THE INFLUENCE OF WORLD TRENDS UPON HEALTH

PAPER PRESENTED AT THE SYMPOSIUM HEALTH FOR ALL BY THE YEAR 2000 — THE CHALLENGE FOR THE NURSE

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OPSOMMING

"Gesondheid vir Almal teen die jaar 2000" is wêreldwyd as doelwit aanvaar en primêre gesondheidsorg as middel om die doel te bereik. Die vordering wat tot dusver gemaak is, is egter onrusbarend.

Meeste gesondheidstendense vandag is die gevolg van die mens se toenemende kennis en sy gevolglike optrede. Voorkoming is dus in die hande van die mens self.

Die mens benadeel sy eie gesondheid deur gedrag soos rook, alkoholmisbruik en dwelmverslawing. Ander belangrike tendense wat menslike gesondheid beïnvloed is die toename in bejaardes en gestremdes, wanvoeding, oorbevolking en genetiese, ekologiese en kulturele verliese.

Die verpleeg- en mediese beroepe het ook in die laaste tyd by die eise van die mediese tegnologie, eerder as by die basiese behoeftes van die gemeenskap, aangepas.

Om te slaag moet gesondheidsprogramme uit die gemeenskap ontwikkel en deel wees van die gemeenskap. Dit is die uitdaging waarvoor elke gesondheidswerker vandag staan.

HEALTH FOR ALL

Before discussing the influence of world trends upon health, consideration must be given to *Health for All by the year 2000 — the challenge for the nurse.*

As you will know, the World Health Organisation has qualified the word *health* in this context, as follows: *A level of health that permits the people of the world to lead a socially and economically productive life.* Some industrialised countries have slightly amended that definition to read *a level of economically productive life that would permit people to maintain health.*[1] That immediately makes us think of that tragic trend which we are experiencing, particularly in industrialised countries, but one which will have enormous repercussions on the Third World also. The trend is, of course, the increasing number of people who are unemployed and therefore experiencing something which directly militates against their achieving an *economically productive life.* In Britain alone, unemployment has become a monster — affecting the physical and mental health of millions. It is not only the numbers of unemployed persons who suffer — their parents, siblings, spouses, children and other dependants are also affected. Because of their consequent boredom, frustration and lack of appropriate outlets for adolescent energies, one most tragically also has to speak of their victims — the victims of their physical and mental violence.

In 300 B.C. Herophilus set out, not a definition of health as the absence of disease, but more dramatically described the absence of health. He said:

When health is absent.
Wisdom cannot reveal itself.
Art cannot become manifest.
Strength cannot fight.
Health becomes useless.
And intelligence cannot be applied.

In many of the developing countries of the world, we find that progress towards achieving our desired goal of Health for All is slow. In the majority of cases it is very slow. Whilst most WHO member states have enunciated plans and policies for primary health care — identified at Alma Ata, as the key to providing health coverage — health services of socially and geographically peripheral populations have not improved significantly since that clarion call to action four and a half years ago. In a recent edition of the World Health publication *World Health Forum,* Richard Smith (who is Director of Health Manpower Development at the University of Hawaii, U.S.A. — an institution which has been widely involved in the health care programmes of many developing countries), writes: *With some notable exceptions, the unco-ordinated projects in many countries today are probably of little consequence.* He goes on to say, *only a few of the many recent experiments in primary health care have been successful on a large scale and serious concern must be expressed about the present state of the primary health care movement.* [2]

At the end of 1982, the writer was working at the W.H.O. Headquarters in Geneva, preparing a report on the progress of Health for All by the year 2000 since the Alma Ata meeting four years before. From the reportings of all WHO Regions, what Richard Smith has written can only be confirmed: the picture **is** gloomy.

The second part of the subtitle *the challenge for the nurse* probably reflects, **one** of the reasons for this, for it is a well and frequently used phrase. So many symposia, conferences, meetings, organisations and publications tell us that Health for All 2000 is *a challenge* — for which every section, discipline or profession is being addressed. The trouble is that although so many people are busy throwing down this particular topical gauntlet, no group appears anxious to pick it up.

