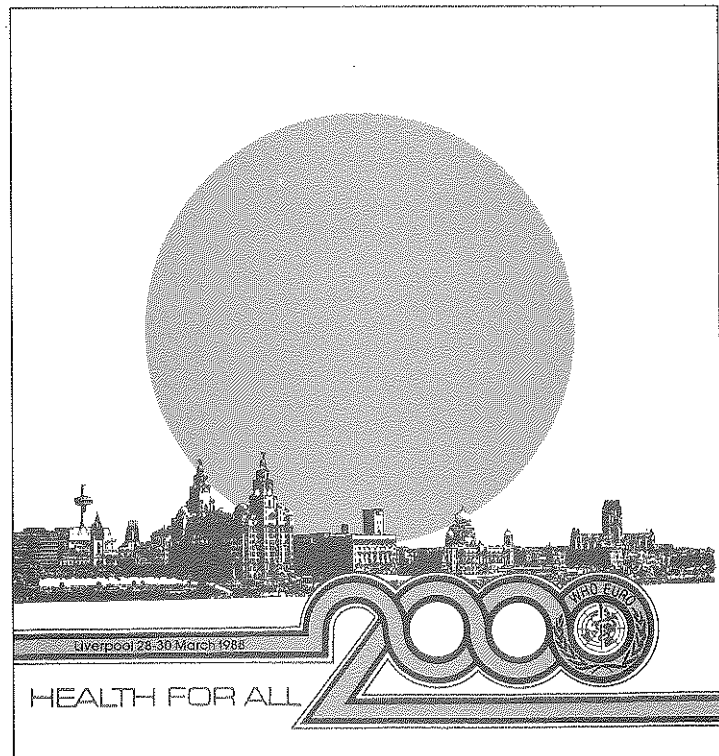


Proceedings of the first United Kingdom Healthy Cities Conference

Edited by
Dr John Ashton and
Ms Lindsay Knight

Liverpool 28-30 March 1988



City 2000

by Adrian Henri

In this city
filled with the sound of alarm-bells
police sirens howl
like animals mating,
vagrants huddle together
in cardboard cities;
in a damp bed-sit
a girl dreams visions of Patmos,
cool white spaces,
the dusk gleam of an icon,
THE NIGHT
written in dripping white
on a railway wall.

swarming city,
city full of dreams ...

In this city
the sound of the bulldozer is banished from the
land,
swingeing custodial sentences imposed
on anyone designing a building
finished in shuttered concrete.

Carparks burst into flower
narcissi, blue-flags, lilies-of-the-valley
pushing up through the tarmac,
the streets heaped with yellow marigolds.
All planning decisions are referred to
the postman Ferdinand Cheval
Charles Rennie Mackintosh
and
Antoni Gaudi
(all speaking through a medium).

This city
no longer an embarrassment,
the too-much-loved-mother
at the School Speech Day,
lipstick blurred,
smelling of gin-and-lime.

As the sun rises over
this city,
your morning face on the pillow
through strands of dark brown hair,
the river lying back open to the day,
the lace curtains of terrace-houses
sing like schoolchildren.

This city
is your mother,
and your lover.

She is your first thought,
and your last.

She is your future,
and your past.

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**Dr John Ashton
and Ms Lindsay Knight**

**Department of Public Health
University of Liverpool, 1990**

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Hoisting the WHO flag at the start of the week

Foreword

Dr John Ashton

*Senior lecturer in Public Health, University of Liverpool;
Liverpool Supporting Centre, WHO Healthy Cities Project*

This book is a collection of the papers presented at the first United Kingdom Healthy Cities Conference which was held in Liverpool in March 1988.

The Conference was attended by some 400 delegates from Britain and beyond. Delegates mostly came in mixed groups of five or six representing different sectors from towns and cities. They included politicians as well as officers, people from the voluntary as well as the statutory sectors. A deliberate attempt was made to enable active members of community and neighbourhood organisations to attend by creating an allocation of free places. This was seen as an important part of the structure of the Conference in keeping with the participative philosophy of Health For All.

In the event the Conference was grossly oversubscribed and several hundred applicants had to be turned away. Such is the level of interest in Health and in our cities at the present time.

Relationship of the conference to the Healthy Cities Project

The WHO Healthy Cities Project was initiated in the winter of 1985/86 with the first European Conference in Lisbon in April 1986. The original intention was to have a small group of five or six cities which would collaborate in assessing the health of their cities. They would then develop local policies to improve city health in line with the spirit and philosophy of the Health For All strategy adopted by WHO in 1981.

The emphasis of that Strategy is on reducing inequalities in health through the reorientation of medical care towards primary and community care, prevention and health promotion. Much greater public participation and intersectoral collaboration are seen as being essential to the process of improving health. More recently the European region of WHO has established 38 specific targets for Health For All drawing on notions of management by objectives. The way these have been developed is in fact more radical than many have perhaps appreciated – for the first time it is proposed to plan for health rather than solely waiting for sickness and planning to treat and manage it.

The original idea of a number of cities developing Health For All strategies was rapidly overtaken by events. The project has tapped into an enormous pool of energy and civic pride which still exists in towns and cities despite the concentration of power to national government which has proceeded remorselessly in many countries in recent years. There is an enormous groundswell of public feeling

in favour of more decentralized and accessible decision making. At the same time people seem now to be much more prepared to accept supranational organisation and even government and to take a world view, particularly with regard to environmental issues. It is in fact the national level which is about to be squeezed.

