million US dollars; 1990 value) or about ten percent of the total value of drugs locally
Use of modern medicines

Self-Medication: The main health care system in developing countries

Self-medication, the use of modern pharmaceuticals in self-care without consulting a doctor (Hardon 1991:9), is the most important aspect of the popular health culture appearing everywhere. Traditionally, it consists largely of taking home-made, usually herbal, medications. Presently it is increasingly complemented or replaced by the use of industrially manufactured pharmaceuticals (Kleinman 1984; Van der Geest 1987a).

Self-medication, according to Van der Geest (1987a:295; 1996: 164-165), is a self-evident act. It is a non-decision, natural, convenient, economic and pragmatic. Self-medicating practices create both self-reliance and dependency at the same time. They let individuals become free from the influence of others (i.e. family members, healers etc.) but increase dependence on the drug industry (Van der Geest and Whyte 1991:340; Van der Geest 1987a:300). At the same time, the modern medicines' attributes-- their perceived innate power, thingness, liberating effects, and embedded social values (i.e. as a symbol of modernity) etc.-- (Whyte and Van der Geest 1991; Van der Geest et al. 1996) cause them to be perfectly suited to one’s self-medicating endeavors. That explains why it has been increasingly reported as a pervasive mode of health care worldwide.

The marked roles of modern pharmaceuticals in people’s self-medication have also become a worrying concern internationally. The easy accessibility of dangerous and non-essential drugs amidst weak state control and poor coverage of health services results in a rampant irrational use and misuse of pharmaceuticals worldwide (Melrose 1983; WHO 1988b; Hardon et al. 1991; Hardon and le Grand 1993). Studies from developing countries since the 1980s have consistently revealed these facts. The irrational use of pharmaceutical products such as antibiotics, analgesics, vitamins and injections is commonly found. Table 1.2 below shows such findings of some selected studies.
Table 1.1  Self-medication with Modern Drugs in Selected Studies

<table>
<thead>
<tr>
<th>Study</th>
<th>Results</th>
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<tbody>
<tr>
<td>Hardon, 1987: Philippines; one rural community;</td>
<td>80% of infant illness episodes treated without medical advice; 50% of which were treated with modern drugs including prescription-only.</td>
</tr>
<tr>
<td>Haak, 1988: Brazil; two urban communities</td>
<td>118 episodes studied; 75% medicated without doctor’s advice; 30% of drugs used were banned, withdrawn, or severely restricted.</td>
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<tr>
<td>Le Grand &amp; Sringernyuang, 1989: Thailand; four rural communities</td>
<td>1,755 episodes recorded; 70% initially self-medicated; half were self-medicated with modern drugs.</td>
</tr>
<tr>
<td>Hardon, 1991: Philippines; two urban communities</td>
<td>1,411 episodes studied; 92% treated without doctor’s consultation; 50% treated with modern drugs.</td>
</tr>
<tr>
<td>Adome et al., 1996: Uganda</td>
<td>1,344 episodes studied; 73% self-medicated; 67% of antibiotics, 64% of chloroquine, and 64% of injections were administered without advice of trained health workers.</td>
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Self-medication and influence of commercial sector

The remarkable role of the commercial drug sources in people’s (self) medication has been confirmed by a number of studies. Community drug use studies in Bangladesh (Ashraf et al.1982), Thailand (Le Grand and Luechai 1989), Philippines (Hardon 1991), Pakistan (Rasmussen et al. 1996) and Uganda (Adome et al. 1996) support such a conclusion (see Table 1.1). What can be drawn from the findings of these studies is that drugs from informal sources comprise about one-third to three-fourths of self-medicated medicines.

Table 1.2  Role of drugs from informal sector in self-medication

<table>
<thead>
<tr>
<th>Country</th>
<th>Study</th>
<th>% of medications obtained through informal sector</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh*</td>
<td>Ashraf, Chowdhury, Streefland 1982</td>
<td>40-50</td>
<td>384 episodes</td>
</tr>
<tr>
<td>Thailand*</td>
<td>Le Grand and Sringernyuang 1989</td>
<td>55</td>
<td>1,755 episodes</td>
</tr>
<tr>
<td>Philippines*</td>
<td>Hardon 1991</td>
<td>50</td>
<td>1,411 episodes</td>
</tr>
<tr>
<td>Pakistan**</td>
<td>Rasmussen, Rahim, Streefland and Hardon 1996</td>
<td>33</td>
<td>1,068 episodes</td>
</tr>
<tr>
<td>Uganda***</td>
<td>Adome, Whyte, Hardon 1996</td>
<td>77</td>
<td>2,269 pharmaceutical treatments</td>
</tr>
</tbody>
</table>

The commercial pharmaceutical sector stimulates people's self-medication behavior. As Hardon (1991:2) describes, 'self-medication is profitable to the pharmaceutical industries which stimulate demand through advertisements designed to reinforce popular ideas on illness and health.' In a similar manner, using the term 'pharmaceutical schismogenesis', Nichter and Vuckovic (1994a:1518) view the relationship between the drug industry and people's drug demand as an endlessly reinforcing process: supply stimulates demand and demand then creates supply.

