The Oxford Health Alliance

Broadening the scope of inquiry:
including an urban and habitat
planning perspective in strategies
for better health

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Summary

Where we live has such a profound influence on our well-being that we accept as self-evident that we need to attend to housing, neighbourhood and city design if we are serious about preserving and promoting health. But, paradoxically, it is very hard to move beyond the obvious relation between habitat and health to find the critical elements in our immediate environment that we need to reinforce to achieve better health. There is little solid evidence linking urban design to, for example, obesity: at times, people in unpropitious settings surprise us with their physical activity and their perseverance in maintaining good nutrition, while others in splendid suburbs are sedentary and over-eat. Further, human habitat is incredibly varied and hence no one size fits all when it comes to planning for health.

Although these complexities are daunting, several principles emerge that have broad applicability and common value. The environments that are most conducive to health are those that:

• provide uncrowded secure shelter;

• maximise physical activity among the otherwise-sedentary and reduce labour among the malnourished;

• allow access to healthy food and protect the local population from road trauma and natural hazards; and

• enable access to health services.

Such environments are often created in the shadows of official urban plans rather than as a result of them. This paper explores what practical steps OxHA might take in assisting with urban and habitat design to enshrine these qualities. It is meant as a discussion paper, to provoke thought, raise agreement and disagreement, and to serve as a base for in-depth reflection at the Cape Town Summit.

1 Background

This paper builds on work undertaken for the Oxford Health Alliance Annual Summit at Yale University in 2005 (DiPietro et al. 2005). The working group prepared a paper, 'Design for a Healthy World', which reviewed the state of research on the impact of the built environment on public health.

This paper is not a further review of this literature – rather, it is intended to broaden the discourse, moving beyond the developed world, and away from a tendency towards seeing healthy outcomes as being largely achieved through good urban design. There are two main reasons for doing so:

• the evidence base for linking risk factors for chronic non-communicable disease – such as sedentary behaviour and over-eating – to the built environment is very limited; and

• there are many aspects of the built environment that are not amenable to change, especially in the growing cities of the developing world. We need to take sensitive account of these aspects and sort out exactly what we can do to promote health in the city.

We also freely acknowledge that there are many health concerns about the environment in which people live that arise in rural and semi-urban settings.

We aim to be sensitive to those concerns as well: one size for urban and habitat planning does not fit all, and our ideas and hopes need to be flexible to fit these different settings.

During the past year, writing and research in this field that incorporates disciplines that study urban form and assess the impact of city living on public health has strengthened (Patrick et al. 2006).

However, a yawning gap still separates understanding and intervention on this matter. As well, and possibly for this reason, the recent World Urban Forum (WUFIII) concluded that government physical-design plans may not be effective instruments of social policy.

The Yale paper (DiPietro et al. 2005) showed that, in developed and some developing cities, cardiovascular disease, injury, sedentary living and obesity may be influenced by the form and function of cities. But this association between city form and illness is mediated not only through urban plans and building design. Reliance on motorised transport, particularly private automobiles, for access to jobs and services has a major impact. This is particularly the case for the poor, many of whom live in distant suburbs and are unable to live and work in inner urban environments that better cater for healthy daily activities and nutritional choices. In poorer cities in developing nations, health is compromised by the total absence of transport, with people spending hours trudging to and from work for want of a bus service. Walkability is by no means the central or exclusive requirement of a healthy city!

The record on sustainability for many new-world developed cities, often seen as the 'most liveable' – for instance Vancouver, Seattle, Portland, Melbourne and Sydney – is seriously wanting. Their ecological footprints are appallingly large. As car-based cities, they share many positive attributes, but sustainability is not one of them.

