

Chapter 8

Health agenda for the 21st century

future health challenges

During 1995, 15 000 babies were born every hour. More than 90% of them will survive their first five years to see the dawn of the new century. Half of them will live to celebrate their 75th birthday in 2070. Many will become centenarians who will live throughout the entire 21st century and into the early 22nd.

By 2025, the 1995 baby will be an adult whose own child will have a 90% chance of surviving not merely the first five years, but the first 50 years of life. Two out of every three babies born in 2025 will live to be at least 75.

The enhanced life expectancy of tomorrow's children is the harvest of health improvements witnessed in the 20th century. Another consequence is that even before 2025, for the first time, small children will be outnumbered by people over 65. While children under 5 years will represent about 8% of a global population that will have risen to 8 billion, the over-65s will represent about 10%. For every 100 adults aged 20-64 in 2025 there should be 17 older people aged

65 and above, 14 children under 5 and more than 40 older children and adolescents aged 5-19 years.

For young and old alike, the world of 2025 will be very different from that of today. This report has explained trends in health across the human life span during the past 50 years. While the conclusion overall is that health has steadily improved, the main issues now are how to sustain those improvements and how to meet the health challenges of the future.

In the early 21st century the world, already free of smallpox, should also be free of poliomyelitis, measles, and neonatal tetanus. Some other infectious and parasitic diseases will be eliminated, and the burden of many more which currently afflict tropical regions should be further reduced.

Most children should be protected from vaccine-preventable diseases through well-established and sustainable immunization programmes; deaths among small children should be further cut through a package of interventions known as the Integrated Management of Childhood Illnesses.

Most of the global population should have regular access to essential drugs. However, as shown in Table 11, it is disconcerting to note that in the early 21st century, it is expected that there will be 21% more deaths among adults aged 20-64 years than during the late 20th century. Given that these adults form the main foundation for any social and economic support to the young and old, it is imperative that they are protected from premature mortality and disability.

Table 11. Deaths by age group, world, 1975-2000 and 2000-2025

Age group	1975-2000		2000-2025	
	Number (000)	Percentage of total	Number (000)	Percentage of total
0-4	304 970	25	181 024	12
5-19	96 127	8	63 400	4
20-64	349 719	28	422 028	29
65+	482 479	39	787 202	54
All ages	1 233 295	100	1 453 654	100

The epidemiological assessment in this report suggests that the major health problems by the year 2025 will be diseases of the circulatory system, cancers, infectious and parasitic diseases and external causes (*Table 12*).

