# Establishment of primary health care in Vietnam

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*SUMMARY. Basic demographic and epidemiological data relevant to health problems in Vietnam are described in this paper. Existing health service arrangements are referred to, with particular emphasis on the strategy for development of primary health care. The establishment of the paediatric centre in Ho Chi Minh City is reported, and examples of its valuable work in primary health care development are described.*

## Introduction

VIETNAM is one of the poorest of developing countries. Its state of comparative under-development is largely attributable to a history of war going back over about 40 years, at first with the French and subsequently with the Americans, which resulted in devastation of the country. Despite an apparent desire for peace, military spending remains high, owing to tension with China in the North, and on account of Vietnam's recent involvement in Cambodia. However, it was also inevitable that, following the 1975 liberation, a number of inexperienced individuals were thrust into senior positions in the country. The last party congress of the Vietnamese communist party acknowledged such errors, and it is hoped that Vietnam is now entering a new phase of development.

Official figures claim that the population of Vietnam in 1986 was 61 661 220. However, other research institutes in the country estimate that in 1988 the population was approximately 66 000 000. According to statistics issued by the Vietnamese Ministry of Health, after taking account of the birth rate and mortality rate, the population growth rate in 1987 was 21.5 per 1000 population. Moreover, 46% of the total population of the country is under the age of 15 years, and 0–4 year olds constitute 14% of the total population. The infant mortality rate was stated to be 35 per 1000 live births, and the maternal mortality rate between 1.0% and 1.4%. Life expectancy was stated to be 63 years for men and 61 years for women. However, surveys carried out by the paediatric centre in Ho Chi Minh City cast some doubt on these figures. These suggest a higher infant mortality rate at around 50–60 per 1000 live births in urban areas, and higher still in some remote districts. Mainly on account of this higher infant mortality rate, the paediatric centre calculates that life expectancy is nearer to 55 than 63 years for men.

Despite these more pessimistic figures, the fact remains that health status for the population in Vietnam appears to be considerably better than the mean for all African countries, for example, and is no worse than that experienced in some other developing countries where the gross national product per head is much higher. In Vietnam, this figure is US$ 210 per head, and health spending per person per year is the equivalent of US$ 1.9.

## Morbidity and mortality

As in many developing countries, the commonest cause of death is infectious disease. In adults, the main infectious diseases are malaria, tuberculosis, a variety of bowel infestations, and various chest infections. Hepatitis B is also common. Next comes cardiovascular disease (mainly strokes), with cancer being the third commonest cause of death. Among cancers, the incidence of cervical cancer and gastric cancer seems to be particularly high. Lung cancer is known to be fairly common, but may be more so owing to failure to make the correct diagnosis in many cases of chest disease. Breast cancer incidence is low, which may be associated with the low fat content in the Vietnamese diet. In children, among the infectious diseases, the diarrhoeal diseases are the commonest causes of death, followed by dengue and malaria. Nowadays, uptake of immunization for children is encouraging. Malnutrition is the next most common problem among children.

The cities of Vietnam have many of the problems common in centres of population in developing countries. These problems are seen at their worst in Ho Chi Minh City. This conurbation has a population of over 4 000 000 (compared with around 500 000 living in the same area in 1940), of which 3 000 000 are resident in the crowded central area (Saigon). Here the problems posed by lack of sanitation and poor hygiene are particularly exacerbated. Pollution is a problem and this takes three main forms: pollution of the air from traffic fumes and factories; human pollution caused by poor sanitation; and pollution from industry into water courses (mainly chemicals including in one particular area, heavy metals). A further problem in Ho Chi Minh City is infectious disease as already described for the rest of Vietnam.

Among the most disturbing health problems facing Vietnam is the legacy of the chemical warfare agents used during the Vietnam war. During one phase of this war it was USA policy to drive rural people away from their villages, using defoliants to destroy crops. Certain highly toxic dioxins were included in the defoliants used. There have been a number of documented increases in morbidity and mortality which appear to be attributable to dioxin exposure, including an increased incidence both of liver cancer and chorioncarcinoma. In the case of this latter condition, over recent years, between 45 and 51 pregnancies resulting in chorioncarcinoma have been observed for every 1000 live births in Ho Chi Minh City. These health problems are, generally speaking, only seen in South Vietnam (especially around Ho Chi Minh City and the Mekong delta), as chemical warfare agents were not used in North Vietnam.

