

# **Financing drugs in South-East Asia**

**Health Economics and Drugs  
DAP Series No. 8**

**Report of the second meeting of the  
WHO/SEARO Working Group on Drug Financing**

**World Health Organization  
Action Programme on Essential Drugs, Geneva  
Regional Office for South-East Asia, New Delhi**

WHO/DAP/98.15  
SEA/Drugs/140

# **Financing drugs in South-East Asia**

**Health Economics and Drugs  
DAP Series No. 8**

***Report of the second meeting of the  
WHO/SEARO Working Group on Drug Financing***

Yogyakarta, Indonesia  
24-28 November 1997

***Prepared by:  
Budiono Santoso, Kin Shein, Sri Suryawati***

***Karin Timmermans, Germán Velásquez***  
**Action Programme on Essential Drugs, Geneva**  
**Regional Office for South-East Asia, New Delhi**

## **Acknowledgements**

The WHO Working Group on Drug Financing of the Regional Office for South-East Asia and the Action Programme on Essential Drugs would like to thank G. Grayston and J. Sawyer for their editorial contribution and M. Clarke and K. O'Leary for their assistance with the layout of this document.

---

in any form or by any means - electronic, mechanical or other - without the prior permission of WHO.

The views expressed in documents by named authors are solely the responsibility of those authors.



# Contents

Abbreviations and acronyms .....	iii
Executive summary.....	1
<b>1. Introduction .....</b>	<b>12</b>
<b>1.1 Opening session .....</b>	<b>12</b>
<b>1.2 Objectives of the second meeting .....</b>	<b>12</b>
<b>1.3 Message from the Regional Director .....</b>	<b>12</b>
<b>2. Country presentations on drug financing.....</b>	<b>19</b>
<b>2.1 Indonesia.....</b>	<b>19</b>
<b>2.2 Myanmar .....</b>	<b>21</b>
<b>2.3 Nepal .....</b>	<b>24</b>
<b>2.4 Thailand .....</b>	<b>29</b>
<b>3. Field visit: Sleman district .....</b>	<b>34</b>
<b>3.1 Descriptions of the health units .....</b>	<b>34</b>
<b>3.2 Results of the field visit .....</b>	<b>37</b>
<b>3.3 Summary.....</b>	<b>40</b>
<b>4. Drug financing issues.....</b>	<b>42</b>
<b>4.1 The role of the state in drug financing .....</b>	<b>42</b>
<b>4.2 Review of cost-sharing experiences.....</b>	<b>59</b>
<b>4.3 Experiences of the Myanmar Essential Drugs Project in drug         financing and sustaining availability of essential drugs .....</b>	<b>71</b>
<b>4.4 Drug financing and health reform .....</b>	<b>89</b>
<b>5. Country priorities for drug financing .....</b>	<b>95</b>
<b>5.1 Indonesia.....</b>	<b>95</b>
<b>5.2 Myanmar .....</b>	<b>95</b>
<b>5.3 Nepal .....</b>	<b>95</b>
<b>5.4 Thailand .....</b>	<b>97</b>
<b>6. Priorities for work group action .....</b>	<b>98</b>
<b>6.1 Increase efficient use of available budget.....</b>	<b>98</b>
<b>6.2 Reduce production and distribution costs.....</b>	<b>100</b>
<b>6.3 Policies/mechanisms to improve existing cost-sharing schemes         in the region.....</b>	<b>100</b>
<b>6.4 Mechanisms to reduce the cost/price of drugs .....</b>	<b>101</b>
<b>7. Conclusions and recommendations .....</b>	<b>103</b>
<b>7.1 Country priorities for action.....</b>	<b>103</b>
<b>7.2 Recommendations .....</b>	<b>106</b>

<b>Annex A: Agenda</b> .....	<b>108</b>
<b>Annex B: List of participants</b> .....	<b>111</b>
<b>Indonesia</b> .....	<b>111</b>
<b>Myanmar</b> .....	<b>111</b>
<b>Nepal</b> .....	<b>111</b>
<b>Thailand</b> .....	<b>113</b>
<b>WHO Secretariat</b> .....	<b>113</b>
<b>Annex C: References</b> .....	<b>117</b>
<b>Annex D: Evaluation of the meeting/priorities for the working group</b> .....	<b>120</b>
<b>Tables:</b>	
<b>Table 1: Growth of the Indonesian pharmaceutical market, 1992-1996</b> .....	<b>11</b>
<b>Table 2: Health facilities, December 1995</b> .....	<b>17</b>
<b>Table 3: Pharmaceutical profiles among countries</b> .....	<b>18</b>
<b>Table 4: Indicators for national health and financing</b> .....	<b>32</b>
<b>Table 5: Travel schedule</b> .....	<b>19</b>
<b>Table 6: State and corporate worth, 1994 (US\$ billion)</b> .....	<b>26</b>
<b>Table 7: State functions in the pharmaceutical sector</b> .....	<b>30</b>
<b>Table 8: Budget to finance local drug procurement (in Ks)</b> .....	<b>45</b>

## Abbreviations and acronyms

ASKES	State insurance for civil servants
BNMT	British-Nepal Medical Trust
CCSS	Costa Rican Social Security Fund
CHMF	Community health management and financing project
CMSD	Central Medical Stores Depot
ENT	Ear, nose and throat
GDP	Gross domestic product
GMP	Good manufacturing practice
GNP	Gross national product
HMG	His Majesty's Government
HPs	Health posts
ICD	International Statistical Classification of Diseases and Related Health Problems
INGO	International nongovernmental organization
INPRES	Special presidential instruction programme
JPKM	Jaminan Pemeliharaan Kesehatan Masyarakat
MEDP	Myanmar Essential Drugs Project
MOH	Ministry of Health
NCDA	Nepal Chemist and Druggist Association
NGO	Nongovernmental organization
PHCs	Primary health centres
PPP	Purchasing power parity
RDF	Revolving drug fund
TMO	Township Medical Office
UMN	United Mission to Nepal
UNICEF	United Nations Children's Fund
UNIPAC	UNICEF Packing and Assembly Centre (now known as UNICEF Supply Division)
VDC	Village development committee
VDF	Village drug fund
WTO	World Trade Organization



# Executive summary

## Background

This second meeting of the WHO/SEARO Working Group on Drug Financing was a follow-up to the first meeting held in Korat (Thailand) in November 1996. During these meetings, which it is planned to continue on a regular basis, members exchanged experiences on drug financing and policy.

## Objectives

The overall objective of the discussions at the second meeting was to ensure that essential drugs are available at the various levels of primary health care at affordable costs. The specific objectives were to:

1. increase efficient use of the available budget;
2. find ways and means of increasing the health and drug budget;
3. identify policies and mechanism(s) for improving existing cost-sharing schemes in the Region;
4. identify policies and mechanism(s) to reduce the cost of production, distribution, and the price of drugs.

## Drug financing, problems, and pricing policy in Member States

### Indonesia

With only 20% of the funds available in the country for drug expenditure, the public sector procured essential drugs for more than 70% of the population. The total budget allocated for essential drugs to be used in primary health care services was US\$ 90 million (in 1996). In 1997-1998 it increased to US\$ 170 million, or US\$ 0.85 per capita. Drugs are provided free of charge to the community, through primary health centres but not through hospitals. There is also a government health insurance scheme for civil servants and their families. Patients pay a very modest contribution for health care in health centres, but drugs are subsidized by the Government. In the private sector, total drug expenditure is around 19% (US\$ 5 per capita) of total health expenditure (US\$ 12 per capita). The growth of the pharmaceutical market from 1992 to 1996 was around 20% annually, which was in accordance with growth in health expenditure.

Allocation of financial resources is a major issue in a country with limited resources. Several factors influence the allocation and the use of resources,

including the free market system which involves manufacturers, health providers, and the community in various market segments.

Drug price control by the Government is only used for provision of drugs in the public sector. In the private sector, there is practically no pricing policy except the control on prices of generic preparations, through the Generic Drug Programme.

## **Myanmar**

The main source of drug financing in the public sector is government revenue. The budget allocated from the health department for drugs from 1995 to 1996 was Ks 47.20 million. In the National Health Policy, exploring and developing an alternative health care financing system was clearly defined. Thus some alternative drug financing mechanisms have been adopted and implemented in hospitals and in some townships, i.e. user charges for selected drugs in hospitals, and user charges for essential drugs in project townships. There are two sources of drug financing in the private sector: private household and community contributions. Government health institutions are allowed to accept donations. Many townships have successfully raised trust funds for use in the overall development of institutions, including purchase of drugs.

The main problems in drug financing in Myanmar include: (1) the increasing price of drugs; (2) the limited budget allocation for drugs; and (3) the slow progress in decentralizing the drug financing system.

The price of drugs should not be higher than on the outside market. The Government exempted 76 essential drugs items from commercial tax and custom duties, so that its citizens could enjoy a proportional reduction in the price of drugs.

## **Nepal**

Drug financing in the public sector comes under the health expenditures of the Ministry of Health (MOH) and other government agencies involved in providing health care services. The MOH covers preventive, curative and promotional health services. In fact, the MOH has the major share of the Government's health budget, constituting over 90% of public health expenditure. It is estimated that out of the total budget allocated for health care, 30% goes to the procurement of drugs. Drugs are distributed free of charge to clients in the public sector health facilities. Large hospitals, managed by a semi-autonomous hospital management committee, can sell drugs at either the subsidized or the full price.

Private sector drug financing includes household expenditures, private nursing home investments and drug funds from nongovernmental organizations (NGOs). Most Nepalese usually obtain the majority of their drugs from the private sector. Private nursing homes, doctors in private clinics and other health practitioners prescribe medicines to patients who must buy them at full price.

Various cost-sharing schemes exist in drug supply, i.e. the HMG/WHO Community Drug Supply Scheme in the public sector, the Britain Nepal Medical Trust-supported Hill Drug Scheme in the private sector and the United Mission Lalitpur Medical Insurance Scheme.

The main problems in drug financing include:

1. public sector budget limitations;
2. inequity in geographical distribution of drug wholesalers and retailers (remote areas have no wholesalers or retailers);
3. perception of health services as the Government's responsibility;
4. lack of buying capacity in low-income and underprivileged groups;
5. lack of flexibility in government regulations to use the generated fund under some schemes (HMG/WHO);
6. inadequate skills and motivation of the Health Management Committee at village development committee level;
7. vested interested of paramedical health workers.

Public sector drug pricing depends on the method and quantity of purchases. For small local purchases, the cost may be at or close to retail prices. But for bulk purchases, significant hospital discounts and considerable price variations can be obtained through competitive bidding. Furthermore, it is not necessary to include transportation costs in overall public sector supply because the Government is expected to cover transportation costs.

The Nepal Chemist and Druggist Association (NCDA) prepares a list of recommended prices and distributes it to all retailers. The National Drug Policy recommends creating an official price list, but a fixed price for drugs has not yet been established. The benefits for wholesalers are based on the reductions they obtain from the factory on the written Indian price. The retail price equals the wholesale price plus 16%. The cost of delivery must be included in the retail price. For non-motorable remote areas, a reasonable extra transport charge can be added. Drugs imported from other countries follow more or less the same guiding principle for pricing.

## **Thailand**

The public sector provides the budget for medical care through government health facilities, which includes drug expenses for the poor, schoolchildren, the disadvantaged, the elderly, government officials, and public enterprise employees and their families. Together with employees and employers, the public sector also pays an equal contribution to the Social Security Fund for insured workers. People who are not included in any medical benefit scheme have to pay out of pocket for their medical care and drugs from public or private facilities. Only a few people are covered by private insurance. Government officials who use private health facility services can obtain reimbursement for part of their inpatient care expenses.

The health card project is another voluntary health insurance scheme that is subsidized by the Ministry of Public Health. This project intends to cover those people in rural areas who qualify for neither low-income nor higher-income

medical benefits. Another scheme, the Workmen's Compensation Fund, is financed by employers' contributions for work-related sickness and death compensation.

Apart from difficulties in obtaining reliable information, the main problem in drug financing is that there are many schemes with different benefits which makes drug financing highly variable. This is coupled with the problem that about 30% of the population has no health care benefits at all.

## **Future priorities**

### **Indonesia**

- Proposing additional funds for the drug budget to pay for activities such as:
  - improving the coverage of hepatitis-B vaccination for newborn babies;
  - improving the coverage of the tuberculosis programme;
  - increasing the local government budget for drugs;
  - encouraging and enlarging the programme for community participation.
- Requesting WHO to elaborate guidelines for cost-sharing schemes (public-private mix) for countries participating in the next meeting. This meeting should:
  - discuss the development of national guidelines;
  - formulate an action plan;
  - include field visits.
- Requesting WHO or other agencies to provide assistance for a pilot cost-sharing project.

### **Myanmar**

- Strengthening and extending cost-sharing activities.
- Improving financial management through training.
- Promoting the plan of action for drug financing and the development of drug financing mechanisms, through presentations and discussions on models for financing systems. This will be done in consultation with local hospitals and drug stores.
- Helping to coordinate external assistance.
- Requesting WHO to provide technical tools for the review of the drug financing situation in each country.

### **Nepal**

- Convincing higher authorities as well as users about the benefits of cost-sharing schemes.
- Reviewing the progress made between this meeting and the next.
- Promoting the exchange of experience between Member States.

- Supporting the development and use of guidelines and monitoring systems for drug financing, and providing updates and ideas.

## **Thailand**

- Strengthening essential drugs programmes in the public and private sectors.
- Holding a follow-up meeting.
- Requesting WHO to provide technical support in the areas of operational research, provision of documents, and short-term consultancies.

## **Recommendations**

1. Member States should strengthen national and local drug-financing schemes to ensure equity and access (availability and affordability) in relation to essential drugs.
2. Ministries of Health, in collaboration with Ministries of Finance (treasury, other relevant ministries), have the obligation to ensure adequate financing for essential drugs to meet the basic needs of the population.
3. If cost-sharing is introduced, revenues should be used to supplement government allocations for health and drug financing, and not as a substitute for government financing of health and essential drugs. Furthermore, policies and guidelines should be formulated by Ministries of Health to define the objectives, responsibilities and methods of operation for cost-sharing schemes.
4. Financial and other economic mechanisms to promote rational use of drugs should be identified.
5. Ministries of Health should explore ways to achieve optimal public and private financing of health and drugs in order to achieve equitable to access and quality of care.
6. Appropriate pricing policies should be formulated by governments to ensure that drug prices, especially for essential drugs, are affordable for the majority of the population.
7. WHO will assist in the identification and evaluation, when possible, of the different health and drug pre-paid schemes existing in the four Member States which could be used as strategies to develop national social health insurance systems.

## **Workshop evaluation**

Participants were asked to indicate their top five priorities. It turned out that one participant indicated “priority 1” for every topic; this person’s form was excluded. Six participants completed the form exactly as requested, and two participants gave ratings for each sub-topic. The issues of highest priority were cost-sharing for health and drugs, insurance for health and drugs, public financing, health reform and global change, and drug pricing policies and mechanisms.

**The next meeting** will be held in Kathmandu (Nepal) during the last week of October 1998.



# 1. Introduction

## 1.1 Opening session

The meeting was opened by Dr Robert Kim-Farley, the WHO Representative for Indonesia. Dr Kim-Farley thanked the MOH, Republic of Indonesia, for hosting this meeting, and the Directorate of Drug Control and the Centre for Clinical Pharmacology and Drug Policy Studies of Gadjah Mada University for arranging the meeting. He then read the message from Dr Uton Muchtar Rafei, the Regional Director of WHO/SEARO (the full text of the Regional Director's message is contained in Section 1.3). Dr Wisnu Katim, the Director General of Food and Drug Control of Indonesia, MOH, also welcomed participants and officially opened the meeting.

After the opening speeches, brief presentations were given by Dr Germán Velásquez of WHO/DAP, Geneva and Dr Kin Shein, the WHO/SEARO Regional Adviser on Essential Drugs and Vaccines, on the background and the objectives of the working group. The opening session concluded with the participants introducing themselves and the nomination of the Chairperson, Vice-Chairperson and Rapporteur for the meeting.

## 1.2 Objectives of the second meeting

### Overall objective

To ensure that essential drugs are available at the various levels of primary health care at affordable cost.

### Specific objectives

1. To increase efficient use of the available budget.
2. To find ways and means of increasing the health and drug budget.
3. To identify policy and mechanism(s) for improving cost-sharing schemes existing in the region.
4. To identify policies and mechanism(s) for reducing the cost of production, distribution, and the price of drugs.

## 1.3 Message from the Regional Director (Dr Uton Muchtar Rafei, Regional Director WHO South-East Asia Region)

Distinguished Participants, Dear Colleagues, Ladies and Gentlemen,

I am pleased to welcome all of you to this second meeting of the WHO/SEARO Working Group on Drug Financing. I wish to thank the MOH, Republic of Indonesia, for hosting this important meeting; the Directorate of Drug Control, and the Centre for Clinical Pharmacology and Drug Policy Studies of the Gadjah Mada University for making excellent arrangements.