The way in which the Healthy Cities project has evolved since 1986 reflects these trends. As part of a global overview of health and of planetary ecology it has deliberately sought to put flesh on the idea of thinking globally and acting locally. By so doing it is believed that policies will be developed which are consistent with Health For All but which are also apposite to local culture, tradition and history. In due course policies at the more macro-level should emerge from the collaboration of many cities around the world. The use of the logo of the Healthy Cities project reflects this idea in a vivid way having now been adapted to local cityscapes around the world whilst maintaining the corporate image of the original project.

The original 5 or 6 European cities rapidly became 25 and many of these spawned national networks of cities committed to the local implementation of Health For All. The United Kingdom network alone includes some 75 towns and cities. By 1988 projects had been established in Canada, the United States, Australia and New Zealand and in 1989 two other WHO Regional Offices – PAHO in Washington with a large territory which includes North, Central and South America, and EMRO in the Eastern Mediterranean and North Africa – had inaugurated their own projects. It has truly proved to be a fertile idea. With the programmatic approach to the 38 targets which is inherent in the Healthy Cities project it is likely that a very large number of cities around the world will have Health For All policies in place by the mid-90s.

The Liverpool conference has turned out to be one of a series of similar national conferences which have now been held in many countries to promote and provide a focus for the dissemination of the Healthy Cities approach. In the case of the Liverpool conference the organisation drew directly on the goodwill and involvement of the many sectors which had become involved in the Liverpool Healthy Cities intersectoral committee. The members of that committee also galvanised around the production and endorsement of the Liverpool Declaration on Health in Cities which was adopted by the conference. A conference addition to the Declaration was a specific Black Declaration stressing the special health needs of the local Black population and also a statement by representatives of community groups.

The Liverpool conference programme was broad and extensive. It required a stamina of the delegates with more than 20 major papers in three days, yet such was the quality of the papers that the full delegation remained in place throughout, stimulated and thoroughly stretched. The weather was kind and on the second afternoon the site

visits to models of good practice around Healthy Cities themes took place in magnificent sunshine and were one of the highlights of the conference. By the end of the third day it was clear that the conference had more than fulfilled its purpose in establishing a solid base for the Project in the United Kingdom.

Commentary

Tony Delamothe MD MRCP

Assistant Editor British Medical Journal

Liverpool has a standardised mortality ratio 29% above the national average and was identified in the Black report as one of 10 health districts with high concentrations of ill health. Merseyside has had the highest rate of unemployment of any English conurbation in every decade since the 1950s and the city has the worst economic problems of any in England. The European Community gave Liverpool the highest "problem" score of 103 European cities.

Healthy Cities

The main purpose of this first United Kingdom Healthy Cities conference was to bring people from towns and cities already committed to the principles of Healthy Cities (fig 1), such as Coventry, Leeds, Manchester, Oxford, and Sheffield, and other interested parties to help set an agenda for the new a public health in urban areas. Local health authorities, councils, the University of Liverpool, Liverpool Polytechnic, King's Fund, the Health Education Authority, and the World Health Organisation all participated in the conference's planning.

There is nothing new about attempts to reform cities. In Britain in the 1840s many towns (including Liverpool) joined the Health of Towns' Association, which was responsible for some of the sanitary reforms of the nineteenth century. That was the "old" public health – paternalistic, hierarchical, "top down," its agenda set by experts. The "new" public health, which the healthy cities movement represents in an advanced form, differs in that community participation is expected and health promotion is used to help people increase control over their health. As

-
- The right to health
 - Equity in health
 - Community participation
 - Intersectoral collaboration
 - Health promotion
 - Primary health care
 - International cooperation
-

Figure 1: Principles of health for all

Sir Donald Acheson, Chief Medical Officer of the Department of Health and Social Security, told the conference, "Behaviour conducive to health and effective medical interventions even working together are not enough. Social and environmental policies which support health are also needed."

A belief that the health of people in cities cannot be divorced from the a health of cities underpins the healthy cities project – the strategy adopted by the World Health Organisation's Regional Office for Europe to implement WHO's principle of "health for all by the year 2000." It is the logical choice for Europe: three in four Europeans will be living in cities by then.

The project was begun in 1986 with the hope of creating a network of cities that place health high on their social and political agenda. WHO's participation is intended to last for five years, by which time the organisers hope that practical models of urban health promotion based on "health for all" will be commonplace. WHO has so far designated 25 project cities (fig 2), with Liverpool and Gothenburg responsible for providing resources for participating cities and evaluating the project. These project cities are meant to help with the introduction of national networks.

Some versions of local

Much of the impetus for the conference came from Dr John Ashton, senior lecturer in community health at the University of Liverpool, director of the WHO Healthy Cities Supporting Centre at the University of Liverpool, and one of the founders of the healthy cities initiative. In his speech explaining the healthy cities project Dr Ashton suggested that although consensus may have broken down at a national level, it had increased locally. Elsewhere (with others) he has argued that "the city is often the lowest administrative level which can marshal the resources and has the political mandate and authority to develop and implement intersectoral approaches to health."² This emphasis on the "local" recurred in several speeches.

Professor Graeme Davies, Vice-Chancellor of the University of Liverpool, spoke of how the philosophies of

universities were changing with a return to roles more in keeping with the ethos of their foundation, which in the case of his university was explicitly local.

