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Review

An Introduction to the Health System in Vietnam

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Abstract

After independence, the Vietnamese government made an enormous effort to construct a comprehensive health care network from the central down to the grass roots levels, however, the health situation of the population has not improved as much as was expected. The most fundamental cause is poverty, as it is in other developing countries. Because of poverty, the means to achieve a safer environment such as sanitation, safe drinking, water and adequate nutrition, is often absent. Inefficient administration due to the sectionalism among different organizations makes the situation worse.

With the introduction of a market policy in 1986, privatization has been introduced into the health sector in order to address some of the inadequacies inherent in the current system. Although privatization might reduce public health expenditures by reducing utilization pressure on public facilities, it deprives the most vulnerable inhabitants of health services.

Key words: Health system, Community health, Human resources, Market economy, Vietnam

Introduction

After the introduction of a market economy in 1986, Vietnam has undergone rapid economic growth. Table 1 summarizes the actual situation of Vietnam in 1992[1)-3)]. Economic development might improve the future health conditions in Vietnam by providing basic infrastructures, but on the contrary, it will bring about a multitude of potential health hazards: i. e., direct risks associated with higher production such as accidents at work, environmental damage, rapid and unplanned urban growth, and indirect risks resulting from child labor. A healthy economic growth is something difficult to achieve, both for rich and poor countries. Especially in poor countries, health problems tend to take second place in order to realize an economic growth as quickly as possible. In this report, the author will introduce the health system of Vietnam and its problems, based on four field studies from 1993 to 1995, in order to offer some direction for the future international collaboration in this field.

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Health system

1) Administration

Vietnam is a socialist republic based on a tripartite structure: the Communist Party of Vietnam, the People, and the State. The Party is the most important and conducts the affairs of the country, the Vietnamese administation system consists of four levels: nation, province (44), district (519) and commune (9807). Within each level, the People's Committee and the Communist Party exist and they are responsible for administration. Health services are included in this basic administrative structure. Figure 1 shows the health system structure in Vietnam. At the national level, the Ministry of Health has the responsibility of establishing health policy strategies. For example, according to the health strategy developed between 1991-1995, they are stressing the importance of developing Primary Health Care activities such as strengthening the PHC network, maternal and child health and family planning, and the development of pharmaceutical industries for essential drugs[4)].

The ministry has promulgated regulations in order to actualize these programs. However, it should be noted that the Ministry of Health is not the only ministry in charge of health. Other ministries such as the Ministry of Defense and the Ministry of Family Planning also have their own health branches. In addition to this situation, the Ministry of Health infrastructure

Table 1 Basic statistics of Vietnam.

Population (1992)	
• Population density	69.3 million
• Population growth rate	209 persons/Km^2
• Population distribution :	
Urban	20%
Rural	80%
GNP per capita (1992)	220 USD
Economy	
• Real growth of GDP (1992 estim.)	8.3%
• Annual average growth rate (1986-90)	3.9%
• GDP by main activity (1991 estim.)	
Agriculture	39%
Industry	29%
Service	32%
• Exchange rate (June 1993)	USD 1=Dong 10500
• Inflation (1992)	17.5%
• External debt (1991 estim.)	Rbls 10.4 billion plus USD 3.97 billion
• Scheduled debt service ratio (1992, as percent of exports)	25%
• Infrastructure	
Roads	87507Km
Railways	3259 Km
Electricity	9799KWH
Land use (thousand hectares 1990)	
• Total area	33103
• Agricultural land	6993
• Forest and woodland	9395
Education	
• Mean years of schooling (25+years old, 1990)	
Total	4.6
Female	3.4
Male	5.8
• Adult literacy rate (1990)	
Total	88%
Female	84%
Male	92%
Health	
• Infant mortality rate (1990)	49/1000
• Life expectancy (1989)	
Female	67.5
Male	63.0
• Access to health services (1987-89)	80%
• Access to sanitation (1988-90)	53%
• Daily calorie supply/requirements	102%
• Percent of population served with safe water (1991)	44%
• Annual health expenditure (in Mill, VND)	650
• Percent of health budget to total budget	4%