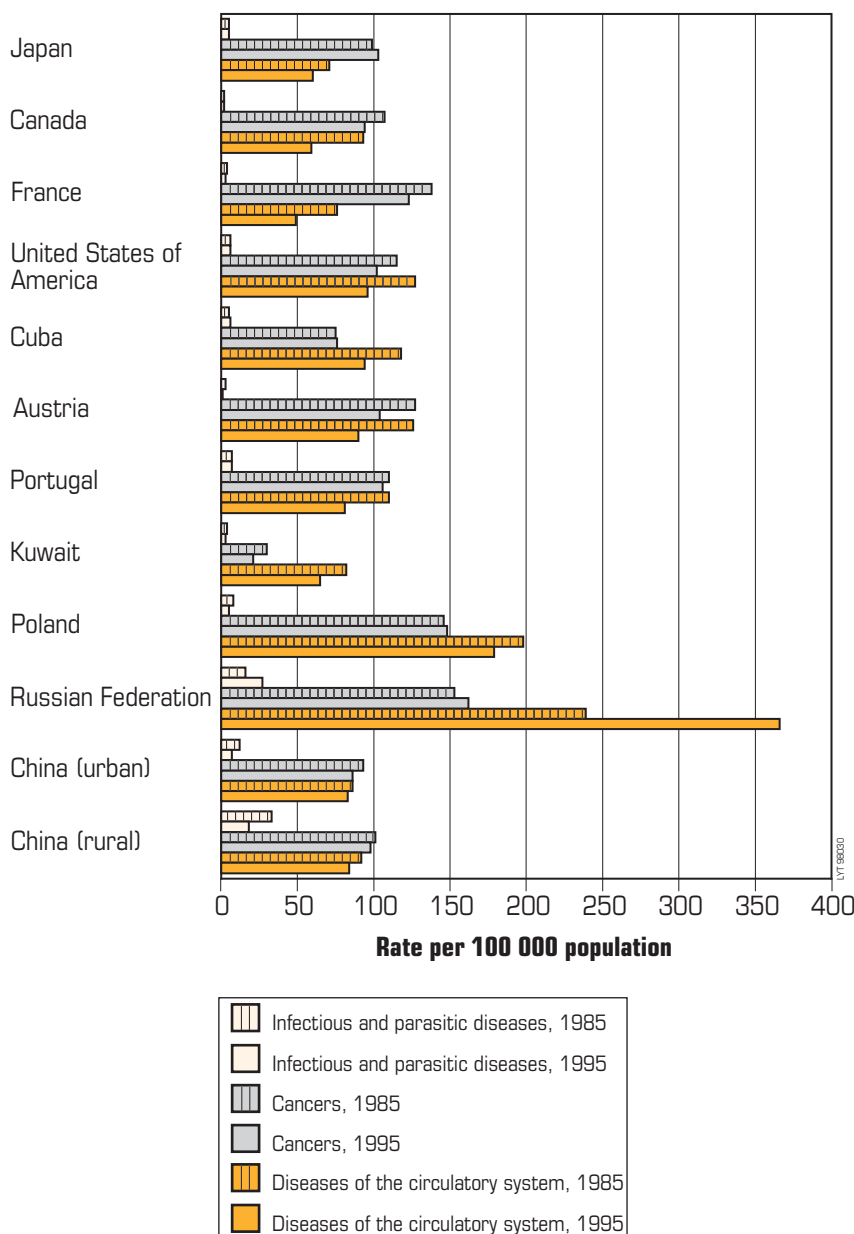
Chapter 3 of this report and *The World Health Report 1997* on chronic

diseases have discussed the dominant role of these diseases, musculoskeletal conditions, and mental and behavioural disorders, in defining ill-health among adults. Available data indicate that in some countries, deaths from circulatory diseases are falling while cancer deaths are increasing (*Fig. 21*).

WHO estimates that about two-thirds of global cancer deaths, cancer incidence during 1997 and cancer prevalence in 1997 can be clustered according to just four risk factors, i.e.: diet-related (stomach, colon-rectum, liver, mouth-pharynx and prostate); tobacco-related (lung); infection-related (lymphoma and cervix); and hormone-related (breast). WHO foresees that the overall global situation in respect of cancers of the stomach, liver, mouth and pharynx, and of the cervix and breast, will improve in the early 21st century while those related to the lung, trachea, bronchus, colon and rectum, and prostate as well as lymphoma, will worsen.

The changing world is experiencing changing patterns of health. Influences include: rapid modernization; an everyday life dependent on technological advances; changing behaviour – sedentary living, excessive or ill-balanced diets and smoking; and a deteriorating environment – air pollution, exposure to chemicals, contamination of soil and water, and hazards to food safety. Together, these are resulting in an increase in crippling chronic diseases such as diabetes, rheumatoid arthritis and low back pain. In addition, many hundreds of millions of people worldwide are affected by some form of mental disorder, from the relatively minor to the incurable and life-threatening; many individuals suffer from several simultaneously. An increase has also been observed in the incidence of suicide, associated with economic downturns.

Fig. 21. Death rates by cause, adults aged 20-64, selected countries, 1985 and 1995^a



^a Ranked by decreasing order of 1985 life expectancy values.

