WOMEN'S HEALTH SERIES

VOLUME 8

Women's Health Profile: Viet Nam

World Health Organization
Regional Office for the Western Pacific
Manila

WOMEN'S HEALTH SERIES

VOLUME 8

Women's Health Profile: Viet Nam

World Health Organization
Regional Office for the Western Pacific
Manila
1995

Contents

Tables

Foreword

Viet Nam is undergoing a profound and far-reaching social and economic transformation. Vietnamese women face both old and new challenges to their health status, in particular infectious diseases and reproductive and occupational risks. Chronic undernutrition, long working hours, physically-taxing jobs and frequent child-bearing are important factors in the morbidity and mortality profiles of Vietnamese women. Lack of employment opportunities and a greater need for cash income are influences that impel some to undertake hazardous jobs in factories, farms, construction and the commercial sex industry.

At the same time, Vietnamese women are literate, they play a role in nearly all occupations, and they are involved actively in political, social and cultural affairs. The Viet Nam Women's Union is a significant force in the development of policies and programmes to protect women and ensure that their interests are considered during this crucial phase of national development. Vietnamese women are speaking out publicly on many issues that concern them, including gender relations, the direction of development, environmental protection, and occupational health and safety.

This profile of Vietnamese women's health summarizes a large body of evidence drawn from recent surveys and reports. It serves as an overview of the range of health problems confronting Vietnamese women and the policy, programme and legislative developments that give cause for optimism. This profile also reveals the existence of inconsistencies and serious gaps in data concerning nearly every major health area, not the least of which is the relative lack of gender-disaggregated data. Comprehensive research, combining both quantitative and qualitative methods, along with routine collection of gender-disaggregated data, are essential for a fuller understanding of particular problems pertaining to women in Viet Nam.

This profile, one of a series, is part of a project to collect data on women's health in the Western Pacific Region of the World Health Organization, in anticipation of the Fourth World Conference on Women in Beijing, China, in September 1995. Activities to improve women's health and studies to investigate social, cultural, legal, religious or economic constraints to the advancement of women, should continue also in the aftermath of the Conference. The countries included in this initial project were Australia, Philippines and Viet Nam. The project used existing data and was coordinated by the Key Centre for Women's Health, University of Melbourne, which is a World Health Organization Collaborating Centre for Women's Health. Funding for the project came from the International Development Research Centre of Canada.

It is hoped that this initial project to prepare women's health profiles will constitute a stimulus for other research in the future, and will provide examples for other countries to follow.

S.T. Han, MD, Ph.D.
Regional Director

Acknowledgements

We would like to thank the principal contributors to this monograph, Dr Martha Morrow, Key Centre for Women's Health in Society, University of Melbourne, Dr Nguyen Thi Thom, National Committee for Population and Family Planning, Viet Nam, and Ms Jo-Anne Rayner-Smith, Key Centre for Women's Health in Society, University of Melbourne.

The framework for the profile was drawn from two sources. The first source was the WHO document *Investing in Women's Health: Guidelines for the Women's Health Profile, 1993.* The second source was the set of indicators of women's health devised by the Global Commission on Women's Health. These indicators cover six issues critical to women's health: nutrition, reproductive health, the health consequences of violence, aging, lifestyle-related health conditions and women's work environment. Sections on demographic information, the socioeconomic and political situation, prostitution, principal causes of morbidity and health services are based on *Investing in Women's Health.*

The principal contributors would like to express their thanks to all those who facilitated the collection of data in Viet Nam, in particular Dr Vu Quy Nhan (National Committee for Population and Family Planning, Hanoi), Dr Do Trong Hieu and Ms Do Hoai Nam (Department of the Ministry of Health, Hanoi), Dr Do Kim Lien (National Institute of Nutrition, Hanoi), Dr Nguyen Thi Nhu Ngoc (Hung Vuong Hospital, Ho Chi Minh City) and Ms Le Ngoc Huong (journalism student, Ho Chi Minh City).

Introduction

Viet Nam has a population of 75 million. After many years of war, with great destruction of both infrastructure and the natural environment, Viet Nam has moved towards a free market system and greatly expanded its relationships with other countries. Changes since the late 1980s have been profound and far-reaching. This report summarizes currently available data on women's health as seen in the context of this rapid transformation.

The position of women in Viet Nam is considered to be relatively high in comparison with some neighbouring countries. The 1946 Constitution of Viet Nam stipulated equality between the sexes in all respects. The Marriage and Family Law promulgated in 1960 further set out principles of monogamy and equality between husbands and wives, including the ownership of property, and between sons and daughters. The New Law on Marriage and the Family in 1986 prohibited early or forced marriage. In 1988, the Council of Ministers gave the Viet Nam Women's Union (a mass organization with 11 million members) the right to be consulted, informed and involved in any discussions of policies regarding women and children at all levels of government. In July 1993, the Communist Party Political Bureau adopted The Decision on the Mobilization of Women, which calls for active participation by women to achieve the objectives of Viet Nam's market reform programmes. Viet Nam also has a National Committee for the Advancement of Women, which includes high-ranking members from government, the Women's Union and other mass organizations. This Committee coordinates activities relating to the United Nations Convention on the Elimination of All Discrimination Against Women (Thai Thi Ngoc Du, 1994b).

Gender imbalance and discrimination are apparent in many aspects of Vietnamese society. Women hold few senior government positions, and their participation in this sector has declined since 1975. Although women can be found at various levels in nearly all branches of employment, their wages, in general, are substantially lower than

men's. Men continue to be more responsible for important decisions, both in the family and in the community (Thai Thi Ngoc Du et al., 1994). While legal protection exists in theory, a study of women in the Mekong Delta found that many were unaware of their legal rights (Thai Thi Ngoc Du et al., 1994). Many young women marry and have children younger than officially sanctioned (Le Thi Nham Tuyet, 1994). Continuing preference for sons, is still widespread, as sons play the principal role in ancestor worship and carrying the family lineage. Moreover, daughters join their husband's family on marriage (Dao Hung, 1989; Vuong Xuan Tinh, 1994). Many Viet Namese women continue to have children until they give birth to at least one son (Thai Thi Ngoc Du et al., 1994; Vu Quy Nhan, 1994).

Literacy rates in Viet Nam are relatively high (approximately 82 per cent for females and 91 per cent for males overall) (State Planning Committee 1994). However, at nearly all levels, both in urban and rural areas, women receive less education than men and are more likely to drop out of school (Center for Women Studies, 1994).

In 1986, the government of Viet Nam formally abandoned its reliance on a planned centralized economy and introduced a programme of transition to a market system, known as Doi Moi. Doi Moi has been accompanied by an open door' policy towards the West and an enormous increase in foreign investment, particularly from the strong economies of Asia. In addition, Doi Moi has brought a greater degree of intellectual freedom, and controversial policies are openly debated (Thayer, 1992).

These reforms have created a structure more favourable to economic growth and have brought some impressive benefits. Viet Nam has been able to stabilize its economy and increase exports. Agriculture has thrived as has the urban economy, especially in trade and service delivery (Vu Tuan Anh, 1993). Living standards have generally improved and consumer goods are now freely available (Dinh, 1993). Estimates put the growth of gross domestic product at 8.3 per cent for 1992 and 8 per cent in 1993; Euromoney and Asiamoney magazines awarded Viet Nam the title of 'best managed Asian economy in 1992' for lowering inflation from 67 per cent in 1991 to 17.5 per cent in 1992 and for achieving growth during the global recession (Economist Intelligence Unit, 1994).

However, the transition to a market economy has had some negative consequences. Beresford (1993) suggests that decentralization has only reproduced problems at a different level of society. Social service delivery, particularly in health and education, has suffered as a consequence of economic

reform. Many people continue to endure economic difficulty and the disparity between rich and poor is widening (Thanh Binh, 1992).

Like all sections of the population, women have both profited and been disadvantaged by Doi Moi, depending on their circumstances. Because they are less well-educated than men, and because their household responsibilities make it more difficult for them to seek retraining or to move in search of better jobs, women are less able to avail themselves of new opportunities to reap the positive results of development. Furthermore, a reduction in free social services, the introduction of user fees for education, health and child care, and consequently a greater need for cash income, have put financial pressures on many families.

While primary education is free in principle, parents are still required to make payments for school buildings and supplies, which probably explains the fact that the net enrolment rate for primary school is only 82.3 per cent nationwide. Illiteracy rates in rural areas are as high as 31.4 per cent, whereas rates for largely urbanized centres are as low as 7.8 per cent. The recent Viet Nam Living Standards Survey of 1992-1993 found that family income was directly related to years of education, especially for children aged 11 years and above (Nguyen Ba Can et al., 1994).

Retrenchment in government enterprises has affected more women than men. The change from collectives to privately-owned land for agriculture has not been of universal benefit. Those with capital and expertise have been best placed to achieve success. Some families have not had sufficient labour or skills to manage their allotments and non-payment of taxes can lead to expropriation of the land. Some women, particularly heads of households, have been forced to sell their lands after crop failures and then sell their hire on a daily basis, often at lower rates than for men (Thai Thi Ngoc Du et al., 1994). Unemployment in rural areas has driven many men to seek work in the cities, leaving women with sole responsibility for farming, housework and child care (Thanh Binh, 1992). Environmental degradation from rapid development affects women most directly, particularly in terms of their traditional roles (Nguyen Kim Cuc, 1994).

In the health sector, a transfer of land control from collectives to households has reduced the budgets of local government authorities. In poor areas in particular, there is less to spend on the public health system. Wages for public sector health staff have fallen. The Ministry of Health has a new programme to increase wages and build and staff local-level health stations, but many are without any services at all,

and those with services often have poor facilities and shortages of essential drugs. Private practice has been made legal, and there is a fear that public health staff, particularly more highly-skilled members, will desert the public system, causing an erosion of standards (Ministry of Health, 1994). There are, nonetheless, hopeful signs in movements to revitalize and upgrade commune health services by women's groups and communes themselves (Allen, 1993; Chalker, 1995).

The Statistics Bureau of Ho Chi Minh City found that 19 per cent of households reported a decline in living standards in 1993 compared to 1992; 40 per cent reported no change and 41 per cent reported an improvement (Thai Thi Ngoc Du, 1994a). For Viet Nam as a whole, UNICEF-Hanoi has estimated that 5 - 15 per cent can be categorized as 'rich', 50 - 60 per cent as 'middle income' and 35 - 45 per cent as 'poor' (1994). The World Bank, however, claims that 51 per cent of Vietnamese are poor (The Economist, 1995). Large disparities are evident between urban and rural areas in most social indicators; poor rural women, therefore, are greatly disadvantaged.

Women are generally expected to look after most household responsibilities, care for children, the sick and elderly, and contribute financially to the well-being of the family, which accounts for the long working day reported by many (Duong Thoa, 1992). A recent Ministry of Health survey found that women overwhelmingly continued to be responsible for carrying out tasks seen as traditionally female, such as cooking, house cleaning and caring for children (Ministry of Health - Department of Hygiene and Epidemic Prevention, 1994). In a two-year study of six communes in three regions of Viet Nam, the percentage of husbands participating in housework ranged from 0 to 3.2 per cent (Centre for Women Studies, 1994).

Heavy manual labour, frequent child-bearing, hazardous jobs and inadequate nutrition characterize the lot of a large proportion of women in Viet Nam (Tu Giay et al., 1991a; Duong Thoa, 1992; Le Thi Quy, 1994a, b), but little research has been carried out on living conditions of women in rural areas, where the vast majority reside (Thai Thi Ngoc Du et al., 1994). There has been more migration of males than females in past years; women-headed households, which make up half of rural households

in some areas (Thai Thi Ngoc Du et al., 1994), are substantially poorer than those headed by males (State Planning Committee, 1994). Access of women to credit is very limited and private money-lenders charge interest rates ranging from 7 to 30 per cent per month; the Women's Union, other organizations and even self-help groups are introducing credit schemes for women (Thai Thi Ngoc Du et al., 1994).

Prostitution has dramatically increased in Viet Nam, with its attendant risks of contracting HIV and sexually transmitted diseases (Hoang Thi Lich, 1992; Le Thi Quy, 1994c). The National AIDS Committee in 1993 projected a cumulative total of 570 000 HIV-positive people by 1998; this holds grave implications for women's health as both sufferers and carers.

An awareness of gender issues has become more widespread since the late 1980s, and has been the subject of workshops, seminars, and even a special issue of Viet Nam Social Sciences (April 1992). Several women's studies departments and organizations have been established in both Hanoi and Ho Chi Minh City. However, most women continue to acquiesce to their subordinate position, considering it to be their fate to endure great hardship and sublimate their needs to those of their family (Do Thai Dong, 1993; Le Thi, 1994a; Nguyen Thi Oanh, 1994; Thai Thi Ngoc Du et al., 1994). Thai Thi Ngoc Du et al. assert that insufficient attention has been given to the needs of women or to the impact of development projects on women (1994). The respected commentator Le Thi has called for greater efforts to incorporate gender issues into public discussion and policy formulation in the spheres of social and family relations, employment and unemployment, and socio-economic transition (1992; 1994b).

Women's Health Profile: Viet Nam draws mostly on research carried out over the past five years. No new studies were undertaken to compile this profile of women's health in Viet Nam, although every effort was made to collect the most recent and accurate reports available. Sources include those published in Vietnamese as well as in English. It is difficult to ascertain the reliability of some of the data presented here. For one thing, some of the sources cited, including census figures, are somewhat out of date, especially in view of the extremely rapid pace of social and economic change over the past ten years. A recent technical

report criticized the reliability of some reproductive health data sources in particular (United Nations Population Fund, 1994). (The same report claims that the census of 1989 is considered to be relatively reliable.) Certainly, along with serious gaps, there is a high degree of inconsistency and variability in some of the areas examined. For that reason, we have attempted to include both quantitative and qualitative results from as many sources as possible, government and nongovernment, and, where appropriate, to provide information about the range of values reported.

The intention of this profile is to explore Vietnamese women's health through the life-cycle and within the broad context of present social and economic circumstances, thus moving away from a narrow interpretation of 'women's health' as maternal or reproductive health. Women in Viet Nam participate fully in all aspects of development. Their health status and health needs vary according to their place of residence, occupation, age and income. It is hoped that this document will assist in delineating and predicting potential future health issues for women within a society undergoing extremely rapid change. The potential health risks associated with poverty and the consequences of widening gaps between rich and poor have been highlighted here. It is also hoped that economic renovation, together with constitutional and legislative protections and guarantees, will offer a bright future for all women in Viet Nam.

Demographic information

Information on demographics comes from several sources. Much of the data cited here come from the last nationwide census, conducted in 1989, the Viet Nam Intercensal Demographic Survey (VNICDS) of over 13 000 households carried out in 1994 and the 1992-1993 Viet Nam Living Standards Survey.

Viet Nam has a population of 75 million, and has a high population density of 214 people per sq. km. The Viet or Kinh majority comprises 87 per cent of the population; the remainder is made up of 53 distinct ethnic minority groups. The government made an explicit commitment to reduce population growth rates in the north of the country in the early 1960s, and through all of Viet Nam since reunification in 1975. The overall population growth rate stood at 2.1 per cent per annum at the last census. This compares to a rate of 3.9 per cent per year during the period from 1954 to 1960, and a rate of 3.0 per cent for the period 1970 to 1976 (Viet Nam Population Census, 1989, 1992).

The Council of Ministers Decree on Population and Family Planning Policies was promulgated in 1988. This decree was designed to cut fertility rates through an expanded family planning programme and had the following aims: increasing the age of mothers at first birth (at least 22 years for women and 24 for men in urban areas; at least 19 years for women and 21 for men in rural areas), birth spacing of three to five years and a family norm of one to two children (with the exception of ethnic minority groups). Some financial sanctions exist for couples who disregard these guidelines. Intercensal Demographic Survey results showing that most women desire to have no more than two children suggest that the two-child family norm is becoming widely established (VNICDS, 1994).

The 1989 Health Law stipulated that individuals should be free to choose their method of family planning; forcible implementation of measures was explicitly prohibited (National Committee for Population and Family Planning, 1990). Financial incentives exist for sterilization.

In 1993, The Population and Family Planning Strategy to the Year 2000 was issued, which further emphasized the commitment to reducing population growth. This strategy broadened the approach to policy implementation by calling for greater choice of methods, increased information and education programmes and improved services through both public and private outlets. Recent analysis of intercensal data reveal the widespread existence of an unmet need for contraception; 28 per cent of births to urban women and 34 per cent of births to rural women were reported to be either unwanted or mistimed (VNICDS, 1994).

The fertility rate in Viet Nam continues to be high. Its population is extremely young, with 39 per cent under the age of 15 years (National Committee for Population and Family Planning, 1992). Along with the unmet need for contraception, there are both social and structural influences on population growth. The custom of children supporting elderly parents is thought to be related to the nearly universal desire of Vietnamese to have children (VNICDS, 1994). Traditional preference for sons means that many women will continue to give birth until having at least one son (Duong Thoa, 1992; Vu Quy Nhan, 1994; Thai Thi Ngoc Du et al., 1994). The change to a market economy also means that families can benefit from having more labour to work, both in agriculture and small businesses, which may encourage couples to have more children (Thai Thi Ngoc Du et al., 1994; Ministry of Health, 1994). At the same time, efforts are expanding to improve women's health services, particularly in terms of flexibility and quality. These efforts, together with the expected positive outcomes of renovation, may reduce fertility rates over the medium term.

Total population

The National Committee for Population and Family Planning in Hanoi estimates the population of Viet Nam in 1995 to be 75 million. The last nationwide census was undertaken in 1989, at which time the population was 64.4 million.