But on the positive side, cities have learned from one another as they grapple with informal settlements, of which cities in the developing world such as Rio de Janeiro, São Paulo, Curitiba and Salvador de Bahia in Brazil, Mbabane in Swaziland, Dar es Salaam, Dakar, Bogota and cities in Mauritania, Morocco, South Africa, Thailand and especially Tunisia, are beautiful examples (Hildebrand and Cobbett 2005). Case studies of best practice are now systematically shared through a network of urban observatories – about 200 civil-society bodies that monitor and publicise the performance of cities in reaching their own objectives,

Box 1 DIAP and urban observatories

The Dubai International Award for Best Practices in Improving the Living Environment (DIAP) was established to recognise initiatives that have made outstanding contributions to improving the quality of life in cities, communities, eco-systems and eco-regions around the world, and maintains a large database of case studies (see http://dubai-award.dm.gov.ae/).

Urban observatories have been established in developing and developed countries to encourage sustainable urban development through monitoring urban trends, debate and policy formulation. A worldwide urban observatory network is sponsored by UN-HABITAT, which hosts a Global Urban Observatory (see http://web.mit.edu/urbanupgrading/upgrading/resources/organizations/GUO.html).

in many cases local versions of the Millennium Development Goals (MDGs) – and through the well-resourced collation of urban case studies associated with the Dubai Award (see Box 1). This sharing process could be greatly enhanced were it supported by an IT network of the sort being contemplated more generally by the Oxford Health Alliance.

Meanwhile, during the past year the expansion of slum households* has outstripped the most ambitious interventions. Brave progress towards the relevant Millennium Development Goal (MDG 11) – significantly to improve the conditions of life for 100 million slum-dwellers globally by 2015 (which replaced the earlier unrealistic target of a 'world without slums') – is nevertheless falling behind the expansion of existing slums and the formation of new slums, which are forecast to house up to 1.4 billion people by 2020 if present trends continue (Arputham 2005). Others, such as Slum Dwellers International (SDI), think the numbers are even greater.

Climbing energy prices, conditions of cities in conflict or at risk of conflict, and hazards associated with global warming such as rising sea levels, rapid climate change and severe weather events, all bring urgency to the need to understand, and collectively act on, the promotion of health in and through cities, whether through city design, planning or management.

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* Recently defined by UN-HABITAT as 'a group of individuals living under the same roof lacking one or more of the following necessities: access to improved water, access to improved sanitation facilities, sufficient living area, structural quality and durability of dwellings, and security of tenure' (Garau, Sclar and Carolini 2005:12).

3 Chronic disease and urbanisation

In 1971, AR Omran observed a global health transition, as major causes of death shifted from communicable diseases to chronic, non-communicable diseases. Less than 30 years later, 'by the late 1990s nearly 50 percent of deaths worldwide were due to cardiovascular disease, diabetes, cancer and chronic lung diseases' (Leeder et al. 2004).

As the World Health Report 2003 (WHO 2003) indicates, people suffer chronic conditions as they get older. As life expectancy continues to rise, the prevalence of these conditions increases across all countries, regardless of the developmental level of each country.

The World Health Report 2003 is very clear on the major cause of preventable premature mortality: cardiovascular disease (see Box 2).

There are many precursors to the chronic disease epidemic, but the behaviours with the greatest impact are:

• our eating;

• our smoking;

• our drinking;

• our driving; and

• our decline in walking and manual labour.

The principal focus of this paper will be one step removed from the specific causes of conditions such as diabetes and CVD. It examines instead the planning of cities in developed and less-developed nations and the potential to have an impact on the everyday behaviours of inhabitants in ways that may have health consequences. A public health paradigm is emerging that emphasises urban planning in much the same way as John Snow emphasised plumbing and water treatment as the way to prevent the spread of cholera in London in the 19th century.

This rise in chronic diseases is occurring as humans become a more urban species, living in closer contact and moving out of the agricultural settings of our ancestors at an unprecedented rate. The movement of people into urban settings is not a planned migration – it is not amenable to orderly management and co-ordinated governance (see Box 3).

Figure 1 indicates the increase in the percentage of the population of four countries living in urban areas over the 80 years from 1950 to 2030.