Source : Statistical yearbook 1992, General Statistical Office, Hanoi, 1993
Health statistics of Vietnam 1990-1992, Ministry of Health, Hanoi,

is also highly fragmented, each of which is in charge of particular programs, such as malaria, trachoma, tuberculosis, and so on. The most remarkable characteristic of the Vietnamese administration is its strong sectionalism between ministries as well as among divisions even in the same ministry. As a result, because information is rarely shared, quite often several ministries/divisions are doing the same thing at the same time. The lack of coordination among different sectors is the most important weakness of the Vietnamese health system.

The health services at the provincial and district levels are under the Ministry of Health and at the same time, are controlled by the People's Committee at the corresponding level. Formerly, the Vietnamese administration system was very centralized, however, according to recent reforms, a considerable part of the administration has been decentralized, thus giving the local government authorities the freedom to define their priorities. However, the quality of planning, management and realization varies among the local governments according to their human and material resources.

2) Administering health services

Principally, most of the health services are provided by the public sector. At the national level, the national central hospital attached to a medical school is responsible for all kinds of medical services including medical research and medical education. Provincial and district general hospitals provide the secondary level of general medical services, including emergency service. Generally, a provincial hospital is built to serve 350,000 inhabitants with 300 to 800 beds, and one district hospital is for 125,000 inhabitants with 100 to 300 beds. In addition to these hospitals, there are a number of special hospitals for obstetrics and gynecology, pediatrics, tuberculosis and leprosy.

The inter-communal polyclinic is a facility which offers basic medical services for outpatients : internal medicine, surgery, pediatrics, obstetrics and gynecology, ORL, ophthalmology, emergency, dental clinic, etc. The polyclinic plays a role as a referral center for communal health stations.

Communal health stations also play an important role in providing primary health care services for the population. It is at these stations that the rural population ofte comes into contact with the medical system. If the patient's problem is beyond the scope of the station, the patient is referred to the polyclinic. These stations are managed by auxiliary medical professionals : i.e. assistant doctors, assistant nurses, and assistant pharmacists. According to the Ministry of Health, about 40% of the population were fully served by the communal health stations, about 57% were partially served and 3% were not served at all in 1992[2].

At the lowest level, communal health workers (CHWs) are dispatched to a village, and their task is mainly providing primitive health services. They are trained locally for several months, and then hired by the productive collective of each commune (i.e., a collective farm like a kolkhoz of the former Soviet Union). However, productive collectives were dismantled after the introduction of the market economy, which made it impossible to maintain the local CHW system. As a result, most of the CHWs have returned to agriculture.

Table 2 shows the evolution of the number of medical facilities from 1985 to 1992[2), 3), 5)]. In 1992, there existed one general hospital for 88 thousand citizens, one polyclinic for 61 thousand, and one health station for 6.8 thousand inhabitants. The average number of beds for 100 thousand inhabitants was 250. In addition to these public institutions, there are private clinics. Since mid-1988 a doctor can open his own private clinic if he has enough experience in the public sector and the local goverment approves his application. Today, many doctors in public hospitals have their own private clinic as well, and are working there after a day's work at the hospital.

3) Financial aspects

The government allocates 4% of the national budget annually for health expenditures for the national and provincial