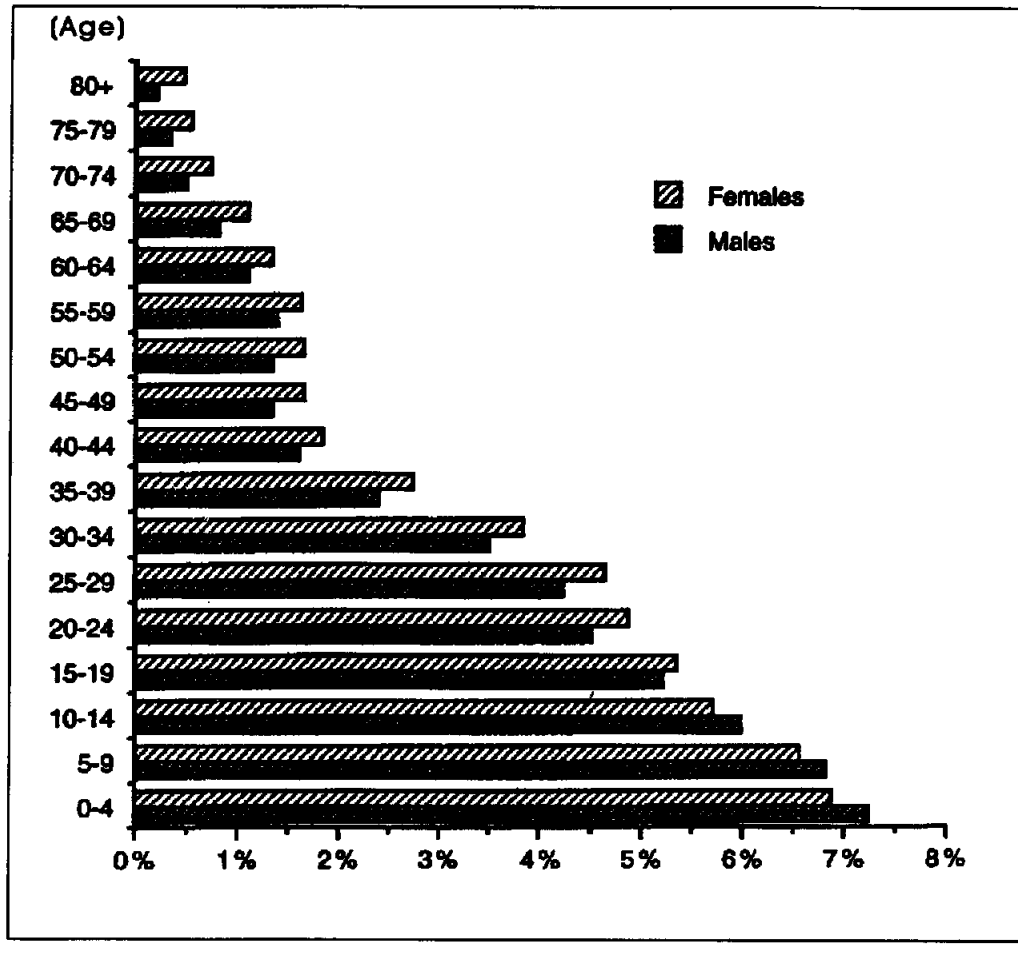
Percentage of women in the total population

Women comprise 51.82 per cent of the total population (State Planning Committee, 1994) (see Figure 1).

Percentage of population living in rural areas

More than 80 per cent of the population live in rural areas. This proportion is much higher than in most other Asian countries, where the urban-rural split is roughly 50/50. It is projected that, by the year 2010, the urban proportion will rise to 25 per cent (Ministry of Construction, 1992).

Figure 1. Sex and age distribution of population in Viet Nam (1989 census)



Source: Ministry of Construction (1992)

Birth rate (per 1000 population) - male and female

The last census found that fertility levels had fallen over the previous several decades. The crude birth rate for 1955 to 1959 was approximately 45 per 1000; it was approximately 30 per 1000 in the year preceding the 1989 Census.

Regional variations are great. Ministry of Health figures for 1990 cited a rate for the Central Highlands of 41.2, while that of the Red River Delta was 25.5 per 1000 (Viet Nam-Sweden Health Cooperation, 1994).

The decline in birth rates appears to be continuing. For the year 1993-1994 it was 25.3, with continuing regional variations (see Table 1). A dramatic decline was found in the Mekong River Delta region. The authors of the Viet Nam Intercensal Demographic Survey have questioned the accuracy of the fertility estimate for this region, as age of first marriage and contraception prevalence rates cannot explain it (VNICDS, 1994).

The male-female sex ratio at birth was found to be 106 in the 1989 census (Viet Nam Population Census: 1989, 1992).

Table 1. Crude birth rate from the 1989 Census, Viet Nam, and 1994 Viet Nam Intercensal Demographic Survey

	1988-1989 (1989 census) Crude Birth Rate	1993-1994 (1994 VNICDS) Crude Birth Rate
Region		
Northern Uplands	33.8	28.95
Red River Delta	26.5	19.05
North Central	32.6	29.60
Central Coast	33.9	26.32
Central Highlands	46.0	35.95
Southeast	29.2	21.83
Mekong River Delta	35.9	20.13
Total	**30.1**	**25.3**

Source: Viet Nam Intercensal Demographic Survey (VNICDS) (1994)

Age-specific birth rate

See Figure 2.

The 1994 Viet Nam Intercensal Demographic Survey found that the mean age at first birth for urban women was 1.3 years higher than for rural women. Mean age at first birth for women with secondary or higher education was 3.4 years higher than those with no schooling (VNICDS, 1994).

Crude death rate (per 1000 population) - female and male

The nationwide crude death rate for 1993 has been estimated at 7.1, a decline from 8.0 in 1988 (Do Trong Hieu et al., 1994). However, regional variation is significant. The highest recorded figure is 8.78 for the Central Highlands; the lowest is 6.42 for the South East (General Statistical Office and National Committee for Population and Family Planning, 1994).

The crude death rate for 1988 was 7.6 for females and 8.5 for males (Viet Nam Population Census: 1989, 1992).

Natural increase (birth rate minus crude death rate)

The natural increase for 1989 was 22 per 1000 or 2.2 per cent (Viet Nam Population Census: 1989, 1992).

Fertility rate (average number of children born per woman in her lifetime) - urban and rural

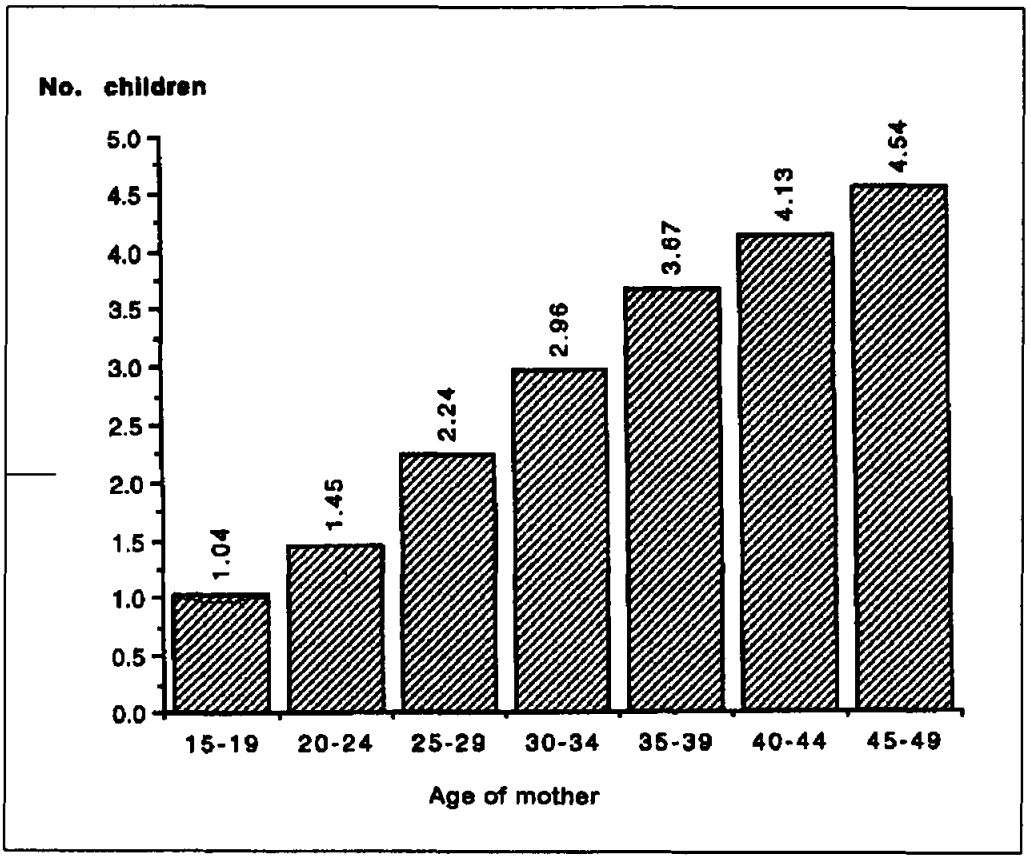
The total fertility rate was 3.3 for the period 1989 to 1993, and 3.1 for the year 1993 alone (VNICDS, 1994). This is a substantial decline from the 1970s, when the total fertility rate was over six (United Nations Population Fund, 1994).

Fertility rates were lower for urban, better-educated women; similarly, desire for larger families was more apparent among rural, less-educated women. Women described as having an unmet need for contraception in Viet Nam include not only those who use no method, but the relatively large proportion who rely on ineffective contraceptive methods, in particular, periodic abstinence and withdrawal (VNICDS, 1994).

Life expectancy at birth - female and male, in all identifiable subgroups

Life expectancy at birth in 1988 was 67.5 years for females and 63 years for males (Viet Nam Population Census: 1989, 1992).

Figure 2. Number of children per mother by age group of mother, Viet Nam, 1994



Source: State Planning Committee (1994)

Number of years of life lost as a result of deaths occurring before age 65

See Figure 3.

The death rates for females aged 1 to 14 years were higher than for males, after which time this trend was reversed (Viet Nam Population Census: 1989, 1992).

Mean age of first marriage (years) - female and male

Most women marry in their early 20s in Viet Nam, and rural women marry earlier than their urban counterparts (VNICDS, 1994).

While the Demographic Dynamic Change and Family Planning Survey of 1993 showed a slight increase in the mean age of marriage for both men and women since 1989 (see Figure 4), figures provided by the General Statistical Office indicate that the mean age among females had fallen from 23.2 years in 1989 to 23.0 in 1992 (Center for Women Studies, 1994). The 1994 VNICDS calculated the mean age of marriage for females as 23.3 years.

Although the legal minimum age of marriage is 18, there is some evidence that many women continue to marry before this age (Dan Nguyen Anh, 1992; Center for Women Studies, 1994). A study in Thai Binh province in 1992 found that 50 per cent of women married between the ages of 15 and 19 years (Nguyen Thanh Mai et al., 1994). A recent survey in the Mekong Delta found that 65 per cent of parents wanted their daughters to marry before the legal age and 25 per cent of girls themselves wished to marry early (Thai Thi Ngoc Du et al., 1994).

Marriage rate - female and male

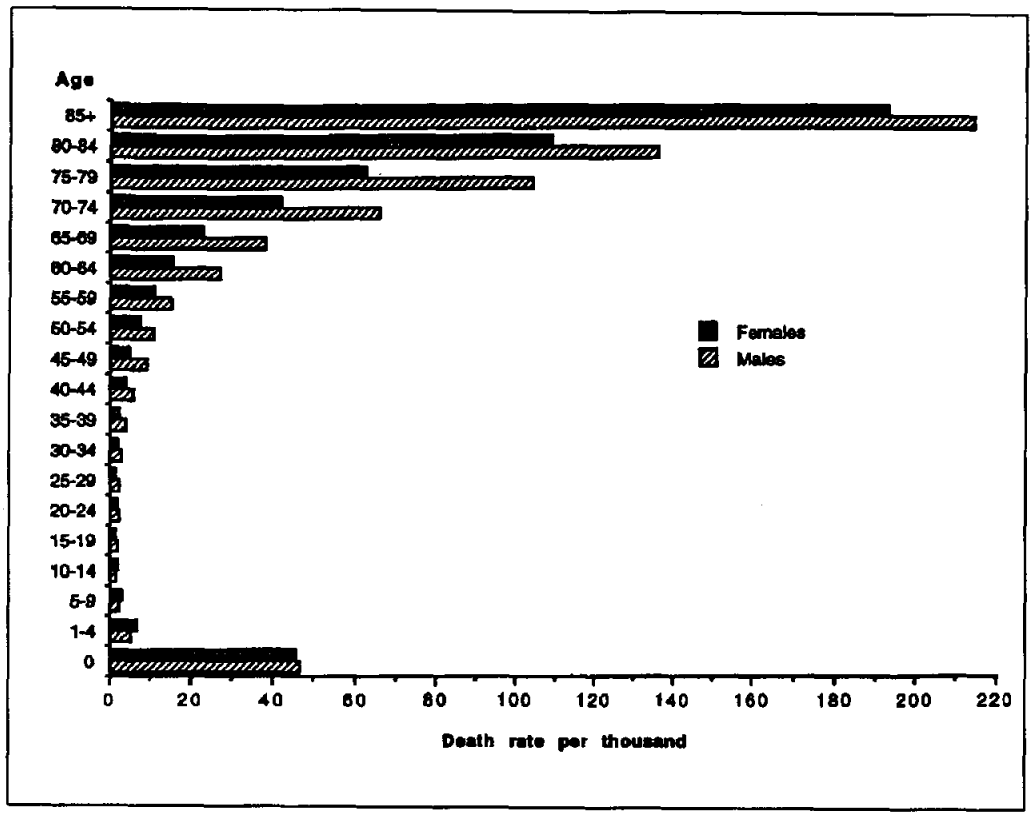
The Viet Nam Living Standards Survey of 1992-1993 found that, of the population over 12 years of age, 53.61 per cent of females and 57.74 per cent of males were married (State Planning Committee Draft, 1994).

Marriage is nearly universal in Viet Nam; 94 per cent of the 45 to 49 years age cohort of women had been married (VNICDS, 1994).

Divorce rate - female and male

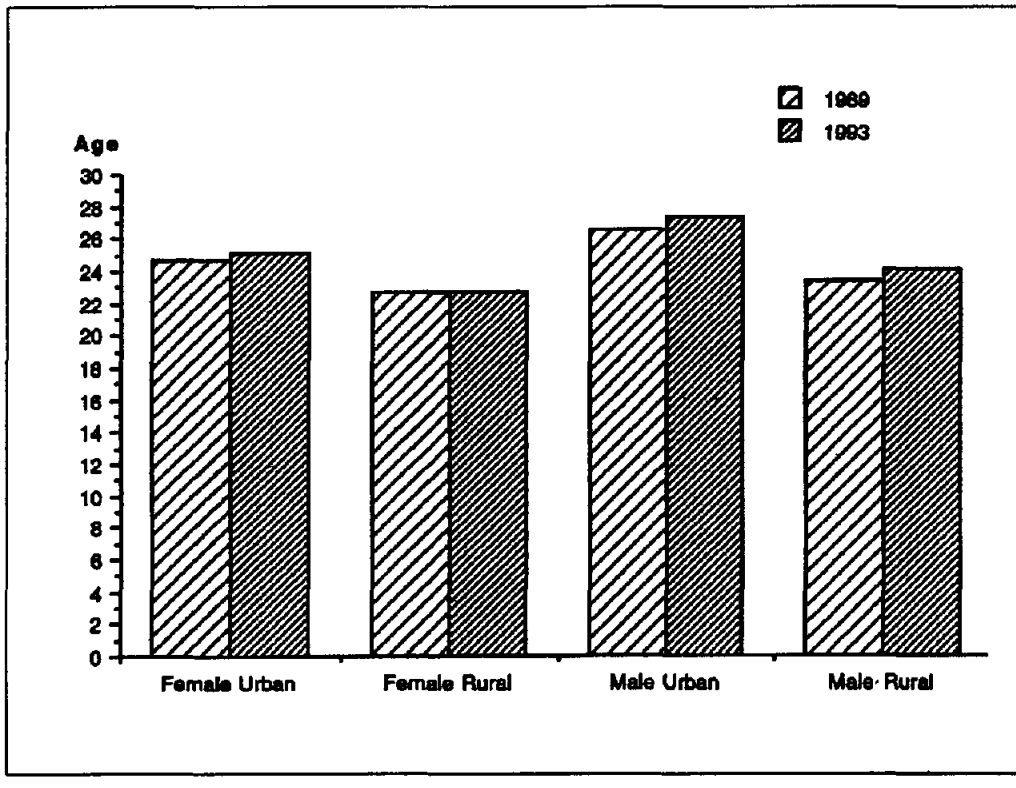
Divorce in Viet Nam is relatively rare. The Viet Nam Living Standards Survey of 1992-1993 found that, of the population over 12 years of age, 1.36 per cent of females and 0.34 per cent of males were divorced (State Planning Committee Draft, 1994).

Figure 3. Age-specific death rates per thousand, Viet Nam, 1988-1989



Source: Viet Nam Population Census: 1989 (1992)

Figure 4. Mean age of first marriage, Viet Nam, 1989 and 1993



Source: General Statistical Office and National Committee for Population and Family Planning (1994)

Socioeconomic and political situation

As noted in the introduction, the position of women in Viet Nam is higher than in many countries and there is a tradition of female involvement in many social and economic spheres, both historically and recently. The Viet Nam Women's Union plays a prominent public role in policy debate and formulation at all levels. However, there is evidence of some gender imbalance in Viet Nam.

Benefits from the shift to a market economy have flowed to many Vietnamese, and many women have seized new opportunities to participate in economic, social and cultural affairs. At the same time, reductions in social services and the need for cash income have enlarged the gap between rich and poor, and put greater pressures on women to find employment and to take extra jobs. In the restructuring of the centralized economy, women have been the main victims of public sector retrenchments (Le Thi Quy, 1994 a, b).

Women overwhelmingly participate in paid employment, usually in physically taxing occupations, but they are less well-educated than men and take home lower wages. Moreover, they bear the principal responsibility for household labour and child care. Long working hours characterize the typical day for most Vietnamese women.

There is a range of social security legislation to protect women, but not all women are aware of its existence and the legislation is not always enforced (Thai Thi Ngoc Du et al., 1994).

It is clear that renovation is changing the lives of many Vietnamese, and many aspects of society are in a state of extreme flux (Le Thi Quy, 1994a, b). Viet Nam continues to be a poor country with a low GDP. Regional variations are extreme, and some sections of the country are more visibly affluent than others. It is hoped that Doi Moi will bring substantial improvements to the lives of all Vietnamese, including women.

GDP per capita

Gross deomestic product per capita is estimated at US$200 (Viet Nam-Sweden Health Cooperation, 1994; United Nations Population Fund, 1994). Average incomes vary greatly between urban and rural areas, with much higher disposable income in the former (State Planning Committee, 1994). This differential does not reflect the existence of poverty and homelessness in urban centres, partly a result of rural-urban migration and joblessness (Le Thi Quy, 1994c).

Women's income as a percentage of men's income

The Viet Nam Living Standards Survey of 1992-1993 found that women's income in both urban and rural areas was 69 per cent that of men's (State Planning Committee, 1994). A recent study of women in the Mekong Delta found that hired labour wages for women averaged 35 to 42 per cent of those of men (Thai Thi Ngoc Du et al., 1994).

Percentage of those in paid employment who are women

The Viet Nam Living Standards Survey of 1992-1993 found that women made up 52.16 per cent of those in paid employment (State Planning Committee, 1994). UNICEF-Hanoi (1994) reported that over 70 per cent of working-age women are employed; the 1994 NICDS found the figure to be 86 per cent. Women overwhelmingly work in physically taxing, unskilled occupations. About 73 per cent of employed women work in agriculture, forestry and fisheries, 9 per cent in trade, 4.4 per cent in education, public health and sciences, and 4.7 per cent in sewing and public services. In rural areas, 85 per cent of employed women work in agriculture, usually in family-controlled farms or as labourers (Duong Thoa, 1992).

Percentage of the unemployed who are women

It is difficult to ascertain actual rates of unemployment in Viet Nam. The recent Viet Nam Living Standards Survey, which collected data on employment patterns for the seven days preceding, found a reported rate of only 7.3 per cent overall (6.46 per cent for men and 8.21 per cent for women) (State Planning Committee, 1994). However, other sources put the unemployment rate at 17 per cent nationwide (Economist Intelligence Unit, 1994) and over 20 per cent in urban areas (Hassan, 1994). The government faces an enormous challenge in this sphere, with approximately one million people entering the labour market each

year). Unemployment and underemployment are rife in the agriculture sector (Hassan, 1994).