The disease burden is shifting at the same time as human populations are moving into cities.

The 'old' public health, which concentrated on then-prevalent infectious diseases, built a strong tradition of investment in environmental solutions. Regrettably, many slum cities still lack the capacity to deliver these public health solutions that have been shown to work.

The 'new' public health (a more socially alert and behavioural sophisticated version of public health, attuned to the problems of prosperity) struggles to assign the development of chronic disease in terms of the environment in a way that would lead to effective action. Nevertheless, interest is growing in the social determinants of health, and societies are becoming restless with our lack of action. A complex array of cultural, social, environmental and economic factors are at work (see Box 4).


Box 2 **The causes are known**

The good news is that an impressive body of research has identified the causes of the CVD epidemics within populations. Global trade and marketing developments continue to drive the nutrition transition towards diets with a high proportion of saturated fat, sugar and salt. At the same time, protective elements such as fibre and phytochemicals in fresh fruit and vegetables are being progressively depleted in diets. When combined with tobacco use and low levels of physical activity, this diet leads to population-wide atherosclerosis and the widespread distribution of CVDs. Variations in these same major risk factors explain much of the major difference in rates of CVDs between countries.

In summary, the major CVD risk factors of tobacco use, inappropriate diet and physical inactivity (primarily expressed through unfavourable lipid concentrations, high body-mass index, and raised blood pressure) explain at least 75–85% of new cases of coronary heart disease. In the absence of elevations of these risk factors, coronary heart disease is a rare cause of death. Unfortunately, the vast majority of the populations in almost all countries are at risk of developing CVD because of higher than optimal levels of the main risk factors. Only about 5% of adult men and women in wealthy countries are at low risk with optimal risk factor levels. There are only a few very poor countries in which these factors have not yet emerged as major public health problems.

Source WHO 2003.
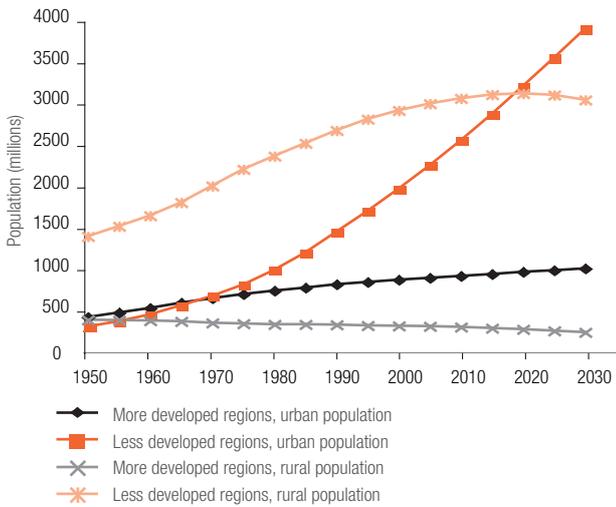
Box 3 A planet of slums?

At present, there are about 900 million slum dwellers and if current local, national and international policies continue, this could rise to an estimated 1.4 billion by 2020.

Almost half the population of African and Asian towns and cities live in slums, with figures for individual towns and cities ranging from 30–70%. In sub-Saharan Africa, an estimated 72% of the urban population lives in slums. This compares with 36% in East Asia, 58% in south-central Asia and 32% in Latin America and the Caribbean.

There are estimated to be 570 million slum dwellers in the Asia-Pacific region alone.

Source UN-HABITAT 2003.

Box 4 LEED-ND Core Committee Report on Public Health and Urban Environments

In May 2006, the Leadership in Energy and Environmental Design for Neighbourhood Development Committee (known as LEED-ND) published a report, *Understanding the Relationship between Public Health and the Built Environment* (Patrick et al. 2006). LEED-ND is a rating system for neighbourhood location design based on smart growth, urbanism and green building: 'The report presents an appraisal of the current state of the research regarding the links between public health and neighbourhood design…'

The paper's recommendations are in terms of urban form and the changes that can be made to influence health outcomes based on the evidence reviewed. It seeks to influence those involved in planning, particularly those in well-developed cities. It considers:

• cardiovascular disease;
• injury;
• physical activity;
• obesity; and
• mental health.