Localism as a philosophy was developed in a paper presented by Dr David Morris, director of the institute for Local Self Reliance in Washington, DC. He argued that the way we have organised our economies has disorganised our communities. His suggested solution was EF Schumacher's goal of self reliance: local production for local consumption from local resources. "We can still look outward for good ideas," Dr Morris said. "But many of our best ideas will come from our own communities for the obvious reason that we ourselves know what works best in our unique conditions."

Dr Rod Hackney, president of the Royal Institute of British Architects, and Mr Tony McGann of the Eldonian Community Association showed what that might mean when put into practice. Dr Hackney is a pioneer of "community architecture" in this country – he believes that when it comes to buildings the experts are the locals. Community architects should live on site, acting as sympathetic enablers for those without access to power or influence. "Younger architects have a debt to repay society," he said.

The housing cooperative of which Mr Tony McGann is a member is in Vauxhall, which suffers from the poorest health in Liverpool (fig 3) – "It was the worst environment in Europe. It didn't matter who was in power: everyone forgot us." A tenants' association was formed in 1978 when the city council declared that all pre war tenements would be demolished and refused to say where their occupants would be rehoused. Having watched other city dwellers being relocated to the outskirts of Liverpool, the people of Vauxhall refused to move. Many fights later, with High Court cases, Alsations, and the stacking of local council wards all featuring, Vauxhall has preserved its community and replaced its housing stock – providing jobs for its inhabitants in the process. It is now the largest "new build" housing cooperative in Europe and has just started its first business venture – a plant nursery on the approaches to the Mersey Tunnel.

The model that community architecture offers – of a community deciding its own needs and then inviting in professionals for their skills on the community's terms – is of relevance to the healthy cities project, and for more than just housing. Some of the benefits are obvious, but so too are the problems it produces, and these problems emerged as the themes of most of the half-day workshops.

The world outside

The new emphasis on seeing both problems and their solutions in local terms has its limitations, as many speakers pointed out. There is a wider context that needs to be addressed – that of national government policies.

Sheila McKechnie, director of Shelter, argued that this government's current housing policies are further dividing British society. "Those on low incomes or state support have now fewer and lower quality housing options than they had 10 years ago. Some have no options at all. The effect of this will be further to compound the health divide in Britain as poor housing again emerges as one of the major negative health determinants of the poorest sector of society."

Other speakers argued that sound government policies promoting health were a prerequisite for any local initiatives. Mr Bob Tanner, chief executive of the Institution of Environmental Health Officers, said that, although the relation between unleaded petrol, environmental lead level, and its consequences for health were all well established, it had taken until the 1988 budget to introduce a price differential between leaded and unleaded petrol (which is smaller than in some other European countries). He was also concerned by the prospect of water metering – plentiful water supplies are a prerequisite of good public health – and "the concept that city residents should have available to them only that quantity of water they can afford to buy seems quite preposterous."

Dr Mayer Hillman, senior fellow of the Policy Studies Institute, argued that current transport policy did not sufficiently recognise its impact on health; governments have favoured an expansion of road traffic (car and motorcycle

Austria Vienna	Fed Republic of Germany Bremen	France Montpelier Rennes	Israel Jerusalem	Sweden Gothenburg Stockholm
Belgium Liege	Dusseldorf Munich	Denmark Copenhagen Horsens	Italy Milan Padua	United Kingdom Belfast Bloomsbury - Camden
Bulgaria Sofia	Greece Patras	Hungary Pecs	The Netherlands Eindhoven	Glasgow Liverpool
	Finland Turku		Spain Barcelona	Yugoslavia Zagreb

Figure 2: WHO project cities

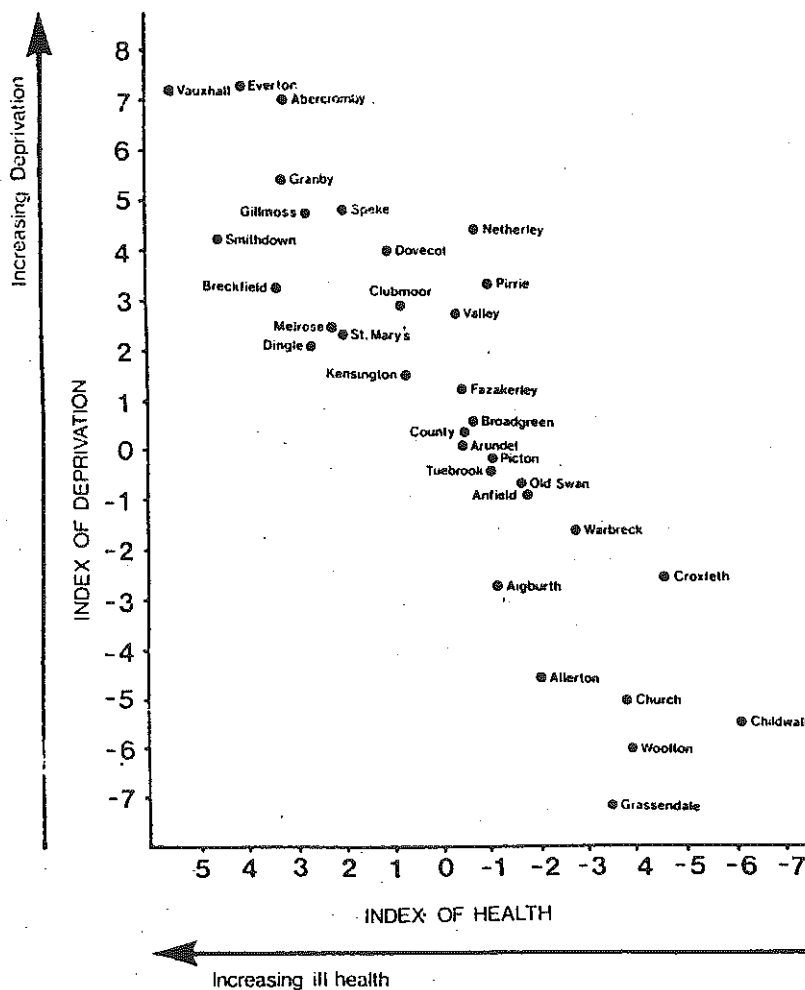


Figure 3
The relationship between deprivation and health scores on each index for Liverpool's 33 Wards. Source: Liverpool City Planning Department