Economic restructuring will result in massive job-shedding in state enterprises, with between 20 per cent and 25 per cent of all public employees expected to lose their jobs. Women made up about between 72 per cent and 82 per cent of state employees made redundant in 1990 and 1991. Some writers estimate that 60 per cent of the unemployed are women (Le Thi Quy, 1994b).

Percentage of seats in parliament occupied by women

Women's participation in parliament has declined substantially since 1975. In that year, 32.3 per cent of representatives were women; by 1992 the figure was just 18.5 per cent. Their representation was highest at national level; much lower levels obtained at provincial, district and commune levels (between two and ten per cent).

Women made up 16.4 per cent of total members of the Communist Party, but only 8.2 per cent of Central Committee members (Thai Thi Ngoc Du, 1994).

Only 9.2 per cent of ministers, 7 per cent of vice-ministers and 13 per cent of department chiefs at central level are women (Viet Nam General Labour Union, 1993).

Percentage of women physicians

In 1993, 60 per cent of health staff (at all levels) were women (General Statistical Office, 1994a).

Percentage of those in senior positions in the health care system who are women

Of units under direct management of the Ministry of Health, 13 per cent of directors are women. One Vice-Minister of Health is a woman (General Statistical Office, 1994a).

Average hours worked by women - paid and unpaid

Studies have found that, with the transition to a market economy and an increased need for cash income, women tend to work longer hours, both paid and unpaid, than men. A double or triple burden of family responsibilities, home gardening and waged or informal sector labour means that women often work up to 17 hours per day (Ungar, 1994). The recent Viet Nam Living Standards Survey found that rural women, on average, worked 1.4 jobs, while those in urban areas worked, on average, 1.3 jobs (State Planning Committee, 1994). In a survey of rural communities in 1989, the average working day for women was 16 to 18 hours, while men worked 12 to 14 hours

(Allen, 1993). One study found that women working in foreign enterprises in Ho Chi Minh City were compelled to work long shifts and on holidays and Sundays (Bui Thi Kim Quy, 1994). Le Thi Quy (1994a) described the lot of women traders, who worked from 5 a.m. to 11 p.m., and often did not see their families for a week at a time (Le Thi Quy, 1994a). The 1992-1993 Living Standards Survey found that women reported longer official working hours in urban areas than men (State Planning Committee, 1994).

Education levels by age and sex

Viet Nam's 1992-1993 Living Standards Survey found that the average number of years of education is 5.89 for males and 4.95 for females (State Planning Committee, 1994). Among school dropouts aged 6 to 14 years, 63 per cent are females and only 37 per cent are males (Nguyen Ba Can et al., 1994).

Women in the Mekong Delta are less likely to attend agricultural extension or literacy classes (Thai Thi Ngoc Du et al., 1994).

Percentage of tertiary enrolments who are women

According to Ministry of Education records for the year 1993 to 1994, women made up 34.1 per cent of those enrolled at colleges and universities and 26.9 per cent of those enrolled in vocational high schools (Ministry of Education and Training, 1994). According to the recent Viet Nam Living Standards Survey, men had much higher rates of completion of the highest tertiary enrolment categories (State Planning Committee, 1994).

Number of women-headed households

Women-headed households account for 20 per cent of all households; this figure is as high as 50 per cent in some areas (Thai Thi Ngoc Du et al., 1994).

Social security benefits for women

Article 141 of Viet Nam's Labour Code of 1994 stipulates that compulsory forms of social insurance shall apply to businesses which have more than ten employees. Benefits cover illness, work-related accidents, occupational disease, retirement and death. Benefits apply equally to men and women. Sick benefits to be paid depend on the working conditions and rate and period of social insurance contribution determined by the Government (Article 142).

Retirement age is 60 years for men and 55 years for women. Pension benefits are payable after social insurance contributions have been made

for at least 20 years (Article 145). Lesser amounts are payable in proportion to the length of employment. Families of employees who die of work-related injuries are covered for funeral expenses and other payments, depending on the length of employment (Article 146).

Health insurance has been implemented in the past few years for public and some private sector employees. The scheme calls for contributions from both employees and employers and is compulsory for some public sector workers. Treatment is provided in designated hospitals. The Viet Nam Health Insurance Department, Ministry of Health, has a nationwide target for 1995 of seven million to be enrolled compulsorily and three million voluntarily (personal communication, Dr Tran Khac Long, Director, Health Insurance Department, 1994).

It is important to note, however, that women and men in the informal sector, those self-employed, and those working in agriculture and other rural-based industries — the vast majority of employed women — are unlikely to be covered by these provisions.

Nutrition

The most comprehensive surveys on nutritional status were made in 1987 to 1989. At this time it was found that women in Viet Nam suffered from a range of nutritional deficiencies related to low protein and energy intake and monotony of diet. It was estimated that approximately 85 per cent of calorie intake came from rice, a figure well above that of neighbouring countries. Protein intake was generally inadequate and tended to be non-animal in origin. The mean daily energy intake was 16 per cent below the 2,300 kcal per person per day recognised as the minimum requirement. Fat accounted for only 7.6 per cent of total energy intake (Tu Giay et al., 1991a). While food production has increased in recent years, problems of availability and distribution remain, and more recent surveys indicate that one third of women in rural areas have poor nutritional status (National Institute of Nutrition (NIN), 1992). The Ministry of Health has reported that household food security is an issue for many families. A survey of 16 provinces in 1993 found that 20 per cent of residents had insufficient food for two meals; this figure was variable according to the year and season, and was as high as 30 per cent at another point in 1993 (Ministry of Health, 1994).

Haemoglobin levels

It is important to bear in mind that low haemoglobin levels among women in Viet Nam are related to the high prevalence of malaria.

Proportion of women aged 15-49 years with haemoglobin levels below 12g/dl of blood (non-pregnant women)

Estimates of iron deficiency anaemia among non-pregnant women range from 41 per cent in urban areas to 51.5 per cent in rural areas (Tu Giay et al., 1990).

Proportion of women aged 15-49 years with haemoglobin levels below 11g/dl of blood (pregnant women)

Estimates of iron deficiency anaemia among pregnant women range from 45 per cent (average figure) to 70 per cent among rural women in the last trimester (Tu Giay et al., 1990; Do Trong Hieu et al. 1994; Nguyen Cong Khan et al., 1994; Ha Huy Khoi et al., 1994).

Proportion of women having recommended weight gain during pregnancy

The recommended weight gain during pregnancy is 10 to 12 kg, the mean weight gain in the late 1980s was 6.5 kg among rural women and 8.5 kg among urban women (Tu Giay et al., 1991a).

Incidence of malnutrition by age and sex

In general, the Vietnamese diet is lacking in both energy and variety, although this is not a problem in all regions. The recommended minimum consumption for adults is 2300 kcal per day, a figure below the daily per capita consumption of many other Southeast Asian countries. In the poorest regions of Viet Nam, the average intake was only 1800 kcal per day in the late 1980s (Tu Giay et al., 1991a).

Surveys have found no significant difference in malnutrition rates between male and female children. Evidence shows the prevalence of underweight-for-age for children aged under five years is 42 per cent and underheight-for-age is 49 per cent (Department of Planning, Ministry of Health, 1991).

Chronic energy deficiency among women ranges from 40 per cent for women aged 15 to 17 years to 50 per cent for women aged 40 to 49 years (Ha Huy Khoi et al., 1993).

A study undertaken in four regions of Viet Nam found chronic energy deficiency rates among women of 28 per cent in Ho Chi Minh City, 38 per cent in Hanoi, 42 per cent in the rural north and 45 per cent in the rural south (Morrow et al., 1995).

Incidence of vitamin deficiencies by age and sex

Vitamin A deficiency is a serious problem in Viet Nam, especially for young children. Low rates of exclusive breastfeeding, together with the small lipid content of the typical Vietnamese diet exacerbate this problem (Monti et

al. 1991). Data are not disaggregated by gender. The prevalence of xerophthalmia in the late 1980s was 0.72 per cent (Tu Giay et al., 1991b). A national programme of vitamin A deficiency prevention was started by the National Institute of Nutrition in 1991.

A survey by the National Institute of Nutrition found that Vitamin A consumption among pregnant and lactating women in northern Viet Nam was much lower than recommended (Pham Thuy Hoa et al., 1994). Deficiency in serum retinol was encountered in 10.8 per cent of a sample of women in three communes, with deficiency increasing with length and number of pregnancies (Nguyen Cong Khan et al., 1994).

A 1985 survey in the Red River Delta found 77 per cent of those examined suffered from thiamine deficiency. Rickets was noted in both urban and mountainous areas in the 1980s.

Incidence of anaemia in children under five years of age

While data are not disaggregated by gender, surveys have found the prevalence of anaemia in children under five years of age to range from 23 per cent in Hanoi to 67 per cent in mountainous regions (NIN, 1991).

Distribution of body mass index (weight/height^2) of female population

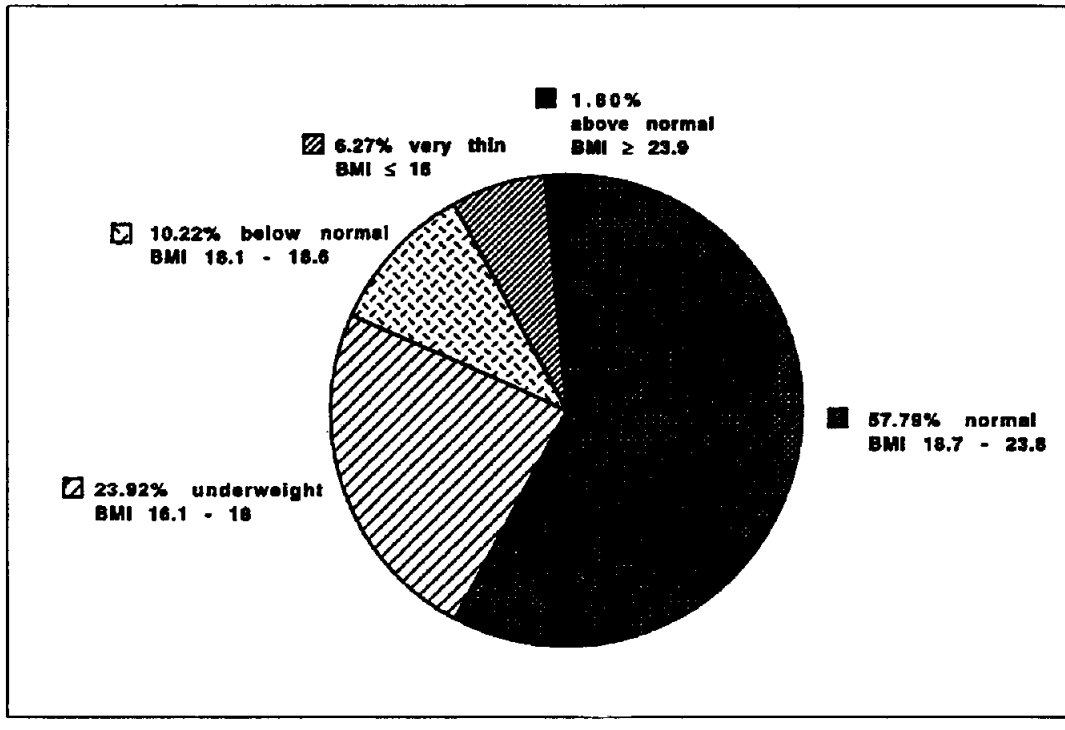
See Figure 5.

Overweight is not a significant problem in Viet Nam (World Health Organization, Manila, 1993).

Incidence of iodine deficiency among women

The prevalence of endemic goitre among females ranges between 34 per cent and 48 per cent in Northern and Central regions (NIN, 1992). The World Health Organization in Manila has estimated that 12 million people are at risk of iodine deficiency. Viet Nam has embarked upon a programme to control iodine deficiency disease (World Health Organization, Manila, 1993).

Figure 5. Body mass index (BMI) of Vietnamese women, 1991



Source: Department of Planning, Ministry of Health (1991)

Reproductive health

The government of Viet Nam, as previously noted, has embarked on a national programme to reduce fertility levels and control population growth rates. This programme has relied overwhelmingly on the use of intrauterine devices (IUDs), favoured because they require little intervention once in place and can be used for long periods of time.

Vietnam's Population and Family Planning Strategy to the Year 2000 strongly emphasizes explicit goals of fertility reduction, with little attention given to wider reproductive health aspects (cited in Viet Nam Social Sciences 1[39] 1994). A study of four rural communes in 1994 found that no clients were examined for anaemia, IUDs were the only method offered, instruments were not sterilized properly and standard family planning counselling was deficient or absent in all consultations (Truong Viet Dung et al., 1994). A relatively high percentage of those practising contraception rely on ineffective methods (VNICDS, 1994).

A 1993 study into the low prevalence of contraceptive pill use found that there was little acceptance of this method of contraception, despite the official adoption of a policy to expand methods offered for family planning. There was no evidence that supply was a difficulty. It appeared that pressures to achieve quotas and incentives provided for acceptance unduly influenced providers, who often lacked the knowledge and training to prescribe the contraceptive pill. Providers preferred methods that posed few problems with compliance, such as the IUD and sterilization, and methods that they felt were "appropriate" for women. It was found that many providers wrongly believed that women had to stop taking the contraceptive pill for two cycles each year to restore hormone levels, thus exposing them to an increased risk of pregnancy. Many health workers also believed that rural women would not remember to take the pill everyday, a problem not borne out by the study findings. The majority of users did not find the contraceptive pill inconvenient

and, although they did experience some side-effects, these were only temporary. The most common reason for discontinuing was the advice of health personnel (United Nations Population Fund, 1993).

It appears that there is now an increased official commitment to the philosophy of providing quality reproductive health services in Viet Nam. The National Committee for Population and Family Planning (NCPFP) is currently developing systems of quality of care for family planning services in target communes, which it hopes to offer more widely. It is also expected that injectable contraceptives will be introduced during 1995, thus providing greater choice of methods (personal communication, Dr Vu Quy Nhan, NCPFP). In addition, more comprehensive aspects of reproductive health will be addressed within new, large reproductive health projects funded by the World Bank, the Australian Government and other donors. These projects aim to provide information, education and training for health workers and the community, and to expand the available range of contraceptive methods. Project designers will incorporate a variety of quality of care aspects (Do Trong Hieu et al., 1994).

Induced abortion and menstrual regulation are used widely in Viet Nam and play an important role in the fertility equation. It is estimated that over 40 per cent of pregnancies are terminated each year (United Nations Population Fund, 1994). While this may be related to the fact that adolescents and unmarried women are not targeted for contraceptive service delivery, terminations are common among married women as well. Terminations are used as a substitute for contraception by many women; menstrual regulation is often performed without verification of pregnancy (Do Trong Hieu et al., 1994). This situation should improve in the future, as the Ministry of Health has now specified that pregnancy should be confirmed prior to conducting menstrual regulation. The Vietnamese government is also committed to reducing its previous reliance on terminations as a fertility control method (United Nations Population Fund, 1994).

Maternal mortality rates in total and by cause of death for all identifiable subgroups

There is a high degree of regional variability in maternal mortality ratio (MMR). In the Red River Delta (including Hanoi) in 1991, MMR was reported to be 107 per 100 000 live births, while in a central highland province it was 418. According to a national survey of hospitals, the MMR in 1994 was 576 per 100 000 live births (Do Trong Hieu et al., 1994).

A much lower figure of 76.56 per 100 000 live births was supplied by the Institute for Protection of Mother and Newborn in Hanoi in 1994.

The principal causes of maternal mortality reported by the Institute for Protection of Mother and Newborn in 1994 were, in order of importance, haemorrhage, infection, toxaemia, rupture of uterus and tetanus. It should also be noted that Vietnamese women customarily refrain from eating sufficiently during pregnancy for fear of the risks associated with delivering a large baby (Tu Giay et al., 1991a).

Inadequate antenatal screening is implicated in maternal mortality. The average number of visits reported by women interviewed in the 1994 VNICDS was 2.71 for urban and 1.2 for rural women. Whether or not there has been a decline, many Vietnamese women experience pregnancy without medical care. During the five years preceding the 1994 survey, 21 per cent of urban and 47 per cent of rural women reported having no antenatal care (VNICDS 1994). Similar proportions were found in the 1992 to 1993 Viet Nam Living Standards Survey (State Planning Committee, 1994). Ministry of Health surveys in several rural areas showed that, of those screened, only 15 per cent were weighed and 19 per cent had blood pressure taken (Ministry of Health, 1994). Prenatal consultation rates were also found to be lower for poor women than for rich women (46.2 per cent versus 75.9 per cent) (State Planning Committee, 1994).

For mean number of children for women, by age group, see Table 2.

For age-specific fertility rates, see Figure 6.

Percentage of neonates having a birth weight of less than 2500 g at birth

The estimate for low birth weight in 1992 was 14 per cent. Regional variations are large, ranging from 23 per cent in central coastal areas to 7 per cent in Ho Chi Minh City. This compares with a nationwide estimated rate of 20 per cent in 1980 (Personal communication, Centre for Family Planning, Ho Chi Minh City, 1995).

Low birth weight is probably related in part to the traditional custom of eating insufficiently during pregnancy for fear of delivering a large baby, as discussed above, but is also exacerbated by chronic energy deficiency among women. A recent report of results from a World Food Programme intervention in 16 provinces and cities found that low-birth-weight infants averaged nine per cent of births in targeted districts; control districts averaged 13.2 per cent. Even after this intervention, only 37 per cent of women gained at least eight kilos during pregnancy, compared to 18.5 per cent at the outset (Ministry of Health

Table 2. Mean number of children ever born for all women, ever-married women and currently married women by age group, Viet Nam, 1994

Age group (years)	All women	Ever-married women	Currently married women
15-19	0.04	0.43	0.43
20-24	0.64	1.18	1.19
25-29	1.66	2.08	2.11
30-34	2.57	2.95	3.01
35-39	3.49	3.70	3.78
40-44	4.12	4.42	4.60
45-49	4.62	4.93	5.23
Total	**1.90**	**2.95**	**2.98**

Source: Viet Nam Intercensal Demographic Survey (VNICDS) (1994)

PAM, 1993). Estimates from 1991 put the average weight gain in pregnancy for rural women at just 6.5 kg (Tu Giay et al., 1991a).