It should thus be pointed out that *the challenge for the nurse* does not refer to a group: the challenge put out is not to nursing, nor even to nurses. It is to **the nurse.** You. Me. Each one of us — educator, administrator, clinician, researcher, hospital or community practitioner, council or association member. Today, the challenge is issued on the most personal level possible — **the individual.**

WORLD TRENDS AND HEALTH

Let us now turn to the influence of world trends upon health — with particular reference to the developing countries. It is only possible to suggest some of these trends and even those, very briefly. The writer trusts, however, that they will suffice to produce a background canvas to paint some of the various settings and activities which form the foreground — always keeping in sight the focal point of the picture and indeed the whole *raison d'etre* of our existence as nurses — the patient, him or herself. It is emphasised — the individual nurse and the individual patient or the individual community. For the opposite denotes a trend which can be seen as another reason for our apparent failure. These days we are frequently subjected to exhortations concerning imaginary homegenous groups somewhat patronisingly named *the elderly, the handicapped, the mentally retarded, the poor* or *the disadvantaged.*

At this time, when the world — including the majority of United Nations and other international agencies — is already half-way down the collectivist slope, it is interesting to note that the two most popular people in the world are said to be the Pope and Mother Teresa of Calcutta. Of the latter, we are told that when she was asked, *Would you agree that one of the main troubles of the day is that 20th century man always thinks in terms of collective solutions?* She replied, *I do not agree with the big way of doing things. If we wait for numbers, then we will be lost in numbers.*

MAN'S INCREASED KNOWLEDGE AND CONSEQUENT BEHAVIOUR

Almost all the health trends appear to be man-made and are the result of man's increased knowledge and consequent behaviour. With the exception of natural disasters, such as floods, spontaneous fires, earthquakes, cyclones and the like, man himself is responsible for his present disastrous environmental conditions, his current demographic changes and, indeed, in many instances for his own ill health.

Man victim of his own behaviour

Just a cursory glance at the most prevalent diseases and conditions in the world today show that unlike many patients of fifty or so years ago, who were often the victims of outside agencies, today's patients — with the exception of those with pathological changes brought about by ageing, and others who are congenitally disabled — are often victims of their own behaviour. One has only to think of heavy smokers with cancer, other addicts of alcohol and non-therapeutic drugs; people mutilated or disabled by traffic accidents; young girls with septic abortions; people of all ages with sexually transmitted diseases; business executives with coronary heart disease, and the large numbers of elderly people alone or even isolated and with disabilities or handicaps which could have been controlled or even prevented at the impairment stage. To put it another way, much of the prevention of present day diseases and injuries is in people's own hands. Therefore, as health workers, we must work **with** them and not just **for** them. But, as yet, we have not succeeded either in motivating them to maintain health, nor have we developed attractive, appropriate and comprehensive learning programmes so that they know how to. Man is also not only injuring himself, he is injuring his fellow human beings. Man-made disasters, wars and conflicts, imprisonments and torture are causing deliberate physical and mental injuries to millions. They, together with some of the natural disasters in recent years, have led also to migrational trends which in turn have brought not only health and social problems of housing, feeding and shelter, but have also affected the pattern and transmission of disease throughout the world.

Air travel, for business and pleasure, has likewise meant that communicable diseases such as malaria, or lassa fever once thought of as being confined to tropical climes, can now affect a suburban family living in a sophisticated community in one of the so-called developed countries.

While man has learned how the balance of nature works, he has also learned how to frustrate its operation. By his mastery over bacteria, Pandora's box has been opened, out of which has come a population explosion far beyond the existing logistic means of food supply and its twin spirit pollution. Man cannot close the lid any more than could Epimetheus. All he can do is to come to terms with the new problems and adapt his thinking and his planning to harness and control the new monsters.

