HEALTHY URBAN PLANNING AND TRANSPORT

Hugh Barton, with Claire Mitcham and Catharine Tsourou

This paper highlights the important work of WHO Healthy Cities movement in seeking to integrate health planning and urban planning. It is based on chapter 9 - "Cities for people" - in the report on the progress and achievements of European Healthy Cities distributed to participants at the Belfast conference in October 2003 (Tsouros and Farrington). The paper identifies urban transport as a key determinant of health and illustrates the work of the Healthy Urban Planning city action group over the period 2000-2003.

Introduction

Health and urban planning are natural bed-fellows. Modern town planning has its roots in the unhealthy industrial cities of the nineteenth century: endemic problems of poor water supply, sanitation, light and air triggered a response not only in terms of infrastructure engineering but also urban design. The codes of street and building layout - were designed to banish forever the dank houses and airless streets.

It is ironic, then, that in the intervening century the connection between health policy and urban planning has become tenuous. It is true that the original health objectives of clean air and water are deeply entrenched in planning and building control systems. But contemporary "diseases of civilisation" have in many ways been ignored. Indeed the powerful trends towards car-dependant, sedentary and privatised life-styles, with their health consequences, have been facilitated if not actually fostered by land use and transport policies.

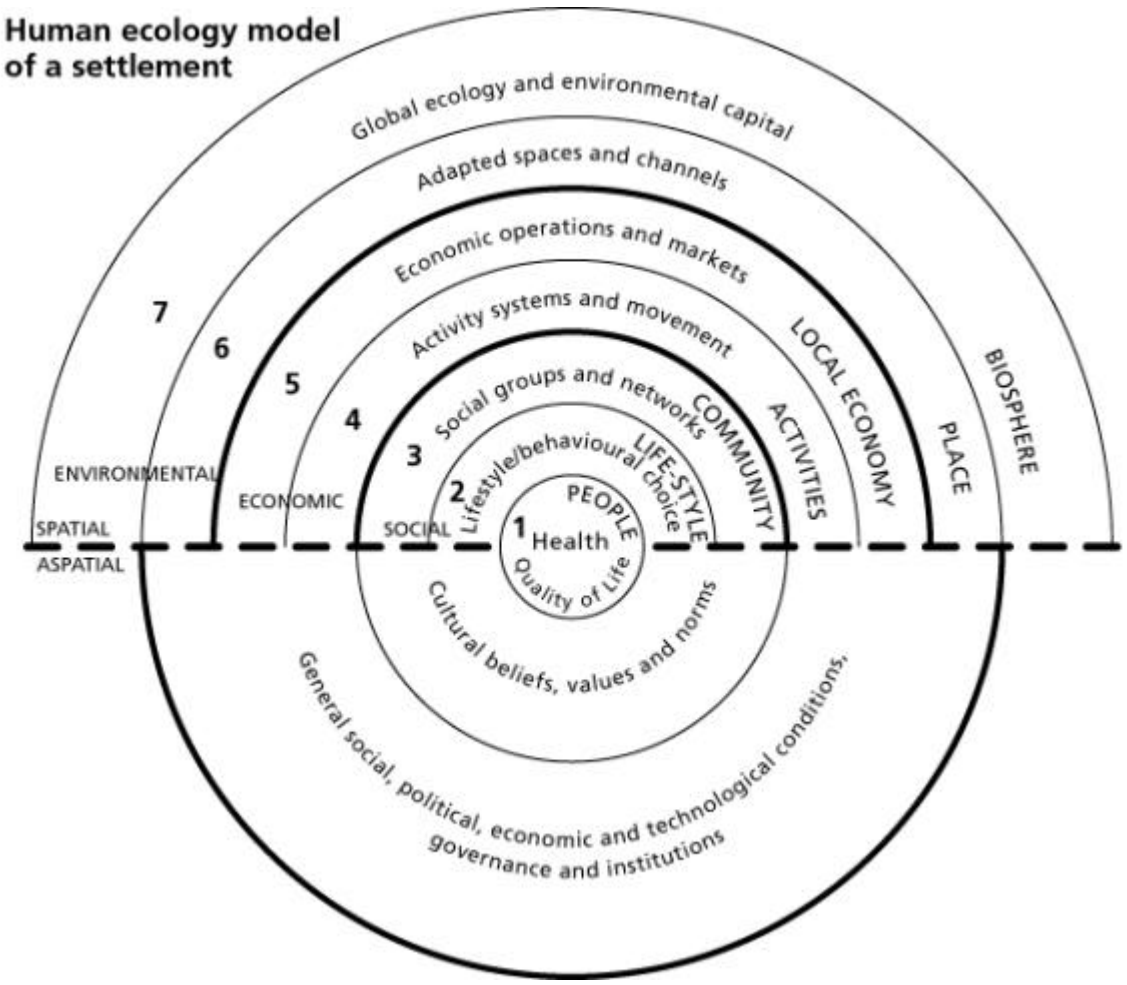
This chapter is designed to highlight the important work of the WHO Healthy Cities movement in seeking to reintegrate health and planning. The first section sets out the nature of the link, with a focus on urban transport issues and health; the second section applies WHO Healthy Cities principles to urban planning; the third section tells the story of the "healthy urban planing" initiative; the final section draws conclusions and pointers to future action.