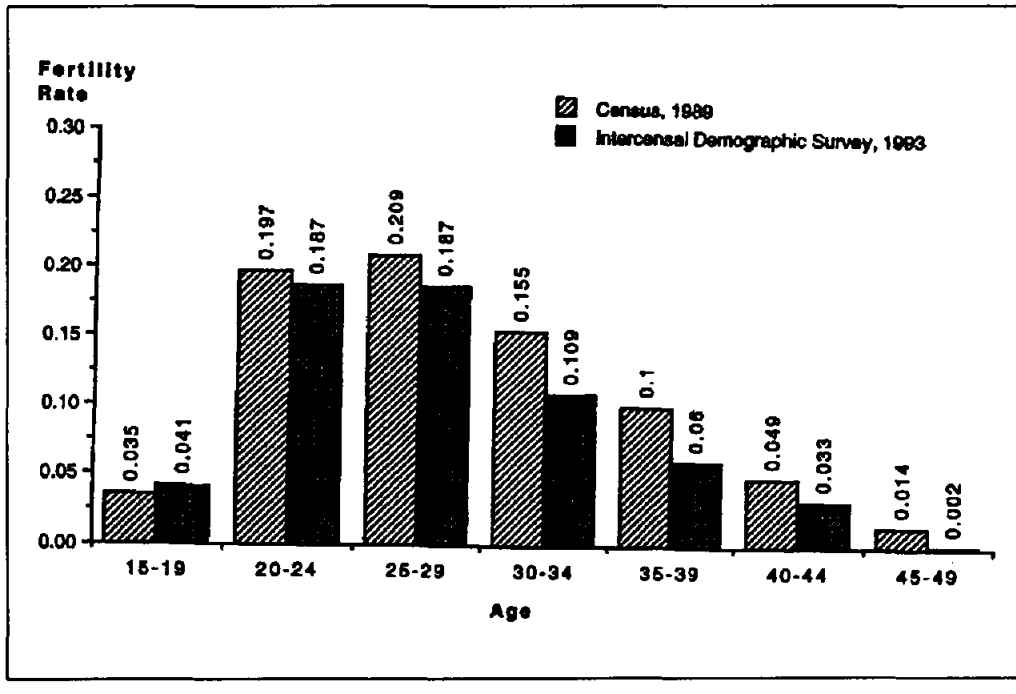
Rate of caesarean sections in childbirth

The only available rates were 5.25 per cent, provided in 1994 by the Institute for the Protection of Mother and Newborn, Hanoi.

Breast-feeding

Surveys have found that close to 100 per cent of Vietnamese women initiate breast-feeding. Average duration was around 14.5 months in the late 1980s (National Committee for Population and Family Planning, 1990; Swenson et al., 1993); the recent VNICDS found that the average duration was 18.9 months in rural areas and 14 months in urban areas. It also found an inverse relationship between duration of breast-feeding and maternal education level.

Figure 6. Age specific fertility rate, Viet Nam, 1989 and 1993, 1989 total fertility rate 3.8, 1993 total fertility rate 3.1



Source: Viet Nam Intercensal Demographic Survey (VNICDS) (1994)

The prevalence of breast-feeding is thought to be related to the duration of postpartum amenorrhoea, which averages nine months (VNICDS, 1994).

Breast-feeding, however, is rarely practised exclusively for the first four to six months. The rate of exclusive breast-feeding at less than one month of age is under 36 per cent, while at four months it is no more than 26 per cent. Promotion of exclusive breast-feeding within a World Food Programme project administered by the Ministry of Health appeared to be successful, increasing rates to 73 per cent in some districts (particularly in urban centres). However, there are few details about the method of reporting or exact definitions used (Ministry of Health PAM, 1993).

Percentage of women and men of child-bearing age using contraceptives

An overall contraceptive prevalence rate for women of reproductive age (using all methods) of 65 per cent was found, an 11.8 per cent increase over the rate found in the 1988 Demographic and Health Survey (VNICDS, 1994). However, this figure includes periodic abstinence and withdrawal, which are relatively unreliable. If only modern methods are included, the rate is 44 per cent.

Variations by region and level of education are apparent in Figure 7 and Figure 8.

It should also be noted that a recent United Nations Population Fund technical report has suggested that Viet Nam's total fertility rate figures and high rates of abortion indicate that the contraceptive prevalence rate can be somewhat lower than that stated officially (1994). As condom use is extremely low, it can be deduced that these figures apply almost exclusively to women.

Accessibility and utilization of family planning services

Almost all Vietnamese women, both urban and rural, have access to district hospitals, which provide family planning services. The average rural woman lives 7.5 km. from the nearest district hospital. Much of the population lives in the densely-settled Red River and Mekong River deltas, where there is ready access to district hospitals. At the local level, however, services are less available. A study of contraceptive availability in 1991 found that 52 per cent of women lived in areas where polyclinics did not offer family planning services (United Nations, 1991).

Many births were found to be unplanned and undesired, indicating a continuing problem with unmet need (VNICDS, 1994).

Availability and use of different types of contraceptives

The most significant aspect of contraceptive use in Viet Nam has been the heavy reliance on IUDs (see Figure 9).

These figures closely resemble the mix found by the Demographic and Health Survey of 1988 (Do Trong Hieu et al., 1994). At present, approximately 63 per cent of all contraceptive users rely on the IUD (Do Trong Hieu et al., 1994), but the Vietnamese government hopes to reduce this proportion to 40 per cent by the year 2002.

Problems with IUDs have been reported. For example, a study of two rural communes found that many women experienced headaches, backaches, abdominal pain and irregular bleeding, but a lack of choice compelled them to

continue using this method. A failure rate of 13 per cent was reported by those using IUDs in the same communes (Le Thi Nham Tuyet et al., 1994a, b).

Cost of contraception and whether costs are covered by health insurance

Family planning services provided through the public health system are free. However, supplies may be unavailable or medical conditions that preclude the use of particular methods may entail a cost, thus acting as a constraint on uptake of services. Moreover, staff may not be adequately trained to provide all necessary services (Do Trong Hieu et al., 1994). The United Nations Population Fund has been and continues to be the major provider of contraceptives. While most services are provided through public system commune health centres, commercial purchase of oral contraceptives and condoms is becoming more widespread.

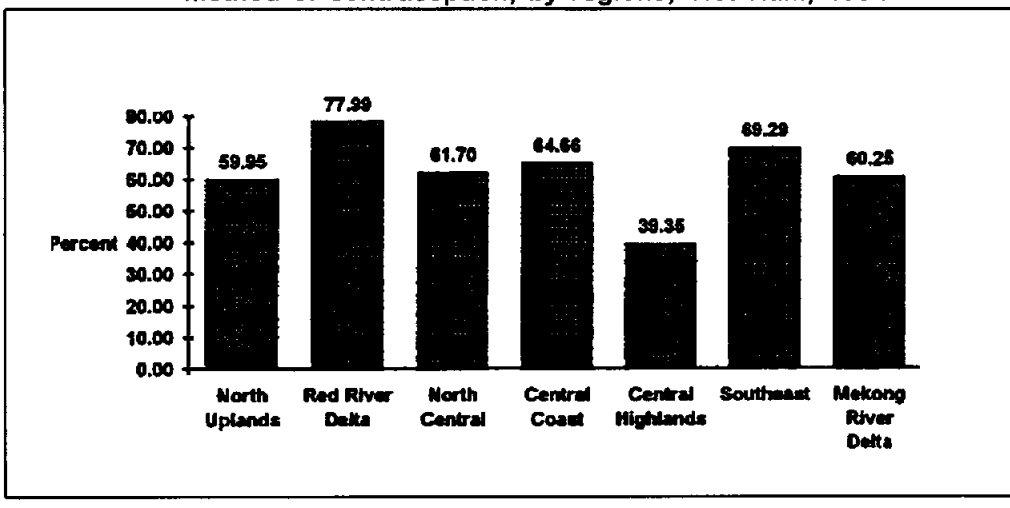
With economic renovation, funding from government sources for family planning services at the lowest level is not secure. Salaries for staff are low, physical facilities are not well maintained and staff training and morale are often weak (Do Trong Hieu et al., 1994).

Sexual behaviour

There is little direct evidence about sexual behaviour in Viet Nam. A survey carried out by the National AIDS Committee in 1992 found that 40 per cent of married men had extramarital sex (United Nations Population Fund, 1994). Data about abortions among single women suggest a certain level of pre-marital sexual activity. In Hanoi, there were 4000 abortions among unmarried girls during the first half of 1992. A youth magazine survey in Ho Chi Minh City reported that 30 per cent of girls aged 15 to 19 years had 'sex experience'. Similarly, the Health Education Centre of Ho Chi Minh City found that up to 25 per cent of city youth aged 15 to 19 years had sexual relations prior to marriage (Chu Thi Xuyen, 1992). There continues to be stigma attached to women who have children out of wedlock (Nguyen Thanh Tam, 1992).

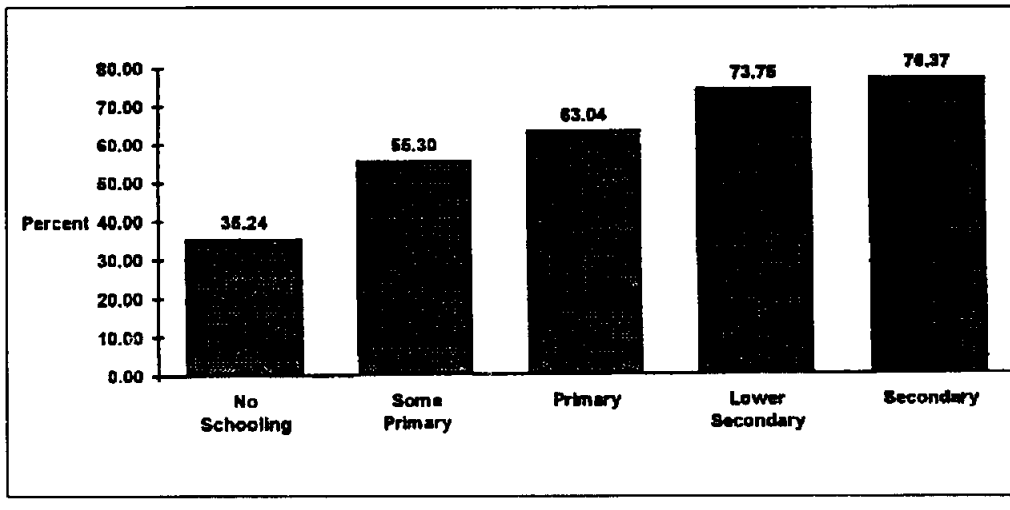
It is generally agreed that prostitution is increasing in Viet Nam. One estimate placed the number of prostitutes at 200 000 nationwide in 1992 (Le Thi Quy, 1993a). Unemployment and underemployment are considered to be factors (Bui Thi Kim Quy, 1992; Le Thi Quy, 1994c). This topic is discussed in more detail below.

Figure 7. Percentage of currently-married women, currently using any method of contraception, by regions, Viet Nam, 1994



Source: Viet Nam Intercensal Demographic Survey (VNICDS) (1994)

Figure 8. Percentage of currently-married women currently using any method of contraception, by level of education, Viet Nam, 1994



Source: Viet Nam Intercensal Demographic Survey (VNICDS) (1994)

Infertility

Data on infertility are not routinely collected. However, it can be inferred that the problem exists because of the high rates of reproductive tract infections (see page 40). There is evidence that abortion is a risk factor for acute pelvic inflammatory disease, a condition known to be related to infertility (personal communication, Dr Nguyen Thi Nhu Ngoc, Hung Vuong Hospital, Ho Chi Minh City, 1994).

The numbers of married women with no children at the end of their reproductive years are reported in the 1988 Demographic and Health Survey as three per cent and in the 1989 census as five per cent.

Infertility is of great concern to those affected. Women who do not produce children, especially sons, within a short time of marriage may be divorced or forced to accept their husbands' decision to take a secondary wife (Le Thi, 1993; Le Thi Quy, 1994c).

What percentage of the population does not know where to find family planning services, including services available for unwanted pregnancies

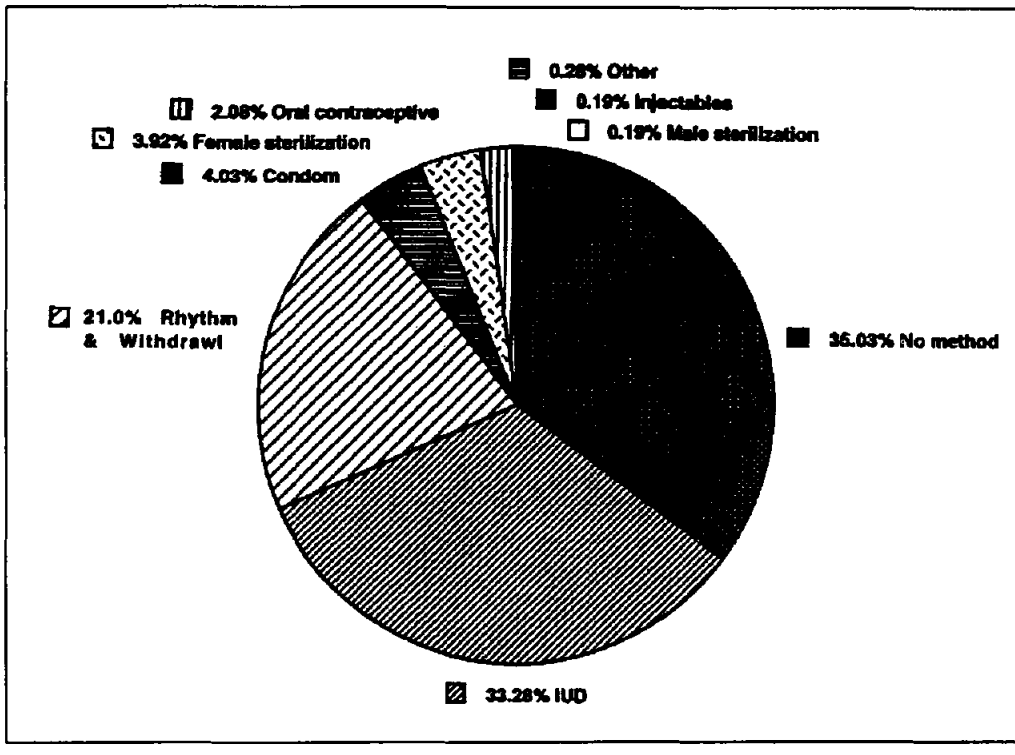
No statistics appear to exist. Government policies on family planning and abortion make it unlikely that this problem is widespread in Viet Nam, but most of these services target married women only (Do Trong Hieu et al., 1994). Among current users, 92.3 per cent stated that it was easy to reach a source of supply (this was slightly more true of urban than rural women) (VNICDS, 1994).

Incidence of unplanned pregnancies, by age

Several studies have provided evidence of an unmet need for effective contraception in Viet Nam (see Table 3).

Unmet need was found to be highest in the Mekong Delta (40 per cent of women surveyed) and lowest in the Northern Uplands and Red River Delta (26 per cent and 27.4 per cent of women surveyed, respectively) (VNICDS, 1994).

Figure 9. Patterns of contraceptive use, Viet Nam, 1993



Source: Viet Nam Intercensal Demographic Surve (VNICDS) 1994

The high rate of terminations is further evidence of unmet need and unplanned pregnancies. A portion of these pregnancies is accounted for by unmarried women, who are generally not provided with contraceptive services (Do Trong Hieu et al., 1994) or adequate sex education in schools (Le Thi Nham Tuyet, 1994). Efforts are under way to expand sex education in schools, partly in response to the threat of HIV/AIDS, but 60 to 85 per cent of youth, especially girls, over the age of 15 years are not enrolled in high school and thus cannot be reached through these channels (Johansson, 1993).

Unplanned pregnancies are also related to the relatively frequent reliance on ineffective contraception; among the 58 per cent of women who reported using some method of contraceptive in the month prior to a termination, 57 per cent said they used periodic abstinence or withdrawal (VNICDS, 1994).

A field study of two rural communes in Thai Binh province found that 64 per cent of women having terminations used no contraception. Reasons given by those interviewed included dissatisfaction with available methods, lactation, objections by husband or wife and irregular residence of husband. The pregnancy may have been desired initially, but later circumstances compelled women to undergo a termination; it was also suggested that the 'cost' of contraception was a disincentive (Le Thi Nham Tuyet et al., 1994a).

Number of induced abortions per 1000 live births by age

The Ministry of Health states that data on induced abortion are not accurate, but that the trend over the past 15 years has shown an increase in its prevalence. Many women are said to consider abortion as a method of family planning. Terminations more than doubled between 1984 and 1987 (Ministry of Health, 1994). Figures for 1992 indicate that there were 660 induced abortions (including menstrual regulations) per 1000 live births (United Nations Population Fund, 1994). There is growing concern in some quarters about the physiological (and psychological) impact on women of repeated abortions (personal communication, Dr Nguyen Thi Nhu Ngoc, Hung Vuong Hospital, Ho Chi Minh City, 1994).

Abortion was found to be most common in the Northern Uplands and Red River Delta and least common in the Central Coast, and the more educated a woman, the more likely she was to have had an abortion (VNICDS, 1994).

Estimates of morbidity and mortality associated with induced abortions

Post-abortion problems were reported by 8.85 per cent of women interviewed (VNICDS 1994), but abortion was found to be the principal risk factor for acute pelvic inflammatory disease in a study carried out in Ho Chi Minh City in 1993 (personal communication, Dr Nguyen Thi Nhu Ngoc, Hung Vuong Hospital, Ho Chi Minh City, 1994).

Among leading causes of maternal mortality in 1984 to 1985, six per cent were attributed to complications of abortion.

Abortion legislation and trends

Article 44 of the 1989 Law on the Protection of People's Health guarantees Vietnamese women the right to an abortion 'if they so desire'. Abortion is provided to both single and married women. Government policies currently in place are attempting to discourage the routine use of abortion (United Nations Population Fund, 1994).

Table 3. Percentage distribution of the three last births in the ten years preceding the survey according to fertility planning status, by birth order and mother's age at the time of birth, Viet Nam, 1994

	Plannning status of birth			Total	Number of births
	Wanted then	Wanted later	Not wanted		
Birth order					
1	91.15	8.45	0.40	100.00	4.282
2	65.79	31.00	3.21	100.00	3.774
3	57.77	26.78	15.45	100.00	2.617
4	54.86	20.73	24.40	100.00	1.814
5	50.19	18.41	31.41	100.00	1.120
6	47.21	18.83	33.95	100.00	.704
7+	43.04	14.37	42.58	100.00	.919
Mother's age (yrs)					
<20	87.25	12.02	0.73	100.00	1.028
20-24	75.55	21.14	3.31	100.00	4.996
25-29	64.53	23.54	11.92	100.00	4.786
30-34	57.88	19.68	22.44	100.00	2.794
35-39	50.57	19.58	34.85	100.00	1.296
40-44	46.08	10.30	43.63	100.00	.320
45-49	29.90	10.47	59.63	100.00	.10
Total	**66.86**	**20.22**	**12.92**	**100.00**	**15.230**

Source: Viet Nam Intercensal Demographic Survey (VNIDCS) (1994)

In the past, menstrual regulation was performed routinely without conducting a pregnancy test. The Ministry of Health is now calling for pregnancy tests to be conducted prior to all menstrual regulations (personal communication, Dr Nguyen Thi Nhu Ngoc, Hung Vuong Hospital, Ho Chi Minh City, 1995).

Support for maternity

Social security for pregnant women

Women workers are given a total of three days paid leave for prenatal examinations (Labour Code of Viet Nam, 1994).