In my book entitled *Partnerships: a new health vision*, I have expounded on the need for building partnerships for health. This is a belief I have held for a long time, based on my intimate knowledge of the health concerns of the people in the South-East Asia Region. We need to look beyond the traditional roles of the health care agencies and promote the cause of health with all those whose decisions and actions make direct impacts on people's health. It is important to proactively seek partnerships to make health care a shared concern between sectors, between organizations, between groups, and between people.

Partners that the MOH will need are the Ministries of Planning, Finance, Education, and Science and Technology, as well as regulatory bodies, professional groups, consumer groups, research institutes, the private sector, the mass media and international agencies.

Health issues should bring together various sectors and organizations to find practical solutions through innovative approaches and new strategies. One of the major challenges is privatization of health care, which is rapidly expanding in some countries. This is resulting in the private sector absorbing a major share of the public sector health services because of the latter's inability to cover the ever-growing population. Coupled with this is the limited capacity of the public sector to utilize trained human resources and give them comparable remuneration.

Privatization of health care has led to the increased influence of market forces on health. The many technologies making their debut in the health care market, such as genetic engineering, micro-surgery, medical imaging and custom-designed drugs, are expensive methods of treatment. These are, therefore, out of reach for the majority of our people.

There are some crucial elements which must be taken into account while developing policies and guidelines for an ideal public-private mix in health. These are: (1) policies must aim at a judicious mix of public and private services, (this can be determined on the basis of local situations and needs); (2) establishment of regulatory mechanisms, standard-setting and a balanced mix of human resources are urgent requirements; and (3) uncontrolled use of market-driven policies can have a negative impact on ensuring equity.

Some of the outcomes expected from an ideal public-private mix are development and production of low-cost, high-volume output of drugs, appropriate technologies for their manufacture, and development and application of a regulatory mechanism that will ensure the viability of both the public and private sectors in a complementary way.

WHO/SEARO has published an information kit on “Privatization of Health Care” which is in conformity with the increasing interest about the subject amongst policy-makers, health planners, senior health administrators and others in the countries of the South-East Asia Region.

Many see the process of privatization as a remedy for the problems inherent in the public sector financing of drugs, and a way to strengthen their policies and strategies, leading to an improvement in the national drug supply situation. It is considered that private endeavours are free from political constraints normally

associated with the public sector run by bureaucracy, and that privatization will lead to improved resource management, thereby resulting in efficient and effective delivery of services. There is also the belief that privatization could free scarce government resources which could be utilized to improve provision of drugs to the poor.

On the other hand, it is also pointed out, in opposition to privatization, that imperfect market conditions developing in the health sector will lead to outcomes such as over-supply of services and excessive investigations, leading to cost escalation and unnecessary cost to patients. Concern is also expressed that privatization will lead to wide disparity in people's ability to access quality health care.

The changing pattern of financing of drugs, from a system where the public sector has predominated for a long time, to a system where the private sector becomes increasingly important, poses new challenges. The question as to what constitutes an appropriate mix of public and private sectors in the provision and financing of drugs in a health care system is for the policy-makers, programme managers and other interested parties to take into consideration in the formulation of their health programmes.

As you are aware, the first meeting of the WHO/SEARO Working Group on Drug Financing was held at Nakhorn Ratchasima, Thailand, in November 1996. One of the outcomes of this meeting was the identification of key issues relating to country priorities in drug financing.

Four countries, namely Indonesia, Myanmar, Nepal and Thailand, have prioritized issues that are important in financing of drugs. These are: having an adequate budget for drugs; equity of health services for the poor; improvement of government subsidies; proper policies and guidelines for cost-sharing schemes; sound financial management; purchase of quality drugs at competitive prices and improvement of rational use of drugs through financial mechanisms and control of drug prices.

Regular access to drugs can result from a satisfactory relationship between three basic factors: the need for drugs; cost of meeting this need, and availability of financial resources to meet this cost. As the health sector budget in general, and its drug budget in particular, are usually inadequate to meet the requirement for drugs, it is important, first of all, to make the most efficient use of the available resources. This must be complemented by improving efficiency in drug selection, procurement, distribution and use. Other options such as increased funding from government sources, introduction or strengthening of cost-sharing, health insurance covering reimbursement for drugs, and donor support either from international agencies or nongovernmental organizations, may complement the basic requirement of improved efficiency in financial as well as drug management.

As the basic issues which are relevant to the Member States in drug financing were identified in the first working group meeting, it is now opportune to review the progress made in the prioritized areas and identify steps that can be taken to improve the situation.

Among the seven priority areas identified by the first meeting, I wish to touch upon three areas which are high on the priority list.

First is the issue of public financing and drug financing indicators. Financing of drugs by national and local government budgets has been seen in a number of instances to be inadequate to meet national drug requirements. Several approaches to increase public financing of drugs have been employed for enhancing the drug budgets. Some of these approaches relate to political benefits accruing from a visible impact of having no shortage of life-saving and essential drugs; a comparison of per capita drug budgets with other countries at similar stages of socioeconomic development and disease burden; and a demonstration of efficiency in drug management both at central and peripheral levels. National drug finance indicators such as per capita drug consumption, comparative disadvantage of the drug budget in the overall national health budget, disproportionate use of funds for essential drugs versus more costly preparations are useful indicators to support the case for increasing public financing of drugs.

The second very highly prioritized issue is respective roles of the public and private in the pharmaceutical sector in the context of health care reforms and global change. Most countries in the Region have experienced increased private sector involvement, which is mostly due to tax benefits given on import of essential drugs, as well as absence of an appropriate policy on privatization. However, a variety of policies have been introduced by various countries. These include tax relief to encourage private health insurance, provision of private health care facilities in public institutions, allowance of private practice in the public sector, and promotion of preventive care in the private sector. More common approaches are implementation of health insurance and user charges as alternative sources of drug financing in health care, contracting transport services for distribution of drugs, and increasing the role of the private-for-profit and private-not-for-profit organizations in promoting the availability of essential drugs. Another area that requires a better focus is the regulation of drug costs or prices, and the quality, quantity and distribution of drugs to various health services.

The third area which has been given very high priority is drug pricing policies and mechanisms, including control of drug manufacturers' prices. Governments can use different options for reducing the cost of drugs to the consumer. Some of these options are: (1) a direct price control can be imposed; (2) free competition can be allowed so that open-market economic forces reduce the cost of drugs; (3) the costs of basic and essential drugs can be subsidized; reimbursement mechanisms can also be introduced through health insurance schemes; (4) the use of generic drugs can be promoted; and (5) economical prescribing can be instituted and measures applied to minimize costly prescriptions.

The above-mentioned cost-containment approaches have been introduced in some developed countries where drug costs in national health services had been increasing. These methods, singly or in combination, could be applied to any national situation to bring down the costs.

Finally, I wish you all success in your efforts to find solutions to the problems most of our countries face with regard to drug financing. I also wish you all a fruitful meeting and a pleasant stay in Yogyakarta.

## 2. Country presentations on drug financing

### 2.1 Indonesia (presented by Dra Andayaningsih)

#### General information

Indonesia has five main islands and 13,677 small islands, with an area of 5,193,250 sq. km, 39% of which is land and 61% sea territory. Indonesia is the fourth most populous country in the world: in 1997 its population was estimated to be 200 million, with an annual growth rate of 1.34%.

The average economic growth rate was 6.8% per annum, with an inflation rate of 8.7% per year during the 1980s. Per capita income had increased from US\$ 70 in 1967 to approximately US\$ 1,023 by 1996. The percentage of people living below the poverty line decreased from 60% (70 million) in 1970 to 13.7% (25.9 million) in 1993.

#### Drug financing

With only 20% of the funds available in the country for drug expenditure, the public sector procured essential drugs for more than 70% of the population. The total budget allocated for essential drugs to be used in primary health care services was US\$ 90 million (in 1996). From 1997 to 1998 it increased to US\$ 170 million, or US\$ 0.85 per capita. Drugs are provided free of charge to the community, through primary health centres and public hospitals. There is also government health insurance for civil servants and their families. Patients pay a very modest contribution for health care in health centres and public hospitals, but drugs are fully subsidized by the Government.

In the private sector, the total drug expenditure was around 19% (US\$ 5 per capita) of the total health expenditure (US\$ 12 per capita). Between 1992 and 1996 the pharmaceutical market grew around 20% annually (see Table 1), which was in accordance with the growth in health expenditure.

**Table 1. Growth of the Indonesian pharmaceutical market, 1992-1996**

Sector	1992	1993		1994		1995		1996	
		US\$	Growth	US\$	Growth	US\$	Growth	US\$	Growth
Pharmacies	323.7	404.4	24.9%	441.4	9.2%	525.2	19.0%	610.8	16.3%

Financing drugs in South-East Asia

---

<b>Drugstores</b>	196.3	241.9	23.3%	266.9	10.3%	339.6	27.2%	413.0	21.6%
<b>Hospitals &amp; institutions</b>	106.3	127.6	20.0%	140.8	10.3%	174.8	24.2%	206.6	19.3%
<b>Total</b>	626.3	773.9	23.6%	849.1	9.7%	1,039.6	22.4%	1,232.4	18.6%

## **Main problems in drug financing**

Allocation of financial resources is a major issue in a country with limited resources. Several factors influence the allocation and the use of resources including the free market system which involves manufacturers, health providers, and the community in various market segments.

## **Drug pricing policies and/or mechanisms in the public and private sector**

Drug price control by the Government is used only for provision of drugs in the public sector. In the private sector, there is practically no pricing policy except the control of prices of generic preparations through the Generic Drug Programme.

## **2.2 Myanmar** (presented by Dr Myint Thaug)

### **General information**

Myanmar has an area of 676,577 square kilometres. Administratively, the country is divided into 14 states and divisions. There are 52 districts, 324 townships, 13,762 village-tracts, and 65,235 villages. The population is estimated at 46 million with a growth rate of about 1.87%. About 60% of Myanmar's population is aged between 15 and 59 years. There is a slight preponderance of females over males. The population density is 65 per sq. km, and 75% of the population resides in rural areas. The country's gross domestic product (GDP) was Ks 603,601 million from 1995 to 1996 (with a growth rate of 6.9%). The Government budget allocated in 1995-1996 was Ks 108,511 million for current expenditure and Ks 41,035 million for capital expenditure, amounting to a total of Ks 149,546 million.

### **Drug financing in public sector**

The main source of drug financing in the public sector is government revenue. The budget allocated by the health department for drugs from 1995 to 1996 was Ks 47.20 million. In the National Health Policy, exploring and developing alternative health care financing systems is clearly defined. Some alternative drug financing mechanisms have therefore been adopted and implemented in hospitals and in some townships.

### ***User charges for selected drugs in hospitals***

Cost-sharing drug shops are opened in hospitals, with 43 drug items supplied by the Central Medical Stores Depot (CMSD). Drugs are sold at maximum 15% profit margin on the original CMSD price. Among the cash recovered from the drugs, the actual or original CMSD cost of drugs has to be returned to the Government budget. The remaining cash can be used by the respective hospital drug shop for its further development. The total amount of cash recovered

from CMSD drugs was Ks 8 million for 1994-1995, Ks 12 million for 1995-1996, and Ks 12 million for 1996-1997.

***User charges for essential drugs in project townships***

**Myanmar Essential Drugs Project (MEDP)**

This project was started in 1989, and essential drugs distribution started in 1991, with the assistance of the Finnish Government. A cost-recovery scheme for drugs was introduced in January 1994. The MEDP is now implemented in 86 townships. Total cash recovered so far from 54 townships is Ks 23 million. This recovered cash is used as a revolving drug fund (RDF) for replenishing essential drugs supplies. So far, Ks 13 million have been used for essential drugs replenishment.

**Community health management and financing project (CHMF)**

With the assistance provided by the Nippon Foundation, and in close collaboration with UNICEF, the implementation of CHMF was started in 1994. Essential drugs were supplied by the Nippon Foundation. Sixty-six townships are now implementing a project whereby patients are charged only for drugs. The total amount of cash recovered from 44 townships so far is Ks 19 million. This recovered cash is used as RDF for replenishing essential drugs supplies. So far, Ks 3 million have been used for drug replenishment.

***Drug financing in private sector***

There are two sources of drug financing in the private sector.

**(a) Private household**

A household expenditure survey was conducted in Yangon from March 1978 to January 1979. It found that 2.48% of household expenditure was used for medical care. A similar survey conducted in 1989 showed a result of 2.58%, and a rural survey conducted in 1996 showed a result of 2.23%.

**(b) Community contribution**

Government health institutions are allowed to accept private donations. Many townships have successfully raised trust funds for the overall development of the institutions, including purchasing drugs.

***Main problems in drug financing***

The main problems in drug financing in Myanmar include: (1) increasing price of drugs; (2) limited budget allocation for drugs; and (3) slow progress in decentralizing drug financing.

***Drug pricing policies and/or mechanisms in the public and private sector***

The price of drugs should not be higher than those available on the outside market. The government has exempted 76 essential drugs items from commercial tax and custom duties, so that its citizens can enjoy a proportional reduction in drug prices.

## **2.3 Nepal** (presented by Dr K.B. Singh Karki)

### **General information**

Nepal is a Himalayan country lying between China and India. Its area is 168,000 square kilometres. Nepal has three geographical zones: cultivated flat land and forest in the southern belt, hills and valleys in the central belt, and

mountains in the northern belt. Transport and communications are extremely difficult in remote parts of the mountainous region. Essential goods usually take a long time to arrive. The cost of medicines and other basic necessities is often beyond the reach of the poor in these remote areas.

The administrative division of the country includes five development regions, 14 zones, 75 districts, 58 municipalities, 4,000 village development committees (VDCs) and 36,000 wards (nine wards per VDC). District health offices are responsible for organizing and managing district hospitals, primary health care centres (PHCs), health posts (HPs) and sub-health posts. Each VDC has one health facility (sub-health post).

## **Drug financing**

### ***Drug financing system in public sector***

Drug financing in the public sector comes under the government health expenditures of MOH and other government agencies involved in providing health care services. The MOH covers preventive, curative and promotional health services. In fact, the MOH has the major share of the Government's health budget, constituting over 90% of public health expenditure. It is estimated that out of the total budget allocated for health care, 30% goes to the procurement of drugs. Drugs are distributed free of charge to clients in public sector health facilities (with the exception of registration fees). Large hospitals, managed by semi-autonomous hospital management committees, can sell drugs at either a subsidized or the full price.

### ***Drug financing system in the private sector***

Private sector drug financing includes household expenditures, private nursing home investments and drug funds from NGOs. Total nongovernmental expenditure was around Rs 7 million in 1993-1994, and estimated at Rs 10,753 million (US\$ 185.4 million) for 1996-1997. Exact information on what percentage of this amount was allocated to the purchase of drugs and other consumable essential items is not available, but it is estimated at 30% (US\$ 55.52 million). Most Nepalese usually obtain the majority of their drugs from the private sector. Private nursing homes, doctors in private clinics and other health practitioners prescribe medicines for patients who must purchase them at full price. Self-medication is also common in many areas where patients go directly to drug retailers. Medicines are sold on the basis of an available prescription, or simply patient desire, or the advice of retailers when health personnel are not accessible. This practice only applies to non-restricted common medicines such as paracetamol and ointments for external application.

### ***Cost-sharing schemes in drug supply***

#### **1. HMG/WHO community drug supply scheme**

This scheme covers some of the cost for essential drugs at 122 HPs in 18 districts through registration fees. Cost recovery is 27.1%.

**2. Britain Nepal Medical Trust-supported**

Hill drug scheme: 30 small retail shops sell a limited number of inexpensive essential drugs at a fixed price in seven districts of the eastern region. This cost-sharing scheme, run in 33 health posts in 8 different districts of the eastern

region of Nepal, recovers some of the cost of essential drugs in the form of token registration fees or a per item (drug) charge for drugs prescribed in those health posts. The percentage cost recovery is 19%.

### **3. United Mission Lalitpur Medical Insurance scheme**

This scheme recovers part of the cost of essential drugs through insurance premiums. It functions in five HPs in the Lalitpur district. Cost recovery is 56.5%.

### **4. Others**

Several other small schemes generally supported by NGOs that usually charge token fees for registration or token per item fees for essential drugs operate in a small number of HPs.

### **5. Community drug programme**

A more extensive national community drug programme was designed by the MOH in collaboration with donors and is being implemented in three districts of Nepal. It aims at providing drugs to consumers at 15% below the local retail price and expects to fully recover drug costs with the provision of revolving funds under the control of local-level health management committees.

