# Global Update

# World Health Organization Warns of Growing "Crisis of Suffering"

Cancer, heart disease and other chronic conditions which already kill more than 24 million people a year will impose increasing burdens of suffering and disability on hundreds of millions of others, the World Health Organization warns in its annual report. The World Health Report 1997: Conquering suffering, enriching humanity says the number of cancer cases is expected to at least double in most countries during the next 25 years. There will be a 33% rise in lung cancers in women and a 40% increase in prostate cancers in men in European Union countries alone by 2005. The incidence of some other cancers is also rising rapidly, especially in developing countries. Heart disease and stroke, already the leading causes of death in richer nations, will become much more common in poorer countries. Globally, diabetes cases will more than double by 2025, and there will be a huge rise in some mental disorders, especially dementias.

WHO is calling for an "intensified and sustained" global campaign to encourage healthy lifestyles and attack the main risk factors largely responsible for many of the diseased-unhealthy diet, inadequate physical activity, smoking and obesity. Such a campaign requires top-level international collaboration and multisectoral cooperation, involving governmental institutions, health authorities, the community, mass media, nongovernmental organizations, medical and voluntary organizations and the private sector.

"The outlook is a crisis of suffering on a global scale, "Dr. Hiroshi Nakajima, Director-General of WHO says. "There is an urgent need to improve our ability to prevent, treat and, where possible, to cure these diseases, and to care for those who cannot be cured." The report shows that at present (*Table I*).

- Circulatory diseases such as heart attacks and stroke together kill 15.3 million people a year.
- □ Cancer in all its forms kills 6.3 million people a year.
- □ Chronic obstructive pulmonary disease kills 2.9 million people a year.

These add up to 24.5 million deaths, or 47% of the annual global total of deaths from all causes. Of the remainder, infectious and parasitic diseases account for 17.3 million, or 33%; deaths from perinatal and neonatal causes account for 3.5 million; there are 585,000 maternal deaths; and 6 million deaths from other and unknown causes, including accidents, violence, homicide and suicide.

The report says that tobacco-related deaths, primarily from lung cancer and circulatory disease, already amount to 3 million a year, or 6% of total deaths. Smoking accounts for one in 7 cancer cases worldwide. "If the trends of increasing consumption in many countries continues, the epidemic has many decades to run, and will surely be judged by future generations to have been one of the greatest health tragedies that has ever occurred in the his-

Abstracted from the World Health Report 1997: Conquering Suffering. Enrichining Humanity. Geneva World Health Organization, 1997.

|   | -                  |  |
|---|--------------------|--|
| Coronary heart disease*                   | 7.2 million deaths |  |
| Cancer (all sites)*                       | 6.3 million deaths |  |
| Cerebrovascular disease*                  | 4.6 million deaths |  |
| Acute lower resporatory                   |                    |  |
| infection                                 | 3.9 million deaths |  |
| Tuberculosis                              | 3.0 million deaths |  |
| Chronic obstructive<br>pulmonary disease* | 2.9 million deaths |  |
| Diarrhoea (including                      | <b>2.5</b>         |  |
| dysentery)                                | 2.5 million deaths |  |
| Malaria                                   | 2.1 million deaths |  |
| HIV/AIDS                                  | 1.5 million deaths |  |
| Hepatitis B                               | 1.2 million deaths |  |
|   |                    |  |

TABLE I-The Ten Leading Killer Diseases

\* = noncommunicable diseases

# tory of mankind."

In 2020, at least 15 million people worldwide will develop cancer, compared to about 10 million cases annually now. The doubling of new cases will occur in developing countries, with about 40% increase in industrialized countries. Between 1995 and 2025, the number of people in the world with diabetes is expected to rise from about 135 million to 300 million.

The projected increases in these and other disabling conditions such as arthritis and the bone involutive condition, osteoporosis, are due to a combination of factors. The most important are population ageing, which puts more people at risk of developing chronic conditions late in life; global population growth; and the rising prevalence of unhealthy lifestyles characterized particularly by inappropriate diet, inadequate physical exercise, and smoking.

A steadily ageing global population means there are more opportunities over time for these diseases to progress to a deadly or disabling stage in a larger number of people. Half a century ago, the great majority of the global population died before the age of 50. Today, most survive well beyond that age. Average life expectancy at birth globally reached 65 years in 1996. In many countries, it is now well over 70 years, and is approaching 80 years in a few others.