Income for maternity leave

Viet Nam's Labour Code of 1994 specifies in Article 114 that working women are entitled to maternity leave of from four to six months at full pay, provided they have paid their social insurance contributions. They are also entitled to an additional allowance of one month's wage if they are giving birth to their first or second child (Article 144).

Maternity leave provisions have been scaled back under the most recent decrees from six to four months. Women are permitted to return to work after a minimum of two months' rest, if a doctor certifies that they are able to work (Article 114). Although women receive full official pay, maternity leave does not usually cover bonuses, and some women feel compelled to return to work early after childbirth. This situation, and the reduction of maternity leave, have been criticized by some writers (Le Thi Quy, 1994b; Beaulieu, 1994).

Involvement of partners

Pregnancy and childbirth are generally considered the domain of women; men are unlikely to be present during the birth (Dao Hung, 1989).

Support for breast-feeding

Vietnam's maternity leave provisions were introduced in part to promote breast-feeding. The National Institute of Nutrition in Hanoi has been a leading force in drawing attention to this issue, and was one of the first research institutes to promote exclusive breast-feeding for the first four to six months (personal communication, Dr Tu Giay, Director, National Institute of Nutrition, 1991).

Vietnam's Labour Code of 1994 reiterates earlier legislation stipulating an hour's paid break each day for mothers with infants less than 12 months of age (Article 115). This break enables those women covered by its provisions to breast-feed their babies during the working day. Article 116 stipulates that enterprises employing 'a high number of female employees' must organize child care centres or assist with a portion of the costs of child care, which will further facilitate breast-feeding for beneficiaries.

In June 1994, the Prime Minister signed into law a code modelled on the World Health Organization's Code for the Marketing of Breast-milk Substitutes. This law is intended to restrict the promotion of artificial feeding, but financial sanctions for contravention are weak. Advertising of formula, including

locally-manufactured formula, is widespread. National workshops to train health workers about lactation have been sponsored by the World Health Organization and the Ministry of Health. Two hospitals, one in Hanoi and one in Ho Chi Minh City, have been certified as Baby-Friendly Hospitals.

Role of midwives and home delivery

Data on deliveries are not widely available and those that are available are inconsistent. A survey conducted for UNICEF in rural Thanh Hoa province found that 29 per cent of mothers had delivered at home. Another survey in Bac Thai province found that 65 per cent of women in the last five years gave birth in their homes. Ministry of Health routine data collection indicated a decline in the proportion of women delivering at health stations from 78.5 per cent in 1990 to 70 per cent in 1992.

Home births accounted for about half of births to rural women, but less than ten per cent of births to urban women in the ten years preceding the survey (VNICDS, 1994). No evidence was provided about trends or changes during this period.

Midwives assisted with births of slightly less than one-fifth of women in both urban and rural areas (VNICDS, 1994). In district hospitals, doctors are available for at-risk deliveries. A recent Ministry of Health document cites concern at the decrease in numbers of midwives, nurses and traditional medical practitioners at commune level; funding constraints have resulted in an overall reduction of 30 per cent in the number of health staff at all levels (Ministry of Health, 1994).

Incidence and prevalence of pelvic inflammatory disease

No reliable data on pelvic inflammatory disease exist. It is likely that this problem is often undiagnosed and untreated. Several studies have found gynaecological infections to be a serious problem for women, especially in rural areas. Rates of reproductive tract infections are estimated to be 20 to 40 per cent in rural areas (Do Trong Hieu et al., 1994). Another survey cited rates of (unspecified) gynaecological diseases at between 28.4 per cent (for women aged 16 to 25 years) and 60 per cent (for women aged 41 to 45 years) (Ha Thi Phuong Tien, 1992). A recent study of women in the Mekong Delta found that the average rate of gynaecological diseases (unspecified) was 50 per cent, with 70 per cent in areas where women worked long hours in water, a frequent occurrence during some stages of agricultural production (Thai Thi Ngoc Du et al., 1994).

Health consequences of violence

The Viet Nam Law on Marriage and Family, promulgated in 1960, outlaws physical violence against women and children (UNICEF-Hanoi, 1990). Nonetheless, violence against women continues to occur, and perpetrators are not always punished. Le Thi Quy suggests that, along with poverty, unequal gender relations, stemming from a tradition of elevating men, are directly linked to domestic violence. Other influences cited are alcohol consumption, gambling, adultery, jealousy and tensions between parents-in-law and husbands/ wives. Women victims of domestic violence may be driven to divorce or suicide (Le Thi Quy, 1992; Le Thi Quy, 1993b; Thai Thi Ngoc Du et al., 1994). In the Hanoi court in 1992, 65 per cent of divorces were a consequence of domestic violence (Le Thi Quy, 1993c). While divorce is not explicitly linked to health, it can be deduced that the greater likelihood of poverty among single women will have deleterious health impacts.

Incidence of domestic violence

No reliable nationwide data exist. The Ho Chi Minh City Statistical Yearbook 1993 reported on the incidence of domestic violence in that city. The murder rate increased slightly between 1990 and 1992, while reported rapes declined slightly.

There is much anecdotal evidence supporting the view that domestic violence is a widespread problem (Le Thi Quy, 1993b; Thai Thi Ngoc Du et al., 1994). Violence against women is seen by commentators as partly a result of the traditional Confucian view of wives as the property of husbands, and of the role of husbands in the 'education' or punishment of wives. A growing gap between rich and poor exacerbates family strains; however, domestic violence has been reported among all social classes (Le Thi Quy, 1992).

Incidence of rape

A recent increase in sexual crime is reported, including rape committed by youth, even in rural areas such as the Mekong Delta (Thai Thi Ngoc Du et al., 1994). Government statistics cited by Hong Khiem (1994) show a total of 400 to 500 rapes reported annually in recent years; 30 per cent of victims were female adolescents. This figure seems excessively small and unlikely to be reliable, especially if we consider the fact that 168 cases of child rape were reported from 1992 to 1993 in Ho Chi Minh City alone (Yen Nhi, 1994).

Societal views on rape

There is some degree of public awareness and discussion of rape in both the popular press and media. Calls for more severe punishments have appeared in the press (Hong Khiem, 1994). Criticism has been levelled at the availability and lack of control of pornographic videos as well as a lack of social activities for youth, who are implicated in many cases (Thai Thi Ngoc Du et al., 1994).

There is a Vietnamese Criminal Code on Rape. Prison terms for rape are one to five years. Terms for rape of a minor are 7 to 15 years. Gang rape and/or great bodily harm during rape draws a term of 5 to 15 years. If death occurs, the term is 12 years to life imprisonment; the death penalty is applied in some cases.

The Women's Union of Ho Chi Minh City organized a workshop about child rape. The Viet Nam Women's Newspaper reported that of 168 notified cases of child rape in the city in 1992 to 1993, 89 involved children aged three to nine years and 79 involved children aged 10 to 16 years. The same report discussed reluctance to take victims for forensic tests, which are required to prove rape, and the difficulty of prosecution (Yen Nhi, 1994).

Prostitution

Prostitution, which is illegal in Viet Nam, is recognized explicitly as a matter of concern to the Vietnamese Government (National AIDS Committee, 1993). The actual number of prostitutes is difficult to determine, due to its illegality. Le Thi Quy has written that the number of prostitutes rose from 40 000 in 1990 to 200 000 in 1992 (1993a). However, the recent technical report by the United Nations Population Fund (1994) cites estimates of 350 000 (provided by the Vietnamese Ministry of the Interior) and 600 000 (provided by the Viet Nam News Agency). Prostitution is linked to unemployment and underemployment among women (Chu Thi Xuyen, 1992; Hoang Thi Lich, 1992; Bui Thi Kim Quy, 1992; Nguyen Kim Cuc, 1992; National AIDS Committee, 1993; Le Thi Quy, 1994c); this linkage is recognized as a growing problem in rural areas as well (Thai Thi Ngoc Du et al., 1994). The Viet Nam Women's Union has embarked upon public education to discourage men from using the services of commercial sex workers (Nguyen Kim Cuc, 1992).

An increasing proportion of prostitutes are young teenagers and street children; a survey of 900 street children in Hanoi found that 25 per cent were part-time prostitutes (Le Thi Quy 1993a). Up to 16 per cent of prostitutes in Hanoi and Ho Chi Minh City are under the age of 18 (UNICEF-Hanoi, 1994).

Le Thi Quy (1993a) writes that prostitution is widespread in hotels, restaurants, beer houses and along street pavements. Prices vary and can be as low as 5000 dong (approximately US$0.50).

Recent reports suggest there is some export of Vietnamese prostitutes to neighbouring countries (Kim Dung, 1994).

Aging

As in most countries, women in Viet Nam tend to live longer than men. Because life expectancies have risen quite rapidly in recent years, there has been relatively little attention given to the needs of older people. This chapter draws on evidence provided from a few studies investigating this area, and highlights the principal known difficulties for the elderly. With life expectancy on the rise, issues for older women will become more important in Viet Nam.

Foremost among current concerns for older women is poverty, which appears to affect women more often than men. Social security benefits are an insignificant source of income for most women, who rely on the support of their families and are often forced to continue to seek paid employment, often at very low wages. Poverty may also be related to the fact that elderly women were more likely to be widowed than elderly men.

The second major issue is that of poor health, which was found to afflict more elderly women than men. Health services were also reported to be inadequate.

Despite these difficulties, most older women command respect from families and society at large, and many continue to participate in social and cultural affairs, contributing to the well-being of their families and their communities.

Cultural attitudes to older people, especially older women

The 1946 and 1960 Constitutions stipulated that older people were entitled to assistance. Article 59 of the 1980 Constitution called for the development of social insurance for the elderly. There is a widespread perception that the elderly have contributed to the development of society and are entitled to rest and assistance (Economic and Social Commission for Asia and the Pacific [ESCAP] 1994). Over 85 per cent of respondents with at least one living child expected to live with their children in old age; this proportion varied only slightly between different age groups (VNICDS 1994). Close to 95 per cent felt that children should provide aid and assistance to elderly parents.

A recent survey found that older people still enjoyed respect and 83 per cent continued to have a decisive role in household decision-making. Both men and women were found to have an active role economically and the difference between the sexes was small, 89 per cent of men as opposed to 74 per cent of women. No elderly people in this survey complained of indifference towards them by their children (ESCAP, 1994).

There are several efforts to facilitate the active involvement of the elderly in the community in Viet Nam; however, reports of these efforts do not indicate differentials between men and women. Many mass organizations for the elderly have been established to attract older people into social activities. Tree-planting and reforestation have been assigned to the elderly in some villages; land has been set aside for orchards for the elderly in others. 'Healthy, handsome and useful aged' competitions have been organized in some localities. The majority (65 per cent) of those in a recent survey participated in social and religious activities and 73 per cent were members of social groups or clubs (ESCAP, 1994). Many older women are active members of the Viet Nam Women's Union.

Assessment of quality of life of those aged 65 years and over

There is conflicting evidence about the health status of the elderly. A recent, large Ministry of Health survey of rural elderly people found that 'good health' was reported by only 1 per cent of men and 0.5 per cent of women; 'average health' was reported by 45 per cent of men and 26 per cent of women; 'poor health' was reported by 49 per cent of men and 73 per cent of women (Institute of Social Sciences, 1994). By contrast, the 1993 ESCAP survey (urban and rural) found better health reported by respondents: 'good health' was reported by 35.5 per cent, 'average health' was reported by 54.3 per cent and 'poor health' was reported by only 10 per cent of respondents. Slightly poorer health was reported by women than men in this sample (ESCAP, 1994).

Poverty is extremely widespread among the elderly, according to both reports. Many elderly people (89 per cent in the ESCAP survey) are forced to continue to look for work, often for wages as low as 18 000 to 25 000 dong per month (approximately US$1.80 - $2.50 per month) (Institute of Social Sciences, 1994).

The 1989 census found that there were 1.9 million males and 2.7 million females over 60 years of age. Nearly 53 per cent of elderly women were widows; but only 15 per cent of elderly men were widowers (Institute of Social Sciences, 1994).

Percentage of women not covered by a health insurance scheme or social security

Few elderly women are covered under Viet Nam's new health insurance scheme, which applies almost exclusively to workers. In theory the elderly should be covered by public assistance, but this is rarely the case in practice. Subsidies are available to some older people, but many live in situations where this is not standard, particularly in rural areas; many older people rely on their children for support (ESCAP, 1994). Of those receiving support (not disaggregated), a recent study in Hai Hung and An Dien found that only 10.6 per cent of older people received significant assistance from pensions or social welfare (Institute of Social Sciences 1994). A study carried out by ESCAP (1994) found that 71.26 per cent of the elderly received no support from government or other organizations. It also found that women were less likely than men (29 versus 21 per cent) to have an adequate income to meet their basic needs.

Voluntary organizations to assist the elderly are rare. The Red Cross, which in some places provides homes for the destitute elderly, is one of these (ESCAP, 1994).

Coverage of elderly women living alone

Statistics about elderly women living along are incomplete. This situation appears to be true for between 6 per cent and 14 per cent of older people in three surveyed rural communes, but data are not disaggregated by gender (Institute of Social Sciences, 1994). The ESCAP survey of 1993, carried out in a mixture of rural and urban areas, found that 3.8 per cent lived alone (ESCAP, 1994).

As health facilities are targeted to reproductive-age women and children, inadequate or prohibitively expensive health care for the elderly was a complaint voiced by up to 95 per cent of older people in the Ministry of Health rural survey. A Ministry of Labour, Invalids and Youth Affairs survey found that 47 per cent of respondents cited a great need for care for the elderly (Institute of Social Sciences, 1994).

Level and trends in extended family support for older women

It has been a tradition for elderly people to live in an extended family situation in Viet Nam. However, new agricultural policies of land distribution, labour structure, housing shortages, internal and external migration, and other loss of family members may explain the reported increase in nuclear families (Nguyen Thi Khoa, 1992). A 1993 survey of the elderly found that 53 per cent said they received no financial support from family members. Indeed, 89 per cent of the surveyed sample contributed to the family budget (ESCAP, 1994). One social commentator suggested that nuclearisation of families has led to more freedom for family members (Nguyen Thi Khoa, 1992), presumably because they do not have to acquiesce to the wishes of parents-in-law.

Amount of caring work that older women do

There is little specific information about this category. However, older women, like older men, report that they continue to work for themselves, their family and the community (ESCAP, 1994). A survey of the elderly (not disaggregated by gender) carried out by the Ministry of Labour, Invalids and Social Affairs in 1990 found that 31 per cent reported that they took care of their family and seven per cent reported that they took care of children (Institute of Social Sciences, 1994).

Lifestyle-related health conditions

One of the principal lifestyle-related health risks in Viet Nam is HIV/AIDS. At present, infection rates among women are small compared to those among men. The Government has publicly confronted the underlying influences on the spread of this pandemic. In October 1990, two months prior to the discovery of the first case of HIV, the government established a high-profile National AIDS Committee, which now reports directly to the Prime Minister and has representatives from many ministries. While prostitution and drug addiction are illegal in Viet Nam, the National AIDS programme has explicitly directed its efforts towards education and behaviour modification, and separated it from those branches of government that deal with criminal activities. The central components of the National AIDS strategy are promotion of safer sexual behaviour, including the use of condoms, promotion of sexually transmitted diseases care-seeking behaviour and treatment, education programmes targeted to injecting drug users, ensuring a safe blood supply and preparing for non-discriminatory care of HIV-infected people (National AIDS Committee, 1993). It is hoped that sufficient funds for these programmes will be forthcoming from both the central government and foreign donors.

Other risk factors for HIV transmission are less well-known or publicly debated. These include some which pertain particularly to women, such as iatrogenic transmission during abortion or intrauterine device (IUD) insertion involving unsterile equipment, the practice of injecting vitamin C 'for beautiful skin' and limited access to condoms, especially in rural areas. The widespread use of injectable antibiotics and vitamins, particularly in the less-regulated private sector, pose potential HIV risks for all populations. Married women whose husbands migrate temporarily to other centres are at risk of infection if their husbands engage in unprotected sexual activity.

HIV/AIDS incidence

As screening is not widespread, the actual incidence of HIV is unknown. Nationwide estimates put the figure at 11 to 15 000 in 1993 (Ministry of Health and Macfarlane Burnet Centre for Medical Research, 1994).

As of 26 May 1995, the National AIDS Committee, Hanoi, confirmed the following details about known cases of HIV/AIDS in Viet Nam:

Cumulative cases of HIV

2173 males	(86.2 per cent)
307 females	(12.2 per cent)
40 unknown	(1.6 per cent)

About 79 per cent were drug users and 4 per cent prostitutes.

There was only one confirmed mother-to-infant infection, according to figures supplied by the National Institute of Hygiene and Epidemiology, Hanoi, in 1994.

Support services

The government's national AIDS strategy has called for training programmes for health workers who care for HIV-infected people. The strategy also aims to make care affordable and accessible, and to promote a non-discriminatory approach to HIV-positive people and those with AIDS (National AIDS Committee, 1993).

Percentage of blood units taken from blood donors tested for HIV

Paid blood donations, often from high-risk groups, accounted for over 90 per cent of donations in the past. The national AIDS strategy calls for voluntary blood donations, universal screening of blood bank products, and education for health workers in the safe handling of blood and equipment (National AIDS Committee, 1993). (Such steps, needless to say, are extremely costly.) Disposable needles and syringes are more widely available now.

Incidence of sexually transmitted diseases - female and male rates

Sexually transmitted diseases statistics are not disaggregated by sex. There are virtually no reliable nationwide data on sexually transmitted diseases, partly because it is estimated that 90 per cent of cases are treated by private practitioners or pharmacists (Ministry of Health and Macfarlane Burnet Centre, 1994). One writer has estimated that over 30 000 cases of sexually transmitted diseases are treated annually by the centres of dermatovenereology (Le Dien Hong, 1992).

The current rate of sexually transmitted diseases among prostitutes is estimated to be 64 per cent, up from 48 per cent in 1985 (United Nations Population Fund, 1994).

Percentage of men and women using condoms to prevent sexually transmitted diseases

A survey on condom-users in three major cities in Viet Nam (Ho Chi Minh City, Hanoi and Danang) found that, overall, most people cited a desire to prevent both conception and sexually transmitted diseases as the reasons for their choice of method (see Figure 10).

A survey of prostitutes in Hanoi in 1993 found that 79 per cent used condoms some of the time; 21 per cent of clients were reported to have refused to use condoms. The United Nations Population Fund has projected that, by 2002, the requirements for men using condoms for safer sex will be 48 million and for commercial sex workers will be between 177 and 324 million. Promotion and distribution of condoms is being undertaken through both public and private channels (United Nations Population Fund, 1994).