## Diet and drugs

As already stated, malnutrition remains an identifiable health problem, especially in children. There appears to be a plentiful supply of many foodstuffs throughout the country (although recently shortages have been reported in some areas, following poor harvests), and it has been claimed that there is no longer any real problem of malnutrition. However, there is evidence that it remains a problem in children, and relates not to the overall supply of food, but to the quality of the diet eaten by the people, which is deficient in fats, especially certain essential fatty acids such as linoleic acid. Not surprisingly, vitamin deficiencies caused by deficiency of fat soluble vitamins are particularly common. As far as vitamin D is concerned, this situation is made worse by the fact that mothers tend to wrap children up, believing that it is not proper to leave children's skin exposed to sunlight.

So far Vietnamese health workers have had little time to think about diseases of affluence, although there is already concern

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about alcoholism and drugs of addiction. There were large numbers of heroin addicts remaining in South Vietnam after the Americans departed, and although many addicts have responded to treatment, heroin addiction remains a problem. Many Vietnamese people now smoke and it is feared that, in a few years time, an epidemic of smoking related diseases will add to existing health care problems.

## Organization of services

Hospital services were developed during the period of French colonialism and the further period before liberation in 1975. These hospitals are now dilapidated and relatively poorly equipped. There has been some new hospital development since 1975. Superimposed on this hospital service is a decentralized system of care (established in the North in 1954 and in the South following 1975) extending from the national level (Ministry of Health) to the cities and provinces and so on down to local communities. The Ministry is responsible for providing schools of medicine and pharmacy, and for supporting research institutes, as well as for direct administration of hospitals. The health services in cities and provinces provide schools for other health personnel (for example nurses and paramedical staff), provide epidemiological and public health services, and run some hospitals and research centres. District health offices, of which there are several in each city or province, provide polyclinics, dispensaries, and also employ the equivalent of environmental health officers. Health centres are provided in all local communities.

Health policy in Vietnam, and the manner in which this is being developed, is most impressive, especially considering the overall level of economic development in the country. It should be stated that some Vietnamese doctors are critical of current health policy, seeing it as too much concerned with the training of health professionals and the provision of health services, and too little concerned with the improvement of the determinants of ill health, namely the overall social and economic environment within which most people live, taking account of their housing, diet and so on. Nevertheless, much progress is being made within the health care field itself. There is already one doctor for every 18 000 population (a high figure for a third world country), and there are now six medical schools operating in Vietnam. The intake to the school in Ho Chi Minh City is 400 medical students per year.

## Primary health care strategy

Since January 1986, the Ministry of Health for Vietnam has made the establishment of effective primary health care in the whole country by 1990 its first priority. Based on the declaration of Alma-Ata, the Ministry has established 10 special priorities on which to base primary health care policy in Vietnam:

— Health education.
— Establishment of health care services in local communities.
— Establishment of adequate clean drinking water supplies for the whole population, and of effective sanitation services.
— Achievement of high uptake of immunization against diphtheria, tetanus, whooping cough, poliomyelitis, measles and tuberculosis.
— Prevention and control of local epidemics.
— Adequate nutrition.
— Establishment of adequate family planning services.
— Provision of an adequate supply of essential drugs including traditional medicines, because of the increasing use of traditional therapies such as acupuncture and massage.
— Promotion of home treatment of illness.
— Improved systems of health care management.

## Health centres and health education

There are more than 3000 health centres in Vietnam, serving all identifiable local communities, both in the cities and throughout the countryside. The author was able to visit one particular health centre in the countryside of South Vietnam, serving a population of 19 500. Most of this population lived in a large village, which provided the labour for a big factory nearby. The staff of the health centre included an administrator, a doctor, a medical auxiliary, midwives and community health workers. The medical auxiliaries, who are trained for three years, have an area of special training. In this case the auxiliary has her own treatment area within the health centre (separate to that used by the doctor), and is an expert in traditional remedies, including various herbs and acupuncture. She stated that it was mainly old people who requested traditional therapies, younger people being more likely to seek 'modern' medicine. Primary care health centres have at least two midwives on the staff, who provide a basic maternity service. There are also a number of community health workers on the staff who are outposted within the local community, living in their own homes, from which they provide a basic service of health advice and first line treatment. The author visited one such worker in his home. He had a pleasant house and a basic but spacious consulting room, set in an attractive garden. Although he is paid for his work, he is expected to provide his own consulting room at his own expense.