mileage have increased by 40% in the past 10 years). This has a large impact on health – 100,000 deaths and serious injuries on the roads each year and noise and air pollution. According to Dr Hillman, “The underprivileged – the poor, the unemployed, children and old people – tend to be more dependent upon public transport, the service characteristics of which are generally in decline, and on walking and cycling, which is less safe in the present man made environment.”

The most trenchant attack on government policies came from Professor Peter Townsend, Professor of Social Policy at the University of Bristol. He said that in the past regional studies of a population's health and the relation between health and social class have had a powerful influence on government policy. Not only did this government fail to recognise more sophisticated and comprehensive scientific evidence than put together either in the mid-nineteenth century or the 1930s and show signs of relating that evidence to the construction of health policies, but it “has been actively promoting the growth of poverty – and therefore ill health.”

If, as the Black report had found, material deprivation played a major part in explaining the very unfavourable

health record of the poorer sections of the population, the elimination of that deprivation should have become a national objective for action, Professor Townsend argued. Instead 1988 had brought a reform of social security benefits, a budget, and the threat of a poll tax – all of which threatened to increase the economic, and therefore health, divide of the population. On the other hand, the government is one of 33 European countries that has signed the European Health for All declaration in 1984, and from Sir Donald Acheson's opening address clearly the Department of Health and Social Security takes many of these targets (fig 4) seriously. Mr David Trippier, Parliamentary Under-secretary of State, Department of the Environment, detailed the grants that the government has made to improve the environment and job prospects of the people of Liverpool.

The future

The first Healthy Cities were nominated in 1986: progress towards achieving the 38 targets of health for all have been understandably modest in such a short time. Ways of ensuring that the community's voice is heard and setting up

Health for all

- 1 Equity in health
- 2 Adding years to life
- 3 Better opportunities for the disabled
- 4 Reducing disease and disability
5. Eliminating measles, polio, neonatal tetanus, congenital rubella, diphtheria, congenital syphilis and indigenous malaria
- 6 Increased life expectation at birth
- 7 Reduced infant mortality
- 8 Reduced maternal mortality
- 9 Combating disease of the circulation
- 10 Combating cancer
- 11 Reducing accidents
- 12 Stopping the increase in suicide

Life-styles conducive to health for all

- 13 Developing healthy public policies
- 14 Developing social support systems

- 15 Improving knowledge and motivation for healthy behaviour
- 16 Promoting positive health behaviour
- 17 Decreasing health-damaging behaviour

Producing healthy environments

- 18 Policies for healthy environments
- 19 Monitoring, assessment and control of environmental risks
- 20 Controlling water pollution
- 21 Protecting against air pollution
- 22 Improving food safety
- 23 Protecting against hazardous wastes
- 24 Improving housing conditions
- 25 Protecting against work-related health risks

Providing appropriate care

- 26 A health care system based on primary health care

- 27 Distribution of resources according to need
- 28 Re-orientating primary medical care
- 29 Developing teamwork
- 30 Co-ordinating services
- 31 Ensuring quality of services

Support for health development

- 32 Developing a research base for health for all
 - 33 Implementing policies for health for all
 - 34 Management and delivery of resources
 - 35 Health information systems
 - 36 Training and deployment of staff
 - 37 Education of people in non-health sectors
 - 38 Assessment of health technologies
-

Figure 4: Targets for Health for all by the year 2000

up intersectoral committees have so far taken up much time and effort, both here and elsewhere. Turning principles into actions is the next step.

If one of the purposes of the conference was inspirational then Liverpool was the right place to come. Not only does Liverpool have a foot in both camps – as a European project city and as part of the national network, it is, as two speakers from Liverpool pointed out, the best place to appreciate what happens when the voice of local people is ignored.

There were good historical reasons for coming to Liverpool. In the 1840s Liverpool was found to be the unhealthiest city in the country and within a few years of this discovery Liverpool had the first medical officer of health,

public wash houses, and district nurses in the country. The a forerunner of the National Society for the Prevention of Cruelty to Children began in Liverpool, as did municipal housing and public parks. Liverpool's example was a great influence on the "old" public health; with this conference it seems poised to exert a similarly important influence on the "new."

References

- 1 Frazer, W. M. 1950. *A history of English public health*. London: Baillire.
- 2 Ashton J, P Grey and K Barnard. "Healthy Cities – WHO's new public health initiative." *Health Promotion* 1986; 45:319.