Urban planning as a determinant of health

The environment has long been recognised as a key determinant of health (Lalonde 74, Whitehead and Dalgren 1991, Marmot and Wilkinson 1999). There is a growing recognition amongst health related professions that promoting health only through programmes of individual/small group behavioural change is not very effective, reaching only a small

proportion of the population and seldom being maintained in the long term (Lawlor et al 2003, McCarthy 1999). What is needed is more fundamental social, economic and environmental change.

Urban planning as a mechanism of environmental control influences health in a number of quite systematic ways. The diagram below sets out the various spheres of social and economic life and the wider environment that are affected by planning. It is derived from Whitehead and Dalgren's 1991 figure of the determinants of health. The sphere of *direct* planning influence is the physical form and management of the built environment (sphere 6 below: adapted spaces and channels). This sphere impacts to a greater or lesser extent on all the others, literally shaping some of the options that are open to individuals, social groups and businesses. For example the propensity of people to take healthy exercise is affected by availability, convenience, safety and attractiveness of pedestrian and cycling facilities, parks and playing fields. Such exercise is critically important for children, yet in some countries walking to school has become a minority occupation (Cooper 2003).



Source: Hugh Barton 2003

More broadly it has become apparent that many of the urban development trends promoted by the market and facilitated by planning authorities are pandering to our unhealthy instincts (Barton et al 2000). Despite over a decade of official advocacy of sustainable development many conventions of the development industry remain trapped in a pre-Rio timewarp. So the expanding outer city areas exhibit, across Europe, a pattern of low density, use-segregated car-based development that not only uses land profligately but reduces the viability of local services, makes walking impractical because of distance and cycling deterred because of traffic levels. The fashionable office/retail/leisure parks that spring up in the wake of road investment typically rely on 90-95% car use. The segregation of land uses is undermining the potential for integrated neighbourhoods and local social capital. We are literally building unsustainability into our cities.

In this context it is hardly surprising that health is a casualty. The decline in regular daily walking and cycling is resulting (in some cultures) in increased obesity and risk of diabetes and cardiovascular diseases (New Urban Futures 2003). Social polarisation of opportunity is exacerbated. People tied to locality - the elderly, children, young parents, the unemployed, the immobile - are increasingly vulnerable. The decline in local facilities, the reduction in pedestrian movement and neighbourly street life, all reduce opportunities for the supportive social contacts so vital for mental well-being (Halpern 1995). We are storing up health problems for the future that will make the present problems of the health service delivery look trivial by comparison.

Given the recognition that the quality of the urban environment is important for human health, it is puzzling that "direct assessments of the links between the built environment and physical activity as it influences health are still rare" (Handy et al 2002). There is an unfortunate divide in the research literature between that focussed on health outcomes (eg. Halpern 1995, Aicher 1998) and that focussed on planning interventions and behaviour (eg. Cervero and Kockelman 1997, Hedicar and Curtis 1995, Williams et al 2000). Articles that make the connection explicit still promote the idea as innovative and newsworthy (eg. Dubé 2000, Jackson et al 2002, Barton et al 2003(b)).

The absence, as yet, of a major integrating research effort does not mean, however, that there has been no linkage between health and planning in practice. But normally this link is implicit, not explicit, lacking a systematic or comprehensive approach. In this respect a recent book produced by the WHO European Healthy Cities programme sets out challenging health objectives for urban planning (Barton and Tsourou 2000). The background to this is reported

later. In the book urban transport planning is seen as fully integrated with urban land use planning. Transport is widely recognised as a key determinant of health (Wilkinson and Marmot 2003). The transport objectives below demonstrate the centrality of transport and accessibility issues in healthy urban planning. The objectives are related to the human ecology settlement model – the physical provision of space and transport channels is represented by sphere 6 in this model, and that provision can influences health in quite specific ways, expressed as a positive aspiration here, but often of course more negative:

- *reducing road accidents* (sphere 1 in the settlement model). Accidents are not only a direct hazard but also impact on behaviour by, for example, discouraging parents from allowing their children to cycle (with associated health impacts).
- *promoting healthy lifestyles* (sphere 2 in the settlement model). Transport policy could play a key role in combating the sedentary by encouraging walking and cycling. Regular exercise protects against heart disease and diabetes, promotes a sense of well-being and combats depression in older people (Wilkinson and Marmot 2003).
- *facilitating social cohesion and supportive social networks* (sphere 3 in the settlement model). There is a powerful relationship between mental well-being and social support (Halpern 1995). Transport policy can assist the creation of a supportive local environment by facilitating casual street meetings and the viability of local facilities that are the focus of interest communities (Barton et al 2003). This is particularly important for vulnerable, less mobile groups.
- *promoting access to affordable housing* (sphere 4 in the settlement model). Good quality housing with adequate space, warmth and light are important for health. Transport policy affects the locational choices open to poorer groups by the quality and price of public transport services.
- *promoting accessibility to educational, cultural, leisure, health and retail facilities* (sphere 4 in the settlement model). The purpose of transport is not *mobility* (in the sense of allowing people to move around) but *accessibility* (ie allowing people to get to the places they need to get to). Transport/land use strategies determine accessibility to a significant extent. This impacts on heath in many ways, eg: access to open space which may encourage physical activity, especially in the young; access to outlets for healthy food; access to health facilities; access to educational/training facilities that assist self-improvement.
- *promoting access to employment opportunities* (sphere 5 in the settlement model). Job search areas are affected by transport policies, for example the extent and price of public

transport may severely limit the range of accessible jobs. Unemployment leads to increased levels of stress, physical and mental illness.

- *promoting good air quality* sphere 7 in the settlement model). In many European cities motor vehicles are now the dominant cause of poor air quality which can lead to higher levels of asthma, lung and heart disease.
- *Promoting climate stability* (sphere 7 in the settlement model). Transport accounts for about a third of the carbon dioxide emissions which are implicated in global warming. The health impacts of climate change are uncertain but liable to be large. The reduction in emissions is a key international goal (the Kyoto agreement).

From this brief review it is clear that transport-integrated urban planning has a central role in promoting health. It affects lifestyle, equity and social cohesion in quite profound ways.

Applying WHO principles to urban planning

In this situation the current WHO healthy urban planning initiative is timely. What can planners and decision makers do to minimize the health stressors and to increase the health contributors posed by the built environment in cities?

A comprehensive definition of Healthy Urban Planning should address all the health determinants relating to the physical environment of the cities and should reflected the core principles of the WHO strategy "Health for All" (WHO 1999a), such as equity (see chapter 15), community participation (see chapter 12) and intersectoral cooperation (see chapter 11). These principles are consistent with those of sustainable development and Agenda 21. Implementing the **equity principle** in urban planning means mainly improving the living standards of the town users bearing in mind their diversity in terms of age, gender, physical ability, ethnic origin etc. Obviously priority should be given to up-grading the more deprived urban areas. Public spaces and urban facilities should be planned and located increasing their accessibility in terms of distance from home, and safety (Barton et al 1995, WHO 1997a, Sandonnini 1990, Gumuchdjean 1997) .

The effective integration of the equity principle in urban planning should result in reduction of urban fabric imbalances, car use, air and noise pollution, while quality of public spaces, social cohesion, healthy life styles and employment opportunities are increased.
The way local decisions are made is widely recognized as important both in terms of the quality of the decisions and the commitment of local stakeholders to making them work (UN 2000, WHO 1997b).

Active **community involvement** in every stage of the planning process, is a necessary condition not only to identify the real needs of town users and to establish the priority interventions (WHO 1999b, WHO 1997c), but also to strengthen the social cohesion and individual self-determination, both very important especially for mental health (Dept. of Health 1998, WHO 1998).

Since different public sector policies (housing, transport, planning, social services, public health, education, etc) as well as activities of the private and voluntary sectors produce an impact on health, **intersectoral cooperation** represents a way to achieve a shared vision, legitimacy for action, precious know-how exchange and co-ordinated actions among specialists, administrators and users (Woodward 1998, WHO 1997b, OECD 2001). The neighbourhood seems to be the most suitable land unit for designing and implementing these changes (Barton et al 2003, Horsens 1991).