#### ***Main problems in drug financing***

1. Public sector budget limitations.
2. Inequity in the geographical distribution of drug wholesalers and retailers (remote areas have none).
3. Perception of health services as the Government's responsibility.
4. Lack of buying capacity in low-income and under-privileged groups.
5. Lack of flexibility in government regulations to use the generated fund under some schemes (HMG/WHO).
6. Inadequate skills and motivation of the health management committee at village development committee level.
7. Vested interest of health workers (paramedical).

#### ***Drug pricing policies and/or mechanisms in the public and private sector***

##### **Private sector**

The NCDA prepares a list of recommended drug prices and distributes it to all retailers. The National Drug Policy recommends creating an official price list, but a fixed price for drugs has not yet been established.

Prices are fixed on the following criteria:

1. for locally produced drugs: factory price plus 16% for the retailer;
2. for drugs imported from India, the wholesale price equals the Indian price (written on the box), converted into Nepalese rupees (1.6), plus 3.5% for customs and other charges.

With respect to the latter, the benefits for wholesalers are based on the deductions they obtain from the factory on the Indian price written on the box. Retail price equals the wholesale price (the wholesale price, plus an additional

1% custom duty and 2.5% handling charge for imported drugs) plus 16%. The cost of transport must be included in the 3.5%. For non-motorable remote areas, a reasonable extra transport charge can be added. More or less the same guiding principle for pricing is applied too.

### **Public sector**

Public sector drug pricing depends on the method and quantity of purchases. For small local purchases, the cost may be at or close to retail prices. But for bulk purchases, significant hospital discounts and considerable price variations can be obtained through competitive bidding. Furthermore, it is not necessary to include transport costs in overall public sector supply costs because the Government is expected to cover transport costs.

## **2.4 Thailand** (presented by Dr Porntep Siriwanarangsun)

### **General information**

In 1996, Thailand had a total population of 60 million. Per capita income had increased from US\$ 490 in 1960 to US\$ 1,570 by 1990 (World Bank, 1993). The economic growth rate was 8% per annum during the 1980s. Total health expenditure was 4.98% of GDP and per capita health expenditure was US\$ 72 in 1990 (WHO, 1994). Health expenditure was 5.9% of GDP in 1992, is growing more rapidly than GNP and is projected more rapidly than GNP and is projected to increase to 8.1% of the gross national product (GNP) by the year 2000. Direct household expenditure on health is three-quarters of total health expenditure (mainly for curative services). Expenditure on medical care as a percentage of monthly household income did not change significantly between 1981 and 1990. Drug purchases amounted to 21-32% of household expenditure on medical care from 1980 to 1990.

Health services are provided by both the public and private sectors. The public sector consisting of specialized hospitals, regional hospitals, provincial hospitals, community hospitals and health centres (as shown in Table 3) provides 70% of these services. In the private sector in 1995, 140 out of 430 (33%) private hospitals in Thailand were located in Bangkok. The number of private health facilities and drugstores is also shown in Table 2. In 1995, there were 4,319 pharmacies in Bangkok and 13,834 pharmacies in other provinces.

Funding for health care comes from public, private and other third-party payers. Twenty per cent of all funding comes from public sources such as the Ministry of Public Health (main source), while other ministries and public employee medical benefits come from other sources. Seventy-six per cent of health care funding comes from private households. A further 3% of the health care funding comes from other third-party payers such as the Workmen's Compensation Fund, Social Security Fund, and Private Insurance and State Enterprise Employees Medical Benefits. The remaining 1% comes

from foreign aid. However, a recent study that examined the national health account questioned the reliability of these figures.

**Table 2. Health facilities, December 1995**

Type — Public Health Facilities	Number	Type — Private Health Facilities	Number
<b>Bangkok</b>		<b>Bangkok</b>	
Specialized hospitals	24	Private hospitals	140
General hospitals	34	Private clinics	4,062
Health centres	61	Pharmacies	4,319
Sub-health centres	85		
<b>Other Provinces</b>		<b>Other Provinces</b>	
Regional/specialized hospitals	47	Private hospitals	290
Provincial/general hospitals	126	Private clinics	8,122
Community hospitals	708	Primary health care centres	62,240
Health centres (rural/urban)	9,471	Pharmacies	13,834

Source: The Eighth Five-year National Health Development Plan (1997-2001), Bureau of Health Policy and Planning, 1997.

### ***Drug system***

The Thailand National Drug Policy was established in 1981. It addresses the supply of safe and good quality drugs, availability of essential drugs, promotion of rational use of drugs, quality assurance, use of indigenous raw materials, and the use and promotion of herbal medicines. In the 1993 revision, three other objectives were added: the promotion of drug research, improvement of drug management, and legislation to protect consumers.

### **Drug financing**

Total drug expenditure in Thailand is estimated to range from 25,000 to 80,000 million baht annually, and is considered a major component of health care expenditure. The range is so wide because reliable data on the drug expenditure of Thai people are difficult to obtain. However, it is most often estimated that drugs account for 35% of all health expenditures.

Estimating the division between the public and private sectors in total drug expenditure is difficult. What is known is that the public sector provides the budget for medical care through government health facilities, including cover of drug costs of the poor, schoolchildren, the disadvantaged, the elderly, government officials and public enterprise employees and their families. Together with employees and employers, the public sector also pays an equal contribution to the Social Security Fund for insured workers. People who are not included in any medical benefit scheme have to pay out of pocket for medical care and drugs obtained from public or private facilities. Only a few people are covered by private insurance. Government officials who use private health facilities' services can obtain reimbursement for part of their inpatient expenses.

The health card project is another voluntary health insurance scheme that is subsidized by the Ministry of Public Health. This project intends to cover people in rural areas who qualify neither for low-income nor higher-income

medical benefits. Another scheme, the Workmen's Compensation Fund, is financed by employers' contributions for work-related sickness and death compensation.

### Main problems in drug financing

Apart from difficulties in obtaining reliable information, the main problem in drug financing is that there are many schemes with different benefits which make drug financing highly variable. This is coupled with the problem that about 30% of the population lacks any health care benefits.

**Table 3. Pharmaceutical profiles among countries**

	Indonesia	Myanmar	Nepal	Thailand
Population per physician	12,500	3,357	22,800	4,180 (1995)
Number of pharmacists	6,245	96	94	10,104 (1995)
Number of pharmacies	4,753	6,265		18,153 (1995)
public	0	155	4,140*	0
private	4,753	6,110	8,732**	18,153
Number of registered pharmaceutical products	15,154	2,810	6,440	32,195 (1996)
Essential drugs lists	320 (1994)	80	269 (1997)	372 (1996)
Number of drug importers (public and private)	96	40	1,100	562 (1996)
Number of local drug manufacturers	225	55		175 (1996)
Nationals	190	55		149
Internationals/foreign	35	0	29	26
Number of manufacturers of pharmaceutical raw materials	6	0	0	10 (1996)
Fees for drug registration (in US\$)	0	300	***	100 (1996)

\* In Nepal, all health institutions in the public sector have pharmacies. None of them is managed by a pharmacist. Dispensaries at each level, from national level hospitals to sub-health posts, have to be considered as pharmacies.

\*\* Pharmacies in the private sector include 65 NGOs/INGOs, 61 private nursing homes, and 8,606 drug stores.

\*\*\* \$0 for imported products, \$3 for domestic products at time of registration, valid for two years, and thereafter \$0.30 per product every year.

**Table 4. Indicators for national health and financing\***

Currency	Indonesia (Rupiah)	Myanmar (Kyat)	Nepal (Nepalese rupee)	Thailand (Baht)
<b>Indicators</b>				
population (million)	200 <sup>6</sup>	46	18.49 <sup>2</sup>	60 <sup>5</sup>
GDP per capita	1,023 <sup>5</sup>	1,130*	4.9	1,570 <sup>1</sup>
exchange rate (US\$)	3,600 <sup>6</sup>	6.14	59.05	25 <sup>7</sup>
<b>National health and drug expenditures:</b>	<b>Rupiah</b>	<b>Kyat</b>	<b>Nepalese rupee</b>	<b>Baht</b>
Government expenditure in health as % of GDP	2.0 <sup>2</sup>	0.46		5.9 <sup>1</sup>
Health as % of household expenditure	N/A	2.23		3 <sup>1</sup>
Drug (public and private) as % of health	19	2		21 <sup>1</sup>
<b>Public/private expenditures (US\$)</b>	<b>US\$</b>	<b>US\$</b>	<b>US\$</b>	<b>US\$</b>
Public share of health (%)	35 <sup>2</sup>	16**		20.4 <sup>1</sup>
Public share of drug (%)	20 <sup>2</sup>	19.3**		20-40

2. Country presentations on drug financing

<b>Per capita expenditures (US\$)</b>	<b>US\$</b>	<b>US\$</b>	<b>US\$</b>	<b>US\$</b>
Total on health	12 <sup>3</sup>	13**		72
Total on drugs	5 <sup>3</sup>	2**		21**
Public sector expenditure on health	3 <sup>2</sup>	2.08**		28 <sup>4</sup>
Public sector expenditure on drugs	0.85 <sup>6</sup>	0.38**		5.6**
<b>Expenditures in local currency</b>	<b>Rupiah</b>	<b>Kyat</b>	<b>Nepalese Rupee</b>	<b>Baht</b>
Total on health (million)	13,000,000	16,709		129,488.65 <sup>4</sup>
Total on drugs (million )	2,500,000 <sup>5</sup>	281		25,000-80,000 <sup>4</sup>
Public sector on health (million)	4,600,000	2,812		48,276 <sup>4</sup>
Public sector on drugs (million)	400,000	47.2		5,000**

<sup>1</sup>1990; <sup>2</sup>1991; <sup>3</sup>1993; <sup>4</sup>1994; <sup>5</sup>1996; <sup>6</sup>1997; <sup>7</sup>1990-1996.

\* 1995 real GDP per capita PPP\$.

\*\* Estimation.

### 3. Field visit: Sleman district

Seven health units were visited, with schemes ranging from community financing and private health insurance to cross-funding within private hospital networks and public finance funding mechanisms. All participants visited each unit. The allotted time for each visit was a maximum of 20 minutes. Each visit consisted of a five-minute presentation by the host, followed by discussion (see Table 5).

All seven units were in the Sleman district, which in 1997 covered a total area of 875 square kilometres, 17 sub-districts and 86 villages with a total population of 804,491 (50.7% female and 49.3% male).

**Table 5. Travel schedule**

Time	Location/health unit	Activity/type of financing
08:00	Leave hotel	
08:30-09:00	Pos UKK Tempel traditional market	Community (market vendors)
09:15-09:45	Medarindotex	Private textile company
10:00-11:00	Morangan District Hospital	Public and national insurance
11:15-12:00	District Health Office & district warehouse	Multisource pharmaceutical management
12:00-13:00	Lunch	
13:00-13:45	Ngaglik I Health Centre	Public and national insurance
14:00-14:30	Panti Nugroho Private Hospital	Cross-funding mechanism within private hospital network
15:00-15:45	Ngemplak Village Cooperative	Community health insurance (JPKM)

#### 3.1 Descriptions of the health units (compiled by Dr Sri Suryawati)

##### **Pos UKK Tempel market**

Pos UKK is a community-financed health post organized by the Tempel Market Vendor Cooperative. It provides basic health services and is funded through regular contributions by members. Health services are provided and supervised by Tempel Health Centre.

##### **Medarindotex**

Medarindotex is a private textile company whose workers are provided with outpatient services at their clinic, as well as hospital services contracted with

various public and private hospitals in Sleman and Yogyakarta. Mechanisms for funding, the amount of the company's subsidy for health and terms for contracts were discussed during the visit.

### **Morangan District Hospital**

This typical public district hospital with 125 beds provides general as well as specialist services, including surgery, pediatrics, obstetrics and gynaecology, ophthalmology, treatment for skin and venereal diseases, dentistry, ENT, neurology, psychiatry and radiology. Pharmaceuticals funding is derived from a multisource budget, i.e. from the central MOH through INPRES (a special presidential instruction programme) and other vertical programmes, the local government budget and ASKES (state insurance for civil servants). The hospital applies user charges for its services. These were discussed during the visit.

### **District Health Office and district warehouse**

The District Health Office is responsible for managing and supervising health services in the whole district, i.e. 29 health centres and 68 sub-centres. The population of the whole district is around 800,000. The funding for pharmaceuticals is derived from various sources, i.e. INPRES, the MOH vertical programme, ASKES, the local government budget and so forth. The mechanism whereby the multisource budget is used to fund pharmaceuticals was discussed during the visit.

### **Ngaglik I Health Centre**

Ngaglik I Health Centre is a typical community health centre manned by physicians, dentists, and midwives and other paramedical staff, providing primary health care services. User charges are applied to services used by patients who do not participate in the insurance scheme. The organization of health services, sources of funding and so on were discussed during the visit.

### **Panti Nugroho Private Hospital**

This newly established small community hospital is owned by the Panti Rapih Foundation, which various some private hospitals in the province, including the 300-bed Panti Rapih Hospital in Yogyakarta. The Foundation applies a kind of cross-subsidy for its services. Panti Nugroho Private Hospital was in transition from an outpatient clinic to a community hospital providing outpatient as well as inpatient services. It is subsidized by the Foundation.

### **Ngemplak Village Cooperative**

The village cooperative, KUD (Koperasi Unit Desa), has organized a kind of pilot scheme called JPKM (Jaminan Pemeliharaan Kesehatan Masyarakat, or Community Health Maintenance Programme). It issues contracts with health centres for primary health services. The Government initiated a programme whereby members pay a modest premium via monthly electricity bills. Membership was intended to include the entire community (or practical in terms, people who have electrical connections in their homes). The organization of the scheme, how to collect, how to utilize the money, and so forth were discussed during the visit.

### **3.2 Results of the field visit** (compiled by Dr Yos Hudyono)

#### **Tempel Market Vendor Cooperative**

This health post was initiated and organized by market vendors with technical support from Tempel health centre. A prepaid contribution from 700 members financed the basic health services scheme, producing a positive balance of Rp 100,000 per month. Each member contributes Rp 50 a day, and the money is used to finance on-the-spot preventive and curative health care for members and their families, and to subsidize hospital care. Each visit costs Rp 600 — the cost of the local district contribution. While drugs and services are subsidized by the Government, cost-sharing occurs between members (the healthy and the sick).

#### **Medarindotex**

Medarindotex, a private textile company with 1,200 employees, created a workers health scheme covering preventive, curative, environmental and occupational health. The total number of persons covered is 3,500, including 742 employees and their families. The health scheme was designed to improve previously uncontrolled health expenses. Five per cent of total personnel expenses were allocated for the scheme, the principal features of which are as follows:

- Rp 5,000 to Rp 10,000 per month is allocated to each employee (depending on their employment status) towards the cost of drugs.
- Rp 5 million per month is paid to the hospital for hospital care, on the basis of a fee-for-service contract.
- Rp 1.2 million is allocated to occupational/environmental health as well as polyclinics.

Total health care is financed 100% by the company. Drugs are subsidized through cost-sharing between employees and the company. Hospital care costs are covered by the company and the Government. A subsidy for outpatient/ambulatory care might be sometimes applied when employees use their drug subsidies to pay for visits to public health centres. In such cases the employees receive service and drug subsidies from the Government.

#### **Morangan District Hospital**

Morangan District Hospital, with 125 beds and 281 personnel, provides a referral service for health centres. The bed occupancy rate is 67.54%. On average it serves  $\pm$ 250 ambulatory patients a day. The community pays between Rp 6,000 and Rp 11,000 per visit, including drugs, and approximately Rp 30,000 per day for inpatient care. The hospital provides emergency, general, specialized and medical dental care.

Cost-sharing applies to drugs as well as to services. About 38% of the hospital's expenses are for drugs; some could be covered, and some could be subsumed under services since 57.5% of the hospital's income is derived from patients. Cost-sharing between the Government and the community is relatively high, compared with cost sharing relating to primary health centres.

### **Ngaglik I Health Centre**

Ngaglik I Health Centre serves three villages with a total population of 32,912, consisting of 7,792 households. Services are provided by 24 personnel: one physician, one dentist, six midwives, four nurses, two dental technicians, one assistant pharmacist, one laboratory technician, one janitor, and seven administrative and general service staff. The health centre runs 18 health programmes, covering environmental, promotive, preventive and curative health programmes. It earns approximately Rp 1 million per month from contribution fees. The members of the community each pay Rp 600 for ordinary visits, Rp 1,200 for emergency visits and Rp 600 for additional laboratory services. An average of 80 to 100 patients visits the health centre every day. Around 50% of the contribution fee goes to the local government and 50% is retained by the health centre to cover and subsidize operation costs. Drugs are subsidized 100% by the Government at Rp 30,000,000 a year. The health centre's operational costs are financed through cost-sharing by the community and the Government, but drugs are totally subsidized by the Government.