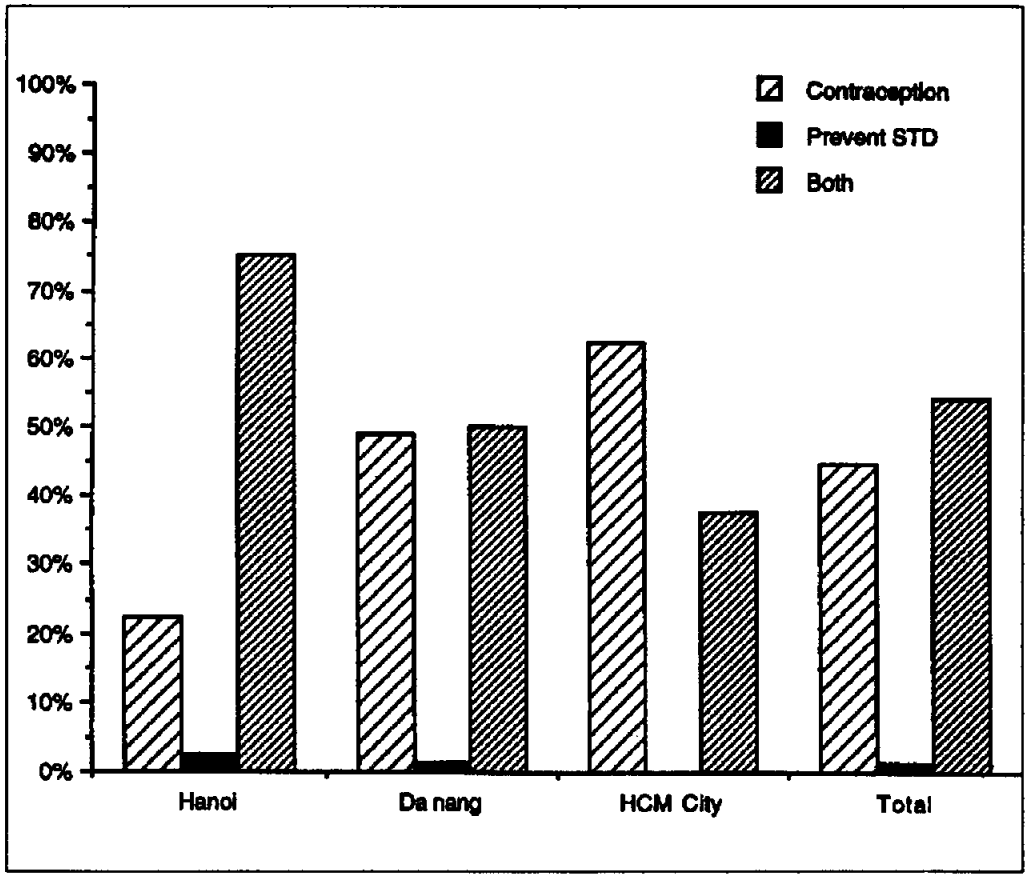
Alcohol consumption

Le Thi Quy has linked domestic violence in Viet Nam to the consumption of alcohol among men (1993).

Use of illicit drugs

The smoking of opium used to be the most common form of drug addiction in Viet Nam; this has been replaced at least in part by injecting drug use. It is believed that drug use has become more popular, especially in large urban centres (Johansson, 1993). The National AIDS Committee estimated in 1993 that there were approximately 100 000 injecting drug users nationwide. Considering the fact that the vast majority of HIV-infected people are male injecting drug users, it can be deduced that this form of drug addiction is relatively rare among women.

Figure 10. Main purpose for condom use by city, Viet Nam, 1994



Source: United Nations Population Fund (1994)

Non-smoking population patterns by age and sex

Smoking among Vietnamese women is relatively uncommon. The Viet Nam Living Standards Survey of 1992 to 1993 found that women accounted for only 7.28 per cent of those smoking or chewing tobacco (State Planning Committee, 1994).

Mortality rates by age and sex, from suicide and self-inflicted injury

Data on mortality rates from suicide and self-inflicted injury could not be located. It has been suggested that women commit suicide as a response to domestic violence (Le Thi Quy, 1993b).

Physical activity patterns by age and sex

Most women are engaged in occupations requiring an expenditure of energy (e.g., agriculture, fisheries, industry). Insufficient caloric intake is apparent in the high rates of women suffering from chronic energy malnutrition.

In terms of leisure, it should be noted that Vietnamese work a six-day week. Moreover, urban centres tend to be crowded with traffic, and there are few parks or other potential places for exercise. Long working hours reported by women preclude many from undertaking physical activity for leisure.

Work environment

This chapter explores two areas: working conditions for women and the state of the environment in Viet Nam, particularly as it pertains to women. It is not easy to make generalizations about these areas due to the complexity of these issues and the lack of comprehensive, nationwide data. Nevertheless, it can be said that women are at some degree of risk from both their working conditions and environmental degradation. At the same time, however, there is growing public interest in confronting these problems. New legislation to protect both workers (including women workers) and the environment, along with open discussion in the press and public forums of existing deficiencies, are hopeful signs.

Although data on environmental pollution and occupational health and safety in Viet Nam are not routinely collected, numerous quantitative studies investigating the health and working environment of employees have been carried out and published in recent years, particularly by the National Institute of Occupational and Environmental Health (a World Health Organization Collaborating Centre) and the National Institute of Medical Expertise, both part of the Ministry of Health. A recent workshop (sponsored by the Embassy of Canada in Hanoi) brought together experts concerned not only with women's occupational health, but also with the health of the environment.

Environmental degradation in Viet Nam has become increasingly evident with the recent emphasis on rapid development. The concept of sustainable development, and its importance in the lives of Vietnamese women, has become more widely discussed in the past few years. Le Thi (1994b) has emphasized the crucial need for ensuring long-term interests for the whole population and has highlighted the dangers of opting for short-term benefits.

Air, water and soil contamination from industry, agriculture and waste disposal are widespread problems (Le Thi, 1994b; Phung Thanh Van et al., 1994). Forest cover has declined to only 20

per cent of the land mass, resulting in declining supplies of water for household and agricultural use, coupled with increases in flooding in some seasons (Economist Intelligence Unit, 1994; Do Thuy Binh, 1994).

In response to these threats, the Government enacted a Law on Environmental Protection, which came into effect on January 1, 1994. This law strictly prohibits burning and destruction of forests, unregulated exploitation of mineral resources, the importation of technologies which do not meet minimal environmental protection standards, and exportation or importation of contaminated residues (Le Thi, 1994b). Implementation of this law is a first step to improvements in the environment (Nguyen Kim Cuc, 1994). In the area of forest protection, prosecutions for illegal logging have been reported and the People's Committee halted the operations of 21 timber processing plants in November 1993 in Gai Lai province (Economist Intelligence Unit, 1994).

Along with legislation, there is a further need to promote comprehensive environmental programmes that encourage sustainable development and changes in harmful practices. Le Thi suggests, for example, that the state should assist in finding markets for agricultural products being grown in areas where nomadic farming had been the custom previously (1994b). Simple, appropriate technologies are needed to assist families, particularly women, to economize fuel use and dispose of garbage (Le Thi, 1994b). A great boost to the environment, as well as to household food security, would be provided by the expansion of the traditional Vietnamese VAC system, which combines family gardens, animal husbandry and fish ponds in a self-sustaining, environmentally friendly, ecosystem. VAC has been promoted widely in recent years by Professors Tu Giay and Ha Huy Khoi, and staff of the National Institute of Nutrition in Hanoi.

Occupational risks are gaining increasing attention in Viet Nam. Protective measures were enacted years ago in laws pertaining to state enterprises, but the shift to a market economy in Viet Nam has greatly reduced the number of public sector employees. Recognizing the need for new legislation for the era of Doi Moi, the National Assembly gave 'in principle' approval to a new Labour Code of Viet Nam (1994), which applies to private and joint venture enterprises. It has been described as 'the most comprehensive workers' rights Bill of any developing nation in the region' (Dover, 1994). This Code guarantees freedom to unionize (indeed, unionization is now compulsory for joint venture enterprises) and the right to strike, and contains numerous measures to protect the health and well-being of workers, including women, who are specifically identified in many sections

of this law. Not only does the Code forbid discrimination against women (including dismissal for marriage, pregnancy, during maternity leave or in caring for a young child), it also calls on the State to actively promote employment and training opportunities for women and to reduce taxes for enterprises that employ a high number of women. The law specifies that women are to be given time off for menstruation, abortion, prenatal checks, childbirth, maternity and breast-feeding breaks. Night work, heavy work or working in distant locations is forbidden for women pregnant beyond seven months or with a child under the age of one. In addition, the code prohibits employers from hiring women to undertake heavy, dangerous, or toxic and poisonous work (as specified by the Ministry of Labour, Invalids and Social Affairs and the Ministry of Health in 1988) (Chapter X, Labour Code of Viet Nam, 1994).

At the same time, however, there is a body of evidence confirming that many employed women in Viet Nam are exposed to hazardous working environments and do not always reap the benefits of protective legislation. In 1988, the Government of Viet Nam drew up a list of heavy labour or harmful jobs expressly forbidden to women, but many women work in such occupations from necessity (Duong Thoa, 1992). A Ministry of Health study of state enterprises concluded that working conditions, especially for female employees (particularly for those working in enterprises where they are outnumbered by males), has deteriorated in recent years. Women were no longer routinely given up to 20 days off to care for sick children, for example, and 86 per cent of factories not only offered no special benefits for women during pregnancy, miscarriage or abortion, but also reduced their bonuses. Workers could no longer count on subsidized drugs or free hospital care, and 52 per cent of factories were found to have insufficient or no monitoring of the work environment (Ministry of Health, Department of Hygiene and Epidemic Prevention, 1994). One study of women working in joint venture enterprises found high levels of dissatisfaction with wages (Bui Thi Kim Quy, 1994).

The Code cannot be seen as a universal panacea for several reasons. First, while employees may welcome the new Labour Code, the legislation does not cover those working in the informal sector, including family businesses, or in agriculture, where most women work. Second, as Thai Thi Ngoc Du et al. have noted (1994), many women are not aware of the existence of protective legislation. Third, at least some employers flaunt these regulations (Nguyen Ngoc Nga, 1994b). Paying below the minimum wage and threatening dismissal for those attempting to form unions has been widespread among foreign-owned and joint-venture companies, whose owners

recognize that high unemployment rates make for job insecurity among employees. It is too early to say whether or not the Code is being implemented. However, its existence potentially provides a high degree of protection for some workers, and an official means of redressing deficiencies. Clearly, its implementation is of paramount significance.

Proportion of population with access to safe water supply

It is estimated that between 45 per cent and 50 per cent of urban dwellers and approximately 21 per cent of rural dwellers have access to adequate amounts of safe water. The Government has set a target of increasing this figure to 80 per cent in rural areas by the year 2000. It is theoretically possible to meet this target, but in practice there are major constraints: and the rural water supply projects require financial and/or manual contributions from the communities they will serve.

The recent Viet Nam Living Standards Survey collected data on access to water from different sources; however, there is no information about whether these sources are safe. It should be noted that there are acute shortages of clean drinking water during the lengthy dry season in many parts of Viet Nam. Salinity is a problem in many areas, as is contamination from human and industrial waste, pesticides and fertilizers. The Government has encouraged rural people to construct wells and rainwater tanks. Efforts are under way to improve water facilities in the major cities, where low pressure, breakages causing contamination and inadequate connections have been the norm in the past (UNICEF-Hanoi, 1990, 1994).

Formal/informal health-related occupational hazards

Most Vietnamese women work in agriculture, and consequently are exposed to particular hardships and risks. Long working hours, heavy manual labour in the absence of even intermediate technology and inadequate nutrition all take a toll on the health of rural women over their life span. Studies have found that rural women report increasing levels of ill-health as they age (Ha Thi Phuong Tien, 1992). Women in agriculture are exposed to contaminants from fertilizers and pesticides, musculo-skeletal strains due to heavy manual labour, infections from standing in water, malaria, trachoma and other eye diseases, and skin and internal diseases (Ha Thi Phuong Tien, 1992; Duong Thoa, 1992; Le Thi, 1994b; Thai Thi Ngoc Du et al., 1994). Studies in agricultural and tea-growing areas found

high levels of improper storage and excessive concentrations of pesticides, and evidence of pesticide poisoning in up to 57.7 per cent of screened workers (gender and specific occupational breakdown not given) (Le Trung et al., 1994; Nguyen Thi Xuan Thuy et al., 1994). Accidental injury is common, with women accounting for 85 per cent of those injured doing farming work in Nam Ninh district in 1986; the proportion in 1961 was only 75.5 per cent. Frequent childbirth is the norm in rural areas; it is reported that 75 per cent - 80 per cent of women continue to work as usual until the time of birth (Ha Thi Phuong Tien, 1992).

Women employed as road-builders and in construction also undertake physically taxing and sometimes dangerous work. Exposure to toxic fumes and melanosis are common among asphalting workers (Khuc Xuyen and Pham Dac Thuy, 1994). A study of tar-sprayers working in the Ministry of Transport and Communication found worksite temperatures were 4 to 5 °C higher than the open air, and hydrocarbide gas concentrations were two to three times higher than accepted standards. Over 30 per cent had irregular periods and 23 per cent had abortion with sepsis or premature deliveries. Nearly half had skin disease (Pham Dac Thuy et al., 1994).

Work in industry is accompanied by a number of risks. A review of conditions between 1984 and 1994 carried out by the National Institute of Occupational and Environmental Health found inadequate systems for ventilation, control of toxic fumes and temperature in workplaces for both males and females. Workers often sweated excessively (in microclimates 3 to 5 °C higher than allowed) and ate insufficiently to cover calorie expenditure (Tu Huu Thiem et al., 1994). Those working in cold storage were likely to suffer from digestive, circulatory, skin and arthritic conditions (Tran Ngoc Hung et al., 1994). Others were exposed to dangerous chemicals (between 2 and 100 times recommended limits) and dust with a high silica content, thus risking silicosis. Noise levels exceeding the threshold limit (above 90 dBA at several worksites) caused headaches, increased accidents, illnesses and hearing loss (Tu Huu Thiem et al., 1994). Employees in older textile plants were exposed to high levels of respirable dust (up to 82.8 per cent of total dust concentration) (Nguyen Huy Dan et al., 1994). A listing of occupational diseases affecting women included silicosis (chemical production), lead contamination (battery production), benzene contamination (paints, plastics and printing), hearing loss, skin discolouration, respiratory

disease, miscarriage and birth defects (Nguyen Thi Du, 1994; Pham Minh Khoi, 1994; Nguyen Ngoc Nga, 1994a).

Other work environments were found to have particular risks. For example, a study on conditions for micro-computer workers revealed excessive levels of carbon dioxide and noise, together with sensori-nervous and musculo-skeletal strains (Nguyen Ngoc Nga et al., 1994). Those working in radiological units (sex not specified, but likely to include women) were sometimes exposed to excessive radiation (Nguyen Xuan Hien and Dang Ngoc Tuan, 1994).

Women undertaking routine household chores are also potentially at risk. Poorly-ventilated kitchens, where coal and wood-smoke are the norm, are a worrying source of inhaled particles for women (Nguy Ngoc Toan, 1994).

Incidence of certified occupational diseases, by sex

The Ministry of Labour, Invalids and Social Affairs (1994) collects some data on occupational diseases and accidents, including data disaggregated by type of employment and gender, but this does not appear to be comprehensive. However, the quality and availability of these statistics seem to be improving.

Many individual studies have found evidence of a high prevalence of occupational diseases.

A survey of women working as weavers found that poor working environments, with excessive noise, heat and dust, high work intensity and repetitive movements, were probably related to early retirement of these workers, who lose their capacity for this type of work within 15 to 20 years (Tran Thi Lan, 1994).

Access to occupational health services and facilities for child care at the workplace

There is conflicting evidence about the overall standards of occupational health. One study concluded that working conditions and protection for workers in recent years had improved, although some problems still remained (Nguyen Ngoc Nga and Le Gia Khai, 1994). In another review of occupational health services at small-scale industries, most were found to have no employed medical staff or protective equipment. Both workers and managers were found to have little understanding of the concept of 'occupational health' (Nguyen Ngoc Nga, 1994b). Another survey of factories, including those owned by foreigners, provided evidence

that many had inadequate ventilation and poor facilities for toilets and washing. These studies were carried out prior to the promulgation of the new Labour Code; however, the authors commented that previous health ordinances were not being implemented reliably (Bui Thu et al., 1994).

In 1992, user fees for child care were introduced, causing new financial burdens and constraints for many employed women. Many employers have sought to avoid paying subsidies for child care (Nguyen Ba Can et al., 1994).

Trends in the incidence of diseases and adverse effects attributable to air, soil and water pollution

A lack of modern, cleaner technologies, unregulated urban construction, inadequate sewage facilities and the production of supplies for building, industry and agriculture have been cited as particular factors in pollution. Urban centres have many environmental problems: standing polluted water in open drains (allowing for mosquito infestation), deficiencies in facilities for run-off, inadequate garbage treatment sites, foodstuffs contaminated by pesticides and chemical fertilizers, lack of sewerage for human waste and, in Ho Chi Minh City, 53 km of highly polluted canals (Le Thi, 1994b; Nguyen Kim Cuc, 1994). Recent media reports have highlighted rising levels of chemical and bacterial contamination of rivers and waterways (Viet Nam Investment Review, 1995). Water pollution directly affects the daily lives of women, who are responsible for cooking and cleaning. Infectious and gynaecological illnesses spread by unclean water cause particular problems for women in their role as care givers and for their own health (Le Thi, 1994b; Trinh Thi Thanh, 1994).

Chemical factories, brick kilns, cement factories, trucks, tractors, motor-bikes, buses and cars release large amounts of waste products into the atmosphere, water and soil, among them dust, carbon dioxide, sulphur dioxide and various chemical contaminants (Le Thi, 1994b). A three-year assessment (1992 to 1994) of industrial waste and river water found that coke and paper factories and textile mills almost universally exceeded standards of contaminated discharge; phenol was detected at six to eight times allowable limits (Phung Thanh Van et al., 1994). Sulphur dioxide (a product of coal-burning and fuels used in motor vehicles) and carbon dioxide levels in Hanoi have been found to exceed acceptable levels by 14 and 2.2 times, respectively (Viet Nam Investment Review, 1995). In rural areas, a growing population has put increased

pressure on land and water resources; the available farm land per capita has declined from 0.13 in 1980 to 0.11 in 1985. Related to this is the pollution from increasing quantities of fertilizers and pesticides, which are used with little control or monitoring. A lack of appropriate latrines results in human contamination of sources of drinking water. Forest cover has declined dramatically, due both to defoliation by United States forces during the war and to population pressures; every year an estimated 200 000 hectares of forest land are destroyed or depleted (Le Thi, 1994b).

Health status

A crucial constraint in this chapter is the lack of data and the fact that most available statistics are not disaggregated by sex. We do not know with certainty whether or not there are different health and illness patterns for women and men in Viet Nam. Moreover, with large portions of the population living in rural and isolated areas, there is incomplete reporting of both disease and mortality. Interpretations based on this chapter, therefore, should be made with caution.

Women have longer life expectancies than men, but a recent Living Standards Survey found that women had had more days of illness than men in the previous twelve months (State Planning Committee, 1994), a trend found elsewhere, in both developed and developing countries. It has been noted that, in contrast to the situation in wealthier countries, middle-aged Vietnamese women tend to lose weight and body mass (Ha Thi Phuong Tien, 1992). Patterns of morbidity and mortality for women can only be inferred by integrating information from this chapter with that of other chapters.