Table 12. Leading clusters of diseases/conditions, WHO regions, selected years^a

Disease category	1960						1980					
	Africa	The Americas	Eastern Mediterranean	Europe	South-East Asia	Western Pacific ^b	Africa	The Americas	Eastern Mediterranean	Europe	South-East Asia	Western Pacific ^b
Infectious and parasitic	1	1	1	5	1		1	1	2	5	1	
Perinatal and maternal	2	2	3		3		2	3	5		3	
Malignant neoplasms		5		2		3		5		2		2
Endocrine and nutritional	4				2		4				2	
Mental and behavioural												
Circulatory system	5	4	5	1		2	5	4	1	1		1
Respiratory system	3		2	3		1	3		3	4		3
All external causes		3	4	4		4		2	4	3		4

Disease category	1997						2025					
	Africa	The Americas	Eastern Mediterranean	Europe	South-East Asia	Western Pacific ^b	Africa	The Americas	Eastern Mediterranean	Europe	South-East Asia	Western Pacific ^b
Infectious and parasitic	1	2	2		1		1	4	4	5	3	
Perinatal and maternal	2	5	5		3		2	5				
Malignant neoplasms		4		2		2		3	5	2	2	2
Endocrine and nutritional	5						5				5	
Mental and behavioural				5						4	4	
Circulatory system	4	3	1	1	2	1	3	1	1	1	1	1
Respiratory system	3		3	4		3	4		2			4
All external causes		1	4	3		4		2	3	3		3

^a Indicative list, as ranked by the respective regional offices.

^b For all years, the Western Pacific Region ranked *Digestive system* in fifth position. This category was not used for the other regions.

With a better understanding of ageing and diseases processes, distinctions have become artificial between infectious and non-infectious diseases, as well as between physical and mental ill-health. Recent studies indicate for example that interruption of the blood supply to the brain has important mental and physical health consequences, producing stroke, vascular dementia and transient ischaemic attacks (mini-strokes). Every year, millions of people survive a stroke and suffer brain damage with varying degrees of continuing mental and physical disability.

Vascular dementia has a more gradual onset than stroke and is less likely to be reported as a cause of death, but it is another important cause of disability. Transient ischaemic attacks affecting the brain are important warning signs of future

stroke or dementia and call for prompt preventive measures. Although most strokes and dementia occur in the elderly, they are nevertheless a significant cause of morbidity in younger populations (one-third of strokes occur in people aged under 65). Both stroke and dementia contribute significantly to the global burden of disease, and are expensive to treat. To the cost to health services should be added the financial and emotional cost to the families who provide most of the caring for those affected.

In addition to the prevention methods common to cardiovascular disease and stroke, such as smoking cessation or avoidance, hypertension treatment and diet modification, there are also now promising treatments for stroke which, if started within hours of onset, may reduce the extent of

Box 31. The brain, neurology and psychiatry

Because of the importance of the brain in controlling human activity, injury and diseases affecting the brain result in a significant proportion of all human disability. Until relatively recently, knowledge about the brain depended on crude observation and studying the effects of head injury. Study of the brain's electrical activity gave some insight into the pathology of epilepsy, but only in recent decades have scientific studies thrown light on the relationships between brain function and mental functions such as thought and emotions. The coming decades should bring better understanding of the biological or physical processes in the brain that accompany thinking and feeling.

Until recently, the physical processes of the brain were studied by neurologists and neuroscientists, whereas the mental processes (thinking and feeling) were studied by psychologists and psychiatrists, with little interaction between the two groups. In some countries, the clinical discipline of neuropsychiatry has flourished, bringing the two together, while in others they have stayed separate. Several factors are now bringing the two together. One is the advance in "noninvasive" methods of investigation. Apart from crude electroencephalographs, the only way of investigating brain function used to be to open the skull and physically probe into the brain. The technology is now available, however, to localize extremely accurately virtually every part of the brain without opening the skull. By following the changes in blood flow and chemical activity that accompany neural activity, it is possible to map the areas involved when, for instance, the subject looks at something, hears a word or experiences pain or pleasure.

Within the next 10-15 years, such methods are likely to generate new knowledge of the functional anatomy of the human brain, making possible a better understanding of how normal brain function is disturbed in conditions

such as dyslexia, epilepsy and motor dysfunctions. These tools should also throw light on how the brain is altered during the disturbed thought patterns and emotions that are such a troublesome feature of schizophrenia and the affective disorders.