Patrick et al. argue that land use and transportation systems determine how much individuals drive. They conclude that 'there is sufficient evidence to justify policies to encourage more compact, mixed use development around transit to reduce air pollution' from vehicle emissions. The health implications of the increased use of motorised personal transport are profound, and are rapidly spreading across the world as such transport becomes more affordable to more people.

The report documents the specific measures of higher vehicle air pollution (frequent short trips, cold starts, congestion), the implications of street design such as disconnected streets for vehicle use, walking amenity and recreational activity, and the social impacts of road trauma. The report reviews the various management strategies and their success in mitigating road trauma.

Traffic crashes, air pollution, citizens spending hours each day in their cars, are factors that combine to impact negatively on health. The use of personalised motorised transport is a key feature of many aspects of the research in the report. It provides detailed recommendations to local planners for ameliorating these negative health impacts under the following headings:

• regional accessibility/location of development;
• population and employment density;
• land-use mix;
• access to transit;
• streetscape design/pedestrian amenity;
• bicycle amenities;
• access to recreational facilities;
• distance of residential zones from busy roadways;
• diversity of population and income;
• the roadway network; and
• street cross-sections.

Although focused on the United States, the report provides a valuable blueprint for assessing the impacts of urban design in any modern city.

4 Urbanisation, urban development and urban planning

As the fundamental causes of chronic disease become clearer, the causal connections between public health and the urban sector, and the implications for policy interventions, remain rather vague. This may be so for several reasons.

First, a search for public health solutions in the urban setting requires an understanding that the physical city – the place, however defined, in which most people in the world now live and work – must be matched by an understanding that urban settings are not easily influenced by public policy. Cities grow through the accretion of millions of decisions; as Jay Moor (2005) reminds us, 'more than 95 percent of all development decisions are made by members of civil society, each acting more or less in their own self-interest'.

Second, even to the extent that cities' physical form, social and economic function or environmental condition can be influenced by policies, there is still only weak consensus as to what those policies should be. Discussion is too often based on physical determinism, a belief that (qua Churchill) 'we shape our buildings, and afterwards our buildings shape us'. This is not universally true. No single best approach exists, and this can be frustrating to health professionals whose understanding of the origins of illness is built upon the notion of identifiable, principal causes.

Third, although policy interventions for good health put forward by the WHO Healthy Cities Movement in the 1980s and 1990s are well known and well researched, the usefulness of policy interventions through the urban sector – namely, urban development, urban planning and urban management – is less well explored. One set of goals that derive from the Healthy Cities Movement is summarised in Box 5. Policy tools for health and policy tools for urban development are different – they now need to be considered together and shared territory clearly identified.

Typical interventions for urban development include the following:

- strategic planning for urban regions in which health is frequently mentioned, particularly in relation to health-service delivery, but seldom seriously addressed:

- for example, Melbourne's metropolitan strategy seeks to achieve good health through urban design, particularly for new areas, but public health remains a secondary issue: 'New areas will be comprehensively planned as sustainable communities that offer high quality, frequent and safe local and regional public transport, and a range of local activities – living, working and recreational. Emphasis will be placed on fostering healthy lifestyles through initiatives such as creating walkable neighbourhoods where it is easy and attractive to walk or cycle to facilities and services' (Victoria 2002: 100);

- statutory planning whereby zoning, development control or other regulations for land use, construction and buildings are embodied in formal local plans;

- design codes and guidelines to promote environmental sustainability and other objectives, including building guidelines directly intended to promote physical activity – for example, by use of stairs rather than elevators;

- direct public-sector urban development via land commissions, housing providers, urban renewal authorities – for example, slum clearance in the name of health;

- comprehensive (or at least broad in scope) corporate planning for cities where services (including health and hospital services, education, recreation and nutrition) are delivered together.