Increase in aged and disabled

The reduction of infant death rates has had three important effects. First, in the more developed countries where the reduction has been most startling, there has been access to family planning services, albeit haphazard. In these countries the birth rate has fallen to match the death rate and the ages of populations are rising slowly because people are living longer. If this process continues we know that developed countries can look to the day when half their adult populations will be past retirement age, and if the present trends in this field are allowed to continue, with all the social, economic, and health problems longevity brings. It has also been realised that more than one third of the world's population in the year 2000 has yet to be born. 2,500-million of the projected 6000-million will be under 21. Who will be able to provide in the needs of the old?

Secondly, while these countries have been remarkably good at dealing with the diseases people acquire, they have been less good at dealing with those they inherit. Once upon a time intercurrent infection kept down the number of people with severe defects, but now increasing numbers of physically and mentally disabled children are nurtured to adult life. Their care involves great demands upon sparce resources. Premature babies or frail deformed children are cocooned until they are fit to leave their expensive hospital units and life-supporting equipment and are then often destined to live for the rest of their lives in an institution which rates, in the majority of health services, as the lowest priority.

Having willed the **end** — survival — the community has brought upon itself a duty to provide the **means** of a decent life. Mere survival is not enough.

At the other end of the life span, advances in scientific technology mean that with the aid of organ transplants, clever machines and all

the ironmongery of modern medical practice, the frontiers of death have been pushed back. Having assured that we live on borrowed time, does the achievement prove anything other than professional prowess and surgical dexterity? How often are limited health care resources allocated to fund the intellectual exercises of researcher and practitioner? Are we not caught in an interregnum? . . . A kind of moral and demographic no-man's land?

Still concerned with saving life at any cost, we find ourselves with too few resources left over to ensure the quality of that living. At the present time in developing countries the problem, in Indira Ghandi's words *is not so serious*. But even she, in her message last summer to the U.N. Assembly on ageing, points out that it is likely to be serious very soon. Mrs Ghandi goes on to explain why . . . *Old people have been revered as elders and sheltered within the joint family. Being in touch with several generations, seeing their families grow up around them keeps up their interest in life and issues. But industrialisation and modernity are beginning to disturb the pattern. Even here (India) the respect and concern for the old, which were so much a part of our tradition, is weakening.*[3]

Changing family pattern

The very fact that Mrs Ghandi, like Mrs Thatcher, is a Prime Minister, focuses our attention on another strong influence on health. That is the changing family pattern in industrialised countries due to the so-called liberation of women. The employment of wives and mothers and the appointment of some to high office has meant that fewer are at home to care for the very old, the very young and for the sick or disabled members of the family. Yet in the Third World, women have always undertaken work other than that of a wife and mother. In India, for example, women account for nearly half the labour force in the building industry. In fact, women put in two thirds of the world's working hours yet they receive 10% of the world's income and own less than 1% of the world's property. These facts are not produced by a woman's organisation — they are produced by OXFAM, the U.K. based international relief organisation and a charity, first set up to help with some of the problems caused by famine and malnutrition.

Malnutrition

This brings us to another great influence on the health of millions. Malnutrition is one of the greatest scourges of developing countries. In today's semantics, there are gradations of hunger — famine, starvation, undernourishment and malnutrition. On mission for various organisations the writer has seen many of them — acute famine in East Africa, chronic famine and starvation in south-east Asia and the Pacific. She has seen hundreds, if not thousands of children malnourished or undernourished. Some she regrets to tell, have been the victims of relief agencies who have given out belly filling grains and other carbohydrates, deficient in protein, vitamins and enzymes. She has also seen women who themselves are nothing but skin and bone, trying to give nourishment to their babies. We all know how important it is to impress upon mothers the value of breastfeeding, but after seeing women crumpled by osteomalacia, one cannot ignore the draconian law of nature by which a foetus is nourished and an infant is fed at the expense of the mother's skeleton. Let us consider a few of the trends which have led to this.

Before the Second World War, central Java was a proverbial rice bowl, able to feed its own people and exporting surplus rice to other Asian countries. After the War, its already intensive cultivation was intensified. Peasants responded to new ideas presented to them, and were diligent in their husbandry. They increased irrigation, and they responded to exhortations about *green manure*. They planted fish with their rice, putting fingerlings into the wet paddy and harvesting sizeable fish when the paddy was drained. They thus increased productivity by 25% in 10 years. But during those same years the population increased by 30%. That 5% difference meant chronic starvation with its stigmata of marasmus, kwashiorkor, hunger oedema, dehydration, blindness and other manifestations of vitamin deficiencies. Similar stories can be told about countries of south-east Asia, Africa and Latin America.