Another factor influencing our understanding of the relationship between brain function and mental function is the discovery in recent decades of the psychotropic drugs used to treat mental disorders. These drugs have shown that it is possible to change mental function by chemically modifying brain function. Study of their action has led to an understanding of the chemicals that carry messages from one nerve cell to another (neurotransmitters) and the chemical environment in which the brain functions. Originally, most of the drugs used to treat mental disorders were discovered almost by chance. Now, with more precise knowledge of neurotransmission, it is possible to design drugs that will block or accelerate the nervous activity causing mental disorders. It is now unscientific to argue over whether epilepsy, stroke, dementia, multiple sclerosis, schizophrenia, bipolar disorders or indeed the addictions are "neurological" or "psychiatric". All are diseases or conditions of the brain which demand investigation, treatment and care for those affected and, taken together, which contribute to an enormous amount of disability in the world.

With increasing knowledge, much of the gulf between the mind and brain, between neurology and psychiatry, between neuroscience and psychology, is fast being bridged, enabling rational research and interventions to be carried out to prevent or treat brain damage and disorders of brain function. These advances have the potential to bring about a significant reduction in the level of disability worldwide.

brain damage or even allow the brain to recover completely. For many patients, however, the brain will be irreversibly damaged unless an effective rehabilitation strategy is in place to make a timely response (*Box 31*).

Globally there are still 21 million deaths among those aged under 50; most of them are due to infectious diseases, many of them being preventable through cost-effective in-

terventions such as immunization and essential clinical care management, personal hygiene, public health and sanitation practices, and the safe processing, preparation and handling of foods. With increasing international travel and mass population movements due to war and internal conflicts, foodborne diseases are emerging as a major threat in the 21st century (*Box 32*).

Globalization of trade and services also poses global threats to health. The health of the world's citizens is inextricably linked, and is less determined by events within geographical boundaries. The threat posed by emerging and re-emerging infectious diseases is accentuated by changes in human behaviour, changes in ecology and climate, in land use patterns and economic development, as well as by tourism and migration.

Despite the progress that can be achieved in a world without frontiers, there is a danger that insistence on cross-border uniformity, or even on unwarranted minimum levels, could reduce the scope of mutually beneficial trade. Countries may have failed to enforce adequate environmental standards, or (more commonly) been deterred from introducing justified improvements, by pressures arising from business concerns about international competitiveness. Attention should be paid to identifying those areas of policy where common or agreed cross-border minimum standards are justified, and those where the choice should be left to individual States and governments.

Patterns of health and disease have changed more rapidly worldwide in the last half-century than during any comparable period in history. Although survival strategies underlying health systems development during the past decades have been extremely successful in increasing the length of human life, they have not led to a corresponding reduction in morbidity and disability, or improvement in the quality of life. Available data indicate that disability-free life expectancy at birth has not significantly increased. While mortality reduction targets are achieved through disease-specific interventions, the attainment by people of their full potential for health – the main thrust of

Box 32. Foodborne diseases – A global threat

Public health officials attribute the rise in incidence of foodborne illnesses and the emergence of new foodborne diseases to a combination of different factors related to changes in demographics and consumer lifestyles, in food production, international trade and travel, and microbial adaptation. Globalization of the food supply means that people are exposed, through foods purchased locally, to pathogens native to remote parts of the world. As a result of international travel, people are exposed to foodborne hazards in foreign countries and import the disease into their home country upon their return. As a result, a person may acquire an illness in one country and expose others in a location thousands of kilometres from the original source of the infection. Changes in microbial populations can lead to the evolution of new pathogens, the development of new virulence factors for old pathogens, the development of antibiotic resistance making a disease more difficult to treat, or to changes in the ability to survive in adverse environmental conditions. People are becoming increasingly vulnerable, particularly since the number of susceptible individuals such as the elderly and people with HIV infection or other underlying medical conditions is increasing. As lifestyles change, more people eat meals prepared outside the home. Insufficient training in food handling constitutes one of the major factors responsible for the rise in foodborne disease incidence.

To deal with these problems, a comprehensive strategy is needed at national and international levels. This must be based on effective food control, improving agricultural and animal husbandry practices, applying food technologies with the potential to reduce or eliminate foodborne pathogens, and educating persons who handle food. Improved surveillance programmes are essential for early detection of foodborne disease outbreaks and for limiting their spread before they take on epidemic or pandemic proportions. Early identification of the source of the outbreak is becoming increasingly important as countries move towards industrialization. Protecting the public from emerging foodborne diseases also means keeping track of new events in agricultural and processing practices and of the origin of food, while climatic and environmental changes need to be monitored for potential negative effects on the food chain.

the health-for-all movement – is far from complete.