Much of the work of outposted community health workers consists of health education. They are supported by an apparently well administered and coordinated health education service, provided by the local city or provincial health service. The director of health education services of Ho Chi Minh City, and his staff, are concerned with the production of information and the holding of monthly seminars for community health workers, the provision of health information to the population by means of television, newspapers, radio, as well as by means of a health newsletter, and for the supply of appropriate information to all health service personnel. However, the approach to health education is somewhat paternalistic, with little attempt at encouraging the self-empowerment of the people. Health education departments are involved in providing vital support to other services, such as the provision of calibrated spoons for measuring salt and sugar to help people to cope with dehydration following diarrhoea. These departments are also involved in a scheme for providing malnourished children in poor families, with some basic foodstuffs, and with vitamin A and D supplements (fish oil) free of charge. Health education workers stress that in many cases such malnutrition is caused more by lack of education of mothers than by unavailability of food. Accordingly, they are making considerable efforts to teach mothers the essentials of a balanced diet.

## Establishment of the paediatric centre in Ho Chi Minh City

In 1982, this centre was set up as a research institute associated with a major childrens hospital; it was given the responsibility of researching the health needs of children and new improved systems for delivery of health care to children. Since its establishment its director has been Dr Duong Quynh Hoa, a respected paediatrician who had her original medical education in France in the 1950s. During the Vietnam war Dr Hoa was the Minister of Health in the provisional revolutionary government of South Vietnam. She is therefore not only a specialist doctor in her own field, and one who is informed about a range of health problems outside her own field, but she is also well versed in Vietnamese politics.

Dr Hoa does not believe that the health services alone can answer the needs for primary health care for children or for any other age group. She has been demonstrating in the work of the paediatric centre that solutions to health problems in Vietnam (as elsewhere) can only be addressed satisfactorily on a multidisciplinary approach, involving education, agriculture, forestry, food supply, and industry in health problems — an 'intersectoral' approach as the World Health Organization would describe it. She insists that primary health care workers can only be successful when they truly understand the social and economic determinants of health.

The objectives for the paediatric centre, as agreed with the Ministry of Health, can be described as follows. First, to study the family as a single unit, rather than to concentrate on individuals. The paediatric centre would collaborate with particular primary health care centres, which would hold a file for each family, providing socioeconomic information as well as an individual health record for each member of the family. Secondly, to collaborate with health centres in the training in new skills for community health workers and in planning three particular directions of work: (1) involvement of primary health care workers in environmental hygiene (dealing with the problems of clean water supply, human waste disposal and rubbish disposal as a priority); (2) involvement in the stabilization of social conditions (raising the socioeconomic and cultural level of the people); and (3) involvement in tackling employment problems, vocational training, and improvement in economic conditions (giving particular attention to improving nutrition and general living standards).

Wherever it becomes involved in a project, the paediatric centre insists that primary health care must be part of an overall community development programme. Every attempt is made to change attitudes towards the doctor as being the only source of health care. Development requirements are of course different for rural and urban areas and for communities with different cultures and levels of socioeconomic development. There is therefore no single model for primary health care which can be prescribed for every area.

Two of the projects with which the paediatric centre has been associated will now be described in greater detail.

## Primary health care centre in quartier 6, district 4, Ho Chi Minh City

This is a poor quarter close to the dock area of the city. It is built on old swamp land, and the remaining swamps are gradually being filled in with the rubbish generated by the city. The area covers about 20 hectares, of which seven are still stagnant swamps. There are four residential zones, which range from some quite comfortable houses with running water, electricity, latrines, and regular rubbish disposal, to huts built in a swampy area, without any running water, no public stand-pipes, water which is fetched from one kilometre away, no electricity, and public latrines over the ponds and the river.

Primary health care, based on the model described by the paediatric centre, is being established in this quarter. Wherever possible, the assistance of outside agencies has been obtained.

As a result of a survey of the community, the following priorities were agreed. The first objective would be the active participation of the people and community leaders. Training sessions are being organized with the help of UNICEF as part of a programme of environmental hygiene. Secondly a programme for the provision of the supply of clean drinking water has been launched with the assistance of UNICEF. This will involve providing an adequate water supply to two large apartment blocks, the repair and cleansing of the public stand-pipes, and the establishment of further public stand-pipes. The third aim is to establish a proper primary health care centre for the community. One part is reserved for maternal and child health, and this has been sponsored and financed by a British charity. A separate part of the centre is designed for services to adults, and financial support has been obtained from a French charity. Other French sources have provided funding for immunization campaigns, improved record systems, support for midwifery training, and the provision of a creche.