There are today an estimated 380 million people aged 65 years or more. By 2020, that number is expected to rise to more than 690 million. Also by then, it is predicted that chronic diseases will be responsible for a large proportion of deaths in the developing world. Cancers and circulatory diseases are already major causes of death in South-east Asia, one the world's most populous regions.

The report says that many countries will increasingly come under the "double burden" of both infectious and noncommunicable diseases. Industrialized nations are already facing bigger risks from infectious diseases, partly because of the globalization of travel, tourism and trade. Simultaneously, developing countries with fast-growing economies are becoming increasingly exposed to conditions sometimes labelled as "disease of affluence" while struggling to control their own, still continuing infectious epidemics.

"In the battle for health in the 21st century, infectious diseases and chronic diseases are twin enemies that have to be fought simultaneously on a global scale," Dr. Nakajima says.

"We dare not turn our backs on infectious diseases, for they will return with a vengeance if we do. But neither can we ignore the growing burden in ill-health and disability imposed by noncommunicable diseases. This, too, is the plight of hundreds of millions."

Dr. Nakajima calls for global efforts aimed at preventing, treating and curing

noncommunicable diseases, and reducing disability caused by them. But such efforts must not mean a switch away from fighting infectious diseases, he says. Infectious agents play important roles in the development of some noncommunicable diseases, notably cancers of the cervix, liver and stomach.

"People in poorer countries are now acquiring many of the unhealthy lifestyles and behaviors of the industrialized world: sedentary occupations, inadequate physical activity, unsatisfactory diets, tobacco, alcohol and drugs. Populations in richer countries continue to live with all these risks."

Referring to dramatic increases in life expectancy in recent decades, Dr. Nakajima points out: "In celebrating our extra years, we must recognize that increased longevity without quality of life is an empty prize, that is, that health expectancy is more important than life expectancy.

"The majority of chronic diseases are preventable but cannot as yet be cured. The emphasis must therefore be on preventing their onset, delaying their development in later life, reducing the suffering they cause, and providing the supportive social environment to care for those disabled by them."

Dr. Nakajima continues: "In identifying priorities for action, World Health Organization is looking towards key areas of chronic diseases that are major causes of death or avoidable ill-health and disability. These are areas in which actions or interventions that have a direct and tangible effect on individual health-that make a difference and make it sooner, rather than late, are possible."

### Cancer

According to the report, the eight most common cancers worldwide in terms of incidence are also the eight which cause most deaths. These are cancers of the lung, stomach, breast, colon/rectum, mouth, liver, cervix, and esophagus. Together they accounted for about 60% of the 6.3 million cancer deaths and 10.3 million cancer cases in 1996. The number of cases and deaths for each are shown in Table II. In all of these cancers, at least one lifestyle factor plays an important role. The most worrying trend is the increasing number of women developing either lung caner or breast cancer.

Lung Cancer: Incidence rates of lung cancer in men are increasing in most countries. In

| Site         | Female  | Male    | Both sexes | Total deaths |
|--------------|---------|---------|------------|--------------|
| Lung         | 330 000 | 990000  | 1320 000   | 989 000      |
| Stomach      | 380 000 | 635 000 | 1015 000   | 776 000      |
| Colon-rectum | 430 000 | 445 000 | 875 000    | 495 000      |
| Liver        | 165 000 | 375 000 | 540 000    | 386 000      |
| Breast       | 910 000 | -       | 910 000    | 376 000      |
| Oesophagus   | 160 000 | 320 000 | 480 000    | 358 000      |
| Mouth        | 190 000 | 385 000 | 575 000    | 324 000      |
| Cervix       | 525 000 | -       | 525 000    | 247 000      |

TABLE II - Cancer Cases and Dealths

Note: The number of deaths from a disease in any year do not relate only to new cases of the disease occurring in that year, but also to cases in previous years.

countries where the smoking epidemic first began, and has now passed its peak, they are beginning to fall-for example in Finland, the United Kingdom and the United States. Among women, incidence rates are rising briskly in countries where female smoking is long established. Lung cancer is now the commonest cause of death from cancer in women in the US. In the European Union countries, a 33% increase in female lung cancer cases is predicted by 2005. Worldwide, about 85% of lung cancers in men and 46% in women are tobacco-related. The ratios in developed countries are 91% and 62%. There is no effective treatment for lung cancer. Only 7%-12% of patients are alive five years after diagnosis.

Stomach Cancer: The steady decline in cases in most industrialized countries during the last 30 years is attributed to nutrition richer in vitamins from fresh fruits and vegetables, and less consumption of preserved, cured and salted foods. But the disease is the second most common cancer worldwide, and almost two-thirds of all cases are in developing countries. Infection with the bacterium *Helicobacter pylori* contributes to the risk of the cancer. Only about one patient in five survives longer than five years after diagnosis.