Outlining desirable aspirations for better health and constructing a reasonable vision for the future has become crucial for setting health objectives for the early 21st century. It is therefore time for a breakthrough in thinking and a clearly defined vision for guiding strategies to defeat the powerful enemies of positive health, and thus ensure quality of life.

Present knowledge and scientific evidence show that diseases and disabilities, which prevent many people from reaching old age in good health, can be delayed or avoided. Such prevention of major infectious and chronic diseases is however possible only if there is a shift in emphasis from the disease itself to risk factors or determinants related to the development of the disease.

A single risk factor may contribute to many diseases and different risk factors often act in combination to produce a single disease. Many of these risk factors associated with a broad spectrum of diseases – physical or mental, infectious or non-infectious – widespread in both developing and developed countries have been created by, and can be controlled by people themselves. Tackling a limited number of risk factors, over which the individual has control, and environmental hazards over which national and international communities have a say, could reduce substantially sickness and suffering caused by them.

In visualizing the future, the following fundamental points have been considered:

- The *primary focus* of health development is positive health, an enhancement of the health potential of individuals and a contributor to better quality of life in the context of human development. Health will then not be an end in itself but a resource for everyday life that enables individuals to realize aspirations and strategic needs and to change or cope with their environment. Policies and strategies for health development provide people with a positive sense of health and enable them to make full use of their physical, mental and social capacities. Positive health implies adding life to years i.e. increasing years lived free from ill-health,

reducing or minimizing adverse effects of illness and disability, and improving quality of life through a healthy lifestyle in a healthy physical, social and ecological environment.

- The *primary concern* will be to improve health potential and quality of life at all phases of the life cycle. Preventive, protective, promotive, curative and rehabilitative measures to improve health will also ensure that such improvements can be sustained, and if possible further enhanced. It will make individuals economically and socially active given their biological and chronological maturity.
- The *primary objective* of health development activities will be outcome-oriented. Various disease-specific interventions will be assessed not so much in terms of outputs, for example, improved access to health care or services, reduction in mortality, morbidity or disability from any single disease or condition. Instead they will be assessed in terms of outcomes, ensuring value for money by improving the overall health of the individual and enhancing his or her health potential. Health care should not only meet professional standards but also benefit the person who receives it. Quality assessment may become heavily biased towards reflecting consumers' needs and interests as well as their expectations and values. A major consequence of such an "outcome" perspective is the advantage of health and social interventions being integrated and inclusive. It requires and reflects the contributions of all those who provide care including self-care. However, it cannot identify which specific initiative or action was responsible for the outcome.

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With these fundamentals underpinning health improvements for people-centred development, a future health picture can be envisioned and elaborated for the first quarter of the 21st century. This foresees that, worldwide, *every individual should enjoy his or her full health potential throughout the life span and be socially, economically and mentally productive and able to have a better quality of life*. Concerted efforts should be made to sustain and build on health gains in terms of increased life expectancy and reduced risk of ill-health, and to reduce and where possible eliminate premature mortality and disability.

An effective response to all these challenges requires a radically different approach and should be based on knowledge, experience and insights gained over the past 50 years.

Some of the developments in technology, and the information and knowledge that stem from them, are listed in the following section. So too are examples of advances in communication technology which allow this information and knowledge to be accessible to those who need it (*Box 33*).

Health and technology

The most significant feature of technology development in the early part of the 21st century will be the rapidly increasing knowledge-intensity of products and processes used globally. Lifelong learning will be essential for ensuring that workers remain productive, especially as populations and labour forces age over the coming decades. The emphasis will need to be on active ageing, encouraging individuals to participate fully in society regardless of their age.