Delegates being received at the Town Hall

Philosophy and background

Overview

Sir Donald Acheson

Chief Medical Officer, Department of Health & Social Security

I have links with Liverpool which always make it a pleasure to return here. In this city's hey day before the First World War – or should I say its first hey day because a second will undoubtedly come – my father was a general practitioner here. I still have the pocket notebook in which he jotted down the prescriptions he used on his daily round. There were only seven medicines in those days, he said, which were any good (I won't bore you with the list) but while he was here the first effective remedy was introduced, later called an antibiotic, against a bacterial infection – organic arsenic injections for syphilis. Salvarsan, as it was called, and subsequently of course Penicillin, virtually eradicated the long-term consequences of syphilis (although we still have some 19,032 new infections a year). In 1916 the Royal Commission on Venereal Disease reported that syphilis affected no less than one person in ten in the population of Britain.

My personal links with this city date from the late 1930s. The Mersey and the ships of the Belfast Steamship Company were my way to and from school, and later to and from university. My clearest recollection is of fog; or more correctly smog; and of waiting anchored at the mouth of the Mersey for the weather to clear so that we could sail up river and tie up in Princes Dock under the shadow of the Liver Building. The virtual extinction of smog as a result of the Clean Air Act of 1968 has transformed this city and urban life throughout this country.

From these personal and family recollections I distil my first point. The story of syphilis reminds us how the key to much illness lies deep in the realm of personal behaviour and social relationships. It also reminds us both of the power and limitations of modern medical science. When we have another lethal sexually transmitted disease and no magic bullet – as in HIV infection and AIDS – how naked we are. The story of smog reminds us of man's potential, by his own activities, to render his environment hostile to health. Thus behaviour conducive to health and effective medical interventions, even working together, are not

enough. Social and environmental policies which support health, are also needed.

From the days of Jericho, cities have been unhealthy places. Overcrowding, the accumulation of human excrement and waste, industrial effluents: each has brought its own category of disease. While at least in the developed world a great deal has been accomplished to secure within our cities adequate shelter; nutrition; heating; lighting; transport; work and education, even in these areas work remains to be done. But as Byron reminds us when he writes:

*I live not in myself but I become Portion of that
around me; and to me High mountains are a feeling
but the hum Of cities torture.*

Childe Harold's Pilgrimage

Cities must also provide nourishment for the human spirit. Their planning, design and aesthetics must combat the feelings of anonymity and voicelessness, of loneliness and solitude in cities of which so many writers speak. They must support recreation; promote fulfilment and independence, and minimise alienation and violence.

Seaport cities like Liverpool, London and New York have, over the centuries, been the entry point for the immigrants who have so much enriched our culture and strengthened our commerce and industry. The first wave of immigrants to Liverpool travelled the relatively short distance across the Irish Sea. Subsequent groups came from further afield. They brought with them a different cultural and religious heritage, and naturally a strange land with a different mother-tongue and customs led most to seek out their own existing communities. This familiarity and closeness of friends and family gave, and still gives, comfort and support.

However, it brings with it its own problems. Isolation by language and social custom still exists. The inability of some to communicate with health care workers and social services leads to isolation and deprivation, and as a result,

lack of appropriate medical care and health education. Much is being done to improve access to health and social services for all ethnic minorities, and facilitators and link workers from their own background are increasingly being employed.

It is still the case today in Britain that cities, or parts of cities, contain more than their share of illness and premature death. Local authority areas of England can be ranked on the basis of the number of times they appear in the worst 20 areas across a large range of the important causes of mortality. Areas which are “top of the league” (as defined above) for more than 20 large categories of mortality (1979-83 figures) include parts of Merseyside, Greater Manchester, Tyneside and Teeside. At the other extreme, much of Devon and Dorset do not appear at all at the top of the league. In fairness, I must add that, as mortality data derived from Standardised Mortality Ratios (SMRs) are heavily weighted by the experience of older people, this picture reflects to some substantial degree urban conditions several decades ago.

But in view of the global remit of the World Health Organisation, we must place the Healthy Cities Initiative in its wider context. We must remember that, by the end of this century, it is calculated that 50 per cent of the world’s population of three billion will live in cities. In many parts of Africa, Asia and South America, these already include vast and rapidly growing accretions of shanty towns where millions of people have only rudimentary shelter, and no access to the other prerequisites for health – such as safe water and adequate nutrition.

So far I have dwelt upon the negative side of cities – their faults, shortcomings and problems. But cities are, of course, also crucial to society and its future development. They are centres of much of our corporate wealth; of political power; of culture; of art and of religion. I cannot do better than to quote from a document prepared by the European Office of WHO: “Despite prophecies that the cities are doomed they remain in the front line of innovation and change; they continue to be the focus for the energies of youth and, for many, of our dreams of an urban Utopia.”

The basic idea, which emerged from the WHO Lisbon conference in 1986, to exploit the cities as a paradigm for public health is in my opinion a brilliant one. This is because cities are, and always will be, in the forefront as places of innovation and as seats of power and influence; as well, regrettably – often – as focuses of poverty and disease. I congratulate those who have contributed to this idea and in particular John Ashton of the Department of Public Health of this University and Ilona Kickbusch of WHO.

At the present time there is an enormous renewal of interest in Public Health. Building on the Health For All strategy, my Secretary of State in a recent speech referred to the potential benefits of developing a more comprehensive health plan for the future, based on a portfolio of

health indicators which will assist in the definition of long-term goals for improvement in the nation’s health. He also highlighted our lack of information on health outcomes and pointed out some of the gaps in our knowledge – for example, about the prevalence of high blood pressure in the population, and its treatment and levels of blood cholesterol.