### **Panti Nugroho Private Hospital**

This small hospital is a kind of private maternity and polyclinic that provides ambulatory services and inpatient care. Its clinic serves a population of 185,388 people, consisting of workers, farmers, students and government employees. Patients pay an average of Rp 10,000 per visit for drugs and services, and Rp 30,000 for day care. Of the revenue generated, 60.8% comes from drugs, 27.8% from inpatient and outpatient services, and 11.4% from other services. This revenue is used to cover drug procurement (40%), employees' salaries (36.5%), and logistic and general support (33.5%).

The Panti Rapih Foundation provided the initial investment, but the community pays for operational expenses, including drug supply and services. The community also contributes 1.5% of revenue to providing health care for poor patients. Cost-sharing for operational costs is completely covered by the community.

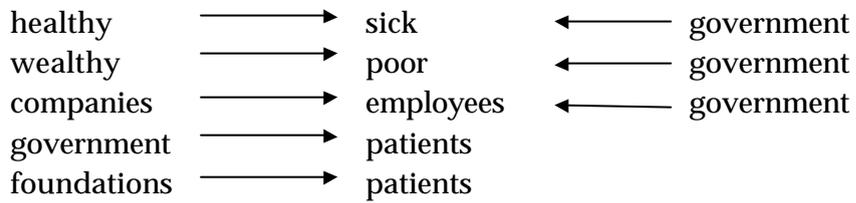
### **Ngemplak Village Cooperative**

This cooperative has a retail business which collects monthly premiums via electricity bills. Costs are shared by the healthy and the sick, the rich and the poor. The cooperative management board serves 3,054 member families, each of which contributes Rp 200 per month to be able to visit a health centre three

times a month. The cooperative pays the health centre every month, on the basis of the number of visits made by members. The contribution fee for each visit is Rp 600. The restriction on the number of visits per month is considered sufficient by members. Drug financing costs are covered by the Government.

### 3.3 Summary

Cost-sharing works differently in various locations. The relationships of the public and private sectors with the various groups of the general population, in relation to cost-sharing, are described diagrammatically below.





## 4. Drug financing issues

### 4.1 The role of the state in drug financing (presented by Dr Germán Velásquez)

#### **Introduction: globalization and health — some concepts and concerns**

The term “globalization” has been used both to **describe** world economic trends and to **prescribe** certain policies and actions. It describes current world economic trends (WTO agreements, subregional common markets) and is also the prescription for a strategy of development based on liberalization of markets, on the assumption that the free flow of trade, finance and information will produce the best outcome for economic development.

The term “globalization” has been used and confused with terms such as “openness” and “liberalization”, “interdependence”, “integration” and “recolonization”. However, it is characterized in particular by:

1. the “globalized” financial market, which functions 24 hours a day;
2. bilateral and multilateral agreements (WTO and subregional common markets) on global production and trade in goods and services;
3. promotion of a unique model and strategy for economic development (indeed, “neoliberal thinking” has re-emerged to the extent that it has become ideological “dogma”).<sup>(1)</sup>

But what are the implications for the role of the state? According to the *Human development report 1997*, “Globalization has its winners and its losers. With the expansion of trade and foreign investment, developing countries have seen the gaps between themselves widen.”<sup>(2)</sup> “Poor countries often lose out because the rules of the game are biased against them, particularly those relating to international trade. The Uruguay Round hardly changed the picture.”<sup>(3)</sup>

Globalization has serious implications for states, particularly for the role of the state in developing countries where the imperative to liberalize has led to reduced state involvement in the social sectors. The opening up of markets has, for instance, limited possibilities for governments to subsidize health services for the poor. After a drastic process of privatization, many states have become too weak to manage such a process, which is driven mainly by powerful international groups.

“Are states becoming irrelevant?” asks the *Human development report*. “At one level they are being resisted by ethnic and other groups pressing for greater autonomy and self-determination. At another they are being bypassed by

multinational corporations that care little about local jurisdiction. They seem to have become too big for the small things, and too small for the big.”<sup>(4)</sup>

The 350 largest corporations now account for 40% of global trade, and their turnover exceeds the GDP of many countries.

**Table 6. State and corporate worth, 1994 (US\$ billion)**

<b>Countries</b>	<b>Total GDP or corporate sales</b>	<b>Corporations</b>
Indonesia	174.6	
	168.8	General Motors
Turkey	149.8	
Denmark	146.1	
	137.1	Ford
South Africa	123.3	
	111.1	Toyota
	110.0	Exxon
	109.8	Royal Dutch/Shell
Norway	109.6	
Poland	92.8	
Portugal	91.6	
	72.0	IBM
Malaysia	68.5	
Venezuela	59.0	
Pakistan	57.1	
	49.7	Unilever
	47.8	Nestlé
	47.6	Sony
Egypt	43.9	
Nigeria	30.4	
	871.4	Top five corporations
Least developed countries	76.5	
South Asia	451.3	
Sub-Saharan Africa	246.8	

Sources: World Bank (1995); UNRISD (1995); *Fortune Magazine* (1996).

In addition to the trends and imperatives of globalization, structural adjustment programmes have been requesting developing countries to cut expenditure on social services, often arguing that the gap can be filled by community financing schemes. “At times, the pressure on spending has prompted the introduction of user fees for health services, in countries where there is no capacity for effective means-testing and where people cannot afford even the lowest fees. This is a perversion of the ideals of self-help.

“A poverty eradication strategy requires not a retreating, weak state but an active, strong one, and that strength should be used to enable the poor rather than disable them.”<sup>(5)</sup>

Structural adjustment programmes and globalization seem to weaken the state's influence, but it is clear that current world trends demand a stronger

state in order to preserve people's rights and maintain equity of access to the social sector, particularly health services.

## State responsibilities in the health sector

### ***Historical overview***

The controversial views concerning the role of the government (referred to in this paper as the “state”) that have been expressed during the past five or six years have in fact existed for the last sixty years. Adam Smith in his book *The wealth of nations* (1776) was already advocating a limited role for government. He attempted to show how competition and the profit motive would lead individuals — in pursuing their own private interests — to serve the public interest.<sup>(6)</sup> Adam Smith’s ideas had a powerful influence on governments and economists of the nineteenth and twentieth centuries, who promulgated the doctrine known as “laissez-faire”. However, some important nineteenth-century social thinkers were not persuaded by Smith's thinking. Karl Marx was certainly the most influential among others such as Charles Dickens, Jean Charles Leonard Sismondi and Robert Owen, who strongly advocated a greater role for the state.

Today, economists and social thinkers have come to recognize important limitations in the ability of the private sector to fully meet basic social needs. Three reasons justify government intervention in the health and pharmaceutical market.

The **first** reason includes the so-called market failures and the circumstances or conditions under which the market is not efficient. The health and pharmaceutical sector is characterized by a number of market failures:

- **Uninformed consumers.** Informational imbalance probably constitutes the most important form of market failure for the pharmaceutical market. Patients rely on the doctor’s knowledge or information. They certainly know less about the appropriateness of the drug than the prescriber. Prescribers in their turn are usually less informed about efficacy than the manufacturer. Additionally, there is frequently very little information available on the quality of the drugs.
- **Limited competition.** Economic theory states that in “perfect markets” government should not interfere since market conditions will lead to an optimal solution. However, in the case of the pharmaceutical market, there are substantial problems related to the failure of competition. For example, the pharmaceutical industry often exercises considerable market power owing to the monopolistic conditions under which it operates. Moreover, this power is strengthened further owing to the monopolistic conditions under which it operates patent protection, brand loyalty and market segmentation by therapeutic sub-class.
- **Externalities.** This refers to those cases where the actions of one person or institution (positive or negative) influence others without this person or institution paying or receiving compensation — for example, effects associated with contagious diseases, vaccines or other treatments.

- **Non-profit-maximizing behaviour.** One of the main differences between health markets and standard competitive markets is the absence of a profit motive. The health sector views its objective not as minimizing the cost of medical care or maximizing profit, but as maximizing the coverage and quality of health services.

The differences between health and other markets that we have just described mean that the health market behaves quite differently from markets where competition is effective, where consumers are well informed, and pay directly for what they receive, and where producers are driven by the profit motive.

The **second** reason that justifies an increase of the role of the government or state in the health sector includes the inequality existing in society. “No individual, regardless of his income, should be denied access to adequate medical care.”<sup>(7)</sup> The public sector, by definition, is the only body in society that can take an active role in redistributing income. In many developing countries, for instance, where there is great inequality of income, equitable access to health services cannot be guaranteed by market forces. This is partly because a significant percentage of the population in the least developing countries lives outside the formal market.

There are two classic categories of government redistribution programmes:

- **public assistance programmes**, e.g. social insurance programmes in cash or in kind;
- **social insurance programmes**, which differ from public assistance in that the support to individuals depends on the contribution made by the individuals themselves.

The **third** reason for government intervention relates to concern that an individual may not act in his or her own best interest. Even if they are well informed, consumers may make “bad” choices. Individuals continue to smoke, or not use seat belts even when they know very well that these can increase the chances of surviving a car accident. In the case of individual choices relating to the use of tobacco or seat belts that can have a serious impact on other persons, it is quite clear that the state should defend the public interest above the individual's views or behaviour.

### ***Different approaches***

Health systems can be classified according to the level of government involvement. They range from the United States model, which maximizes the role of the market, to the United Kingdom health care system, which minimizes the role of the market. In seeking to establish a typology of health systems existing around the world, five models can be identified<sup>(8)</sup>:

- 1. Emergent:** systems which are in the process of being defined and structured. This includes many health systems in developing countries. Health services in this model are comparable items of personal consumption; the role of the state is minimal; and most of the health facilities and pharmacies are private.
- 2. Pluralistic:** health and pharmaceutical care handled as predominantly consumer goods or services. The state's role is mainly indirect and the health facilities are a mix of public and private, as in Switzerland and the United States.

- 3. Insurance/social security:** health services as insured/guaranteed consumer goods or services. The state plays a central but indirect role, as illustrated by the health systems in Canada, France, Japan and Spain. Health facilities are private and public.

4. **National health service:** health care as a state-supported public service. The role of the state is central and direct. Ownership of health facilities is mostly public, as in Scotland (United Kingdom).
5. **Socialized:** health services as a state-provided public service. The state plays a unique role in the financing and provision of health services, and the ownership of health facilities is entirely public. Examples of this model are Cuba, the Russian Federation and some countries of the former Soviet Union.

### ***New trends***

Since the collapse of the centrally planned economies of the former Soviet Union and Central and Eastern Europe, neo-liberal thinking has strongly re-emerged as the best and unique solution for the organization of society. From Latin America to the “miracle” economies of East Asia, and from the African continent to the newly independent states of the former Soviet Union, almost every country speaks of the market economy, of the opening up of markets, liberalization and privatization, and subregional and regional common markets.

The current development model of the majority of countries is focused on economic growth, with little concern for equity or solidarity issues or whether economic growth by itself will solve problems such as unemployment, inadequate education and incomplete coverage of a population’s health needs. The “sovereignty” of the market, combined with the rapid process of globalization, is seriously affecting the role of the state in many countries. Indeed, the downsizing of the state seems to be the common prescription around the world, with the World Bank suggesting in the first chapter of its *World development report* that the state should be adapted to the demands of a globalized world economy. This is not, in our opinion, how the question should be put. Are we going to adapt the state to the demands of globalization? Or should we rather adapt and drive globalization to preserve the social objectives of the state?

### **Role of the state in the pharmaceutical sector<sup>(9)</sup>**

#### ***What is the role of the state in the pharmaceutical sector?***

The state must assume responsibility for ensuring that a set of core functions in the pharmaceutical sector are performed. These state responsibilities include policy-making, financing, drug regulation, establishing professional standards and promoting rational drug use. These functions constitute the minimum for which the state must take responsibility.

The state may choose not to discharge all of these responsibilities itself, but to delegate some functions to other actors in the pharmaceutical sector. However, irrespective of who performs these functions, the state must assume responsibility for ensuring that they are performed, and that they are performed effectively.

***Policy-making***

National drug policies are guides to action. They provide a framework for the functioning of the pharmaceutical private and public sectors. Within the context of a national health policy, national drug policies should promote access to and rational use of drugs. National drug policies can be developed with the broad involvement of the full range of public, private for-profit and private not-for-profit organizations. However, the ultimate responsibility rests with the state for ensuring that a policy exists and that it is implemented.

**Financing**

Recognition of health as a fundamental human right brings entails the state's responsibility to ensure access to health care, including essential drugs. This does not mean that the state should necessarily finance and provide all drugs; but it is the responsibility of governments to ensure that financing mechanisms, be they public and/or private, are managed in such a way as to achieve universal access to essential drugs. Geographical accessibility to the latter may be promoted through the public and/or private sectors. Irrespective of the strategy or mix of strategies chosen, government should ensure the availability of essential drugs in all public health care facilities.

**Drug legislation and regulation**

Ensuring public health and welfare requires a legislative framework and some regulatory control over drug quality, safety, efficacy and use. Such a framework should define which organization has the authority to regulate and over which areas it has regulatory control. Within this legislative framework the appropriate regulatory authority must then issue specific regulations to cover both public and private sectors, and should specify the sanctions to be adopted in the event of failure to conform. Enforcement of sanctions is imperative if regulations are to be effective.

**Table 7. State functions in the pharmaceutical sector**

<p><b>Policy-making</b></p> <p>1. Development and routine review of national drug policy, including policy on:</p> <ul style="list-style-type: none"> <li>• government financing of drugs (how much of what?)</li> <li>• affordability (including policies on price regulation and price competition)</li> <li>• rational drug use</li> <li>• drug quality</li> </ul> <p>Development of legislative, regulatory and programmatic initiatives for policy implementation Policy monitoring and evaluation</p> <p>2. <b>Financing</b></p> <p>Ensuring appropriateness of financing mechanisms (public and/or private) so that universal access to essential drugs can be achieved Ensuring geographical access to essential drugs Ensuring the supply of essential drugs to all government health facilities</p> <p>3. <b>Drug legislation and regulation</b></p> <p>Licensing and inspection of importers, wholesalers, pharmacies and other drug outlets Licensing and GMP inspection of manufacturers Registration of drugs (safety, efficacy, quality) Control of marketing and independent drug information Post-marketing surveillance (safety, efficacy, quality)</p> <p>4. <b>Professional standards</b></p> <p>Setting educational standards for pharmacists, doctors and other health professionals Licensing of pharmacists, doctors and other health professionals Developing and enforcing codes of conduct</p> <p>5. <b>Rational use of drugs</b></p> <p>Ensuring availability and dissemination of unbiased information Continuing education of health professionals</p>
--

Public education
------------------

Ensuring an effective regulatory framework for the pharmaceutical sector is a major challenge for governments. Many countries have a legislative framework but inappropriate or outdated regulations. Equally or more commonly, regulations exist but enforcement agencies do not have the capacity to implement them.

***Professional standards***

The state has a responsibility to maintain adequate and appropriate educational standards for pharmacists, doctors and other health professionals, to ensure through the licensing process that these standards have been met, and to ensure that codes of conduct are developed and implemented.

***Rational drug use***

Drug markets require a full and accurate flow of information between buyers and sellers. Informational imbalance between drug producers and health care providers, and between health care providers and patients, is thus a major contributor to failure in the pharmaceutical market. Irrational use of drugs may stem both from lack of knowledge on the part of the providers and from deliberate attempts to mislead less informed consumers in order to increase profits.

Efforts to promote rational drug use are aimed at ensuring that independent and unbiased information is available, and that this information is actively used by prescribers, dispensers and patients. In addition, the state has a role to play in ensuring that professional ethics are not misplaced in the pursuit of profit.

**Public expenditure on drugs**

***Goals for public health and drug expenditure***

There are certain activities and functions that constitute the essence of the state's *raison d'être*, such as the maintenance of defence, law and order; the creation of basic infrastructures, for example roads, electricity and water supply; and the provision or organization of the provision of certain goods and services, known in economics as public goods, externalities and merit goods. Public health services are considered to be among these three types of goods and services because of the evident benefits for society. In their constitutions, many countries clearly state that health is a human right that should be enjoyed by every member of the population.

The recognition that health is a fundamental right to which all the population should have access justifies government involvement in the financing of drugs and health services.

In many countries, particularly developing ones, drug expenditure is the most critical aspect of the financing of health services. In monetary terms it is not the largest item in the health budget (salaries come first), but it is the more important and difficult element for two reasons. **First**, because drugs save lives and improve health, a lack of them can block the operation of health care facilities. **Secondly**, in many countries drug expenditure involves spending foreign currency on importing drugs (in the form of finished products or raw materials).