Morbidity and mortality patterns for Vietnamese people are similar to those in many other poor developing countries, where preventable diseases comprise the major health burden. The prevalence of these diseases is closely related to undernutrition through the life cycle, and to environmental contamination and lack of safe water, as noted earlier.

It is expected that infectious diseases will decline in frequency in coming years as an outcome of Viet Nam's expanded programme of immunization.

Trends and differences in mortality, morbidity, disability and perceived health status

Data from the Viet Nam Living Standards Survey 1992 to 1993 indicate that, in the twelve months prior to the survey, women reported more illness than men and both rural men and women report more illness than urban men and women. More illness was

reported by both women and men in the lowest socioeconomic groups (State Planning Committee, 1994).

Infectious diseases, particularly malaria, diarrhoea and respiratory infections, are the main cause of disease and death in Viet Nam (Allen, 1993). Malaria, in particular, has increased greatly in incidence and virulence since 1980 (Ministry of Health, 1994), and is the second leading cause of death after respiratory diseases. Heart diseases, including congenital defects, were the fourth leading cause of death in 1993 (General Statistical Office, 1994a). Gynaecological problems (usually unspecified) are reported very frequently by women (up to 80 per cent in some surveys) (Allen and Nguyen The Thach, 1989; Ha Thi Phuong Tien, 1992; Thai Thi Ngoc Du et al., 1994; personal communication, Dr Nguyen Thi Nhu Ngoc, Hung Vuong Hospital, Ho Chi Minh City, 1995); diseases of the reproductive tract including ovarian, tubal and uterine, were the seventh most common diseases in 1993 (General Statistical Office, 1994a).

Surveys of reported conditions in rural areas showed the following results (in order of frequency): eye diseases, gynaecological diseases, diseases of teeth/jaw/face, neurological disorders, internal diseases, ear/nose/throat disorders, skin diseases (Ha Thi Phuong Tien, 1992).

The incidence of preventable, communicable diseases such as diphtheria, whooping cough, measles and poliomyelitis, has been reduced by national immunization campaigns (Tran Van Tien et al., 1992).

Serum cholesterol and blood pressure levels, by age and sex

There are no data on serum cholesterol and no national data on the incidence and prevalence of hypertension. A survey exploring the relationship between salt intake (a major lifestyle risk factor) and hypertension in Vietnamese adults found hypertension prevalence rates of between 10.6 per cent and 17.9 per cent among those over 15 years of age in six provinces (Phan Thi Kim et al., 1993).

Incidence of malignant neoplasm of female breast

No nationwide data was located. However, a survey in four districts of Hanoi between 1988 and 1990 found that neoplasm of the breast was the most common female cancer (Pham Thi Hoang Anh, 1993). This disease may often go undetected and untreated (personal communication, Dr Nguyen Thi Nhu Ngoc, Hung Vuong Hospital, Ho Chi Minh City, 1995).

Incidence of malignant neoplasm of the cervix

The incidence is of concern, especially because cancer of the cervix often remains undetected until it has become invasive (personal communication, medical worker, Viet Nam Women's Union, Hanoi, June 1994; personal communication, Dr Nguyen Thi Nhu Ngoc, Hung Vuong Hospital, Ho Chi Minh City, November 1994).

Measures to improve primary prevention, screening, medical and social care of patients

Pap smear testing is becoming more common, primarily in larger hospitals at district level and above. Resources do not exist for universal testing.

Mortality rates by age and sex, diseases of the circulatory system ischaemic heart disease

No data disaggregated by age or sex are available but heart disease (cardiac infarction) was listed as the eighth leading cause of death in Viet Nam in 1993 (General Statistical Office, 1994a).

Cerebrovascular diseases

No data disaggregated by age or sex are available but cerebral haemorrhage was listed as the fifth leading cause of death in 1993 (General Statistical Office, 1994a).

Malignant neoplasms

No national survey on cancer has been conducted. However, according to the Hanoi cancer registry, between 1988 and 1990, in four districts of Hanoi, the rate of malignant neoplasms among women was 63 per 100 000. The most frequent reported neoplasm was that of the breast, followed by stomach, cervix, liver and lung (Pham Thi Hoang Anh, 1993).

Motor vehicle accidents

No reliable statistics for the country are available, but recent media reports highlight the growing problem. Data collected in Hanoi city alone showed there were 336 accidents during the first half of 1994, in which 144 people lost their lives. In 1993 nationwide, there were 9287 reported accidents, a six per cent increase from 1992, in which 10 000 people were injured and 3503 died (Viet Nam News, 1994).

Long-term patients (over one year) in mental health institutions, by age and sex

No nationwide data are available. The results of the 1994 report from one hospital for the mentally ill indicate 1400 patients registered that year, of which 100 were long-term residents. Almost all of the patients were over 25 years of age, 70 per cent being between 25 and 40. Of the 100 long-term patients, 25 per cent were female (General Statistical Office, 1994a).

Diseases of the musculo-skeletal system

Back and joint pains were reported more commonly than any other conditions in a survey of self-reported illnesses in the late 1980s (Allen, 1993).

Chronic diseases of the respiratory system

Comprehensive data could not be located. However, respiratory diseases are listed as the leading cause of death in 1993. There is no disaggregation by age or gender. It should be noted that respiratory tuberculosis was the third leading cause of death in 1993 (General Statistical Office, 1994a)

Health Services

Health care in Viet Nam, while not optimal, nevertheless can be described as one of the country's foremost achievements. A widespread system of primary health care was established in the north during the 1960s, and was extended throughout Viet Nam after reunification in 1975. In the face of years of war and destruction, natural disasters and à very low GDP, this system, which operated effectively at grassroots level, is considered to be responsible for the relatively high life expectancy and low infant mortality rates in Viet Nam today (Allen, 1993; Ministry of Health, 1994). Despite these successes, however, Viet Nam remains a poor country, and its health services are constrained by this reality. Regional variations, as noted elsewhere, are dramatic, and averaged health data may give a false impression about conditions in particular areas.

Acute deficiencies in health services have been apparent since the late 1980s, when aid from the former Soviet Union was reduced and inflation increased. In real terms the public health budget was halved and salaries and morale declined accordingly (Chalker, 1995). Since 1989, the number of health staff at all levels has fallen by 30 per cent, leading to reduced attendance at health stations and hospitals. There is also some concern that health standards have declined in recent years in at least some places, due to the indirect results of policy changes brought about with Doi Moi. In 1989, private practice and sale of drugs were legalized, and people increasingly go directly to private, often unlicensed, drug sellers. With decentralization, communes are required to collect revenue locally to help finance health and social services, putting extra burdens on poor areas (Chalker, 1995). In early 1994, commune health workers earned only about US$7 per month, and many were forced to take on other jobs to supplement their income. Sale of drugs by communes became one of the main sources of public sector income, which put pressure on health workers to overprescribe (Chalker, 1995). There are insufficient mechanisms for regulating the importation, quality or sale of pharmaceuticals. It is believed that there has been an increase in the supply

of drugs in urban centres (it has been estimated that drug consumption has risen up to six-fold since 1986), but there may have been a decline in rural areas (Ministry of Health, 1994).

Complaints have been made by families forced to provide nursing care for relatives in hospitals. The positions of doctors may have been retained at the cost of nursing positions (Ministry of Health, 1994), which has implications for the care of women. Moreover, foreign aid accounts for about one-third of the budget, which means that a large proportion of the health budget is at the whim of aid agencies and their priorities. Also of concern is the fact that, in 1990, only 11 per cent of this budget was assigned to preventive services, whereas 78 per cent was allocated for curative services. This allocation, according to a recent report by the Ministry of Health, does not seem appropriate in the light of Viet Nam's morbidity and mortality statistics (Ministry of Health, 1994).

There is a generally high level of open discussion about deficiencies in health care, even within the publications of the Ministry of Health. *Health Statistics 1994* contains numerous references to problems and directly addresses issues of policy formulation. Notably, the document states that economic renovation, while expected to have generally positive outcomes for Viet Nam, 'has been negative for the health system' (Ministry of Health, 1994).

Falling standards and declining attendance led the central government, as well as local authorities, to take several steps to revitalize grass-roots health services. The national budget for health services in Viet Nam has been increased, both in real terms and as a proportion of GDP (it now stands at approximately four per cent of total expenditure) (Ministry of Health,, 1994). And salaries of commune health workers have been doubled (Chalker, 1995). However, the actual money spent on health is lower than in many countries of the region (only US$0.83 per capita) (Allen, 1994); once again, discrepancies between urban and rural areas are acute, with Ho Chi Minh City's per capita health expenditure approximately US$5.00 (personal communication, Dr Nguyen Thi Ngu Ngoc, Hung Vuong Hospital, HO Chi Minh City, 1995).

Some aid agencies have provided commune health stations with drugs which can be sold to provide some level of financial security. However, this strategy has not been accompanied by monitoring of prescribing. The fact that most public sector health staff also work in private practice may mean less dedication to the public system, an erosion in care for the very poor, and continuing reliance on selling drugs to earn a higher salary, all of which constitute potential dangers to the health system as a whole. Chalker has called for more explicit attention to the viability of local-level health services (Chalker,

1995). Some degree of optimism is appropriate in view of a widespread movement by the Women's Union, community organizations and communes themselves to raise revenue and revitalize commune-level health services (Allen, 1993; Chalker, 1995).

How accessible and friendly are health services for women?

While the situation may be changing, most women have had relatively good access to health services. However, surveys have found that many women still report that time and distance are factors constraining their attendance. Moreover, these services have often been lacking in suitably-trained staff, facilities and equipment. It has been noted that many women are not seen at all during the antenatal period, and many do not seek treatment for other conditions, choosing rather to self-medicate (Ministry of Health, 1994).

It is difficult to say whether or not services are 'friendly', as little evidence about this issue exists. Allen (1993) describes health workers' attitudes and communication as 'patronizing and directive'. On the other hand, a recent programme initiated by the National Committee for Population and Family Planning seeks to improve quality of care in family planning services at commune level (personal communication, Dr Vu Quy Nhan, National Committee for Population and Family Planning, 1995). Certainly the lack of funding, infrastructure and equipment, and low wages for public health workers, leading to poor morale (Ministry of Health, 1994) are constraints on the 'friendliness' of services.

Differences in distribution, and utilization of health facilities

The health system of Viet Nam consists of several tiers. At village level, community health workers, often with minimal training, provide a few basic services. Above this level is the commune health centre, which offers primary health care services for populations ranging from 5000 to 8000. This type of centre usually has three to five beds, and its staff (usually numbering three) includes one or two assistant doctors and a pharmacist or primary nurse. Not all areas are equally well served. People must travel a great distance in some rural and isolated regions, and some health centres lack essential equipment and drugs. A survey in 1992 found that over one-quarter of commune health centres lacked blood pressure gauges and more than half lacked sterilizers. The minimal requirements for equipment have not been defined. Communes must now purchase their drugs, and this is difficult for poor regions.

The next tier, in theory, is the inter-commune polyclinic, meant to provide higher services for about five communes. However, this level is underutilized, as most people prefer to go directly to district level (Ministry of Health, 1994).

The district level has hospitals of about 100 beds. District hospitals are referral and training centres for lower levels, and have responsibility for all health programmes in the district. Each serves a population of 100 000 to 200 000. These hospitals have doctors, assistant doctors, midwives, nurses, pharmacists and technicians. The district hospital has inpatient, outpatient and preventive services. Quality at the district level is variable.

Above the district level is the province level, which provides health services for about 350 000 inhabitants. This level is responsible for specialized hospitals, clinics, preventive care activities, drug factories and pharmacies and medical schools. While province level hospitals are meant to be referral centres, they usually serve the needs of those living in the district in which they are located.

At the highest level in Viet Nam is the central level, which oversees the Ministry of Health, specialized research and training institutes and university medical schools. The central level defines policies. The public health sector is 'highly vertical' (Ministry of Health, 1994).

In terms of staffing, health personnel are most numerous at district and province levels (67 120 and 73 530, respectively), and least numerous at commune level (36 855), a result of lack of funding at local levels. This is reflected in the fall in attendance at health centres. The 1992 total clinic attendance figure was only half of that recorded in 1984 to 1985.

Private practice is now legal and appears to be increasing (Ministry of Health, 1994).

How are preventative and curative activities integrated in relation to women?

Despite the fact that the principal causes of morbidity and mortality are preventable, transmissible diseases, most health workers would be characterized as curative (Ministry of Health, 1994). It has been reported that commune health workers comprise only 22.6 per cent of all public sector health staff, which is described as 'less than optimal' because it precludes the early treatment and prevention of many illnesses. Furthermore, 40 per cent of communes are lacking in trained midwives and only four per cent of the health workforce are competent to treat maternal health. As most assistant doctors are male, women may be unwilling to seek maternal care from these workers. Evidence of this

deficiency for women can be seen in the low rate of antenatal screening described earlier. The actual number of midwives nationwide declined from 15 100 in 1986 to 12 000 in 1993 (General Statistical Office, 1994b). This decline is probably linked to shedding of public sector employment and the low wages offered to public system personnel (Ministry of Health, 1994).

Health education and training programmes

Most health education programmes that target women in Viet Nam cover the principles of primary health care, including nutrition, breast-feeding and contraception. A recent World Food Programme intervention project included in its activities 'health education' for pregnant women. An evaluation found that up to 82 per cent of pregnant women received this 'education', while this was the case for only 43 per cent of women in the control areas. However, the quality of this education was variable; the report found that many women who had received the education did not know anything about their blood pressure or about appropriate vaccinations for infants (Ministry of Health PAM, 1993). The Ministry of Health reported last year that some studies had found that only 16 per cent of women washed their hands before eating. It also noted that a small-scale survey found that the first action taken by women when ill was self-medication; the second was traditional medication (Ministry of Health, 1994).

In recent years, there has been a great increase in education materials regarding HIV/AIDS, which have been designed at national, regional and local levels. These are being targeted for schools as well as as high-risk groups, as part of the national AIDS strategy (National AIDS Committee, 1993).

References

Allen, S (1993) Women and health in Viet Nam. *Development Bulletin*. 26:13-17.

Allen, S. and Nguyen The Thach (1989) *Women's health survey in Vinh Phu and Ha Tuyen Provinces*. Unpublished report, available at SIDA, Hanoi.

Beaulieu, C (1994) *Feminism comes to Viet Nam: Are Vietnamese women losing to market reforms?*. Institute of Current World Affairs, Hanover New Hampshire (unpublished).

Beresford, M (1993) The Vietnamese economy 1979-93: reforming or revolutionising Asian socialism?. *Asian Studies Review*. 17(2):33-46.

Bui Thi Kim Quy (1992) The export of female labourers — problems to be treated. *Viet Nam Social Sciences*. 4(34):37-41.

Bui Thi Kim Quy (1994) A preliminary survey on the working environment of women workers in some joint ventures in Ho Chi Minh City. In *Abstracts: 10-Year Activity of the National Institute of Occupational and Environmental Health (1984-1994)*. The National Institute of Occupational and Environmental Health, Hanoi.

Bui Thu, Tran Thanh Ha, Ta Tuyet Binh and Nguyen Bach Ngoc (1994). Some hygienic irrationalities in the construction of industrial factories. In *Abstracts: 10-Year Activity of the National Institute of Occupational and Environmental Health (1984-1994)*. The National Institute of Occupational and Environmental Health, Hanoi.

Center for Women Studies (1994) A participatory approach to gender responsiveness policy research. Strengthening the role of Vietnamese rural women in development. *Results of the Project VIE/90/WO1*. UNIFEM and Center for Women Studies, Hanoi.

Chalker, J (1995) Viet Nam: profit and loss in health care. *World Health Forum*. 16(2):194-195.

Chu Thi Xuyen (1992) Vietnamese Youth Union and its AIDS prevention activities. *National Seminar on Social and Economic Implications of HIV/AIDS. Dec. 3-4, 1992*. National AIDS Committee, Hanoi.

Dan Nguyen Anh (1992) Youth as a transition: their current situation and socio-economic policy implications in Viet Nam. *Proceedings from International Conference on Demographic Transition in Southeast Asia. V.1. April 1992.* Institute of Sociology, Hanoi.

Dao Hung. (1989) Viet customs and habits in childbirth, childcare and raising of children. *Vietnamese Studies.* 23(93):5-36.

Department of Planning, Ministry of Health (1991) *Report on Re-analysing data collected by General Nutrition Survey 1987-89.* Ministry of Health, Hanoi.

Dinh, Q (1993) Viet Nam's policy reforms and its future. *Journal of Contemporary Asia* 23(4):532-553.

Do Thai Dong (1993) Modifications of the traditional family in the south of Viet Nam. *Viet Nam Social Sciences.* 3:77-89.

Do Thuy Binh (1994) Environment in mountain areas and women. From *Workshop on Gender, Environment and Development, Project VIETPRO 2020. Nov. 9-11, 1994* (sponsored by Embassy of Canada, Hanoi).

Do Trong Hieu, Pham Thuy Nga, Nguyen Kim Tong, Do Thi Thanh Nhan, R. Simmons, P. Fajans, P. Hall, A. McNee, Vu Quy Nhan, Nguyen Thi Thom, Doan Kim Thang and K. Hardjanti (1994) *An Assessment of the Need for Contraceptive Introduction in Viet Nam.* Draft. Ministry of Health, Hanoi.

Dover, B (1994) Viet Nam workers flex muscles Aussie style. *The Australian.* 12 July 1994.

Duc Tin (1994) Child exploitation on sex. *Viet Nam Women's Newspaper.* 1994. No. 33 (1424), 15 Aug. 1994.

Duong Thoa (1992) On the present situation of Vietnamese women's living and working conditions and orientations for their improvement. *Viet Nam Social Sciences.* 4(34):42-52.

Economic and Social Commission for Asia and the Pacific (ESCAP) (1994) Local Level Policy Development for Integrating the Elderly into the Development Process in Viet Nam. *Asian Population Studies Series No. 131-F.* Economic and Social Commission for Asia and the Pacific, United Nations, Bangkok.

The Economist (1995) Viet Nam: the call of the city. *The Economist.* March 4, 1995.

Economist Intelligence Unit (1994) *Economist Intelligence Unit Country Report.* 1st quarter, 1994.

General Statistical Office (1994a) *Some statistical information on women and men of Viet Nam.* General Statistical Office, Hanoi.

General Statistical Office (1994b) *Statistical Yearbook (1993).* General Statistical Office, Hanoi.

General Statistical Office and National Committee for Population and Family Planning (1994) *Results from Demographic Dynamic Change and Family Planning Survey of 1993.* General Statistical Office, Hanoi.

Ha Huy Khoi, Do Kim Lien and Pham Sy Long (1993) Chronic energy deficiency status of women in reproductive age in village of Hai Phong province. *Ve Sinh Phong Dich.* 3(11):9.

Ha Huy Khoi, Vo Thi Hien and Nguyen Cong Khan (1994) Assessment of iron status of pregnant women based on ferritin serum determination. *Y Hoc Viet Nam.* 182(7):18.

Ha Thi Phuong Tien (1992) On the problem of female labourers' health protection. *Viet Nam Social Sciences.* 4(34):59-64.

Hassan, R (1994) Tiger's burning. *Arena.* Apr.-May 1994:42-44.