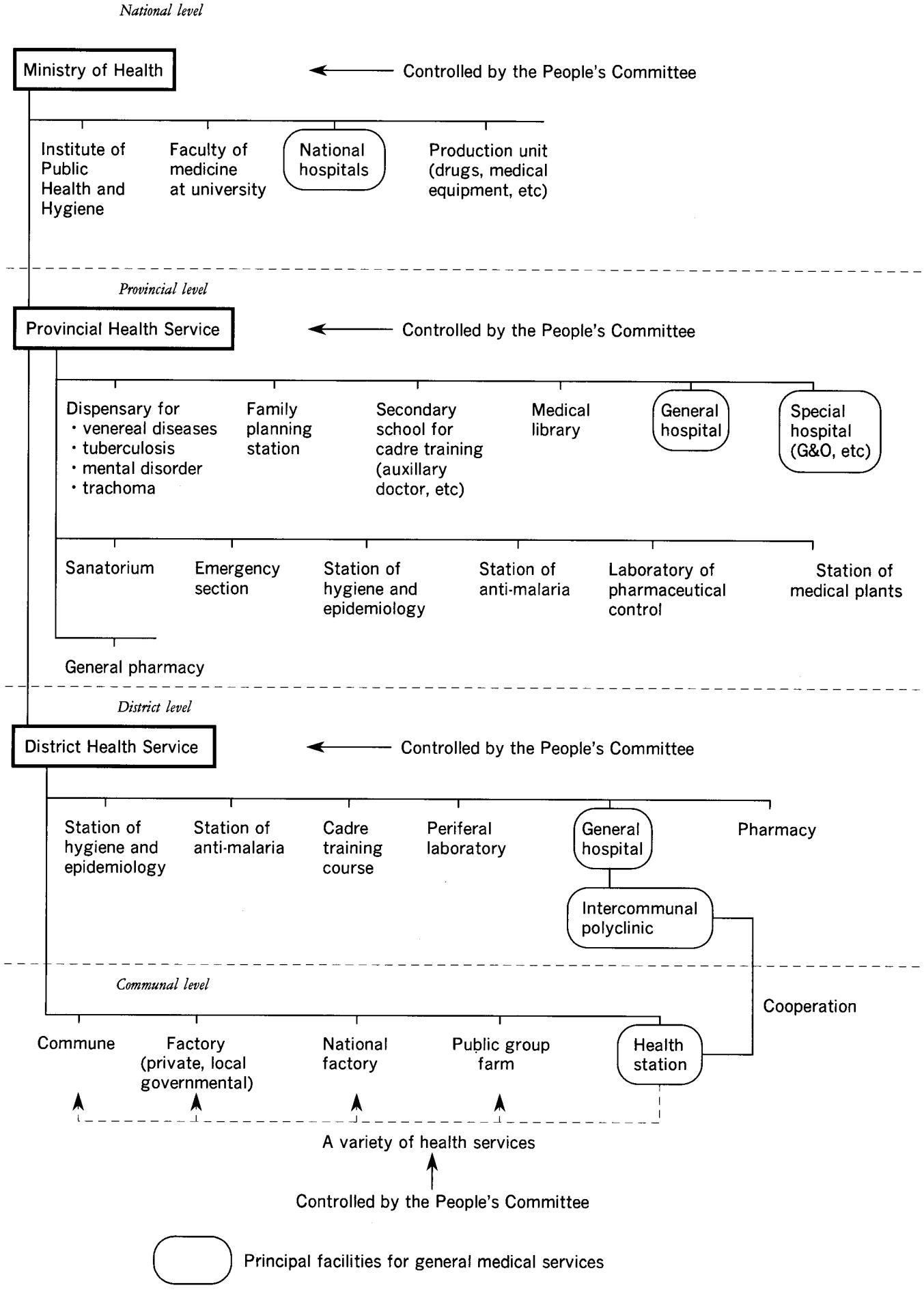

Fig. 1 Structure of health system in Vietnam.

Table 2 Number of medical facilities in Vietnam (1985-1992).