*Colorectal Cancer:* Studies show a higher risk of colorectal cancer in people eating a diet low in vegetables, legumes and whole cereals. Frequent consumption of red meat increases the risk. Although it is more common in richer countries, incidence of the disease is rising in some developing countries. Incidence increases rapidly in the first generation of migrants moving from a low-risk country, such as Japan, to a high-risk country, such as the United States. If diagnosed at an early stage, 90% of patients survive at least five years, compared to no more than 8% of those diagnosed at an advanced stage.

*Liver Cancer. A* major problem in developing countries, with China alone accounting for 55% of all cases. The risk is twice as high in men as in women everywhere; 83% of all cases are attributable to infection with hepatitis B virus. Most other cases are linked to excessive alcohol consumption. Only about 6% of patients survive more than five years.

*Breast Cancer*. More than half of all cases are in industrialized countries. Incidence is increasing in most parts of the world, particularly in regions which previously had low rates. Studies show that the incidence in women who migrate from low to highrisk regions, slowly rises, over two or three generations, to the rates of the host country. This illustrates the importance of lifestyle as well as hormonal risk factors in the development of the disease. Other risk factors are obesity after menopause, and diet, in particular too high a consumption of animal fats. At least half of breast cancer sufferers survive at least five years after diagnosis.

*Esophageal Cancer:* Tobacco and alcohol are the most important risk factors, particularly in combination. Smoking accounts for 45% of cases in men worldwide, but only 11% of female cases. About 85% of cases are in developing countries. About 75% of patients die within a year of diagnosis: only 5-10% survive for five years.

*Mouth Cancer:* Tobacco and alcohol consumption are again major risk factors. Three out of four cases worldwide are in developing countries. Studies indicate a protective effect of a diet rich in vegetables and fruit. Five-year survival from the disease ranges between 80% in its early stages to as low as 5% in advanced cases.

*Cervical Cancer:* Eighty per cent of cases occur in developing countries, where it is

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often the most common cancer in women. Cases and deaths have declined markedly in many industrialized countries, mainly because of extensive screening programmes. The sexually-transmitted human papilloma virus is found in more than 95% of cases; it is a necessary but probably not sufficient cause of the disease. A vaccine against the virus is being developed. Survival depends on the stage of the disease at diagnosis, with 90% of localized cases surviving five years compared to less than 10% with distant spread.

#### **Circulatory Diseases**

- Heart attacks, stroke and other circulatory diseases together kill more than 15 million people a year, or 30% of the annual total of deaths from all causes.
- □ Many of these deaths are both premature-occurring in people under 65. years-and preventable.
- Circulatory diseases are emerging rapidly as a major public health concern in most developing countries, where they now account for about 25% of all deaths, compared to about half of all deaths in developed countries.
- Once, these diseases were regarded as affecting exclusively industrialized nations, but this is no longer true. As developing countries modernize, they are more able to control communicable dis eases, and the life expectancy of their populations increases. Unfortunately, so do their risks of circulatory conditions. This is partly because of their adoption of lifestyles similar to those in industrialized countries, and the accompanying risk factors-high blood pres sure, smoking, high blood cholesterol levels, unhealthy diet, physical inactivity and obesity.
- □ In the industrialized countries them-

selves, meanwhile, deaths rate from coronary heart disease have declined dramatically in the last 30 years. This is largely because of better medical treatment and preventive measures including health education on smoking and diet.

- High blood pressure is a leading risk factor for heart disease and stroke, and affects about 20% of adults in most countries. Blood pressure increases progressively with age.
- Cigarette smoking is the most readily preventable risk factor for both heart disease and stroke.
- High blood cholesterol levels are also a major risk factor. The causes can be genetic, but are commonly related to a diet rich in animal fats.
- Lack of physical activity is the most prevalent, modifiable risk factor for heart disease in many industrialized countries. Similar levels of inactivity are becoming more common in newlyindustrialized countries.
- Obesity is a risk factor in itself for heart disease, and is related to inappropriate nutrition and inactivity.

### Diabetes

The projected risk in the number of diabetes sufferers from about 135 million now to almost 300 million by the year 2025 is due to population ageing, unhealthy diets, obesity and a sedentary lifestyle. Developing countries will bear the brunt of the diabetes epidemic in the 21st century. Up to 90% of all cases of diabetes worldwide are non-insulin-dependent. Insulin-dependent diabetes develops most frequently in children and adults.