In Britain, and in many other industrialised countries, the majority of people have too much food in general and too much of certain articles of food in particular, and excesses of sugar and unsaturated fat are thought to be pushing up the incidence of diabetes, coronary disease and tooth decay. At the same time about 40% of the world's population eat less than 2200 calories per day and many 1500 or less. The picture regarding protein consumption is worse and is growing even more gloomy.

The result of these dietary failures is that in large areas the main source of ill-health is basically nutritional and this predisposes to infection. In Africa, kwashiorkor is widespread; in rice-eating countries of Asia, vitamin B deficiency produces beri-beri and many other less bizarre symptoms, while in maize-eating countries, pellagra is still by no means unknown. Rickets is still to be found where children are deprived of a balanced diet and where custom shields them from light. Iodine deficiency is thought by many experts to be the cause of a good deal of feeble-mindedness and cretinism in the world. General a-vitaminosis and underfeeding accounts for much ill health that is unclassified, but which plays an important part in the maternal and infant mortality rates throughout the world.

Overpopulation

What the optimum population of the world should be, is hardly a profitable speculation. The purpose of child spacing is to limit population to the resources available. At the present time, many countries have slums and shanty towns teeming with people who are unemployed, ill-educated as well as underfed. During recent decades, there has been an enormous increase in the number of these people in the poorer countries of the world. This growth is continuing and in some instances accelerating. Today, more than one third of the people living in cities and in developing countries live in slum dwellings.

The main reason for this growth is that large numbers of people are moving from the rural areas in search of work and a better life. Migrants, industrial workers, farm workers, seasonal workers and displaced persons are a growing population, all contributing to the swelling of urban slums. If present trends continue, in 30 years' time, Calcutta

will be a city with sixty-million people, while the total land area covered by **cities** will occupy one fifth of the world's surface. Experiments with animals show that as living space becomes more cramped, so the tendency to aggression rises. At a certain level of stress and over-crowding muskrats kill each other. The continuous herding of communities into insalubrious cities portends a rise in crime and violence — a rise that is already sufficienty manifest in many cities of the world as to be extremely disturbing.

Drug abuse

Another effect of over-herding, unemployment, poverty, malnutrition and other stresses, is that man has tried to find solace in his own personal form of pollution — tobacco, alcohol, or drugs. It is his last *escape-route*. Drug abuse is not a new phenomenon — it has existed ever since man discovered narcotics. Use and misuse have existed beside each other for centuries. Up to a few years ago, commissions and conventions, including the famous review at the 1931 Bangkok Conference, were mainly concerned with opiates and cocaine and these are still the subjects of the principal pre-occupation of international control. But change is the essence of life and the pattern of drug abuse is no exception to the rule. There have been periodical changes in the past, but recent years have witnessed the most radical change of all. This has been the startling spread of misuse of cannabis and of other drugs which affect the central nervous system — the stimulants, the depressants and the hallucinogens.

The greater medical profession (which includes nurses) is not entirely blameless. An example is the manufacture of and prescriptions for drinamyl in the early 1950s which ushered in the pep pill era among teenagers. The same period also saw the indiscriminate use of antibiotic drugs which has led to the change in some bacteria from drug susceptibility to drug resistance. There has also been widespread handing out of barbiturates, sedatives and hypnotics.

Apart from medicinal, there is an increase in industrial, political and social uses of drugs. Greater productivity in the farming industry by the administration of drugs to promote growth of farm animals is an example of one, and following the dictum that war is an extension of politics, chemical warfare agents are an example of another. Social drugs are those which are used non-medically, and by self-administration, with the intention that the effect will alter a person's mood and mentality. This category includes many substances of widespread every-day use — tea, coffee, alcohol and tobacco — which for better or for worse, are interwoven into the fabric of our societies.