	1985	1988	1992
Establishment			
Hospital	729	767	784
district	485	505	515
Polyclinic	583	676	1130
district	533	611	1052
others	50	65	80
District maternity hospital	84	66	60
Health station	10715	11106	10248
Leprosanatorium	21	20	19
Sanatorium	106	110	107
Number of beds	211790	221343	173536
Hospital	143771	154486	120710
Health station	68019	66857	52826

Source : Health statistics data (scm), Ministry of Health, Hanoi, 1989
Health statistcs of Vietnam 1990-1992, ibd.

health services[2), 3)]. A part of each district's health expenditure is also paid by the central government. The remaining health expenditures of districts and communities are funded by the local People's Committee, except for the poor mountainous regions which are under the responsibility of the central government. The contribution rate varies according to districts and communes. It is estimated that a commune's contribution is equivalent to about 20 to 30% of the national budget for health[6)]. The communal health stations are almost entirely funded by the community they serve. The community builds the station and pays the salaries of the staff members. Villagers raise the necessary funds for these activities by contributing in cash, by allocating a part of the harvest, or by a local tax. It should be noted that Vietnam receives enormous external financial aid from international organizations and foreign countries ; it amounted to 33 million US dollars in 1992[7)].

As a socialist country, Vietnam formerly maintained a free medical service, but faced with an economic crisis, the government introduced a sliding scale system from 1989. In hospitals, beds are divided into two categories. The first category of beds must be paid for by the patients (the price is different according to region, i.e., 5 US dollars per day on average in Hochiminh City, and 1-2 US dollars in Hanoi City in 1993) and are reserved for the relatively rich. The second category of beds are free or low-priced (0.5 US dollars per day on average in Hochiminh City and 0.1-0.2 US dollars in Hanoi) and are reserved for the poor. Outpatient services in hospitals and polyclinics, average about 0.15 US dollars for general services and 0.20 US dollars for services by a specialist. In addition to this charge, a patient has to pay for the prescribed drugs. A small amount of user's fees has also been introduced in the health stations. However, this has been criticized because the user's fee deprives the most vulnerable inhabitants, that is, the poor, of health station services. Medical services for tuberculosis, venereal diseases, leprosy, occupational diseases, and vaccinations are free of charge. In the case of the private sector, the amount charged is almost the same as that in the outpatient services of public facilities. Doctors distribute directly to their patients drugs which they have purchased at the drug market. It is expected that this private practice will reduce public health expenditures by reducing utilization pressure on public facilities.

In order to assure financial resources for the medical services, the government has started a new social security scheme since January 1995[8)]. Each employee in the public sector or in an authorized company, has to donate 5% of his salary to the fund, and the employer must donate the equivalent of 15% of each employee's salary. It is not sure, however, whether the government will be able to generalize this scheme for the total population.

The government has allocated 4% of its budget for health (about 18.6 million US dollars in 1992. see Table 1). Most of the budget is consumed by personnel salaries and by the maintenance of institutions, leaving only a small part of the budget available to assure good health for the inhabitants. The programs mentioned above (introduction of a sliding scale, privatization and a social security scheme) may reduce the running costs of medical institutions and increase the money available for community health services. However, the government needs a more basic reorganization of its health services. The problem is that the urban hospitals absorb most of the health budget for their running cost and as a result hinder development of the community health activities of the polyclinics and communal health stations. A program which facilitates a community based health activity should be the main aim of health strategies.

Human resources

The education and training system of medical doctors, dentists, pharmacists, and nurses is almost the same as in developed countries. One of the most important characteristics of the Vietnamese system is the existence of auxiliary medical professionals. They receive an education of short duration in a provincial school (i.e., a three-year education for an assistant doctor) and work mainly at the health stations in the field of primary health care. These auxiliary medical professionals have contributed to the improvement of the health status of the population despite the severe socio-economic constraints, especially in the rural areas. However, because of the lack of

Table 3 Number of health personnel in Vietnam (1992).