***Drug financing alternatives***

“There are several alternatives available for financing pharmaceuticals and these are basically the same as those for financing health services.”<sup>(10)</sup> Six main options can be identified:

1. public financing through general revenues;
2. health insurance schemes;
3. voluntary community drug financing schemes;
4. user charges;
5. donor financing and drug donations;
6. development and commercial loans.

Many health systems in different countries adopt a pluralistic approach to health and drug financing. But whichever systems are chosen, “it is the responsibility of the government to choose and manage financing alternatives so as to ensure that public health objectives are met”.<sup>(11)</sup>

#### ***Optimal level of public expenditures on drugs***

Health and drug expenditures vary significantly among countries. Annual per capita health expenditures vary from less than US\$ 5 in the United Republic of Tanzania or Nepal to more than US\$ 1,500 dollars in some industrialized countries.

Total health spending depends not only on economic output and GNP, but also on political will and government commitment to protect the health of the population. The percentage of GNP spent on health in countries with similar levels of development can vary from 2 to 8%.

As a share of total health expenditures, 75% of health spending is public expenditure in the industrialized countries (excluding the United States), compared with only 25 to 30% in developing countries. Lower public health spending in developing countries is not always the result of a lack of political will. In many cases, the low level of the health budget is the result of the drastic cuts in public expenditure imposed by structural adjustment programmes.

Annual per capita expenditure on drugs varies from country to country between US\$ 1 and US\$ 300. This gives an indication of the level of the supply of drugs to the population and the kind of policy being pursued.

How much should a country spend on drugs? We can consider five orders of magnitude:<sup>(12)</sup>

1. Less than US\$ 5 per capita per year is unlikely to guarantee the entire population a regular supply of drugs. If US\$ 5 is the national average, part of the population therefore has less than that and will thus be unlikely to have access to a regular supply of drugs.
2. An expenditure of US\$ 5 to 10 per capita will ensure that a large part of the population is supplied.
3. With an expenditure of US\$ 10 to 50 per capita the drug needs of the entire population should be satisfied.

4. In excess of US\$ 50 per capita per year consumption may be regarded as partially wasteful.
5. In excess of US\$ 200 per capita, which is the case in certain developed countries, massive over-consumption is probably occurring.

In addition to the “optimal” level of per capita spending on drugs, comparison with other countries of a similar level of development can be useful.

### ***Arguments for public expenditure on drugs***

The allocation of an appropriate budget for drugs requires a clear understanding by Ministries of Health, Economy or Finance of the importance of the availability of drugs for the proper functioning of the health system. To obtain an increase in the drug budget several arguments can be used:<sup>(13)</sup>

- **Health impact.** Emphasis is placed on the vital role of drugs in reducing morbidity and mortality.
- **Political visibility.** In addition to therapeutic utility, the availability of drugs serves as an indicator to measure the effectiveness and equity of the health services.
- **Economic impact.** Drugs and raw materials for drugs are important international trade goods. Lack of foreign exchange may therefore limit purchase of drugs for many countries.

### **Conclusions: major observations on the role of the state in drug financing**

- Globalization has serious implications for the role of the state in countries where the imperative to liberalize has led to reduced state involvement in the health sector.
- Structural adjustment programmes and globalization seem to weaken the state's influence, yet it is clear that current world trends demand a stronger state in order to preserve people's rights and maintain equity of access to health services.
- In terms of meeting basic health needs, the private sector has major limitations.
- The differences between health/drugs and other markets (pertaining to informational imbalance, limited competition, externalities and non-profit objectives) justify government/state intervention in the health and pharmaceutical market.
- The state must assume responsibility for ensuring a set of core functions in the pharmaceutical sector. These functions are:
  - policy-making
  - financing
  - drug legislation and regulation
  - professional standards
  - rational drug use
- The optimal level of public expenditures on drug ranges from US\$ 10 to US\$ 50 per capita. Thus less than US\$ 5 per capita per year is unlikely to ensure that the entire population has access to a regular supply of drugs,

while a per capita expenditure in excess of US\$ 200 per year is indicative of serious over-consumption and irrational use.

- Arguments in support of public expenditure on drugs require a clear understanding by governments of the health, political and economic impact of the drug sector.

## References

1. Antezana F, Velásquez G. *Drugs and health sector reform*. WHO Task Force on Health Economics. Geneva: World Health Organization; 1996 (unpublished document - WHO/TFHE/96.2).
2. United Nations Development Programme. *Human development report 1997*. New York: Oxford University Press 1997; p. 82.
3. United Nations Development Programme. Op. cit., p. 85.
4. United Nations Development Programme. Op. cit., p. 91.
5. United Nations Development Programme. Op. cit., p. 101.
6. Stiglitz J. *Economics of the public sector*. New York & London: W.W. Norton & Company; 1988.
7. Stiglitz J. *Economics of the public sector*. Op. cit., p. 288.
8. *Success and crisis in national health systems*. New York: Routledge; 1989.
9. Bennett S, Quick J, Velásquez G. *Public-private roles in the pharmaceutical sector: implications for equitable access and rational drug use*. Geneva: World Health Organization; 1997 (unpublished document - WHO/DAP/97.12).
10. World Health Organization. *Health reform and drug financing: overview of experiences, options and priorities for action*. Geneva: World Health Organization; 1997 (unpublished document - DAP/MAC(9)97.7).
11. World Health Organization. Op. cit., p. 7.
12. Dumoulin J, Kaddar M, Velásquez G. *Access to drugs and finance; basic economic and financial analysis*. Geneva: World Health Organization; 1991 (unpublished document - WHO/DAP/91.5).
13. Quick J D, Rankin J, Laing R O, O'Connor R, Hogerzeil H V, Dukes M N G et al. *Managing drug supply*. 2nd ed. Hartford (USA): Kumarian Press; 1997.

### 4.2 Review of cost-sharing experiences (presented by Dr Sri Suryawati)

Cost-sharing is a drug financing programme sustained by contributions from both the public sector and the private sector to achieve the goal of better efficiency and equity in drug supply. Cost-sharing means that the cost for health services is shared among users and employers, government, donors, taxpayers, insurance agencies etc. <sup>(1)</sup>

The objectives of cost-sharing may vary slightly among countries, but they usually include promoting efficiency, fostering equity, promoting decentralization and sustainability, fostering private sector development, promoting consumer satisfaction and generating revenues.

In most low- to middle-income countries, the public-private mix varies remarkably, from 90% public provision of drugs in Bhutan and Papua New Guinea to roughly 90% private market supply and financing of drugs in countries such as Nepal and the Philippines. <sup>(2)</sup> In Indonesia, public financing amounts to only approximately 20% of total drug expenditure, but covers roughly more than 70% of the population. <sup>(3)</sup> This figure shows public facilities'

success in providing essential drugs, but at the same time raises the issue of an imbalance between public and private financing.

Governments therefore have the responsibility of ensuring that drug financing mechanisms are managed in such a way as to achieve equity of access to

essential drugs. In other words, governments should organize the most effective cost-sharing system based on the country setting in order to provide drugs for all, especially the poor.

### **Strengths and weaknesses of cost-sharing schemes**

Cost-sharing schemes have been based on two advantages. First, they make the expansion of resources possible. Second, they make more efficient and effective use of available resources. User charges and health insurance are two alternatives to cost-sharing that have been developed in transitional and developing countries, in addition to donor financing, drug donations and development funds. Each scheme has its strengths and weaknesses.<sup>(4)</sup>

#### ***User charges***

User charges are increasingly being applied by governments and local communities in countries at all levels of development, both to supplement general government revenues or insurance premiums, and to help control use. Such programmes, however, are often not well managed, resulting in no improvement of access, and with revenue replacing rather than supplementing government funding. Also, users may misinterpret charges as covering the entire cost of the health service when they are in fact only contributions. This perception increases patient demand for drugs, which leads to over-prescribing.

#### ***Health insurance***

Formal health and various informal community insurance programmes represent a growing source of health and drug financing in transitional and developing countries. Countries' experience has shown that compulsory social insurance can be a critical step in developing a more equitable health care system. The unique features of providing pharmaceutical benefits are often not appreciated by either insurance specialists or essential drugs managers. Policy-makers and managers need, therefore, to be fully informed about the value of insurance coverage, alternative mechanisms for providing pharmaceutical benefits, and methods to ensure quality of care while controlling costs.

#### ***Donor financing and drug donations***

Donor financing includes bilateral and multilateral grants. For some countries, economic necessity may mean dependence on an externally funded drug supply for a relatively long period of time. This is not ideal, but it can improve the situation and be of particular benefit to the poorest. To promote beneficial drug donations and to minimize unintended problems with drug donations, interagency guidelines have been published.<sup>(5)</sup> They set out core principles and specific guidelines which should be followed for all drug donations.

#### ***Development loans***

Development loans through the World Bank and regional development banks may contribute to long-term development of the human and physical infrastructures of the health sector. However, loans should not generally be

used for financing the recurrent cost of drug supplies. Exceptions to this may include capitalizing a new drug supply or financing system, or in extreme circumstances, when external aid is insufficient. As with donor financing, conditions associated with development loans should not distort national drug policies.

## **Problems in cost-sharing**

It is well accepted that cost-sharing should be organized to supplement government funding, not replace it. Questions to be asked are: what is the actual level of cost-sharing? What is the ideal balance between public and user financing? Should public financing be reduced when private financing increases?

In countries where the government has the major responsibility for providing essential drugs, as Bangladesh, Bhutan and Papua New Guinea, the community might rely too much on public financing. In a country such as Indonesia, where the government is responsible for supplying essential drugs to over 70% of the population using only 20% of total pharmaceutical expenditure, equity for the poor might be in question. In such cases the government should create a mechanism to address this issue.

Health insurance in developing countries takes a number of forms: social health insurance, community pre-paid schemes, private health insurance, etc. Problems with health insurance relate to choosing the target users, their ability to pay the premium, and the type of services to be covered. Health insurance should ideally be targeted at the segment of the community that is able to pay for it, so that the load of public financing is reduced, and governments can concentrate more on the poor.

## **Cost-sharing experiences**

Many kinds of cost-sharing schemes have been developed in many countries; even within one country, several schemes may be running at the same time. Unfortunately, only a very few comprehensive evaluations have been undertaken, including a literature study by UNICEF<sup>(6)</sup>. In this presentation, discussion will be focused more on individual cases in order to learn what factors lead to success are and what constraints must be overcome.

The following were chosen because they are good examples of cost-sharing, although they do not necessarily represent the country situations at present.

### ***User charges in Africa<sup>(7)</sup>***

In 34 out of 39 countries where user charges were surveyed, it was found that the revenue generated by these charges was very small, i.e. less than 10%, as compared with public recurrent health expenditures. For some of the schemes which have remained in place for several years, modest improvements in this percentage have been observed. A recovery of about 50% of funds was shown in 17 sub-Saharan African countries which operate community drug funds. The experience of the Central African Republic indicates that public health centres that are self-managed, control their own drug sales and charge fees for all services have higher cost-recovery rates than centres that do not exercise as much control over drug sales and that offer a range of free services.

The demand for community health services with user fees seems to increase if quality also increases. However, because user fees do not always make drugs more available, and other factors are also involved in their use, a decrease in the use of health facilities is also frequently observed. After the adoption of

revolving drug funds, the use of community health centres increased in seven countries and decreased in four.

From these experiences, several things can be learned. First, people are mostly willing to pay, and collecting contributions is not a problem. Second, the management of the drug fund, which may vary among countries, is the crucial factor. In some countries, fees are used to provide higher levels of service, and are not directly used to recover drug costs. In this case, the level of cost recovery is difficult to measure, and usually does not increase even after several years. This kind of self-management has some disadvantages. Self-procurement could lead to the use of non-essential drugs, and may jeopardize the quality of care. Furthermore, access to pharmaceuticals might be hampered for the poor. This system could work only if drug utilization was closely controlled.

### ***Cost-sharing in Nepal***

Nepal has several types of cost-sharing schemes, such as the HMG/WHO community drug supply scheme, the BNMT-supported cost-sharing drug scheme, and the Lalitpur medical insurance scheme, which is supported by the United Mission to Nepal (UMN). An evaluation by Cross et al.<sup>(8)</sup> indicated that the BNMT cost-sharing drug scheme and the UMN Lalitpur medical insurance scheme achieved significant increases in drug availability, health-post utilization and drug consumption. They recovered drug costs by 18.7% and >50% respectively. Their success was attributed to intensive technical and administrative support. The HMG/WHO community Drug Supply Scheme achieved an intermediate level of cost-recovery, as village health committees have substantial discretionary authority. Only 33% (one-third) of revenue was invested in drug purchases, at nearly double the unit price of UMN purchases.

When the levels of success of the above three types of cost-sharing are compared, it seems that the third failed to achieve its objective because of the lack of a pharmaceutical distribution channel. People are willing to pay, and collecting funds from the community is not a problem. Again, the problem is rather how to use the money, and how to use good bargaining power when purchasing pharmaceuticals.

### ***Cost-sharing in Indonesia***

Indonesia operates a user charge system for public health services in both hospitals and health centres. The average user charge for health centres throughout the country is around Rp 600 (or approximately US\$ 0.20) per visit, while charges for hospitals vary depending on the type of hospital and follow the fee schedule guidelines issued by the MOH.<sup>(3)</sup> Besides the free drugs provided through primary health care services in the public sector, government health insurance has been developed, based on civil community participation, in order to provide drugs to civil servants and their families. In addition to these three types of cost-sharing, other private health insurance schemes exist, e.g. labour insurance schemes and private insurance companies' schemes.

Recently, JPKM pilot scheme involving village cooperatives was developed. It was targeted at the village population. The premium is Rp 1,500 (or US\$ 0.50) per household per month. The fund is managed by the village cooperatives, and health services are provided through collaboration with health centres in the respective villages.

User charges at health centre level cover only one-tenth of the actual health service costs of approximately Rp 6,000. In other words, the public sector still has to heavily subsidize patients. The poor and the rich contribute at the same level, not including the charge waiver for the poor. In the interests of sustainability, such a heavy burden on the public sector will have to be modified, perhaps by increasing charges for people who are able to pay, or limiting access to public facilities by promoting health insurance schemes for people in the middle- to high-income brackets. Public financing could then be focus more on the poor.

The JPKM will, however, require still further attention. JPKM members generally have low to below middle incomes. The scheme at present covers only the administrative fee, excluding the costs of laboratory examination and inpatient services. It is obvious that this insurance scheme does not reduce the burden on the public sector and that members receive only minimum benefits, given that they form a segment of the community that has to be subsidized by the Government. The scheme's target group should be reconsidered. If the scheme is widely implemented throughout the country, new and serious problems will arise, i.e. how to control the way in which money collected from the community is used. Since the community is willing to pay, and the cooperative reimburses only the administrative fee to health centres, a huge positive balance must accrue after a period of time. Mismanagement of these community funds would obviously diminish the trust which people have in policy-makers and the Government as a whole.

#### ***Village drug cooperatives in Thailand*** <sup>(9,10)</sup>

There are several types of cost-sharing schemes in Thailand. In 1977, Thailand supported primary health care through training of village health workers and village health communicators, and establishment of village drug funds (VDFs). VDFs were introduced as village cooperatives to make inexpensive, good-quality essential drugs available. The VDFs grew very quickly; by the mid-1980s, 26,000 villages (one-half) had established drug funds, and 70-100% of households participated in 50% of these funds. The VDFs managed the money themselves, usually involving village health workers and communicators. Most community funds sold drugs at a 30% mark-up, and over 85% reported making a profit. During the period of peak participation, the number of VDFs had grown to nearly 36,000, covering almost 80% of Thailand's villages. In 1994, however, the proportion of villages with functional VDFs had fallen to about 50%, mainly because drugs had by then also become available from drugstores, grocery stores, drug peddlers and private clinics. VDFs lost their market share as a result.

In this example, it appears that village cooperatives made pharmaceuticals readily available, but not necessarily cheaply. Making a profit from the sale of pharmaceuticals is easy, but controlling their use is more difficult. Less control leads to the use of more non-essential, expensive drugs, and to reduced access to drugs for the poor. The lesson to be learned from this example is that village

drug funds should be under government control in order to limit the use of non-essential drugs and to ensure that drugs are used rationally.

***Social insurance in Costa Rica (11)***

The Costa Rican Social Security Fund (CCSS) insurance scheme was established in the 1940s. Nowadays, it provides about 95% of hospital services and 85% of outpatient consultations. Access is nearly universal, and the health indicators are comparable to those of high-income countries. CCSS is funded through contributions from employers, employees, the self-employed, taxes, a hospital lottery, a small contribution from the central government, and income from rent and interest. CCSS accounts for 80% of total health expenditure and provides curative care, individual preventive care such as immunizations, and rehabilitation services and health education. Pharmaceuticals constitute only 10% of CCSS health expenditure. Drug use control is effectively implemented by using a formulary consisting of 535 drugs and dosage forms with annual revision, treatment guidelines, drug utilization studies and generic prescribing.