These ideas and principles are central to healthy urban planning and can be implemented in any country, regardless of its planning system. The operational and assessment tools developed during the Healthy Cities Project experience (indicators, health profile, city health development plan) can provide built environment planners and policy - makers with significant information to identify priorities, understand local needs and assess the effects of implemented planning decisions. In this context urban planning becomes an important strategic tool not only to prevent health problems but also to promote and maintain the health of the citizens.

Urban planning was introduced as a key area for Healthy Cities Project activities, in the third phase of WHO's European programme (1998-2002). The baseline for this new area of work was established in 1998, through a questionnaire survey. ; Respondents were the heads of urban planning departments in 38 cities participating in the second phase (1993-1997) of the Healthy Cities Network (17). The survey found that planning departments and health agencies tend to plough separate furrows. Regular co-operation between health and planning occurred in only 25% of cases. Nearly a third of planning chiefs considered that in certain ways planning policies were actually incompatible with health - particularly rigid standards of zoning and design. Other anti-health issues highlighted were excessive traffic levels, the focus on private/public profit, social segregation and the lack of attention to everyday needs of citizens (Barton and Tsourou 2000). It was clear there was plenty of work to do, bridging these policy divides.

The WHO Healthy Urban Planning story

The WHO Healthy Urban Planning initiative was borne out of a growing conviction that urban planning and related activities have a significant impact on the determinants of health (Duhl and Sanchez 1999). Healthy Cities programmes throughout Europe have sought to involve urban planners in their work since the late 1980's, but during Phase III of the WHO Healthy Cities Network (1998-2002) a more concerted emphasis was placed on the need to integrate health objectives into urban planning processes (WHO 1997d).

The foundations for this initiative were laid in the mid 1990's with the participation of the WHO Healthy Cities Network in the European Sustainable Cities and Towns campaign. The links between health and sustainable development formed an important element in the work of the campaign (Price and Dubé 1997), and provided an opportunity to begin to explore the relationship between health and urban planning. Meanwhile, Urban Planners across Europe were becoming increasingly aware of the importance of sustainable development, with an emphasis on the need to tackle social, environmental and economic issues in a more co-ordinated and more effective way. An inevitable consequence of their work in this area, has led planners to re-consider issues of quality of life, well-being, and ultimately, health in cities.

In 1998, WHO began to work with urban planning practitioners and academics from across Europe and beyond in a more concerted way. As a first step, in 2000 the book already cited - "Healthy Urban Planning" by Hugh Barton and Catherine Tsourou (2000) was published. It makes the case for health as a central goal of urban planning policy and practice, highlighting the role of planners in tackling the environmental, social and economic determinants of health, and suggests 12 key health objectives for planners. It also discusses the relevance of the healthy cities movement to urban planners, drawing attention to key principles such as equity, sustainability, intersectional co-operation, community involvement and international action/solidarity, and presents the results of the survey of urban planners in healthy cities, carried out in 1998. Finally, the book translates concepts and principles into practical ideas for developing a healthy urban planning process, including case studies from all over Europe.

"Healthy Urban Planning" was produced in co-operation with a number of practising and academic planners, who met to discuss the content at a seminar in Milan, Italy in October 1999 (WHO 2000). At the meeting, it was recommended that, in order to push forward the initiative in a practical way, urban planners from interested cities in Europe, should form a group to test the book's ideas, and provide an opportunity for innovation and experimentation,

This provided the momentum for the formation of a "city action group" on healthy urban planning.

Having agreed to lead and support the work of this City Action Group (CAG), the city of Milan hosted the first group meeting, at the Politechnino di Milan in June 2001 (WHO 2002). Senior urban planners from 11 cities across Europe rose to the challenge, and attended the meeting, making a commitment to begin a process to integrate health issues more fully into their work. The initial membership of the group included cities from north, south, east and western Europe; Gothenburg (Sweden), Horsens (Denmark), Sandes (Norway), Sheffield and Belfast (UK), Milan (Italy), Seixal (Portugal), Vienna (Austria(), Geneva (Switzerland), Zegreb (Croatia), and Pecs (Hungary).

Over the past 2 years, this group of cities has been the focus for WHO's developing work on healthy urban planning (WHO 2002, 2003). Group meetings have provided a forum for sharing knowledge and experience of exactly what healthy urban planning implies in practice, and how it affects day-to-day planning processes and outcomes. These planners, have developed an understanding, not just of each other's differences and unique perspectives, but of their commonalties, and of the ways in which experiences in one city, can be draw upon by others around Europe. Together they have begun to examine and experiment with ways in which health, well-being and quality of life can be promoted through urban planning, and to discuss the many challenges and difficulties. Although several cities have inevitably dropped out during the process. the experiences of the remainder, in tackling problems associated with redefining planning processes, and working on specific thematic issues, have been invaluable and a number of interesting case studies have emerged. These are reported in the new WHO report on "Healthy urban planning in practice" (Barton, Mitcham and Tsourou 2003).