The White Paper on Primary Care Services currently before Parliament raises some issues which are relevant to the Healthy Cities initiative. Prevention and health promotion have climbed higher on the agenda, and there is a new emphasis on consumer choice and multidisciplinary working. Julia Cumberledge’s neighbourhood concept, whereby community nursing is organised on a geographical basis, and the proposed new incentives to attract staff into deprived areas are also relevant.

The “Look After Your Heart” campaign launched in 1987 jointly by the DHSS and the Health Education Authority illustrates the key roles of the voluntary bodies, the media, and employers – the latter are literally queuing up to be “signed up” to introduce healthier restaurants and smoke free areas in the workplace. The Environmental Health Departments of Local Authorities have been crucial in the “Heartbeat Award” scheme – encouraging restaurants and butchers to qualify for special shop window certificates.

I shall conclude by mentioning briefly a recent published report – entitled “Public Health in England” – which is currently being considered by ministers and which is relevant to the work of this conference. Although we were invited in our terms of reference to give special emphasis to the control of communicable disease and the future of what we recommend should be called the speciality of public health medicine, we were also asked to consider the future development of the public health function. We followed a definition of public health which closely follows that of WHO in 1952:

“The science and art of preventing disease, prolonging life and promoting health through organised efforts of society.”

And we interpreted our remit as being concerned principally with three things:

- to improve the surveillance of the health of the population centrally and locally;
- to encourage policies which promote and maintain health; and
- to ensure that the means are available to evaluate existing health services.

Amongst other recommendations, we propose that to help in the determination of priorities, each health authority should annually publish a report which defines the principal health problems of the population it serves. This report should also be the basis for evaluation of progress in solving the problems and we see indicators of outcome as a key tool of the new public health. The annual report, which should be published, should be produced in collabo-

ration with the local authorities and Family Practitioner Committees who together make up the triad of statutory agencies concerned with health at local level. But we also emphasise the vital contribution of the voluntary sector, consumer groups, the local media and industry, and trade unions, and call for closer collaboration between them. The involvement and commitment of the individual man, woman and child is also crucial.

But a comprehensive intersectoral approach to public health demands a matching interdisciplinary approach to education and training. We therefore devoted a whole chapter to this aspect of the problem. Quite apart from the duties of schools and colleges in educating future generations, the evidence before us indicated an urgent need for a review of the training of all professional people involved in public health: not only doctors and nurses but environmental health officers, health educationists and, not least, general managers. We recommend that the relevant institutions and professional bodies should work out how best to achieve multidisciplinary collaboration and consider amongst other things the possibility of establishing a multidisciplinary school, or schools, of public health. The

need for a national school is obvious but there may also be a case for some regional schools on a smaller scale.

I congratulate the City and University of Liverpool on the prominent position they have taken in this Healthy Cities project, and in the way they have involved all sectors of the community in a single coordinated effort to secure health for all. As far as the role of my own profession is concerned medical care, or in other words effective interventions based on medical science – so much more beneficial now than in my father's time in practice here – will in future increase further its range of benefits. But, I venture to suggest in the city of William Henry Duncan, there will remain, shorn of the old paternalism and hierarchical approach, also the need for a person “whose knowledge and skills include not only an understanding of the structure and function of the human body in health and how it is affected by disease, and firsthand experience of clinical practice but also special training and experience in epidemiology” – in other words – a public health doctor. After all, the God of medicine, Aesculapius, had two daughters: Panacea; and Hygieia!

Environmental health in urban areas

Eric Giroult

*Regional Officer for Environmental Health Planning and Management,
WHO Regional Office for Europe*

Historical background

The impact of environmental conditions on human health was recognized by the early public health pioneers, as for instance Chadwick, in low-quality housing developments resulting from the industrial revolution. At that time, the knowledge of the aetiology of diseases was limited, but clear evidence had shown low health status to be associated with poor housing and poor environmental conditions in urban areas. After the cholera epidemics in Europe in the 1840s, the role of water supply and excreta disposal in the transmission of this disease was identified, then the correlation between tuberculosis incidence and cold and damp dwellings was established, then the link between rachitis and insulation.

During the late 19th century and the early 20th century, the scientific knowledge regarding the environmental aspects of the transmission of communicable diseases increased, and more attention was paid to environmental factors contributing to chronic diseases. Architects and town planners started to work on designing more healthy towns and dwellings, and their work was consolidated around 1930 through “Athens Carta on Town Planning”,

which actually defines the “functional city”. This model of the “functional city” is outdated today because to some extent it disregards the sociological factors. It has, however, had the merit of advocating the creation of a safe and healthy urban environment, and it dominated the pattern of European city reconstruction after the Second World War.

Following episodes of acute air pollution at the middle of the twentieth century, the focus of urban environmental health moved to chemical pollutants and their impact on chronic diseases. During the last thirty years, more and more attention has been given to physical and chemical parameters of the urban environment and their impact on human health and well-being. The fact that cancers, accidents, mental disorders and cardiovascular diseases became the major causes of death in industrial urban societies justify these trends. However, in order to improve the quality of the urban environment, there was a tendency to transfer pollution and nuisances to the surrounding rural environment. For example, waste disposal plants and sites were located outside the cities, and high stacks were built to disperse air pollutants into the surrounding rural environment.

At present, the surrounding rural communities are increasingly reluctant to accept wastes and pollution from the cities, and it must be foreseen that in the future large cities will have to find the answers to their environmental problems inside their own boundaries. Another new aspect is the increasing recognition of the interaction between the physicochemical urban environment and the socioeconomic environment. The result of these trends was that the model of the “functional city” grew more and more out of date, and that alternative models of city development, such as the “ecological city”, had to be created.