Medicine marketing increases demand for the medication, prompting a growth in its supply and the entrance of alternative products into the market. This in turn fosters increased visibility of the problem, and a concomitant rise in problem consciousness and felt need for medicines... (The pharmaceutical industry)...capitalizes upon the microeconomic concerns of the practitioners and collective anxieties of lay consumers. Through this complex and looping relationship the creation of demand for new drugs and the production of new drugs in response to the newly created demand can happen endlessly...The role of the pharmaceutical industry in schismogenesis involves filling supply as well as fostering demand... (Nichter and Vuckovic 1994a: 1518).

A similar process appears in Ferguson's study (1991) in El Salvador. She views the role of the commercial pharmaceutical sector as having produced a type of medicalization which she terms commerciogenesis- the process by which people are increasingly dependent on pre-packed medications manufactured by multinational firms and on 'a range of agents and institutions that make the products available' (Ferguson 1991:23).

Self-medication, as a natural and self-evident act (Van der Geest et al. 1996: 164) is fertile soil for the expansion of the drug business. It creates people's demand for drugs resulting in the expansion of the pharmaceutical industry. Generally speaking, benefits the people have gained from the commercial drug sector are obvious. It helps make medicines more within reach in the contexts where the public health sector fails to do so and adds more therapeutic choices even when other treatment alternatives are already available. In short, it facilitates people's self-medication.

Advantages the people gain from the informal drug providers, compared to that of the formal sector, are considerable. Its practicality, close or no social distance,
and socio-psychological comfortability are among factors explaining their popular use (Van der Geest 1981:211-213). Because of these reasons, the existence of informal drug sources, though considered 'illegal' by the professional standard, is largely normal and culturally accepted for the local people (Van der Geest 1982). Its marked role seems to lead a researcher to conclude that ignoring the informal sector is ignoring the need of the people (Kessels 1988 cited in Hardon and le Grand 1993: 10).

**Patterns of self-medication and cultural re-interpretation**

A major insight gained from previous studies in developing countries is that lay people, in using drugs, rely upon their own rationalities which at times may contradict those of biomedical professionals. Such rationales guide lay people in what, why, how and when certain medicines are to be used. In other words, they provide criteria for choosing, administering and evaluating efficacy of drugs.

Cultural reinterpretation- the process by which people apply traditional criteria for therapy choice and traditional concepts of efficacy to modern pharmaceuticals- (Bledsoe and Goubaud 1991; Hardon 1991:5) is apparently a common phenomenon. Modern drugs are largely perceived in relation to prevailing traditional beliefs. Traditional medical concepts relating to disease etiology and efficacy; physical characteristics of medicines such as shape, color, form etc., play important roles in the way drugs are used (Logan 1973; Bledsoe and Goubaud 1991; Nichte r 1997). In the Philippines and India, for instance, the idea of compatibility is similarly found being used by lay people for choosing drugs and explaining the drugs' efficacy (Nichter 1989: 190-210; Hardon 1989; 1992).

However, in the context of social change, the cultural reinterpretation of medicines is viewed as possibly having a new form. Nichter and Vuckovic mention the process by which the public becomes increasingly concerned about two different qualities in the same product such as 'modern and traditional' and 'safe but powerful'. They call it the 'double think' concept. Such concerns, according to Nichter and Vuckovic, may create a new cultural reinterpretation of medicines as well as encourage the drug industry to make products and marketing techniques that are more responsive to these people's demand (Nichter and Vuckovica 1994a:1518-1519).
Self-medication and the commodification of health

The pervasiveness of people's self-medication with modern pharmaceuticals can also be viewed as a phenomenon of health commodification manifested by the process in which 'people tend to treat medicines as commodities that one needs to consume to obtain and maintain a state of health' (Hardon 1991:6).