The delivery of health care is dependent on past, recent and future research in biomedical science. Examples of the highly successful use of

Box 33. Sharing knowledge for health

A knowledge-based organization in an environment where knowledge has become a raw material must give serious consideration to how such knowledge is managed, disseminated and used. The interaction between partners in international health is influenced by the following five key factors:

1. **Globalization.** Globalization is principally about increasing interdependence – economic, political and social. It has both positive and negative influences on health. Integration at one level can be matched by marginalization and increasing inequities at others.
2. **The information revolution.** The rapid development of information and communications technology opens up new ways to produce, analyse and disseminate data and health knowledge. The challenge is to build a managed network that allows accessing and dissemination of knowledge; makes it useful and practical; and allows for debates and feedback mechanisms. Information technology also makes available new means of assistance between centres (telemedicine, Internet-based training, etc.).
3. **The health research/technology revolution.** Health information itself is subject to ever more rapid changes and updates, and WHO information (for example on drug development, safety, treatment schedules etc.) needs to be totally reliable and up to date. The average shelf-life of a health fact is currently five years.
4. **The increased privatization of health, health research and intellectual property.** Increasingly health and medical research are private, and a determining factor in one of the largest and most rapidly growing world markets. Research at university institutes is frequently dependent on significant contributions from the private sector.
5. **A broader understanding of and accountability for health.** The increased knowledge available on determinants of health and on the impact of sectors other than health calls for a broader range of information input in areas such as economics, law, human rights and ethics.

Reliable health information and knowledge are becoming a sought-after commodity not only in terms of patents and intellectual property, but also in terms of systems knowledge and comparative data. Given the increasingly fluid borders between health/biomedical research, pharmaceutical and nutrition research and agricultural research, the issues and partners WHO deals with could change significantly.

The challenge before the international community is how to best manage the intellectual capital inherent in these many partners and networks. The result of good management of intellectual capital equals health leadership. The leadership issue in this case is: who sets the “gold standard” for global health issues and the global health debate; and whose approach/paradigm on how to define health is accepted. From this follow proposals on how to manage health, pay for health, and measure the health of populations.

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diagnosis and
treatment of disease
to prediction or
early detection.

discoveries in basic science, or technological developments, are: molecular and cell biology; immunology and genetics; and those relevant for diagnostic and therapeutic procedures, such as magnetic resonance in ageing and the surgical applications of laser techniques. In neurobiology, understanding of the ever-increasing panoply of neurotransmitters has led to new insights into the action of psychotropic drugs and neurotoxins of dietary origin.

Applications of technology can be divided according to functional categories: for prevention, diagnosis, therapy or rehabilitation. The technologies themselves may be classified as biologicals, pharmaceuticals, medical devices and replacement and assistive devices.

Biological medicine is the basis for the fundamental understanding of disease processes. It has made possible the development of novel compounds, and has provided new methods for the large-scale production of existing biologicals. It is the basis for highly sensitive specific diagnostic tests and for the development of new vaccines. Recombinant DNA techniques are available for prenatal screening and postnatal examination, to detect errors in the formation or biological activity of peptides which could result in schizophrenia. They will also prove important in the development of new vaccines.

As a result of the molecular and cell biology revolutions, screening procedures in medical and public health diagnoses are being speeded up. A new generation of drugs is coming into use which can exercise more precise control over human body functions. Current ground-breaking genome research will shift the balance from diagnosis and treatment of disease to prediction or early detection, so that disease can be managed prior to the onset of symptoms. Al-

though it raises ethical problems, it also has the potential to offer significant benefits.

A wealth of diagnostic devices has emerged, covering virtually all branches of medicine and health care. Advances in imaging technology have brought a new dimension to diagnostic procedures. Ultrasonic techniques are cheaper (though less precise) than computer-aided tomography and magnetic resonance imaging, and are suitable for screening and for a wide range of diagnostic work. They also have therapeutic applications. Endoscopic techniques are relatively inexpensive, and automated procedures such as cytological screening are becoming more reliable.

Lasers are being used in surgical treatment, and microsurgery has become much more sophisticated. Artificial joints and prostheses, using new materials and substitutes as well as improvements in traditional materials, have become valuable weapons against disability. The quality of these and other devices such as cardiac pacemakers is continually improving. Transplant surgery has a major future with a rapidly ageing population. Increasing efforts are also being made in the clinical application of the xenotransplantation of cells, tissues and organs from animal donors to human recipients, and in the production of biologicals for human use from transgenic and cloned animals.