Hoang Thi Lich (1992) Vietnamese women in face of socio-economic implications of HIV infection and AIDS. *National Seminar on Social and Economic Implications of HIV/AIDS. Dec. 3-4, 1992.* National AIDS Committee, Hanoi.

Hong Khiem (1994) Rapists must be severely punished. *Viet Nam Women's Newspaper.* 11(1402), 14-3-94.

Institute of Social Sciences (1994) Old age people and the social security system. *Institute of Social Sciences,* Hanoi.

Johansson, A (1993) Doi Moi and AIDS: prevention of HIV/AIDS among youth in Viet Nam. *Karolinska Institute,* Stockholm.

Khuc Xuyen and Pham Dac Thuy (1994) Contribution to the study and medical expertise of occupational melanosis in asphalting workers. In *Abstracts: 10-Year Activity of the National Institute of Occupational and Environmental Health (1984-1994)* The National Institute of Occupational and Environmental Health, Hanoi.

Kim Dung (1994) To be determined to push back and stop social evils. *New Hanoi Newspaper*. 9311, 30 Dec. 1994.

Labour Code of Viet Nam (1994) *English translation by Phillips Fox*, Melbourne.

Le Dien Hong (1992) HIV infection and AIDS in Viet Nam. *National Seminar on Social and Economic Implications of HIV/AIDS. Dec. 3-4, 1992.* National AIDS Committee, Hanoi.

Le Thi (1992) Gender, growth and scientific study on women. *Viet Nam Social Sciences.* 4(34):5-10.

Le Thi (1993) Women, marriage, family and gender equality. *Viet Nam Social Sciences.* 2:21-33.

Le Thi (1994a) Family and its educational role. *Viet Nam Social Sciences.* 2:52-62.

Le Thi (1994b) Gender, environment and development in Viet Nam. *Workshop on Gender, Environment and Development, Project VIETPRO 2020. Nov. 9-11, 1994* (sponsored by Embassy of Canada, Hanoi).

Le Thi Nham Tuyet, A. Johansson and Nguyen The Lap (1994a) Abortions in two rural communes in Thai Binh Province. *Viet Nam Social Sciences.* 1(39):73-90.

Le Thi Nham Tuyet, A. Johansson, Mai Huy Bich and Hoang Thi Hoa (1994b). Women's experiences of family planning in two rural communes in Thai Binh Province. *Viet Nam Social Sciences.* 1(39):55-72.

Le Thi Nham Tuyet (1994) Family life and population education in Viet Nam. *Viet Nam Social Sciences.* 1(39):21-24.

Le Thi Quy (1992) Some views on family violence. *Viet Nam Social Sciences.* 4:81-87.

Le Thi Quy (1993)a. Some ideas about prostitution in Viet Nam. *Conference on Joining Forces to Further Shared Visions, Association for Women in Development, Oct. 20-23, (1993), Washington, D.C.*

Le Thi Quy (1993)b. Domestic violence in Viet Nam and efforts to curb it. From *Conference on Joining Forces to Further Shared Visions, Association for Women in Development, Oct. 20-24, 1993, Washington, D.C.*

Le Thi Quy (1993)c. Prevention of domestic violence in Viet Nam. From *Conference on Violence Against Women. Asian Women Human Rights Council. July 30 - August 6, 1993, Bali.*

Le Thi Quy (1994)a. The role played by women in the market economy in Viet Nam. From *Workshop on Gender Relations: Policy Planning, Kuala Lumpur, May 26 - June 2, 1994.* Centre for Family and Women's Research, Hanoi.

Le Thi Quy (1994)b. Gender: the relations between research and policy making in Viet Nam. From *Workshop on Gender Relations: Policy Planning, Kuala Lumpur, May 26 - June 2, 1994.* Centre for Family and Women's Research, Hanoi.

Le Thi Quy (1994)c. About women in exceptionally difficult situations in the informal economic sector in Hanoi. From *Workshop on Gender Relations: Policy Planning, Kuala Lumpur, May 26 - June 2, 1994.* Centre for Family and Women's Research, Hanoi.

Le Trung, Bui Tuyet Mai, Dam Anh Thu, Ta Thanh Ha, Nguyen Xuan Tac, Nguyen Duy Thiet, Ngo Trinh, Nguyen Quoc, Nguyen Nhu et al (not cited) (1994) Health protection, prevention and control occupational hazards due to pesticides for workers in agriculture. In *Abstracts: 10-Year Activity of the National Institute of Occupational and Environmental Health (1984-1994)* The National Institute of Occupational and Environmental Health, Hanoi.

Ministry of Construction, National Institute for Urban and Rural Planning (1992) National *Data Book.* Ministry of Construction, Hanoi.

Ministry of Education and Training (1994) *Educational Statistical Data, 1993-1994.* Ministry of Education and Training, Hanoi.

Ministry of Health (1994) *Health Statistics 1994.* Ministry of Health, Hanoi.

Ministry of Health PAM Project (1993) *Analysis: a number of PHC indicators through reports of 16 provinces and cities.* Health Statistics and Information Centre, Ministry of Health, Hanoi.

Ministry of Health - Department of Hygiene and Epidemic Prevention (1994) *Study on characteristics and health care needs for women workers at present time.* Ministry of Health, Hanoi.

Ministry of Health and Macfarlane Burnet Centre for Medical Research (1994) *Improving primary health care services for vaccine-preventable diseases, malaria and HIV/STDs in Viet Nam.* Ministry of Health, Hanoi.

Ministry of Labour, Invalids and Social Affairs (1994) *Statistical Yearbook of Labour, Invalids and Social Affairs 1993.* Hanoi.

Monti, F., Tu Ngu and Hoang Dinh Lanh et al (not cited) (1991) A household survey into child nutritional status and food intake in eight communes of Yen Dun District, Ha Bac Province, Viet Nam. In *UNICEF, Proceedings from International Symposium on Nutrition in Primary Health Care in Developing Countries, November 14-20, 1991, Hanoi*:80-94.

Morrow, M., Nguyen Cong Khan, Do Thi Lien, Nguyen Kim Hung and Nguyen Lan Dinh (1995) Unpublished findings from nutritional survey of 400 women in four regions.

National AIDS Committee (1993) *Draft National Strategic Plan for the Prevention and Control of AIDS/STD in Viet Nam.* National AIDS Committee, Hanoi.

National Committee for Population and Family Planning (1990) *Viet Nam Demographic and Health Survey 1988.* National Committee for Population and Family Planning, Hanoi.

National Committee for Population and Family Planning (1992) *Strategy for Information-Education-Communication of Population and Family Planning.* Hanoi.

National Institute of Nutrition (NIN) (1992) *National Food and Nutrition Situation,* Hanoi

Nguyen Ba Can, Doan Hoai, Nguyen Cong My and J. Gallup (1994) *Issues of Education Development in Viet Nam.* Ministry of Education and Training, Hanoi.

Nguyen Cong Khan, Ha Huy Khoi, Vo Thi Hien and Tran Quang (1994) Vitamin A and ferrous nutritional status of pregnant women. *Practical Medicine.* 2:22-29.

Nguyen Huy Dan, Nguyen Duy Bao et al (not cited) (1994) Cotton dust pollution at some textile plants. In *Abstracts: 10-Year Activity of the National Institute of Occupational and Environmental Health (1984-1994)* The National Institute of Occupational and Environmental Health, Hanoi.

Nguyen Kim Cuc (1992) The role of the Viet Nam Women's Union — A large mass organization in AIDS prevention in Viet Nam. *National Seminar on Social and Economic Implications of HIV/AIDS. Dec. 3-4, 1992.* National AIDS Committee, Hanoi.

Nguyen Kim Cuc (1994) Women in urban areas with environmental issues in market economy. From *Workshop on Gender, Environment and Development, Project VIETPRO 2020. Nov. 9-11, 1994* (sponsored by Embassy of Canada, Hanoi).

Nguyen Ngoc Nga (1994)a. Some occupational health aspects regarding women at work in Viet Nam. In *Abstracts: 10-Year Activity of the National Institute of Occupational and Environmental Health (1984-1994)* The National Institute of Occupational and Environmental Health, Hanoi.

Nguyen Ngoc Nga (1994)b. Review of occupational health services in small-scale industries in Viet Nam. In *Abstracts: 10-Year Activity of the National Institute of Occupational and Environmental Health (1984-1994).* The National Institute of Occupational and Environmental Health, Hanoi.

Nguyen Ngoc Nga and Le Gia Khat (1994) Aspects of environmental and occupational health in technology transfer to Viet Nam. In *Abstracts: 10-Year Activity of the National Institute of Occupational and Environmental Health (1984-1994).* The National Institute of Occupational and Environmental Health, Hanoi.

Nguyen Ngoc Nga, Le Gia Khai, Ta Tuyet Binh, Nguyen Bach Ngoc, Tran Thanh Ha, Dang Viet Luong, Nguyen Duc Dan et al (not cited) (1994) Influence of micro computer work on human health In *Abstracts: 10-Year Activity of the National Institute of Occupational and Environmental Health (1984-1994).* The National Institute of Occupational and Environmental Health, Hanoi.

Nguy Ngoc Toan (1994) Air environment and its impact on the health of Vietnamese women and children. From *Workshop on Gender, Environment and Development, Project VIETPRO 2020. Nov. 9-11, 1994* (sponsored by Embassy of Canada, Hanoi).

Nguyen Thanh Mai, Luong Xuan Hien, Khong Thi Hon and Ngo Thi Nhu (1994) The situation of pregnancy and birth of rural women and the use of health services in Tien Hai district, Thai Binh Province. *Viet Nam Social Sciences.* 1(39):46-54.

Nguyen Thanh Tam (1992) Remarks on the women living without husband. *Viet Nam Social Sciences*. 4(34):76-80.

Nguyen Thi Du (1994) Working environment and health of the workers in the Viet Nam chemical industry. In *Abstracts: 10-Year Activity of the National Institute of Occupational and Environmental Health* (1984-1994) The National Institute of Occupational and Environmental Health, Hanoi.

Nguyen Thi Khoa (1992) The real state of forestry workers and peasants' families in the area of paper making in north Viet Nam. *Viet Nam Social Sciences*. 4:65-75.

Nguyen Thi Oanh (1994) Some gender issues as perceived by some Ho Chi Minh City Women's Union staff members. Presented at the *Gender and Development Workshop, Centre for Human Settlements, University of British Columbia, May 2-7, 1994.*

Nguyen Thi Xuan Thuy et al (not cited) (1994) Study on occupational pesticide poisoning in tea workers. In *Abstracts: 10-Year Activity of the National Institute of Occupational and Environmental Health (1984-1994).* The National Institute of Occupational and Environmental Health, Hanoi.

Nguyen Xuan Hien and Dang Ngoc Tuan (1994) The environmental irradiation in some radiological units of Hanoi. In *Abstracts: 10-Year Activity of the National Institute of Occupational and Environmental Health (1984-1994).* The National Institute of Occupational and Environmental Health, Hanoi.

Pham Dac Thuy, Vu Thi Canh Sinh and Khuc Xuyen (1994) Working environment and the occupational darkened skin disease of the women tar-spraying workers in Ministry of Transport and Communication. From *Workshop on Gender, Environment and Development, Project VIETPRO 2020. Nov. 9-11, 1994* (sponsored by Embassy of Canada, Hanoi).

Pham Minh Khoi (1994) Some remarks on the silicosis in Viet Nam on the basis of 2,800 cases of expertise in fourteen years (1977-1990). *Abstracts on Medical Expertise on the Occasion of the 20th Anniversary of the Foundation of NIME and the 46th Anniversary of the Activity of the Medical Expertise Branch.* Ministry of Health, National Institute of Medical Expertise, Hanoi.

Pham Thi Hoang Anh (1993) Cancer in the population of Hanoi, 1988-90. *British Journal of Cancer* 68.

Pham Thuy Hoa, Cao Thi Hau, Le Thi Hop, Le Bac Mai, Cao Thu Huong and Ha Huy Khoi (1994) Daily food intake of pregnant and lactating women in some northern rural communes and Hanoi city. *Y Hoc Viet Nam.* 182(7):42-45.

Phan Thi Kim, Nguyen Thi Lam, Tran Ngoc Ha, Hoang The Yet and Nguyen Thanh Ha (1993) Nutritional status, dietary salt intake and their relationship with hypertension in Vietnamese adults. *Ve Sinh Phong Dich.* 3(11):50.

Phung Thanh Van, Nguyen Ngoc Nga, Do Thi Xuyen and Nguyen Duc Cuong (1994). Assessment of the environmental pollution due to industrial waste water. In *Abstracts: 10-Year Activity of the National Institute of Occupational and Environmental Health (1984-1994).* The National Institute of Occupational and Environmental Health, Hanoi.

State Planning Committee DRAFT (1994) *Viet Nam Living Standards Survey 1992-1993—DRAFT.* General Statistical Office, VIE/90/007. Hanoi.

State Planning Committee (1994) *Viet Nam Living Standards Survey 1992-1993.* General Statistical Office, Hanoi.

Swenson, I., Thang, N.M. and Tieu, P.X (1993) Individual and community characteristics influencing breastfeeding duration in Viet Nam. *Annals of Human Biology.* 20(4):325-334.

Thai Thi Ngoc Du (1994a) Living conditions of women in urban areas of Viet Nam. *Women Studies Department, Open University of Ho Chi Minh City* (unpublished).

Thai Thi Ngoc Du (1994b) The present status of women and women studies in Viet Nam. Paper presented at the *Gender and Development Workshop, University of British Columbia, Vancouver, May 2-7, 1994.*

Thai Thi Ngoc Du, Nguyen Thi Oanh, Truong Thi Kim Chuyen and Ngo Thanh Loan (1994) *The role of women in agricultural production in the Mekong Delta.* Women Studies Department, Open University of Ho Chi Minh City.

Thanh Binh (1992) Scientific seminar of the influence of the socio-economic policies of the Vietnamese government to the life of women and their families in the countryside at present. *Viet Nam Social Sciences.* 4:99-102.

Thayer, C.A (1992) Political reform in Viet Nam: Doi Moi and the emergence of civil society. In Miller, R.F (Ed). *The Developments of Civil Society in Communist Systems.* Allen and Unwin, Sydney.

Tran Ngoc Hung, Le Gia Khat, Pham Ngoc Quy and Vu Bich Hoat (1994) The effects of cold working conditions on the health and diseases of workers. In *Abstracts: 10-Year Activity of the National Institute of Occupational and Environmental Health (1984-1994).* The National Institute of Occupational and Environmental Health, Hanoi.

Tran Thi Lan (1994) The working and living conditions of women workers in light industry. From *Workshop on Gender, Environment and Development, Project VIETPRO 2020. Nov. 9-11, 1994* (sponsored by Embassy of Canada, Hanoi).

Tran Van Tien, Nguyen Van Man, Nguyen Huu Tam, Hoang Van Tan, Nguyen Thu Yen, Le Hong Phong and Thanh Kim Dung (1992) Situation of the main communicable diseases in Northern Viet Nam and recommendations for control strategy. *Ve Sinh Phong Dich.* 4(8):10.

Trinh Thi Thanh (1994) Some assessment of using sewage water and initial research on impact of this use on animal bodies and women's health in Thanh Tri District, Ha Noi. From *Workshop on Gender, Environment and Development, Project VIETPRO 2020. Nov. 9-11, 1994* (sponsored by Embassy of Canada, Hanoi).

Truong Viet Dung, Nguyen Thanh Tam, G. Tipping and M. Segall (1994) *Quality of public health services and household health care decisions in four rural communes of Quang Ninh Province, Viet Nam.* Supported by grant from Science and Technology for Development Program of Commission of the European Union.

Tu Giay, Ha Huy Khoi, Bui Thi Nhan, Nguyen Xuan Ninh, Dao Tu Quyen, Vo Thi Hien and Mai Thi Hanh (1990) Some epidemiological characteristics of nutritional anaemia in women at reproductive age in several rural areas and Hanoi city. *Practical Medicine.* 3:17-21.

Tu Giay, Ha Huy Khoi and Chu Quoc Lap (1991)a. Food intake and nutrition status of the Vietnamese. In *UNICEF, Proceedings from International Symposium on Nutrition in Primary Health Care in Developing Countries, November 14-20, 1991, Hanoi*:21-30.

Tu Giay et al (not cited) and Nguyen Trong Nhan et al (not cited) (1991)b. Programme for the control of vitamin A deficiency and xerophthalmia in Viet Nam. In *UNICEF, Proceedings from International Symposium on Nutrition in Primary Health Care in Developing Countries, November 14-20, 1991, Hanoi*:189-194.

Tu Huu Thiem et al.(not cited) (1994) The occupational environment pollution and recommendations. In *Abstracts: 10-Year Activity of the National Institute of Occupational and Environmental Health (1984-1994).* The National Institute of Occupational and Environmental Health, Hanoi.

Ungar, E (1994) Gender, land and household in Viet Nam. *Asian Studies Review.* 17(3):61-72.

United Nations (1991) Viet Nam: Accessibility of Contraceptives. *Asian Population Studies Series No. 103-A, Economic and Social Commission for Asia and the Pacific, Bangkok.* United Nations, New York.

United Nations Population Fund (1993) *A study of the factors underlying the low prevalence of oral contraceptive pill use in Viet Nam. Project VIE/92/ P05.* UNFPA, Hanoi.

United Nations Population Fund (1994) Contraceptive Requirements and Logistics Management Needs in Viet Nam. *Technical Report No. 16.* UNFPA, Hanoi.

United Nations Population Fund. n.d. *Viet Nam: Programme Review and Strategy Development Report.* United Nations Population Fund, New York.

Viet Nam General Labour Union (1993) *The activities of trade union women, 1988-1993.* Extracted from reports of 16 ministries, branches and unions. Viet Nam General Labour Union Hanoi.

Viet Nam Investment Review. Cities strangled by rising pollution. *27 Feb. - 5 March 1995:36.*

Viet Nam News (1994) Rising toll in city traffic accidents: public transportation an urgent need. *Number 1,187 (136). 20 November 1994*:1-2.

Viet Nam Population Census: 1989 (1992) *The Population of Viet Nam.* Statistical Publishing House, Hanoi.

Viet Nam-Sweden Health Cooperation (1994) *Planning document for Viet Nam-Sweden Health Cooperation 1994 - 1999.* Embassy of Sweden, Hanoi.

Viet Nam Intercensal Demographic Survey (VNICDS) (1994) *Major Findings.* Statistical Publishing House, Hanoi.

Vu Quy Nhan (1994) Family planning programme in Viet Nam. *Viet Nam Social Sciences.* 1(39):3-20.

Vu Tuan Anh (1993) Economic renovation and economic growth. *Viet Nam Social Sciences.* 1/1993:3-18.

Vuong Xuan Tinh (1994) The need for sons: problems and solutions. *Viet Nam Social Sciences.* 1(39):25-28.

World Health Organization Manila (Regional Office for the Western Pacific) (1993) *Nutrition in the Western Pacific Region.* Manila.

Yen Nhi (1994) Alarm for mothers. From *Viet Nam Women's Newspaper. 28 July 1994.*