Diabetes is an under-recognized and under-recorded cause of death. Its long

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term complications include heart disease, predominantly in industrialized countries, kidney failure, blindness, and particularly in developing countries, foot infections, gangrene and amputation of the limbs. It adversely affects the outcome of pregnancy, negates the protection from heart disease which pre-menopausal women without diabetes experience, and can lead to male impotence.

# **Mental Disorders**

Dementia, particularly Alzheimers- disease, are likely to become one of the leading causes of disability in the elderly worldwide. Already an estimated 29 million people suffer from dementia, and the risk of developing the condition rises steeply with age in people over 60 years. By the year 2025, Africa, Asia and Latin America between them could have more than 80 million sufferers.

At least 400 million people suffer from other mental disorders, ranging from mood and personality disorders to neurological conditions such as epilepsy, which alone is estimated to affect 40 million people.

# **Priorities for Action**

The World Health Report 1997 indicates priorities for action that are intended to improve mankind's ability to prevent, treat, rehabilitate and where possible, cure major noncommunicable diseases and to reduce the enormous suffering and disability that they cause. It says that as many of the diseases share a relatively small number of crucial risk factors, an integrated, coordinated approach to their prevention is therefore necessary. There is also an urgent need to raise awareness of, and motivation for, healthy lifestyles. The report's top priorities for international action are summarized as follows:

- 1. Integration of disease-specific interventions in both physical and mental health into a comprehensive chronic disease control package that incorporates prevention, diagnosis, treatment and rehabilitation and improved training of health professionals.
- 2. Fuller application of existing costeffective methods of disease detection and management, including improved screening, taking into account the genetic diversity of individuals.
- 3. A major intensified but sustained global campaign to encourage healthy life styles, with an emphasis on the healthy development of children and adolescents in relation to risk factors such as diet, exercise, and smoking.
- 4. Healthy public policies, including sustainable financing, and legislation on pricing and taxation, in support of dis ease prevention programmes.
- Acceleration of research into new drugs and vaccines, and into the genetic determinants of chronic diseases.
- 6. Alleviation of pain, reduction of suffer ing and provision of palliative care for those who cannot be cured.

"Inevitably, each human life reaches its end," the report concludes. "Ensuring that it does so in the most dignified, caring and least painful way that can be achieved deserves as much priority as any other. This is a priority not merely for the medical profession, the health sector or the social services. It is a priority for each society, community, family and individual."

# Substance Use Among Street Children and Other Children and Youth in Especially Difficult Circumstances

Childhood and adolescence are time of experimentation, exploration, curiosity and search for identity. Such quests can involve risk taking. At times, this is manifested in risks to personal health, such as the use of alcohol, tobacco, pharmaceuticals, inhalants, illicit drugs and other psychoactive substances.

It is believed that young people from problematic backgrounds, further referred to as "children and youth in especially dif- $\Box$  ficult circumstances" (CYEDC), are more vulnerable and more likely to continue or escalate their substance use and to develop problems. These "especially difficult circumstances" are associated with poverty, family disintegration, relocation, discrimination and the lack of suitable alternative  $\Box$  accommodation if the child cannot stay at home.

The notion of CYEDC covers a broad range of populations at risk of developing health and other problems. Within this group are street children, working children, refugee and displaced children, indigenous and minority youth, children and youths with mental and physical disabilities, youths in institutional care (such as detention centers), victims of war and civil unrest, survivors of natural disasters, individuals with learning difficulties, children of dysfunctional and abusive families and those who have been sexually exploited.

Early onset and continued use of illicit substances is more likely to occur among

young people from communities which have a low quality of life and inconsistent support of their children; have low educational aspirations; lack closeness and involvement in the children's activities and exert weak control and discipline; explicitly or implicitly approve of substance use and resort to it on a regular basis; and emotionally, physically or sexually abuse their children.

Due to the imprecise definition of CYEDC, the heterogeneity of these risk groups and the often hidden nature of substance use within these populations, it is difficult to estimate the extent of the problem. Available statistics may only indicate its magnitude.

In 1992, it was estimated that 40% of the world's population was aged 19 years or less, of whom 86% lived in develop ing countries. A large proportion of these children and youths lived in poverty.

Worldwide, over 130 million children, two-thirds of whom are girls, have no access to primary school education. In developing countries, one in four students entering school is estimated to drop out before completing primary education. Today, lack of education is especially damaging because both individual and societal well-being are increasingly dependent on intellectual competence based on literacy and knowledge of basic arithmetic.