Some promising possibilities in the fields of biologicals and pharmaceuticals are new vaccines against infectious diseases, including combination vaccines such as for DPT as well as oral vaccine.

Key areas for general research include sequencing genomes of major pathogens and studying the spread of antimicrobial resistance. There will be an upsurge in the development of low-cost, simple diagnostic and therapeutic devices for use in early detec-

tion of disease or relief from pain. As well as continuing developments in biomaterials for prostheses, advances in robotics are expected to have a considerable impact.

In short, scientific and technological developments in the broadest sense are contributing significantly to the provision of health care. Continued investment in basic and applied science will certainly pay off. Properly planned schemes for technology transfer should make it possible for developing countries to capitalize, for health, on advances in other countries, and there is great scope for regional cooperation.

Technological advances may however raise serious ethical issues which require the urgent attention of the international community. The most recent example is the successful cloning in 1997 of a sheep by somatic cell nuclear transfer. Governments, regional groupings and international bodies worldwide have reacted by firmly opposing human reproductive cloning. WHO's governing bodies have stated categorically that the replication of human individuals is ethically unacceptable.

The information society

Individuals are being expected to assume increasing responsibility for their own health, within the supportive framework of the State. The availability of meaningful information becomes central to their ability to make choices. Each person creates health within the settings of everyday life (at school, at work, at home). Society's role is to create the conditions that allow the attainment of health by all its members.

The information society provides the tools. Sharing the world's store of global health knowledge through information and communication technology is a keystone to international

health development. Rapidly developing information technologies are changing the way the world communicates, with far-reaching consequences, including in the area of public health.

Information societies have three main characteristics. They use information as an economic resource, stimulating business towards greater efficiency (e.g. through the electronic transfer of money). Individual citizens use information more intensively as consumers, to inform their choices, make their purchases and take greater control over their lives.

The capacity of information technology has been increasing at an exponential rate for nearly 20 years and shows no sign of slowing down. These new information systems – satellite broadcasting, telecommunications networks using fiberoptics and the Internet – are global.

Information technology can raise education levels, strengthen community links and stimulate public participation in decision-making. In health, it enables doctors to keep closer track of their patients' progress through sophisticated records management systems. Globally, it enables the surveillance and monitoring of disease, and facilitates the rapid international responses of organizations such as WHO to epidemics. The introduction of information technology in health care delivery and health systems management will enhance quality of care, efficiency and cost-effectiveness in the management of individual and community health.

There is concern that the shift towards information societies will widen the gap between developed and developing countries. International agencies, including WHO, have for several decades been facilitating the information flow towards developing countries, with the expansion of information systems, libraries and archives, so that poorer nations can

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Advances in communications

Communication technology should be placed at the service of all, to facilitate their access to the information they need. The new networks of information that are now developing could lay the foundations of a new social structure. No previous telecommunications advance, even the telephone and television, has penetrated public consciousness as quickly as the Internet. Its integration into conventional social and economic processes is taking place at an unprecedented speed, yet it may be only the very beginning of the Internet explosion. Already, communities and nations around the globe are starting to sketch out the “cyberplaces” of the 21st century.

This technology should not only contribute to promoting economic development and improving quality of life – it could remodel society. The time and space devoted to health issues in the media are expanding. Increasingly, media institutions are playing an active role in the social affairs of the societies they serve. The media have a powerful role to play in partnership with the health sector, in the service of health goals.

Political trends affecting health

Politics involve conflicts of power and influence, and competition between interest groups. Through politics things can be done or prevented from being done, and decisions are taken about who gets what and when in society. Since the attainment of health evokes moral and emotional responses, *health policy cannot be developed in a moral vacuum.*

The commitments and interests of international agencies, foreign aid, nongovernmental organizations and community organizations shape the politics of health and health care. The business interests of pharmaceutical and medical devices companies, as well as the motivations and ideologies of health care providers, also influence health and health care.