This example shows how a mechanism can work well and efficiently, and how rational drug use can be incorporated into the health system. Funds were generated from both the Government and the community, and the services were organized by the Government. It is interesting to learn how such a mechanism can be sustained for decades.

**Lessons to be learned**

From the above experiences, it is clear that governments should take responsibility for health care for the poor. User charges can significantly reduce the burden on public financing if they are managed efficiently. Social as well as community health insurance schemes can be useful if their targets are selected carefully. Overall, the most effective drug financing system combines three schemes: user charges, cost-sharing and public financing. However, the different types of user groups - those who can afford to pay user charges, those who can afford to pay premiums and those who cannot afford to pay anything for health care - should be identified well in advance. In low-income countries, the best choice is public financing plus affordable user charges. Public financing without user charges would be counter-productive.

Whatever the system chosen, drug financing schemes should be accompanied by monitoring and evaluation. Evaluations are needed periodically in order to assess achievements and provide guidance for improving the system.

**Conclusions**

- The targets of health insurance schemes need to be determined carefully. The rich should be encouraged to join these schemes, while the poor should be encouraged to use public services with affordable user charges.
- Responsibility for the poorest, who should be exempted from user charges, should be borne by the government. The percentage of the population needing exemptions should be identified and the criteria for identification established.

- Drug financing schemes should be evaluated periodically. Indicators for evaluation should be established to assess the achievement of objectives and to enable means of improving the schemes to be identified.

- Cost-sharing systems should be a part of the health system, and therefore a part of national health policy.

## References

1. World Health Organization. *Health Economics: glossary* (reprint from: *Health economics: a guide to selected WHO literature*). Geneva: World Health Organization; 1995.
2. Hume M, Litvack JI, Quick JD. Revolving drug funds. In: JD Quick et al. eds. *Managing drug supply*, 2nd ed. West Hartford: Kumarian Press; 1997.
3. Andajaningsih A. *Implementation of essential drug concept and drug financing strategies*. New Delhi: World Health Organization; 1997.
4. Velásquez G, Madrid Y, Quick JD. *Health reform and drug financing*. Selected topics. Geneva: World Health Organization (unpublished document — WHO/DAP/98.3); 1998.
5. World Health Organization. *Guidelines for drug donations*. Geneva: World Health Organization. (unpublished document — WHO/DAP/96.2); 1996.
6. Reddy S, Vandemoortele J. *User financing of basic social services: a review of theoretical arguments and empirical evidence*. New York: United Nations Children's Fund; 1996.
7. Shaw PR, Ainsworth M. *Financing health services through user fees and insurance*. Washington DC: World Bank; 1996.
8. Cross PN, Dias V, Bates J. *Nepal cost-sharing in pharmaceutical distribution*. Kathmandu: Rational Pharmaceutical Management Project; 1996.
9. World Health Organization. *Review of drug programme in Thailand*. Geneva: World Health Organization; 1986.
10. World Health Organization. *Implication of community health workers distributing drugs: a case study of Thailand*. Geneva: World Health Organization, (unpublished document WHO/DAP/94.19); 1995.
11. Newbrander W, Quick JD, Waddington C. Drug financing strategies. In: JD Quick et al, eds. *Managing Drug Supply*, 2nd ed. West Hartford: Kumarian Press; 1997.

### 4.3 Experiences of the Myanmar Essential Drugs Project in drug financing and sustaining availability of essential drugs (presented by Professor U Hla Myint)

#### Pilot project on essential drugs

The Myanmar Essential Drugs Project (MEDP) began in December 1988 in collaboration with the World Health Organization and with financial aid of US\$ 2.5 million from FINNIDA. It had two objectives, namely the development of a national drug policy and the implementation of a pilot project. The duration of the project was three and a half years.

The project has developed, promoted and distributed the following information to Myanmar's medical officers/practitioners (private and public) and health workers: (1) a national list of essential drugs; (2) a national formulary; and (3) a standard treatment regimen for 13 common health problems.

The objectives of the pilot project were to make good-quality essential drugs and dressings available at minimum cost in sufficient quantities at different levels of health care in the country; to improve the diagnostic, rational prescribing and dispensing skills of health workers; to improve patient compliance with the

rational use of essential drugs and the activities of the project if acceptable; and to replicate the activities of MEDP on a national scale in order to sustain the availability of essential drugs in adequate quantities.

**Selection of essential drugs.** The project collected and identified the morbidity data in nine townships by studying patient registers retrospectively for three years, and prospectively for a year in the peripheral area. After full scrutiny of common morbidity, a selection of essential drugs was made on the basis of the morbidity standard treatment method.

**Estimation of drug requirements.** Quantification of drug requirements for nine pilot project townships was based on the morbidity standard treatment method and careful collection of treatment episodes of each health problem for a year. The number and the amount of drug items required were calculated, and a further 10% was added to each item for damage and loss during transportation and storage.

**Procurement of drugs.** After quantifying the drugs required for the nine pilot project townships, the project requested WHO/SEARO, New Delhi, to order the essential drugs from UNIPAC.

**Training.** While the drugs were being procured, the project trained health workers in the nine townships in the systematic storage of drugs, including regular quality checks and distribution, as well as rational prescribing and health education for patients. The health workers will therefore be able to manage and prescribe drugs in a rational way by the time the drugs are distributed to them.

**Development of guidelines and data collection materials.** The project developed simple and workable morbidity forms, since midwives and nurses with poor vision were experiencing difficulties in completing the WHO ICD forms. Data were collected from four different centres at primary health care level, such as rural health centres and sub-centres, and station and township hospitals. At the same time the project developed patient attendance registers and diaries to collect morbidity data during rounds, in addition to the data collection at the dispensary.

The project also developed manuals for estimation of drug requirements and systematic management of drug supply systems for health workers. In addition, it prepared and developed standard treatment guidelines for four levels of health care based on the morbidity of the respective areas. The guidelines include the principle of rational drug use and proper history-taking, with examination of patients' external features and behaviour supplemented by diagnostic flow-charts. Diagnoses following these guidelines lead to rational prescribing.

**Establishment of useful data.** The project established an intermediate list of essential drugs and morbidity data for the four different primary health care levels that provides basic information on drugs which can be used in health education for the community (patients) on rational use of drugs. In 1995 the project also reviewed and revised the national list of essential drugs, the national formulary, and standard treatment guidelines for health care facilities at the four different levels.

**Information, education and communication.** Local authorities, religious and community leaders, teachers and the community were educated to encourage compliance with the concepts of essential drugs and rational use of drugs, and the activities of the MEDP.

**Supervision and monitoring.** The project conducted supervision not only through ensuring systematic collection and recording of data by health workers and proper storage and distribution of drugs, but also through monitoring whether those health workers understood the subjects taught, performed satisfactorily and prescribed drugs according to standard treatment guidelines. At the same time the prescribing behaviour of the health workers and the patterns were also studied and revised, if necessary.

**Cost recovery/cost-sharing.** The project planned to adopt means of recovering drug procurement financing in the pilot project and replicated townships in order to ensure that an adequate amount of safe essential drugs of good quality are available in future and that the replication of further townships is successful.

**Replication of MEDP activities in other townships.** As the mid-term evaluation team was satisfied with implementation of the project, the MOH approved the future replication of MEDP activities in other townships. The project had appropriately planned the replication activities.

The project was terminated in March 1994 after extending its activities beyond mid-1992 thanks to a surplus drug budget.

### **Replication of MEDP activities in other townships**

#### ***Requirements***

The two significant components required in the replication of MEDP activities in other townships are the availability of an adequate amount of essential drugs and enough trained health workers at the four health care levels. The health workers should have knowledge and skills in rational drug use, i.e. the selection of drugs, estimation of requirements, procurement, systematic drug storage and distribution, rational prescribing and health education for patients.

#### ***Strategy***

From the beginning, the MEDP attempted to obtain an adequate amount of essential drugs for each township in its replication activities. The crucial factor was deciding where drug financing would come from: the Government, NGOs or the private sector. The Government normally provided buildings for dispensaries and hospitals, medical equipment, human resources and drugs. As the drug budget allocation did not increase in proportion to the increase in population over time, the community was obliged to buy drugs from outside sources to offset the resulting shortage of essential drugs. In this way, patients became used to paying for drugs out of their own pockets, and this practice has now become acceptable.

The project requested that the community, local administrative authorities, communal and religious leaders, and community and health workers actively participate in paying for drugs according to their means. This cost-sharing was necessary in order to achieve sustained availability of essential drugs for the community at primary health care level. Therefore, when free drug supply

ended in March 1994, the community should have had no problem with active participation in health care delivery in the pilot project areas and replicating townships.

The project also tried to find ways to tap drug financing in order to ensure an adequate amount of essential drugs for each township by the time the replication had been carried out.

The MEDP could not successfully implement replication in other townships without an adequate supply of essential drugs. Essential drugs had been identified for health care facilities at each level, i.e. rural health centres and sub-centres, and station hospitals and township hospitals at the first referral level. A project was arranged with the UNICEF Myanmar supply officer to provide a US dollar revolving fund to finance the procurement of essential drugs for 44 replicating townships annually from 1996 to 2001. UNICEF agreed to collaborate in principle since the project met its objective of collaborating on primary health care programmes for procurement of good-quality essential drugs. Each township receives an annual budget of Ks 40,500 for drugs. Since 67 townships have been replicated with the provision of drugs for one year, the Department of Health does not need to include them in its drug budget. However, for 1996-1997, 44 townships should have received an increased drug budget of Ks 97,568 (US\$ 16,261) (i.e. equivalent to the normal drug budgets plus the surplus from the 67 replicated townships). This amount would have been sufficient to procure drugs for four months from UNIPAC through UNICEF Myanmar. In this way, the 44 townships would not have needed extra funding from the Department of Health. With the proceeds from selling drugs for three months, the townships would have been able to replenish drug needs locally from the private sector. In subsequent years, until 2001, the townships might have received double, triple, quadruple, etc. the amount of the drug budget, which should have been sufficient for procuring drugs for 6, 8, 10 and 12 months in subsequent years. However, this plan was not implemented since UNICEF could not provide the annual US dollar funding needed by the 44 townships owing to other commitments.

Since the UNICEF funding did not materialize, the project arranged to procure essential drugs from UNIPAC with hard currency from private entrepreneurs earned by exporting commodities. UNICEF agreed to the arrangement and pledged to import drugs every six months for a commission not exceeding 5%. This proposal was put before the MOH for approval in 1993.

Another proposal is to place the existing Myanmar pharmaceutical factory under the MOH and bring the drug manufacturing process up to date with the principles of good manufacturing practice.

### **Sources of drug financing**

The MOH provided US\$ 60,000 worth of essential drugs per year to each township. Since it also has commitments to other projects, it will not be able to

continue providing this support (amounting to US\$ 19.5 million worth of drugs for 326 townships) either at once or in stages.

As it had a leftover stock of drugs, the project negotiated with the final evaluation mission to supply a year's stock of essential drugs to nine pilot project townships to initiate alternative financing for future drug procurement. With the remaining stock of drugs, the project was able to supply essential drugs to another 13 townships, bringing the total to 22. These townships were to charge only for drugs and to keep profits in separate bank accounts. These will serve as rolling or revolving capital for the township for future financing to procure drugs. The townships should independently procure drugs afterwards, as the Central Medical Stores Depot (CMSD) does not supply drugs to replicated townships.

Usually the CMSD allocates Ks 40,500 to each township. Since the CMSD can save the cost of the drug budget for replicated townships, the project proposed distributing the saved amount to other townships that wish to replicate MEDP activities following the third national five-year health plan towards the end of 2001. One year after starting the replicate MEDP activities in 1995, the Nippon Foundation offered essential drugs through a community health promotion project with UNICEF to 41 townships.

So far 131 townships have been replicated: 66 financed by FINNIDA and the Government, and 65 by the Nippon Foundation. "Cost-recovery" for drugs only or community cost-sharing systems (CCS systems) based on MEDP activities by 1996 has been adopted.

Plans have been made to replicate the project in the remaining townships under the third national five-year health plan. This will involve increasing the number of townships replicated annually to 39, between 1997 and 2001, with the drug budget financed by the Government.

***Some sources of drug financing***

1. financial assistance from NGOs;
2. community participation in cost-sharing through which interest or dividends will accrue annually;
3. health insurance systems;
4. health cooperative systems;
5. private investment by business entrepreneurs;
6. income-generating mechanisms;
7. taxation in townships, for instance, on sales and agricultural transactions;
8. bank loans;
9. joint ventures;
10. the present system.

## **Budget**

The budget for financing drug procurement for 131 townships from 1994 to 1997 is derived from FINNIDA (US\$ 704,000), the Nippon Foundation (US\$ 2,808,000) and the Government (US\$ 1,408,000). The budget that will be required annually from 1998 to 2001 is as follows: US\$ 975,000 (1998), US\$ 97,500 (1999), US\$ 97,500 (2000) and US\$ 975,000 (2001).

Since 131 townships have been supplied with drugs for a year, they can finance drugs independently. The CMSD allocated equal shares of the drug budget to 131 replicated and 39 to be replicated townships, totalling Ks 16,6034. Thus, each township to be replicated received Ks 176,538 (Ks 136,038 plus Ks 40,500), which provided approximately a two-month supply of drugs in 1997. The townships were (or will be) able to replenish drugs from local suppliers at the end of six weeks in 1997, in eight weeks in 1998, in 10 weeks in 1999, in 12 weeks in 2000 and in 14 weeks in 2001. In this way the replenishment of an adequate supply of drugs can be ensured. Subsequently, these townships will be able to procure drugs according to their needs, in order to ensure sustained availability of essential drugs locally within their allotted budget, which will serve as rolling or revolving capital for purchasing drugs in the future.

**Table 8. Budget to finance local drug procurement (in Ks)**

Year	1994-1996	1997	1998	1999	2000	2001
Township	131	170 (131 + 39)	209 (170 + 39)	248 (248 + 39)	287 (248 + 39)	326 (287 + 39)
Drug budget for each township Ordinary	5,305,500	176,538 136,038 +	217,038 176,538 +	257,538 217,038 +	298,038 257,538 +	338,538 298,038 +
Drug budget for each township Extra		40,500	40,500	40,500	40,500	40,500
		676,538	717,038	757,538	798,038	838,538
Months of drug supply		2 8	2.5 8.5	3 9	3.5 9.4	4 10

The above drug budget was proposed to finance drug procurement in all 326 townships from 1997 to 2001 by replicating MEDP activities to townships not yet replicated within the allocated drug budget, without extra drug budget funds being requested. This was done in order to obtain the approval of the MOH, and to avoid problems with the Ministry of Finance and Budget, as it was revised within the approved and allocated budget.

After the year 2001, all townships with primary health care services should finance an adequate supply and the local replenishment of essential drugs, independently of the MOH drug budget. They should also ensure a sustained supply of essential drugs in primary health care.

In addition to the above proposal, the Department of Health proposed allocating an initial Ks 500,000 to each replicated township to facilitate financing of drug procurement for additional months during replication of MEDP activities.

The community cost-sharing system was based on replication of MEDP activities in townships in order to ensure availability of funds for financing the procurement and replenishment of an adequate supply of essential drugs. The system should be sustainable over subsequent years and should promote rational drug use, with emphasis on drug supply management and rational prescribing.

**Activities**

Health workers should prescribe drugs rationally, on the basis of standard treatment guidelines according to the level of primary health care. Additionally, when dispensing drugs, they should inform patients about the rational use of drugs.

After dispensing, health workers should charge for drugs according to the pricing list developed for most health problems by the health supervision committees of each township. The township health committees have priced drugs for each health problem, taking into consideration transport and porter charges, and damage, in addition to the basic cost of the drugs. The prices are subject to change, according to current exchange rates.

The MEDP included a provision in its cost-sharing scheme exempting religious personnel, prisoners and the poor from charges in accordance with MOH policy. A reserve fund using funds donated by interested persons was developed to cover the cost of the exemptions. This was intended as an intervention to prevent the depletion of the rolling or revolving capital, to ensure the availability of an adequate amount of essential drugs and to sustain the scheme.

**Accounts**

The cost of prescribed drugs is recovered by charging patients for drugs solely in accordance with prices indicated in the list developed by township health committees. Community social workers fill out vouchers or receipts for the cost of the drugs, and keep systematic accounts of the amounts paid. Five days before the end of the month the social workers should hand the month's proceeds to the health workers, who deposit them at the Township Medical Office (TMO) at the end of the month when they collect their salaries. The proceeds from the sale of drugs are then deposited in a local bank account held jointly by the Township Administrative Officer, Chairman and Secretary respectively, and by the Township Medical Officer, of the township health supervisory committee. The TMO Township Medical Officer has to send 90% of the sales from township proceeds to the central committee at the Department of Health, which is responsible for replenishing the essential drugs supply for replicated townships.