□ According to the estimates-of the International Labour Organization (ILO) in 1996, in developing countries alone, there were at least 120 million children between the ages of 5 and 14 who were fully at work.

Abstracted from the World Health Organization Fact Sheet N° 151, March 1997 entitled Substance Use Among Street Children and Other children and Youth in Especially Difficult Circumstances.

Between 5 and 10 million children under the age of ten years will be orphaned by the end of the 1990s as a result of AIDS-related deaths of parents; 90% of these children live in Africa. As much as 75% of HIV transmission takes place before the age of 25 years in the epidemics of East and Southern Africa.

The common denominator for all of these children and youths is the fact that they are more vulnerable than their peers of the same age living in a supportive environment. It is also more likely that these young people have few, if any, positive attachments, and few positive role models. They are likely to be marginalized within their communities and have fewer opportunities to learn life skills. Their immediate community often does not have the resources to prevent nor treat substance abuse.

In a stressful environment, the use of psychoactive substances by these young people often has a purpose. Such substances may be used to keep them awake to be able to work, to relieve hunger, to sleep or anesthetize physical or emotional pain. However, their use increases health risks and introduces other problems, such as their exploitation and criminal activity.

The substances used by CYEDC are usally those which are cheap and most readily available. For example, glue in market places, solvents in industrial areas, coca products in the Andean region and opiates in opium producing areas, as well as alcohol, tobacco, cannabis and pharmaceutical drugs.

#### Street Children

Among a wide range of disparate target groups covered by the umbrella term CYEDC, one group-street children-is at the highest risk of developing substance abuse problems and, therefore, deserves special attention. The pnenomenon of street children is not new. Almost every country has witnessed large groups of homeless children who appear in large urban settings at some stage of history

In recent years,, the problem of street children has worsened throughout the world due to increasing family separations and conflict brought about by urbanization, economic crisis, political change, civil unrest, wars, as well as natural disasters and epidemics.

- Because of political, economic and other considerations, the criteria for defining "street children" vary from country to country and with time. Therefore, it is difficult to arrive at any precise global estimates. Today, different estimates put the number of street children at between 10 and 30 million worldwide.
- In the countries of Latin America, by all accounts the problem is especially acute. However, because of the abovementioned difficulties and with few exceptions, there are no reliable data on street children.
- □ In Asia, the situation is no better. In Metro Manila (population 9 million), there are at least 60,000 street children.
- □ In Africa, the problem of street children is the least documented. However, multiple factors contributing to the disintegration of families-continued urbanization, economic crises, epidemics, military and ethnic conflicts, and refugee movements suggest that the problem has been intensifying over the last five years.
- □ Street children have appeared in Central and Eastern Europe, where until recently the problem was non-existent. In Moscow (population 9 million), where

the problem was not reported a decade ago, there are at least 50,000 street children. Many of these children have come to the city to escape poverty and conflict.

- □ Even affluent countries are affected. In Toronto (population 3 million) the number of street youth is conservatively estimated to be between 3,000 and 5,000.
- □ Throughout the world, most children on the street are boys. However, there is now increasing evidence of girls on the street.

# **Street Children and Substance Use**

Street children support themselves by working, begging, stealing, selling sex and by trafficking in licit and illicit substances. Many depend for their existence on the assistance of caring adults and organized services provided by governments or private agencies. They help one another to survive. Such help is an important part of the culture of street life.

- □ The percentage of substance users among street children varies greatly depending on the region, availability of substances, gender, age and circumstances of the children. Studies have found that between 25% and 90% of street children use substances of one kind or another.
- Most street children have virtually no access to health care and community services. As a result, continued sub stance use among street children

usually has serious health and social consequences. In South Africa, for example, as many as 9 out of 10 street children are thought to be dependent on glue.

□ The age of initial substance use among street children is very young-as young as five years of age. In Colombia and Bolivia, 8 year old children have been reported dealing in and smoking basuco cigarettes, a low grade by-product of cocaine laced with kerosene and sulphuric acid.

The consequences of substance use by street children and CYEDC in general are diverse, including acute and chronic health and emotional problems, disruption of interpersonal relationships, school failure, social marginalization and criminal behavior. Their behavior as children will most likely have an impact on their health as adults, and the health of their own children.

#### What WHO is Doing

In 1992, the WHO Programme on Substance Abuse initiated a special project "Street Children and Substance Abuse". The project has been aimed at developing a framework within which specific organizations could assess the nature and extent of the problem of street children and substance abuse in individual communities in order to develop and implement appropriate responses. The initial funding for the project came from the United Nations Drug Control Programme.