In Belfast (UK), the department of the Environment (Northern Ireland) and Belfast Healthy Cities have taken a joint approach to promote and integrate health into a wide range of local and regional plans and policies (Belfast, NI). Tools such as Strategic Environmental Assessment and a quality of life matrix have been developed to assist this process. In Gothenburg (Sweden), a health group has been established within the planning department to consider the health implications of planning proposals. In Horsens (Denmark), health is now a central objective of all municipal activities, and has been integrated into urban planning and transport processes for a number of years. Neighbourhood regeneration initiatives and community empowerment activities have provided an important vehicle for implementing the health-oriented goals of the municipal "master plan" (Horsens). In Milan (Italy), a pilot process has been undertaken to introduce an intersectoral approach to the development of

three regeneration projects in the city, linking social and environmental interventions in a systematic way. In Sandnes (Norway), health has been fully integrated into the new municipal development plan (the main steering document for all municipal activities) (Sandnes). Health represents one of three key themes of the plan, and this is being implemented through a range of practical initiatives and activities with a focus on citizen participation. In Seixal (Portugal), an interdepartmental working group has been set up in order to guide the integration of health into the emerging development plan, and to implement the concept on a practical level.

In all cities the relationship of transport policy to land use policy is recognised as a key to healthy urban planning. Part of the achievement of Healthy Cities initiatives is to break down the institutional barriers that often exist between transport, planning, and health, agencies, thus allowing an effective integrated strategy.

This initial phase of Healthy Urban Planning work has been largely experimental, and taken forward by a small but committed group of cities. In the forthcoming phase of Healthy Cities (2003-2007), Healthy Urban Planning will be one of four key themes that cities will work on, and this will provide an opportunity to take forward this work in a more comprehensive manner.

LESSONS LEARNT

The experience of the WHO healthy urban planning initiative offers many lessons. The degree of progress varies greatly between the cities. Some municipalities have only recently embarked on the journey towards healthy urban planning. For them health is a powerful motivator for addressing issues that have not previously been faced, drawing in new constituencies of political support. For example in Seixal the health agenda has encouraged planning policies to protect allotments from development and tackle problems of social exclusion on isolated estates. But there remains major difficulties because of vertical remits and departmental empires deterring collaborative working. As one planner commented "There are a lot of islands in this municipality". Other municipalities - particularly in northern Europe - have had health embedded in planning and transport policy-making for some years. In these situations inter-agency co-operation is the rule not the exception, and the main planning/transport documents reflect health priorities not only in their context but in decision-making processes that place a premium on building up social capital.

Both the more experienced and the less experienced cities agree on the value of health-integrated planning. Health is seen by the planners as providing valuable re-enforcement for

and validation of other planning goals. Planning policies become better, more responsive to community needs, more strongly supported.

In an ideal health-integrated planning system there are five key elements. The first is an acceptance of inter-departmental and inter-agency collaboration so that health implications can be properly explored and integrated solutions pursued across institutional remits. This is *critical* where transport is concerned. The second is strong political backing, which helps to ensure consistency of approach and the resources needed. The thirds is full integration of health with environmental, social and economic concerns in the context of the main land use planing, transport, housing and economic development policy statements: placing health at the heart of the plan-making. The fourth is the active involvement of citizens and private/public/voluntary sector stakeholders in the policy process, so that health (and other) priorities are understood not just by the town planners but by the other interests whose actions might influence the situation. The fifth is a toolbox of planning techniques which fully reflect healthy goals: quality-of-life monitoring, impact assessment, strategic sustainability assessment, urban capacity and political studies - all should make health objectives explicit. In this context it is important that transport initiatives are judged by the same criteria as other development projects.

The Healthy Cities experiment in healthy urban planning is not alone. Other cities around Europe are progressing in the same direction. Health arguments are increasingly being made explicit in planning policy debate (Jones 2002, Breeze and Lock 2001). Practitioners are grappling with the difficulties of assessing health impacts (Morgan and Mahoney 2001). But the WHO programme does demonstrate both the power of the idea in changing minds and opening new avenues, and the necessity of a sustained, progressively more systematic approach. Health is a powerful motivator, capable of cutting across vested interests in a way which sustainable development maybe does not.

Hugh Barton 3.11.03

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