Environmental problems of the unplanned city

This question is still of immediate importance because the large cities of most of the developing countries are subject to a very rapid, unplanned development. The first priority problems have remained adequate and safe drinking water supply and hygienic excreta disposal. Related problems are low-quality shelters and excessive density of occupation in the city, as well as in available dwellings. At this first level, the main consequence is the transmission of infectious diseases.

At the second level when industrialization starts, more and more difficulties are experienced regarding indoor and outdoor air quality, indoor air climate, noise and radiation, traffic, occupational and domestic accidents, solid waste collection and disposal, industrial pollution and nuisance, treatment and disposal of hazardous wastes, and food safety.

Technical answers exist to all of the above-mentioned problems, however, they request technical and financial resources for their application. In addition, the unplanned character of the urban development makes any construction of environmental facilities, and especially of sewer networks, more costly. Strong efforts have been devoted to the development of appropriate technologies to solve the environmental problems of low-resources in large cities, but the results achieved at present are far from the goal. Another consequence of the unplanned development is the lack of space for sociocultural facilities, either for health care, education and recreation, or as green spaces.

Environmental situation in the functional city

The functional city has been designed to fulfil four main functions: dwelling, working, moving and practising cultural and physical activities. Its main principles are: zoning in order to avoid that hazardous industries being placed in housing areas; hierarchization of transportation facilities to prevent accidents; design of urban patterns with due consideration of the requirements of technical facilities; land-use systems appropriate to the abatement of pollution and nuisances or to decrease human exposure to negative environmental factors.

Despite all these advantages, the functional city model for several reasons has lost its credibility. One of the reasons is its lack of flexibility which prevents it from adjusting to changes in technology and lifestyle, but the main one is the failure of the functional city model to recognize the impact of socioeconomic factors and the interaction between the physical and the social environment. A good example is the case of new capital cities which in some countries are built from scratch. These cities are generally designed as over-functional cities and their planned area is used for public administration purposes, and is not at all attractive to urban social activities. Real urban life in its socioeconomic dimensions develops in the surrounding unplanned suburbs in which the majority of the population will concentrate. This “Brasilia” model astonishingly results in the fact that a large majority of the population prefers to live in the poor environmental health conditions of the unplanned suburbs, instead of enjoying the good physicochemical environment of the functional administrative cities. This is for economic reasons, but also very much for sociological reasons.

The concept of the ecological city

This concept is the result of the transfer to urban areas of criteria developed by the ecological sciences for the natural environment. These criteria are:

- 1 Minimal intrusion into the natural site
- 2 Maximum variety
- 3 A close system as far as possible.
- 4 Optimal balance between population and the use of resources.

We can try to analyse the practical significance of these criteria for urban planning and environmental health services.

The minimal intrusion criteria mean that architects and town planners should revert to a time when the siting of buildings and houses, or the choice of location of new settlements, were made with due consideration of the topographic, hydrographic, vegetal and climatic environment; when a modern office building is built without any consideration either to orientation or to prevailing winds. In environmental health terms, a better consideration of the natural site may help to solve problems such as drainage, ventilation, insulation, indoor climate and green spaces.

The maximum variety criteria apply to buildings and housing, but also to economic activities. A city offering jobs within a large variety of industrial or commercial activities will be far less sensitive to economic crisis and unemployment than a city depending upon a limited number of major economic activities. A large city is also a place where people from different ethnic and cultural groups mix and through mutual interactions create new forms of culture and civilization. In relation to the physical environment, the criteria of maximum variety mean that working places should not be systematically separated from hous-

ing areas, but that non-hazardous industries, as well as commercial and administrative buildings, should be scattered throughout housing areas.

The criteria of close systems apply to town planning, as well as to economic activities and environmental health problems. In terms of town planning, this means, for example, that green spaces and recreational areas should be made available within the city and not located far away in the countryside. In terms of environmental services, it means that wastes should be recycled as far as possible in the urban area, and that the water cycle, for example, be as close as possible within the city limits, when the current tendency is for a city to use distant water resources and discharge its wastes outside the city borders.

The optimal balance criteria mean that the geographical characteristics of each city site are such that there is an optimal size of population to which the city can provide a maximal amount of amenities and economic and cultural opportunities, as well as a housing and physical environment of high Quality. A too small population will result in a lack of variety in employment and cultural resources. An excessive density of population will increase all the inconveniences of urban areas, among other things the urban population and nuisances.

However, it would be wrong to think that in the field of environmental health, the ecological city will always be a better solution than the functional city.

The sanitation principle applied to the functional city is to collect wastes and transport them far away from human concentrations, and then to treat them and dispose of them. This classical approach provides the best safety for public health.

In the ecological city, wastes are recycled as far as possible. This means that instead of discharging human excreta into a sewer system, these will be disposed of through, for example, a septic tank, the effluent being reused to water the garden. The sludge will be composted in situ and reused as garden fertilizer. This process is hygienically acceptable only if operated and maintained properly. Therefore, domestic disposal of waste offers less security in terms of public health.

However, the ecological city model offers big advantages in relation to the socioeconomic environment, especially in times of unemployment crisis. The ecological city models recommend houses where space can be found for

at-home economic activities, such as either handicraft or intensive agricultural activities in the garden (flowers, vegetables, poultry, etc. People may, thus, combine a salaried job with marginal economic resources at home. In terms of technical services, including environmental health services, the ecological city will rely more upon soft technology-using manpower, and less upon high technology requesting costly equipment but few operators.