As the basic health workers on the periphery were involved in the implementation of 48 other Department of Health projects, they were not able to cope with the additional duties required by the drug cost-recovery scheme. The project, therefore requested the community, especially retired service personnel, to come forward and help health workers.

The accountant of the TMO should be in charge of accounting. He or she should be supervised and monitored by the account officer of the TMO, who should in turn be responsible for auditing the accounts of the annual sale of drugs in the township.

In order to replenish the essential drugs supply in townships, the TMO must send financial reports, scrutinized by the township health supervision committees, to the central committee. The latter initiates the procurement of drugs from abroad in collaboration with central medical stores. Drugs from

abroad were purchased for two to three years until the Myanmar pharmaceutical factory could produce essential drugs locally. The TMO is free to replenish the required drugs with the remaining 10% of the fund from the account at the bank, after having sought and obtained the approval of the township health supervisory committee.

### **Training**

Health workers in replicated townships should be trained in:

1. selection of drugs;
2. estimation of drug requirements;
3. procurement, storage and distribution of drugs;
4. rational prescribing;
5. health education and dissemination of drug information to the community (patients);
6. accounting in the community cost-sharing system.

### ***Selection of drugs***

Health workers were trained to collect morbidity data based on health problems. Drugs were selected by matching them to standard treatment schedules according to the morbidity standard treatment method. Drugs should be selected by generic name.

### ***Estimation of drug requirements***

Health workers should be trained to collect the treatment episode data for health problems for a year, and to calculate drug requirements from them by using the morbidity standard treatment method, which is a rather crude procedure but suitable for beginners.

The past consumption method is another method for estimating drug requirements. It is more defined and accurate, provided that drugs are available at all times, in adequate amounts, and disbursed using standard treatment guidelines (i.e. they are prescribed rationally and a drug storage inventory is properly maintained). Before ordering or buying locally, the number of drugs required should be calculated and 10% added before ordering or buying locally to cover potential the deficit caused by damage and loss.

### ***Procurement, storage and distribution of drugs***

As well as being trained in drug procurement, health workers should be trained in how to check drug names and drug amounts, including the state of packaging upon receipt. Drugs should be stored on racks alphabetically, in a well-ventilated, cool storeroom, with bin cards for each item. The physical appearance and state of the drugs should be checked every fortnight. New stock should be placed behind the previous stock on a "first in-first out" basis in order to prevent the expiry of drugs. Drugs should be distributed when necessary.

***Rational prescribing of drugs***

Health workers should be taught to prescribe drugs only when drug therapy is indicated or needed. If at all required, drugs should be prescribed according to the standard treatment guidelines — for example, giving the generic name of the drug, and indicating the dose (strength), frequency (number of times to be taken per day) and duration of the course of therapy. These facts must also be

recorded in the patient's register. When dispensed to the patient, the drugs should be properly packaged with a label legibly stating the above-mentioned indications.

### ***Health education and drug information for patients***

Patients should be told about the nature of their health problems and about the efficacy, safety, suitability, dosage regimens and specific instructions for the use of the drugs prescribed. Side-effects and contraindications should be specifically mentioned. If a patient is on maintenance therapy with other drugs, or if more than one drug is prescribed, he or she should also be informed about drug interactions, if any.

Patients should be asked to repeat what they have been told in order to verify that they understand the treatment. If they do not understand, the information concerning their treatment should be repeated until they do.

The training programme for health workers on the above topics should be preceded by a briefing on the concept and role of the essential drugs project. Training can be carried out directly or indirectly (by training trainers for every locality).

### **Conclusion**

The importance of an adequate supply of essential drugs in townships became evident during the process of replicating MEDP activities. The availability of drugs depends on drug financing. The MEDP started with assistance from nongovernmental organizations such as FINNIDA and the Nippon Foundation. Later, it used its own allocated regular drug budget, without requesting extra funds from the MOH or using bank loans. After the year 2001, if funds are no longer needed for essential drugs the MOH will be able to use the drug budget for 326 townships for other primary health care interventions, such as maternal and child health care, and supply of safe water and sanitation.

The replication of MEDP activities to other townships has progressed smoothly. Thanks to the adoption of a cost-recovery/cost-sharing system in which drugs are charged for only with the patient's consent, proceeds will serve as rolling or revolving capital to finance the replenishment of essential drugs, sustaining their availability for years to come. The success of this system is due to active community participation and involvement, i.e. community cost-sharing based on the activities of MEDP.

The areas to be constantly and closely watched are:

1. availability of locally produced essential drugs of good quality;
2. training of health workers in the rational use of drugs;
3. accounting and auditing;

4. supervision and monitoring;
5. community participation and involvement reinforced by national commitment.

**4.4 Drug financing and health reform** (presented by Dr Germán Velásquez) (Summary of Antezana F, Velásquez G. *Drugs and health sector reform*. Geneva: World Health Organization; 1996 (unpublished document — WHO/TFHE/96.2)).

**Introduction: the challenges of globalization**

In Latin America and Asia, in almost every country of the African continent and in the newly independent states of the former USSR, the market economy, the opening up to markets, and the total abolition of the tariff barriers long regarded as necessary for development, were eagerly sought.

The present model of development of the majority of countries focuses on economic growth with little concern for equity or solidarity issues. This new trend raises some questions for the health sector:

1. Is the current socioeconomic development model of many developed and developing countries compatible with basic public health principles?
2. Can the market economy, privatization and free enterprise solve all the problems of the health sector?
3. In an environment in which the state is assigned the smallest possible role, who can guarantee equity of access to health services?

Some of the specific features of the new economic and social context are: increasing external debt; external debt contracted in the pursuit of development of the health sector; conditions set by the structural adjustment programmes, especially in the social sectors; problems related to currency devaluation for many countries; the accelerating growth of the world population, especially in poor countries; the demographic transition to an increasingly ageing population; the reappearance of diseases such as cholera and tuberculosis, and the appearance of new diseases such as HIV/AIDS.

In this context it is clear that the role of an organization such as WHO is now more than ever to explore new models and ways of organizing health services in order to enable them to meet more fully the objectives of efficiency and equity. Thus, we will be discussing not a single way, but rather a variety of ways, in which to carry out reform. Some of these may not yet have been tested, but that is where the challenge lies.

*The main aim of this presentation is to stimulate thought on the formulation of new ways of organizing health services, based on a concept of society that differs from that which reigns today in so many minds.*

**What does health sector reform mean?**

A reform is usually regarded as a positive change, something that improves what already existed. In theoretical terms, **health reform has been defined as the attempt to improve the efficiency, equity and efficacy of the health**

**sector.** Unfortunately, matters differ in practice. The term “reform” now has a number of different meanings; for example, it can refer to part of the process of remodelling or modernizing the state, the practice of encouraging privatization, or political and administrative decentralization.

## Health reform and drugs

The question that those in charge of the pharmaceutical sector seem to be asking today is: How health sector reform is influencing in the field of drugs? But we not rather be asking how the question of drugs will influence reform?

The essential drugs policy recommended and promoted by WHO for more than 15 years is the precursor and to an extent the motive force behind what we now call health sector reform. This policy, based on the concept of essential drugs, tackled the problems of equity of access, efficacy, quality and rational use.

In many countries, and especially in developing countries, drug expenditure is the most critical aspect of the financing of health services. In monetary terms, it is not the largest element (salaries, for example, cost more), but it is the most important and the most difficult to manage.

**Selection.** The starting point of an essential drugs policy is selection of drugs in the light of the health needs of the population. Selection implies a balancing of different variables: efficacy, safety, cost, health care infrastructure and personnel who are qualified to prescribe. Preparation of national lists of essential drugs was the first step towards pharmaceutical reform.

**Supply and generic drugs.** Drug supply is certainly one component of an essential drugs policy whose economic advantages have been the most studied. Today, generic drug programmes probably constitute the most relevant economic strategy for drug supply.

**Rational use.** Finally, and perhaps the decisive element for improving the efficiency, quality and accessibility of health services, is what the essential drugs policy calls the rational use of drugs, a concept that could be extended to the rational use of health services in general.

### ***What contribution can drug reform make to health sector reform?***

In many countries the health sector has a low priority in government plans. The experience of drug sector reform shows, however, that political, economic and social questions raised by drug issues can help the health sector acquire a far higher profile and make health reform a national priority.

Health officials and promoters of essential drugs policies should perhaps ask themselves whether some of the failures in applying such policies have been a result of by introducing of reforms into obsolete structures. Instead, the structures themselves should perhaps have been reformed first, so as to enable them to adopt the new approach proposed in the essential drugs policy. The introduction of this type of policy, based on equity and solidarity would of course be an even greater challenge in those countries whose macroeconomic model of development is not oriented towards equitable access to social services such as health and education.

We can see too that health sector reform and the essential drugs policy depend on each other. The latter can be a motive force or source of inspiration for reform of the health sector. However, the essential drugs policy in turn needs a wider goal, a new organization and concept of health services, which global reform of the health sector could bring.

Finally, concepts such as equity, solidarity and redistribution of resources can be introduced only within a project whereby economic and social development would clearly benefit the greatest possible number of individuals. Obvious as it may seem, it is still worth repeating that the solution to problems encountered by the health service today cannot come from within the health sector alone, since they are part of a wider picture — that of the options that each country has for economic and social development.



## 5. Country priorities for drug financing

Participants from each country have identified the following concerns and/or problems as their priorities.

### 5.1 Indonesia

1. Improve/increase financial resources for health and drug financing, including the government health budget (local, provincial, central) and community participation.
2. Promote managed care to increase equity and to develop effective cost-sharing mechanisms.
3. Improve quality assurance in and cost-efficiency of health care, including rational drug use.
4. Improve efficiency of health and drug budget utilization in order to develop cost-effective programmes and increase efficiency of programme implementation.

### 5.2 Myanmar

1. Increase financial support from the Government.
2. Improve community cost-sharing through NGO and government aid by providing an adequate supply of drugs in 40% of townships practising cost-sharing, and by improving quality of health care by training health workers.
3. Continue replenishing essential drug supplies in townships practising cost-sharing by using the proceeds from the sale of drugs to obtain drugs locally and abroad.
4. Purchase drugs locally with local currency.

### 5.3 Nepal

1. Increase the health budget as well as the government drug budget.
2. Improve mechanisms for purchasing quality drugs at the lowest prices.
3. Improve financial management at health facilities by practising cost-sharing in order to maintain an adequate drug supply and to ensure low-cost, high-quality care.

4. Improve the rational use of drugs.

## **5.4 Thailand**

1. Improve rational use of drugs through a proper selection process and effective financing mechanisms.
2. Improve the existing data system for drug financing at all levels of health care facilities (public and private).
3. Control drug prices, especially for essential drugs.
4. Develop guidelines and mechanisms for rational prescribing and rational drug use for providers, prescribers and consumers.

## 6. Priorities for work group action

After each country had discussed its priorities, participants were randomly assigned to either Group A or Group B. Their tasks were as follows:

### **Group A:**

- to increase efficient use of the available budget;
- to find policies/mechanisms to reduce the cost of production and distribution.

### **Group B:**

- identify policies/mechanisms to improve existing cost-sharing schemes in the region;
- find policies/mechanisms to reduce the cost/price of drugs.

Group A consisted of: Dr Andayaningsih, Dr Khin Maung Aye, Dr Singh Karki and Dr Orasa Kovindha (**members**) and Dr Germán Velásquez, Dr Budiono Santoso and Ms Karin Timmermans (**observers**). Group B consisted of: Dr I.G.P. Wiadnyana, Dr Myint Thaung, Mr Rishi Ram Sharma and Mr Panyawat Suntiwes (**members**), and Dr Sri Suryawati, Professor U Hla Myint and Dr Kin Shein (**observers**).

A summary of both groups' work is provided below.

### **6.1 Increase efficient use of available budget**

#### ***Utilization of available budget***

##### **Government**

- Health should be regarded as an investment. It has an:
  - economic impact;
  - political impact;
  - health impact.
- An appropriate budget for health and drug expenditures should be allocated.
- Cost-sharing should not be a substitute for the government budget.
- Drugs should be properly selected to improve efficiency, including use of managerial mechanisms for implementation (levels of centralization for local production and imports).
- The choice of procurement system should be based on the most efficient mechanism for the country situation.

##### **User fees**

- User fees should be considered as complementary to the government budget
- User fees (if chosen) should be incorporated into the national health policy and evaluated periodically.

**Insurance**

- Social health insurance schemes should be developed, based on cross-subsidies among different segments of the population.
- Cooperation and pre-paid schemes should be considered as strategies for establishing universal insurance schemes.

**Community voluntary funding (community financing scheme)**

- Community voluntary funding should be encouraged as a developmental stage in the pursuit of universal social health insurance.

**Drug donations**

- Drug donations should be part of the national drug policy but considered as a temporary solution only.

**Loans**

- Loans should not be used to procure drugs.

***Increase efficiency of use of available budget through:***

- proper selection;
- proper procurement, storage and distribution;
- proper use by providers and consumers.

**6.2 Reduce production and distribution costs**

1. Governments should encourage local producers to focus on essential drugs production.
2. The local production of finished products as well as raw materials should comply with international standards of good manufacturing so that local products can compete on an international market.
3. The efficiency of state production should be improved before other measures, such as privatization, are considered.
4. Drug distribution should be rational and well managed so that uniform prices can be established.

**6.3 Policies/mechanisms to improve existing cost-sharing schemes in the region**

1. Implement user charges while at the same time giving more attention to increasing access to health services for the poor.
2. Promote decentralized management of funds and costs.
3. Develop third-party financing schemes and promote private sector participation.
4. Improve quality of services and improve human resources for the delivery of required services.

5. Encourage trust funds to support poor patients.

#### **6.4 Mechanisms to reduce the cost/price of drugs**

1. Provide generic drugs and promote use of them.
2. Control drug prices, especially for essential drugs.
3. Exempt generics on the national list of essential drugs from taxation.
4. Develop and promote national insurance schemes.
5. Reduce the demand for pharmaceuticals through rational use and effective ways and means.



## 7. Conclusions and recommendations

### 7.1 Country priorities for action

Each country's final assignment was to consider its own health and drug financing situation and priority needs, and the role of the working group. They were asked the following questions:

1. What have been the most important insights and experiences gained during this second meeting?
2. What actions could be taken to improve the drug financing situation in your country?
3. How can the meeting of the working group best serve your needs? What field visits, presentations or discussions would be most helpful?
4. Could you see the working group providing any other assistance?
5. Is there any additional information or assistance that WHO could provide to help improve the drug financing situation?

Responses from each country delegate to questions 1 and 2 are outlined below. Responses to questions 3, 4 and 5 indicated the topics, in order of priority, which could be taken up at the third meeting of the working group. The topics are cost-sharing for health and drugs; public financing; insurance for health and drugs; health reform and global change; drug pricing policies and mechanisms; and financing mechanisms. Regarding the format of the meeting, the group gave the field visits a relatively high score. Most participants felt that the length of each session was about right (see Annex D for further details).

#### **Indonesia**

The meeting facilitated an exchange of information, which it is hoped will continue.

#### ***Future priorities include:***

- Proposing additional budgets to pay for such activities as:
  - improving the coverage of hepatitis-B vaccination for new-born babies;
  - improving the coverage of the tuberculosis programme;
  - increasing the local government budget for drugs;
  - encouraging and enlarging the programme for community participation.

- Requesting WHO to elaborate guidelines for cost-sharing schemes (public-private mix) for countries participating in the next meeting. This meeting should:
  - discuss the development of national guidelines;
  - formulate an action plan;

- include field visits.
- Requesting WHO or other agencies to provide assistance to a pilot cost-sharing project.

### **Myanmar**

The meeting increased knowledge of drug financing concepts, as well as facilitating an exchange of experience with other countries.

#### ***Future priorities include:***

- strengthening and extending cost-sharing activities;
- improving financial management through training;
- promoting the plan of action for drug financing and the development of drug financing mechanisms through presentations on and discussions of models for financing systems in consultation with local hospitals and drug stores;
- helping to coordinate external assistance;
- requesting WHO to provide technical tools for the review of the drug financing, situation in each country.

### **Nepal**

Concepts of drug financing have become clear as a result of the meeting.

#### ***Future priorities include:***

- convincing higher authorities as well as users about the benefits of cost-sharing schemes;
- reviewing the progress made between this meeting and the next;
- promoting the exchange of experience between Member States;
- supporting the development and use of guidelines and monitoring systems for drug financing and providing updates and ideas.