The tendency of people to rely more and more on pharmaceuticals has been observed globally. In the present consumeristic world pharmaceuticals are consumed much like other commodities. In the modern materialistic way of life commodities have increasingly penetrated nearly every aspect of human life including health. People have become more and more reliant on medicines like they are on other commodities to help ease their day-to-day difficulties. Medicines have been unconsciously perceived as synonymous to health; the idea that no cure for disease is possible unless drugs are taken has been increasingly evident. Promotion activities of pharmaceutical enterprises are believed to play a significant role in this regard as they 'encourage the use of drugs as the answer to all kinds of problems which manifest disease symptoms' (Hardon 1991:8). Like Hardon's view, Christakis et al. (1994: 291) state that:

In the developing world, biomedicine is yielding control of one of it most powerful and distinctive features- its pharmacopeia- to local pharmacists, traditional healers, and patients themselves. Owing to international and local commercial practices, the proliferation of pharmaceuticals is responding to the commodification of stress and distress as well as the practice of taking medicines for every problem. It is certainly responsible for a considerable amount of pharmacogenic illness in developing countries.'

The proliferation and widespread availability of pharmaceutical products can have profound effects on how people view and deal with life's discomforts. Experiences people learn from drug advertising and drug taking may result in the changing of their minds and deeds towards ill health management. Medicine proliferation leads people to believe that more and more of their discomforts, infirmities, and impairments are curable (Nichter and Vuckovic 1994a:1510). Transformations in socio-economic status often lead to changes in the range and recognition of health problems contingent upon one's ability to pay for medicines. The
tendency that ‘tolerance for uncomfortable symptoms which previously were permissible has been reduced, while the inclination to interpret such symptoms as pathologic and treatable has increased’ is, to a certain extent, influenced by pharmaceutical proliferation (Nichter and Vuckovic 1994a:1510). This tendency coupled with the effects of product marketing of drug firms promising ‘fast cure’ may profoundly affect health care seeking, demand for polypharmacy and the timing as well as quantity and form of medication consumed. Additionally, change in some cognitive aspects such as the conception of which bodily state is considered as normal or ill health and when treatment actions should follow if ill health is recognized can be affected by drug proliferation as well.

One consumers’ behavioral trend which has been observed in many developing countries is a desire for products containing both traditional and modern attributes. Such desire influences consumer demand for products which in turn drives advertising (Nichter and Vuckovic 1994a:1518). The case of Ayurvedic medicines marketed in English names as described by Nichter and Vuckovic is a good example. However, such a notion of ‘double-think’ can appear the other way around: modern drugs are named, produced, and marketed using local traditional concepts. In rural Thailand, especially in the northeastern area, some local illness concepts, such as padong, an adult syndrome, kin phit, a women’s illness, and sang, a childhood illness, have been apparently used for naming modern products (see Chapter 7,8).

In addition, changes in economic life such as working conditions and the increase of income may also determine the extent and form of demand for medicines and health care services. Nichter and Vuckovic (1994a:1517) argue that, for certain groups of people such as subsistence level workers and busy entrepreneurs alike, their response to ill-health and required treatments in the socially transforming context can be very much economically as well as practically rationalized. (These groups of people) ‘often have little time for sickness and demand medications which provide them with at least a state of minimally functional health required to complete work tasks. They demand palliative treatment which is not overly time consuming to acquire and which is provided in sufficient quantity so that replenishing supplies is not burdensome’ (Nichter and Vuckovic 1994a:1517). This argument seems to be applicable in various situations including Thailand (Bennett and Viroj 1994: 5-6).
Summary

This chapter introduces key concepts that guide the organization of this study by reviewing previous studies on the situation of modern drug availability in developing countries. With respect to the distribution side, highlighted of the review are that: 1) the informal sector is the most important channel where modern drugs are accessible by the people; 2) there are various kinds of modern drugs including the prescription-only found available in this sector; 3) actors in the informal sector appear in various faces including different kinds of illegal outlets; 4) in some formal channels, the prescription-only drugs are widely obtained without professional supervision; and 5) the existence and function of the informal sector, in actuality, cannot be separated from that of the formal one.

Regarding the use aspect, it is concluded that: 1) self-medication with modern pharmaceuticals is the most important form of health care in developing countries; 2) most of the drugs medicated in people’s self-care practices are from the informal sector; 3) in using drugs, people rely on their own traditional medical explanatory framework to choose drugs and evaluate their efficacy; and 4) amid the societal changes, people have become more and more dependent on drugs due to the changes in the perception on health and illnesses caused by the changes of socio-economic lives and the proliferation of drug industry.

Note

1 This does not mean, however, that the frontier of the medical system, as termed by Streefland (1985, 1994), has only the expansive direction. Streefland (1994) argues that the dynamic of medical systems, both at the centers or peripheries (frontiers) may be characterized as expanding, contracting and fragmented. In some developing countries, due to global and national processes, fewer drugs are available to the public leading to the contracting characteristics (see Streefland 1985:1151-1159; 1994: 210-215).