Those who do not believe that higher consumption always means a better quality of life, will, therefore, favour the ecological city model. In terms of health, this model is expected to contribute as well to the control of cancers, accidents and cardiovascular diseases and to the improvement of mental health and psychosocial well-being.

Future trends

Within the framework of its Health for All policy, materialized at municipal level through the Healthy City project, the World Health Organisation recommends a multisectoral environmental health policy providing for public information, for community awareness of environmental risks, and for community participation in decisions affecting its living environment and in actions undertaken to improve this environment. The starting point of the cities to achieve this goal will depend upon their present conditions. The unplanned city will have to apply the principles of the functional city in order to improve its physical and social environment. But the industrial city suffering from high unemployment will benefit greatly from the ecological city model. In other cases, a reasonable compromise should be found between these two models despite apparent contradictions in their respective principles.

The more foreseeable future trend is that in all Countries an increasing percentage of the population will concentrate in cities. Therefore, the "urban crisis" will become more acute, and in most big cities the size of the population will increase far above the optimal level. There will be a need to improve the physical and social environment of the middle-scale cities, and there will be a need to combine the planning of the development of large cities with the planning of their suburbs and of the surrounding rural areas, especially in relation to environmental health conditions and activities.

The Healthy Cities Project

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By the year 2000 over 75 per cent of Europeans – and the majority of the World’s population – will live in cities. For those of us who do live in cities, the quality of that urban habitat exerts a major influence on our health, physical and mental. The prerequisites for good health are still shelter, food, pure air and water, a safe physical environment and therefore freedom from fear, and the possibilities of fulfilling work and leisure activities.

But these all depend on a well integrated community, the pursuit of common goals and the creation of “commonwealth”. Nowadays, as before, the expectations held by many people living in cities are too often illusions; gross inequalities in health still exist in cities throughout the world, and in many countries, they are becoming worse.

In the 1840s, the main causes of early death were the infectious diseases which particularly affected the new urban underclass. Today’s causes of death are different; heart disease, strokes, accidents, cancer, suicide, alcohol and drug-related conditions have replaced infections, apart from the recent appearance of AIDS, to remind us of the importance of eternal vigilance against infectious disease. These contemporary problems, like their predecessors are largely avoidable, and also like their predecessors, disproportionately affect the poor and dispossessed. Action to prevent them will require social policies in a wide range of areas other than solely medical services, and will need a coordinated approach; this is the aim of the Healthy Cities project.

Some 140 years ago, 300,000 people seeking refuge from the Irish potato famine landed in Liverpool. Between 60 and 80,000 of them settled in the city, at a time when the resident population was 120,000. According to Dr William Duncan, the first Medical Officer of Health in the country, the refugees “located themselves amongst us, occupying every nook and cranny of the already overcrowded lodging houses and forcing their way into cellars...” The Irish settled predominantly in the poorest parts of the city, along the banks of the Mersey in Wapping and Vauxhall, and up towards Everton Hill, still some of the poorest areas in the city; there they recreated as best they could a village and parish structure within the town.

According to Chave, the inevitable result of this influx of desperately poor, unwashed and starving people, forced to live in crowded and insanitary slum conditions, was a massive outbreak of typhus accompanied by epidemics of smallpox, measles, scarlet fever, tuberculosis and, in 1849, the devastating Asiatic cholera. William Farr, the Superintendent of the Statistical Department of the Registrar-General’s office, stated in his report at that time that

“the mortality of children under one year of age is 111 per 1,000 in the healthy districts of England and 229 in Liverpool...”¹

Liverpool was at that time regarded as the ‘Black Spot on the Mersey’ as far as health and social conditions were concerned.

The systematic work of Duncan and Thomas Fresh, the Sanitary Inspector for Liverpool, backed up by Liverpool’s own Sanitary Act of 1846 and the Public Health Act of 1848, enabled action to be taken against the worst housing, hygiene and environmental conditions so that when the 1854 cholera epidemic arrived from Asia, its impact was far less than that of the 1849 epidemic. In carrying out this work, Duncan and his counterparts in cities throughout the country, built the foundations of the public health movement.

Despite these successes of the Victorian public health pioneers such as Duncan, the advent of personal preventive measures such as immunization and vaccination, and forty years of the National Health Service, in Britain today inequalities in health persist and are becoming greater, especially in many of the older cities.³

The first report on inequalities in health in Liverpool, published in 1986 by the City Planning Department as part of the Healthy Cities project, found that Liverpool had a Standardised Mortality Ratio of 129 – or 29 per cent above the national average. The pattern of mortality within the city showed that the highest SMR’s were concentrated in the inner city areas such as Vauxhall and Granby, where the SMR’s are as high as 180. It is no coincidence that these are the ward with the highest unemployment rates, the highest rates for the uptake of free school meals, the lowest rates for staying on into higher education and the lowest rates for personal mobility as represented by private car ownership.⁴

The example of Liverpool is to be found replicated everywhere throughout the world and, by world standards, Liverpool itself is today a ‘Healthy City’. However, by European standards it remains the ‘Black Spot on the Mersey’.

Within Europe, cities are now to be found at many different stages of development. In some countries or regions, new cities are developing and old ones continue to grow or to be remodelled. In others, once great cities such as Liverpool are in a state of crisis and apparently rapid decline. However, despite prophecies that the cities are doomed, they do continue to attract young people into them and generally remain the focus for our dreams of an