	1992	of which			
		Central level	Province level	District level	Commune level
Medical doctor	26974	3060	12360	10362	1192
Pharmacist	5640	648	3182	1810	
Assistant doctor	45106	561	8003	19204	17338
Medical technician	6418	1530	2967	1921	
Pharmacist (2nd level)	6087	253	3245	2589	
Pharmaceutical technician	1574	185	785	604	
Nurse	20176	2376	10119	6625	1056
Midwife	7308	436	2659	3210	1003
Auxiliary nurse	31378	842	8922	9363	12251
Auxiliary pharmacist	10308	200	4479	3868	1761
Auxiliary midwife	6585	110	580	1405	4490
Laboratory assistant technician	2472	237	1169	1066	
Traditional medical practitioner	967	25	127	238	577

Source : Ministry of Health, Health statistics of Vietnam, Hanoi, 1993.

adequate continuous education, their knowledge and skills are not always adequate for today. In fact, the quality and adequacy of services they offer are often questioned by the receivers. This atmosphere hinders the development of the PHC system. Therefore, a continuous training system must be introduced for these types of professionals.

Table 3 shows the number of medical professionals[3]. The number of medical professionals per 100 thousand population in 1992 was as follows: medical doctors: 44, assistant doctors: 36, nurses: 33 (84 if assistant nurses are included), and pharmacists: 9.2 (19.1 if secondary degree pharmacists are included, and 36 if secondary degree and auxiliary pharmacists are included). The problem is maldistribution of human resources. Approximately half of the health professionals are employed at the central and provincial levels. Although the other half are working at the district and communal levels, over 60% of them are working at district level facilities which are located in urban areas of the district[9]. Thus, the shortage of manpower at the communal level is a critical problem for the further development of PHC.

Health problems in Vietnam

Table 4 shows the ten leading causes of morbidity and mortality in Vietnam in 1992 for the whole population and for children under 15 years of age[2]. However, because these statistics were based on the data from public hospitals, where only 10% of deaths occur, the data must be underestimated. As in other developing countries, infectious diseases are the greatest health problem in Vietnam. To decrease the morbidity and mortality rates due to infectious diseases, the government has placed great importance on its vaccination program for children (EPI). The coverage rate increased remarkably during the past decade to the level of about 90% in 1992.

Another important infectious disease is trachoma. It is estimated that some 30 million people are affected by this discase and that 2 or 3% of the population are suffering from blindness with trachoma implicated as the major cause[10].

The infant mortality rate in 1988 was estimated to be between 45 and 50per 1,000 births[11]. As far as causes of perinatal death are concerned, it is reported that 25% of all cases were due to prematurity, 18% to respiratory infection, 8% to tetanus and 6% to congenital abnormalities[11]. Apparently, malnutrition played an important part in this high infant mortality rate. According to the National Institute of Nutrition in Hanoi, about 50% of the children under 5 years of age require an immediate program of nutritional supplement[12].

The insufficiency of basic hygienic equipment (safe water supply, drainage systems, garbage control, etc) makes it difficult to protect the health of the population. According to published data, 56% of the total population did not have safe water in 1992[13]. Even in urban areas, only about six million people have piped in water[13]. The remainder use polluted water from shallow wells, rain water catchment tanks, rivers and ponds. Apparently the situation is worse in rural areas, where only 10% have access to safe water. Sanitation coverage is still problematic: only 20% of the urban population are covered by a sanitation system, and in the rural areas only 10% of the population possess appropriate latrines[14].

Conclusion

The philosophy of the Vietnamese health policy is based on socialistic principles, which have encouraged people to undertake health-related activities in the form of mass organizations and participation. In this system the people have been required to take an economic and political role in the provision of basic health services. In practice, the communal health stations have been constructed as basic units of the system, where locally-hired auxiliary health staff members administer basic health services under the control of the People's Committee. The government has made an enormous effort to construct a comprehensive network from the central level down to grass roots level, however, the health and nutritional situation of the population has not improved as much as was expected. As shown in Table 4, most of the ten leading causes of mortality and morbidity have been infectious and malnutrition related diseases. There are many reasons for this, most of which are outside of the health system itself. The most fundamental cause is poverty. Because of poverty, the means to achieve a

Table 4 Ten leading causes of morbidity and mortality in 1992 (reported by 60 provincial hospitals, per 100000 inhabitants).