As was said at the beginning, it is impossible to cover all the present day trends which influence our health. One has only to look at some of the issues being discussed in our daily newspapers, as well as in our professional journals, to realise the effects of knowledge today. The misuse of psychiatry, mass medication (fluoride added to water, vitamins to margarines and calcium to flour), marital pathohology, genetic engineering, the growth of the trades union movement, the economic recession, the rights and the health of prisoners and detainees, the practices of euthanasia and abortion.

GENETIC, ECOLOGICAL AND CULTURAL LOSSES

The above deals mainly with the effects of man's behaviour and health of his increased or newly acquired knowledge. Brief mention should be made of the influence upon our health of genetic, cultural and ecological losses.

In many respects, industrial man may be considered to be an aggressive and successful weed strangling other species and the weaker members of even his own. We live in a world of exploitation. Resources are finite and soon even our present day, all-powerful society will be forced to be conservationist. It is suggested that people who live in areas where conservation is necessary have much to teach us. These people, to a large extent, are represented by the remaining tribal groups who have managed to avoid cultural and physical destruction by living in areas of the world which the ecologist calls *marginal*. This includes the extremes of temperature and moisture gradients with their correspondingly more delicate balance of nature. Now, however, we with our newest technological feats stand poised to conquer this small final frontier.

Appell has highlighted the alarming rate at which both the resources of our eco-system and the culture-specific knowledge relating to the resources, are rapidly being lost.[4] The most commonly quoted example is that of our fellow mammals. During the last 2000 years, 110 species have ceased to exist. While in the last 200 years, 600 species have reached the point of extinction. Rather less obvious, but of great importance, has been the contemporaneous drastic loss in species of flora. The loss of varieties of dry rice in south-east Asia alone is colossal. Closely related to this is the loss of knowledge stored up in the fragile form of tribal culture and traditional medicine. It takes only a few decades to lose all that has been gained in thousands of generations.

Lewis Thomas, a biologist and physician, Director of the Sloane-Kettering Cancer Centre in New York, begins his remarkable book *The lives of a cell* by showing that life exists only in so far as different organisms live in a symbiotic relationship.

It is known today that three thousand-million years ago the mitochondria, the sub-microscopic particles through which the cells of our body utilise energy and without which we would be unable to contract a muscle or express a thought, were separate organisms, probably bacteria, just like the plant chloroplasts that control photosynthesis and liberate the oxygen we need to live. Mitochondria and chloroplasts began to live in symbiosis with other organisms. They have now become essential for the life of animal and plant cells, which have themselves lost the power of living independently.[5] This is the way in which human society can be seen — for all life is a kind of symbiosis of that type. The great danger is not that man fails to adapt to his environment, but that, on the contrary, he adapts too easily.

One great problem of our time is to decide what we should **refuse** to adapt to. One example is noise. One can become habituated to noise but only at the expense of damage to the auditory organs. Likewise the body can also become accustomed to air pollution, thanks to the bronchial secretions which protect it, but in the long term emphysema or chronic bronchitis will result.

Hippocrates thought of health as an expression of the **harmonius** balance between the environment, human nature and the individual's way of life. He described a good physician as one who *has a due regard to the seasons of the year and the diseases which they produce; to the states of the wind peculiar to each country and the qualities of its water; who marks carefully the localities of towns; the surrounding country, whether they are high or low, hot or cold, wet or dry; who moreover, takes note of the diet and regimen of the inhabitants and all the causes which may produce disorder in the animal economy.*

Medicine and nursing encompass that complex relationship of man, his environment, his culture and physical and social pathogens. It is not lack of highly trained health workers, money and equipment that are the major problems preventing us from achieving Health for All 2000. The basic problems lie at the preventive level.

MEDICINE AND NURSING

The last group of trends now concerns the two main categories of health workers — doctors and nurses.

Over the centuries nursing has developed as a response to changing social needs. In recent years it has merely adapted — like man, too easily — for it has adapted not to communities' needs but to the demands of medical technology.