Workers' health, for example, is subject to trade and commerce policies as well as to the process of industrialization and the power of unions. Satisfying the health demands of women, the aged, ethnic minorities, children, the disabled and those with certain diseases such as AIDS involves politics related to ideology, ethics and the lack of political influence of these groups.

The evaluation of the health-for-all strategy carried out in 1997 illustrates that in many countries progress in traditional health indicators has been insufficient to ensure the achievement of the goal. Even in countries where the targets have been reached, equity has not been achieved, irrespective of political regime or economic development level, in spite of legislation to protect political and civil rights.

The search for equity is at the heart of the political struggle. Governments, regardless of their political style, should seek to meet health needs through rearrangement of health care systems. Recently in some countries, the core public function of ensuring equity has weakened as individual States reduce emphasis on social areas and transfer some responsibilities to the private sector and to local levels where mechanisms to safeguard equity may be lacking or weak.

Reforms have affected the content and formulation of social policies as the State modifies its role as designer, financier, implementer and regulator of

policies. These modifications relate to shifts in the final purpose of social policies, from universal access associated with high cost and low impact for most to a new paradigm focused on the poor. This framework includes specific targeting strategies and equity with the premise of *treating unequally those who are socially and economically unequal*.

As a result, communities have started to mobilize for their own future through grassroots movements, nongovernmental organizations, and other means. Although community-based health care has become the new rhetoric in many contexts, its effectiveness is hampered by fragmentation, lack of societal commitment and social cohesion, and the value of illness and health services as private goods.

There is a risk that the accelerating global evolution, with the riches it promises, will leave more than half a billion people in poverty in the year 2020. In spite of increasing globalization, national policies remain of paramount importance in determining levels of employment and labour standards, for example. While the current trend is towards international responsibility for standard-setting in many key areas, and towards their implementation at the local level, national governments have a role to play in policy setting and legislation, especially in the social sector. This is particularly so in cases where resources have to be diverted from the social sector because of globalization of trade and services, which may result in a decline in the provision of essential medical and health services.

While forecasters may not be expected to reach beyond the extrapolation of known factors, leaders and policy-makers are mandated to do so. They must determine the global scenario of the early 21st century and put in place the building blocks that will permit a quantum leap forward.

If the global community does not take action soon, hunger, malnutrition and resulting illnesses will persist, natural resources will continue to be degraded, and conflicts over scarce resources such as water will become even more common. For most of humanity, the world will not be a pleasant place to live. It does not have to be this way. With foresight and decisive action, we can create a better world for all people. We have the knowledge and the skills and we still have the necessary resources, including natural resources.

Health imperatives for the 21st century

On the *unfinished agenda* for health, poverty remains the main item. The priority must be to reduce it in the poorest countries of the world, and to eliminate the pockets of poverty that exist within countries, including among refugees. Policies directed at improving health and ensuring equity are the keys to economic growth and poverty reduction.

Safeguarding the gains already achieved in health depends largely on sharing health and medical knowledge, expertise and experience on a global scale. Apart from establishing and expanding national health services based on primary health care, industrialized countries can play a vital part in helping solve global health problems. It is in their own interests as well as those of developing countries to do so.

Increased international cooperation in health can be facilitated by a managed global network making use of the latest communication technologies. Global surveillance for the detection of and response to emerging infectious diseases is essential. As a result of increased global trade and travel, the prevention of foodborne

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infections in particular is of increasing importance. Wars, conflicts, refugee movements and environmental degradation also facilitate the spread of infections as well as being health hazards in themselves.

Enhancing health potential in the future depends on preventing and reducing premature mortality, morbidity and disability. It involves enabling people of all ages to achieve over time their maximum potential, intellectually and physically through education, the development of life skills and healthy lifestyles.

The health implications of **healthy ageing** – the physical and mental characteristics of old age and their associated problems – need to

be better understood. Much more research is required in order to reduce disability among older age groups.

Concern for the older members of today's society is part of the intergenerational relationships that need to be developed in the 21st century. These relationships, vital for social cohesion, should be based on equity, solidarity and social justice.

The young and old must learn to understand each other's differing aspirations and requirements. The young have the skills and energies to enhance the life quality of their elders. The old have the wisdom of experience to pass on to the children of today and of coming generations.