Total population			
Morbidity		Mortality	
1 Acute bronchitis	48.04	Pneumonia	2.19
2 Malaria	47.85	Malaria	0.86
3 Other protozoal intestinal & indefinable intestinal diseases	39.58	Other protozoal intestinal & indefinable intestinal diseases	0.71
4 Pneumonia	39.13	Viral encephalitis	0.70
5 Other digestive diseases	35.35	Acute bronchitis	0.70
6 Unidentified	32.13	Other respiratory diseases	0.68
7 Appendicitis	30.48	Encephalitis	0.65
8 Respiratory tuberculosis	25.89	Crebro-meningeal haemorrbage	0.64
9 Hypertension	23.89	Certain conditions originating in the perinatal period	0.53
10 Inflamation of eyes	23.19	Tetanus	0.48
Among children 0-14 years old			
Morbidity		Mortality	
1 Acute bronchitis	80.00	Cerebro-meningeal haemorrhage	1.27
2 Pneumonia	77.74	Pneumonia	1.08
3 Other protozoal intestinal & indefined intestinal deseases	74.89	Other forms of heart diseases	0.99
4 Haemorhagic fever	40.14	Malaria	0.93
5 Angina & Naso-pharyngitis	26.09	Respiratory tuberculosis	0.87
6 Malaria	24.55	Viral hepatitis	0.69
7 Other viral diseases	20.81	Other cerebro-vascular diseases	0.55
8 Other respiratory diseases	18.20	Other digestive diseases	0.51
9 Bacillary dysenteria	17.69	Intracranial injury	0.43
10 Other infectious diseases	17.59	Viral meningitis	0.42

Source: Health statistics of Vietnam 1990-1992, Ministry of health, Hanoi,

safer environment such as good sanitation, safe drinking water and adequate nutrition, is often absent.

Under the new market policy, Vietnam is realizing rapid economic development. Will this development be followed by the amelioration of the health situation of the people? As Prescott and Jamison observed in China[15], and which is also the case in Vietnam, despite the egalitarian emphasis of a socialist development strategy, the distribution of both physical and budgetary resources in the health sector remain substantially unequal between regions. Furthermore, the current Vietnamese economic policy is likely to increase this inequality. After the introduction of a market economy, investment from foreign countries has been concentrated in already developed areas, such as Hochiminh. Thus, inequality in the economic field between urban and rural areas has widened. The annual per capita average income in Hochiminh city in 1993 was 520 US dollars, more than twice the national average of 220 US dollars[16]. In principle, local health services are organized depending on the local tax, thus the volume and quality of services varies widely according to the financial stability of a local government. While the communal health stations in the peripherals quietly deteriorate, the urban hospitals are receiving more attention from foreign donors as well as from the new rich class.

Wrong priorities and maldistribution of health resources are major problems facing Vietnam. The capitalist approach, such as the introduction of a user's fee and the development of a private sector, might increase this inequality between the 'haves' and the 'have-nots'. Resources must be allocated geographically to reduce this inequality through the provision of an appropriate mixture of different levels of care that reflect the local conditions. For this purpose, it is necessary to organize an appropriate data collecting and analyzing system in order to grasp the actual situation and needs of the people at each level of administration. Moreover, the current health system also requires reorganization in order to improve managerial efficiency. As shown in Figure 1, the health system in Vietnam is very fragmented. The fact that information is collected by different sections but rarely analyzed in an integrated way, is one reason for inefficient management. It should be required that most of the particular services be integrated into one competent unit both at the provincial and district levels in order to collect necessary information, to analyze it and then to offer apropriate services in a more integrated and cost-efficient way. In order to realize this system, it is necessary to train a number of personnel competent for these tasks, especially at the provincial and district levels.

Finally, the present formative analysis does not clarify all the problems of the health system in Vietnam. Further analyses using more quantitative approaches are necessary in order to offer more concrete direction for the future development both for Vietnam and its donor countries.

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