During the role-finding exercise that most categories of the greater medical profession have undergone during the last decade or so, nurses have suffered more than any group and we ourselves are largely to blame. In hospitals and other institutions we have caused our discipline to suffer a kind of exchange transfusion, accepting tasks traditionally regarded as the province of doctors and rejecting basic nursing care. Today, nurses almost everywhere, undertake a disease, hospital and medicine orientated education in order to become twiddlers of knobs and dials, watchers of monitoring machines, dispensers of miraculous drugs and assistants at existence-prolonging surgery.

Yet primary health care was described by a working group meeting recently as an elaboration of the traditional roles and functions of community nurses. By this approach nurses have opportunities and the means by which they can help to achieve for people an enjoyment of life in their own homes with or without disability and especially enable women and the very old to maintain — or obtain — health. It is a tragic fact that in many countries of the world few appear to be interested.

Let us turn to doctors. The lay population increases daily whereas each new physician spends, not just nine months, but at least five years in the making!

If all doctors were involved in the provision of direct health care and if they were all evenly distributed the world would have one for approximately every two and a half thousand people — a very manageable ratio. The real situation is otherwise. Richer countries have one thousand-million people among whom are one-million physicians. The rest of the world contains 2½ times as many people and has approximately three hundred thousand medical practitioners.

A further complication is their distribution within a country. In developed countries doctors are not too unfairly divided between rural and urban areas, and for the majority of people there is little difficulty in travelling to a centre of medical excellence when they need to. But in developing countries, where large numbers of people live in rural areas and where transport is difficult and expensive at best and non-existent at worst, health professionals tend to remain in the urban setting for which their so-called *elegant* training has equipped them, close to modern technology and medical facilities and where they can enjoy the comparatively high standard of living and working conditions. There are therefore many parts of the world where as many as hundred and fifty thousand people share, or rather do not share, the services of just one doctor. In some places this ratio may change to the incredible and shameful one and a half-million human beings per physician.

Still another trend adds to this deprivation, that of international migration of both doctors and nurses. So the situation has developed whereby doctors and nurses can be attracted by professional and material rewards into leaving their own and poor countries to fill gaps in the kind of health services sought by the more prosperous.

The trend has been of course to take just one of the eight aspects of community or primary health care as described in the Alma Ata report and to use primary health care workers for this. Because of the very nature of key primary health care components, many were vague and purposely flexible. The injunction to promote community participation therefore was open to national interpretation. It was also the easiest and the most economic to implement. The narrow objective of the majority of developing countries appears to be *let us at least be seen to be involving the community.* As a result varied programmes to develop a basic level of health worker have been set in motion.

Few have given attention to the absolute necessity of an appropriate infrastructure with referral and supervisory capacities, to the criteria used for selection of suitable personnel, to the logistics for support and supplies, and to the importance of living and working conditions/facilities so that the workers can practise their teaching. Illich's gospel of automomy and the individual's responsibility for its own body and health underscores the other WHO slogan *Health by the People.* Few have stopped to consider whether it is possible, on a significant scale, for there to be health by the people unless their government's are also actively promoting health for the people and their professional health workers are actively supporting health **with** the people.

Health care should entail a long term programme involving the basic principles of identification with the community; by sharing of ideas and decisions; and recognition of the influence of past culture, as well as current trends. Unless a health programme develops from within the body of the community and is of the community, it will not succeed. That is the challenge — to each and every health worker in the world today.

REFERENCES

1. *Primary health care* (1978). Report of the International Conference on Primary Health Care, Alma Ata, USSR. 6-12 September 1978. Geneva. WHO.
2. Smith R.A. (1982). Primary health care — rhetoric or reality? *World Health Forum.* Vol.3 No.1 1982.
3. *Report of the World Assembly on Ageing.* Vienna 26 July to 6 August 1982. A/Conf. 113/31. United Nations.
4. Appell, G.N. (1974) Partial social models and their failures to account for the pernicious effects of development. *Fields within Fields.* New York. World Institute Council.
5. Thomas, Lewis (1974). *The Lives of a Cell — Notes of a Biology Watcher.* New York. Viking.