### **Thailand**

The meeting facilitated technical cooperation among the four countries and encouraged participants to share experiences and ideas.

#### ***Future priorities include:***

- strengthening essential drugs programmes in the public and private sectors;
- holding a follow-up meeting;
- requesting WHO to provide technical support in the area of operational research, provide documents and engage short-term consultants.

## 7.2 Recommendations

The working group members agreed on the following recommendations:

1. Member States should strengthen national and local drug financing schemes to ensure equity and access (availability and affordability) to essential drugs.
2. The MOH, in collaboration with the Ministry of Finance (Treasury, other relevant ministries), is responsible for ensuring adequate financing for essential drugs to meet the basic needs of the population.
3. If cost-sharing is introduced, revenue should be used to supplement government allocations for health and drug financing, and not as a substitute for government financing of health and essential drugs. Furthermore, policies and guidelines defining the objectives, responsibilities and method of operation for the cost-sharing scheme should be formulated by the MOH.
4. Financial and other economic mechanisms to promote rational use of drugs should be identified.
5. The MOH should explore ways of securing optimal public and private financing of health care and drugs in order to ensure equitable access to and quality of care.
6. Appropriate pricing policies should be formulated by the government to ensure that prices of drugs, especially essential drugs, are affordable for the majority of the population.
7. WHO will assist in identifying and evaluating, when possible, the different health and drug pre-paid schemes operating in the four Member States, which could be used as strategies for developing national social health insurance systems.

**Next meeting:** Nepal (Kathmandu), last week of October 1998.



## Annex A: Agenda

### Monday, 24 November 1997

- 09.30 – 10.30**      **Opening of the meeting**  
Welcome by the WHO Representative, Indonesia  
Message from Regional Director, WHO/SEARO  
Director General, Food and Drug Control, Indonesia  
Brief comment by Dr Germán Velásquez,  
DAP/WHO/HQ  
Background and objectives of the working group  
Dr Kin Shein, RA-EDV, SEARO
- Introduction**  
Self-introduction by participants  
Nomination of Chairperson and Vice Chairperson and  
Rapporteur for the meeting  
Announcements for local arrangements/facilities  
Dr Budiono Santoso  
Group photograph
- 10.30 – 12.30**      **Presentations**  
Role of the state in health and drug financing,  
Dr Germán Velásquez  
Presentation of report of first meeting,  
Dr Kin Shein  
Country presentations (Indonesia, Myanmar)
- 12.30 – 14.00**      **Lunch break**
- 14.00 – 15.30**      **Country presentations**  
(Nepal, Thailand)
- 15.30 – 16.00**      **Coffee/tea break**
- 16.00 – 17.00**      **Briefing and discussion of field visit**  
Dr Budiono Santoso/Dr Sri Suryawati

### Tuesday, 25 November 1997 (field visits)

- 08.30 – 09.00**      Pos Usaha Kesehatan Kerja located at Tempel Market
- 09.15 – 09.45**      Medarindotex: a textile industry
- 10.00 – 11.00**      Public hospital at Kabupaten Sleman — RSUD Sleman

<b>11.15 – 12.00</b>	Pharmaceutical warehouse at Kabupaten Sleman and “Dinas Kesehatan Kabupaten Sleman” district health office
<b>12.00 – 12.30</b>	<b>Lunch</b>

<b>13.00 – 13.45</b>	Ngaglik I Health Centre
<b>14.00 – 14.30</b>	Panti Nugroho Private Hospital
<b>15.00 – 15.45</b>	Ngemplak II Health Centre
<b>16.00 – 17.00</b>	Hotel: discussion of field visits

### **Wednesday, 26 November 1997**

<b>09.00 – 10.00</b>	Review of the literature on cost-sharing schemes Dr Sri Suryawati
<b>10.00 – 10.30</b>	Experiences of Myanmar essential drugs project in drug financing and sustaining availability of essential drugs, Professor U Hla Myint
<b>10.30 – 11.00</b>	<b>Coffee/tea break</b>
<b>11.00 – 12.30</b>	Working groups on national experiences and lessons
<b>12.30 – 14.00</b>	<b>Lunch break</b>
<b>14.00 – 15.30</b>	Working groups on national experiences and lessons
<b>15.30 – 16.00</b>	<b>Coffee/tea break</b>
<b>16.00 – 17.00</b>	<b>Plenary: conclusions of the working groups</b>

### **Thursday, 27 November 1997**

<b>09.00 – 10.30</b>	Drugs and health sector reform, Dr Germán Velásquez  <b>Round table:</b> Experiences in increasing government health and drug budgets (all participants)
<b>10.30 – 11.00</b>	<b>Coffee/tea break</b>
<b>11.00 – 12.30</b>	<b>Identification of country needs and priorities.</b> Priorities for working group  <b>Action:</b> discussions, two working groups
<b>12.30 – 14.00</b>	<b>Lunch break</b>
<b>14.00 – 15.30</b>	<b>Closing session</b>  Guidelines and recommendations for country plans of action  <b>Next meeting:</b> timing, venue, evaluation and recommendations

## Annex B: List of participants

### Indonesia

Dr Andayaningsih Director, Directorate of Drug Control Directorate General of Drug and Food Control Ministry of Health Jl. Percetakan Negara 23 Jakarta	Tel: 62-21-4244755 Fax: 62-21-4265927
Dr I.G.P. Wiadnyana Director, Health Centre Promotion Ministry of Health Jl. Rasuna Said, Jakarta	Tel: 62-21-522 1228 Fax: 62-21-520 3116
Dr Yos Hudiono Director, PT Manggala Jiwa Mukti Tebet Timur Dalam IIE/4 Jakarta 12820	Tel: 62-21-8294035/831 8286 Fax: 62-21-829 4035 E-mail: Tomy1@rad.net.id
Dr Erwi Adini Directorate of Drug Control Directorate General of Drug and Food Control Ministry of Health Jl. Percetakan Negara 23, Jakarta	Tel: 62-21 424 2755 Fax: 62-21 426 5927
Dr Syafrizal Directorate of Drug Control Directorate General of Drug and Food Control Ministry of Health Jl. Percetakan Negara 23, Jakarta	Tel: 62-21 424 5459 Fax: 62-21 426 5927

### Myanmar

Dr Myint Thaug Deputy Director, Central Medical Store Depot Department of Health Yangon	Tel: 95-1-282300
Dr Khin Maung Aye Assistant Director, Central Medical Store Depot (Mandalay) Department of Health Yangon	Tel: 95-1-221706/226778

### Nepal

Dr K.B. Singh Karki Director, Logistic Management Division Department of Health Services	Tel: 977-1- 220 736 Fax: 977-1- 220 736
--	--

Ministry of Health  
Kathmandu

Mr Rishi Ram Sharma  
Account Officer  
Financial Administration Section  
Ministry of Health  
Kathmandu

Tel: 977-1-227 006

## Thailand

Mr Panyawat Suntiwes  
Director, Northern Regional Training Centre  
for Primary Health Care Development  
516/41 Phaholyotin Rd., Maung District  
Nakhon Sawan 60000

Tel: 66 - 56 - 222 373/75/81  
Fax: 66 - 56 - 222 384  
E-mail: NRTCPhC@healthmoph.go.th

Dr Porntep Siriwanarangsun  
Director  
Bureau of Health Policy and Planning  
Ministry of Public Health  
Nonthaburi

Tel: 66 - 2 - 591 8195  
Fax: 66 - 2 - 590 1380  
E-mail: Porntep@health.moph.go.th

Dr Orasa Kovindha  
Policy and Planning Analyst  
Bureau of Health Policy and Planning  
Office of the Permanent Secretary  
Ministry of Public Health  
Nonthaburi

Tel: 66 - 2 - 590 1378  
Fax: 66 - 2 - 590 1380  
E-mail: Kovindha@health.moph.go.th

## WHO Secretariat

Professor U Hla Myint  
WHO/STC and National Consultant in Essential Drugs  
Department of Health  
Yangon, Myanmar

Dr Budiono Santoso  
Director, Centre for Clinical Pharmacology  
and Drug Policy Studies  
Gadjah Mada University  
Yogyakarta 55281, Indonesia

Tel: 62 - 274 - 563 596  
Fax: 62 - 274 - 563 596  
E-mail:  
Bsantoso@ins.healthnet.org

Dr Kin Shein  
Regional Adviser, WHO/SEARO  
World Health House  
Indraprastha Estate  
Mahatma Gandhi Marg  
New Delhi 110002, India

Tel: 91-11-331 7804  
Fax: 91-11-331 8607/332 7972  
E-mail: Kinshein@who.ernet.in

Dr Sri Suryawati  
Director, Post-graduate Programme for  
Pharmaceutical Management and Policy

Tel: 62-274-563 596  
Fax: 62-274-563 596  
E-mail: Suryawati@  
yogya.wasantara.net.id

Gadjah Mada University  
Yogyakarta 55281, Indonesia

Dr Germán Velásquez  
World Health Organization  
Essential Drugs and Other Medicines

Tel: 41-22-791 3509  
Fax: 41-22-791 4167  
E-mail: Velasquezg@who.ch

1211 Geneva 27, Switzerland

Ms Karin Timmermans, WHO/STP  
c/o WHO Representative for Indonesia  
Jl. M.H. Thamrin 14, P.O. Box 1302  
Jakarta 10350, Indonesia

Tel: 62-21-390 7727/314 1308  
Fax: 62-21-323 827  
E-mail:  
karint@whojkt.who.or.id  
karint@pusdata.dprin.go.id  
(please send messages to both)



## Annex C: References

- Antezana F, Velásquez G. *Health economics: drugs and health sector reform*. Geneva: World Health Organization; 1996.
- Collins D et al. The fall and rise of cost-sharing in Kenya: the impact of phased implementation. *Health policy and planning*, 1996; 11(1):52-63.
- Collins DH et al. *Health financing reform in Kenya. The fall and rise of cost-sharing, 1989-1994*. USA: Management Sciences for Health; 1996.
- Creese A, Kutzin J. *Lessons from cost-recovery in health*. Geneva: World Health Organization; 1995 (unpublished document — WHO/SHS/NHP95.5).
- Cross PN et al. Revolving drug funds: conducting business in the public sector. *Social science & medicine*, 1986; 22(3):335-343.
- Dumoulin J, Kaddar M, Velásquez G. *Access to drugs and finance. Basic economic and financial analysis*. Geneva: World Health Organization; 1991 (unpublished document — WHO/DAP/91.5).
- Community financing or cost recovery: Empowerment or social dumping? *Tropical medicine and international health*, 1996; 1(3:June):281-282.
- Foster S, Drager N. How community drug sales schemes may succeed? *World Health Forum*, 1988; 9:200-206.
- Fryatt RJ et al. Community financing of drug supplies in rural Nepal: evaluating a “fee per item” drug scheme. *Health policy and planning*, 1994; 9(2):193-203.
- Gilson L, Russel S, Buse K. The political economy of user fee with targeting: developing equitable health financing policy. *Journal of international development*, 1995; 7(3):369-401.
- Kanji N. Charging for drugs in Africa: UNICEF’s Bamako Initiatives. *Health policy and planning*, 1989; 4(2):110-120.
- Kinnon CM, Velásquez G. *Health economics: a guide to selected WHO literature*. Geneva: World Health Organization; 1996.
- Kinnon CM, Velásquez G, Flori YA. *Health economics: glossary*. Geneva: World Health Organization; 1995.
- Kutzin J. *Experiences with organizational and financing reform of the health sector*. Geneva: World Health Organization; 1995 (unpublished document — WHO/SHS/CC/94.3).
- Management Sciences for Health. *Planning-assessment guide for user fee programmes. User fees: managing implementation*. Nairobi: Management Sciences for Health; 1994.
- Nolan B, Turbat V, eds. *Cost recovery in public health services in sub-Saharan Africa*. Washington, DC: Economic Development Institute of the World Bank; 1995.
- Quick JD et al. eds. Financing drug supply (Chapter 40). Part IV, Management support systems. In: *Managing drug supply*. 2nd ed. West Hartford: Kumarian Press; 1997.
- Quick JD et al. eds. Revolving drug funds (Chapter 44). Part IV, Management Support Systems. In: *Managing drug supply*. 2nd ed. West Hartford: Kumarian Press; 1997.
- Reddy S, Vandemoortele J. *User financing of basic social services: a review of theoretical arguments and empirical evidence*. New York: United Nations Children’s Fund; 1996.
- Sarmiento AZ. *Alternative drug pricing policies in the Americas*. Geneva: World Health Organization; 1995 (unpublished document — WHO/DAP/95.6).

Thein S. *Strengthening of primary health care through community cost-sharing*. Myanmar: Ministry of Health, Department of Health; 1996.

United Nations Children's Fund. *The Bamako Initiative: rebuilding health systems*. New York: United Nations Children's Fund; 1995.

Waddington C, Panza A. Ten questions to ask about revolving drug funds. *Tropical doctor*, 1991; 21(April):50-53.

World Health Organization. *Financing drugs in South-East Asia*. Geneva: World Health Organization; 1997 (unpublished document — WHO/DAP/97.8).

World Health Organization. *Health reform and drug financing. Selected topics*. Geneva: World Health Organization; 1998 (unpublished document — WHO/DAP/98.3).

World Health Organization. *Health reform and drug financing: overview of experiences, options, and priorities for action*. Geneva: World Health Organization; 1997 (unpublished document — WHO/DAP/97.7).

## Annex D: Evaluation of the meeting/priorities for the working group

### 1. Evaluation of the meeting

#### Usefulness and time spent on each topic

Evaluation forms were completed by eight participants plus three observers from the MOH of Indonesia. Each topic covered at the meeting was evaluated in terms of:

<b>usefulness</b>	<b>time spent</b>
1 = not useful	1 = too much time
2 = not too useful	2 = about right
3 = useful	3 = too little time
4 = very useful	

The mean scores are shown below.

Topic	Usefulness		Time spent	
	n	mean	n	mean
<b>Monday, 24 November 1997</b>				
1. Role of the state in health and drug financing	9	3.7	9	2.1
2. Presentation of report of the first meeting	9	3.6	9	2.0
3. Country presentations (Indonesia, Myanmar, Nepal, Thailand)	9	3.7	9	2.1
<b>Tuesday, 25 November 1997</b>				
4. Field visits	9	3.9	9	2.4
5. Discussion on field visits	9	3.4	9	2.1
<b>Wednesday, 26 November 1997</b>				
6. Presentations of field visit summary reports				
7. Review of literature on cost-sharing schemes	8	3.5	8	2.1
8. Experiences of Myanmar EDP in drug financing and sustaining availability of essential drugs	8	3.5	7	2.0
9. National experiences and lessons (group work)	9	3.0	9	2.0
10. National experiences and lessons	9	3.6	9	2.1
	9	3.4	9	2.0
<b>Thursday, 27 November 1997</b>				
11. Drug and health sector reform	9	3.4	9	2.2
12. Experiences in increasing government health and drug budget (roundtable)	6	3.5	6	2.2
13. Identification of country needs and priorities	9	3.6	9	2.1
14. Priorities for working group action (group work)	8	3.1	8	2.1

15. Guidelines and recommendations for country plans of action	8	3.2	8	2.0
--	---	-----	---	-----

### **Comments and suggestions on the content and format of the meeting**

(Number in brackets indicating the number of persons who commented)

Excellent	(1)
Well done	(1)
Well designed	(1)
Improving participants' knowledge of drug financing	(1)
Content very good	(4)
Informative	(2)
Useful	(2)
Friendly	(1)
More references should be given to improve understanding	(1)
Materials and areas for discussion should be distributed earlier	(1)
Group discussion is minimum	(1)
Supporting role of Secretariat could be improved	(1)
Meeting should have lasted 10 days	

### **Comments and suggestions on travel and other administrative arrangements**

(Number in brackets indicating the number of persons who commented)

Excellent	(1)
Very good	(5)
Very informative	(1)
Well arranged	(2)

## **2. Priorities for the next working group meeting**

Participants were asked to indicate their top five priorities. It turned out that one participant indicated "priority 1" for every topic; this form was excluded. Six participants completed the form exactly as requested, and two participants gave ratings for each sub-topic. The results are set out below. The highest score corresponds to the highest priority.

<b>Topic</b>	<b>Score</b>
<b>Top five topics</b>	
1. Cost-sharing for health and drugs	22
2. Insurance for health and drugs	19
3. Public financing	15
4. Health reform and global change	12
5. Drug pricing policies and mechanisms	12
<b>Topics with less priority</b>	

6. Financing mechanisms	7
7. The use of international loans in the pharmaceutical sector	2
<b>Other priorities as indicated by participants</b>	
1. Managed care: initiating project and its development	2
2. Mechanism of private-public mix	1
3. Inviting representatives from the private sector to the next meeting	1

\* \* \* \* \*