A new programme to control intestinal parasites is planned, following an appropriate training programme provided by UNICEF. This follows a diarrhoea research programme which has operated in the area since 1987, financed by the WHO. This has shown that children involved in the study have less diarrhoea, fewer serious respiratory infections, and fewer parasites than those who did not participate. It is assumed that this is attributable to health education and the practical application of simple and cheap hygiene practices by families. From this the paediatric centre has concluded that health promotion should be continued even where the socioeconomic conditions are not always favourable. Improvement in socioeconomic conditions is clearly an important component of health promotion, but education and training cannot always wait for these to improve.

## Primary health care in Talai, Dong Nai Province

Talai zone is an old volcanic area, 170 kilometres north east of Ho Chi Minh City. It was badly affected by the bombs, napalm and defoliants in the Vietnam war, and the virgin forests have been reduced to one or two lonely trees on bare hilltops. Soil erosion is serious and streams are drying up. Erosion is exacerbated by uncontrolled felling of those trees which remain by the ethnic minority people resident in the area.

There are approximately 2000 inhabitants resident in the zone, and there are three separate racial groups. As an area of sparse population, Talai has been a settlement area for ethnic minorities since 1981.

Rice cultivation is the principal economic activity of these ethnic minority peoples. Part of the area permits irrigated rice cultivation with two harvests per year, but dry rice cultivation predominates. There is generally a very low standard of living, with hunting, fishing in the streams, and the collection of resin (used for boat building) being the other main activities.

Surveys carried out by the paediatric centre at Talai showed that while there has never been famine, there is permanent undernutrition which affects the children early in their lives. These surveys have shown that prevalence of malnutrition and stunted growth in children of all ages up to the age of 15 years is very high. Associated common problems are premature delivery, low birth weight (over 20% of neonates are born weighing less than 2500 grammes), and the inability of many mothers to produce sufficient milk for breast feeding.

Malaria is the most common serious disease in this area, but other common problems include nutritional anaemia, respiratory diseases, diarrhoea and dysentery, intestinal parasites, skin diseases, deficiency of vitamin A, tuberculosis and leprosy.

A primary health care centre has been established in Talai, and it has been equipped with French assistance. Health workers have been recruited from the local ethnic groups, with a Vietnamese medical auxiliary giving technical support. Further social surveys are continuing. A programme of immunization, family planning, and sanitary improvement is being started with the help of a French charity. A Dutch organization is assisting with a programme of nutrition education and with the establishment of vegetable gardens, fruit trees, and fish ponds. The international Red Cross is assisting in the provision of an appropriate

training programme for community health and health education workers.

The paediatric centre concludes that the two main obstacles to making an impact on the health status of the people around Talai are the lack of understanding of the special needs of the people and lack of cooperation by the authorities, and the inertia and lack of participation in any health promotion activities on the part of the people. The paediatric centre therefore feels that the basis for health promotion in this community must be a raising of the level of consciousness within the community of the possibilities for and advantages of improved health.

## Achievement of primary health care in Vietnam

The paediatric centre in Ho Chi Minh City is basically a research organization, but it has led the way in demonstrating the possibilities for the development of primary health care in Vietnam. A primary health care committee, chaired by a vice-minister for health has been established, and has been given the responsibility for supervising the introduction of primary health care and evaluating it to identify the most useful aspects. In each area, the community itself will be responsible for the introduction and implementation of its own primary health care programme.

It is estimated that each primary health care project will require basic capital of around US$ 80 000–100 000. However, it is also understood that the government will be responsible for purchase of land, supply of locally available construction materials, funding basic construction and labour, and funding materials necessary for certain economic developments (for example, fishing nets, seeds, seedlings, chickens, fish). The government would also, of course, continue to provide the salaries of health service personnel.

In addition, donor organizations in developed countries will be asked to provide US$ 50 000–60 000 to be used mainly for the purchase of imported goods. Where malnutrition remains a problem, some of this money will be spent on food aid for small children and for pregnant and lactating women, until economic improvements make this unnecessary.

A new medical school, the first to specialize in training for primary health care, was established in 1989. In addition to its training function, it will provide a forum where foreign donors and experts can be briefed, where they can research precise requirements, and where cooperation can be established with Vietnamese recipients charged with the establishment of primary health care. Vietnam is aware of the need to introduce a primary health care strategy as part of the World Health Organization's 'Health for all by the year 2000' programme. The aim is to enable Vietnam to use primary health care in its overall development in accordance with the principles of self-sufficiency.

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