Box 5 Goals for healthy cities

Typical goals for healthy cities include:

- **security** from crime and security from domestic, civil or military violence;
- **healthy environment**, unpolluted air, clean drinking water, hygienic waste systems, and access to recreational opportunities;
- **suitable housing**, that is environmentally and economically sustainable, constructed to minimise residents' exposure to environmental hazards associated with poorly sited or built housing;
- access to **nutritious foodstuffs** for all;
- **healthy economy** with economic opportunity for all;
- high-quality public **education**;
- appropriate **healthcare system and public health infrastructure**; and
- **safety** on the roads and from other types of accident.

Source Adapted from WHO Regional Office for Europe 1997.

5 Broadening the scope of inquiry

The urban causes and consequences of chronic disease may be viewed across three urban dimensions: urbanisation; urban development; and urban planning and management. It is important to consider which of these is the most appropriate focus for any interventions considered.

5.1 Urbanisation

The world's population is now – or soon will be – predominantly urban. Definitions of urbanisation are normally based on continuously built-up or contiguous municipal jurisdictions. However, urbanisation is defined differently country-by-country. It encompasses many contradictions. For example, there exist rural village conditions of life for many poor villagers living in areas defined as 'urban', and highly urban patterns of living in non-urban settings in developed countries that may be classified as 'rural'.

However defined, a large and growing part of the urbanisation of the human population is unplanned expansion or commencement of informal settlements where the most basic conditions of human dignity and human rights are often not met.

Slum dwellers are defined as a group of individuals living under the same roof, who lack one or more of the following conditions:

• access to safe water;

• sanitation;

• secure tenure;

• durability of housing; or

• a sufficient living area (UN-HABITAT 2006).

Slums house nearly a third of all city-dwellers.

Some headway has been made through physical improvements such as site and service programmes and housing self-help. Progress has been made with the reduction and eradication of communicable diseases transmitted through poor water supply and sanitation, inadequate waste disposal and weak health services. However, the growth of chronic, non-communicable diseases in these informal settlements is of growing concern and is the focus of this paper.

The stresses of making a daily living in such places, the practical absence of tenure over land or buildings, personal insecurity and lack of physical safety, dangerous roads, unhygienic neighbourhoods and poor food contribute as much or more to the rise of chronic diseases in the world than the better-known problems of sedentary lifestyles and obesity of the prosperous countries. By 2020 seven of the top ten causes of loss of disability-adjusted life years worldwide will be from non-infectious causes (WHO 2002).

In most regions of the world, urbanisation accompanies economic development and contributes to it. However, in some regions – sub-Saharan Africa in particular – rapid urbanisation is retarding economic development and may be associated with reductions in progress towards achieving the Millennium Development Goals (MDGs).

People move to urban areas for economic opportunity or sheer survival. With some exceptions – such as China's now-relaxed policy to limit the size of large cities – efforts to use urbanisation as an instrument of social or economic policy have not been successful: the task is too broad and the causal links between the urban or rural status of the population and their standards of living are not clear.

5.2 Urban development

Urban development – the processes by which cities grow and change – would seem more amenable to action in pursuit of health than seeking control over the entire urbanisation phenomenon. For example, health can be influenced indirectly through:

• land uses;

• patterns of development and redevelopment;

• the standards of buildings and spaces;

• the design of places where people live and work;

• transport and transit; and

• walkways and bicycle ways.

All of these can contribute to healthier cities through the promotion of exercise, reductions in pollution and stress, greater safety, and more equitable access to services and appropriate nutrition.

Rapid urban development in the cities of the world, especially the megacities that are forming through conurbation whereby city regions join together, is largely unplanned. Even in fast-developing cities, however, there are patterns of underlying order, often visible neighbourhoods, in the creation of places where people live and work, healthy or not:

• informal property ownership occurs without legal tenure;

- access to water and electricity if obtained in informal and sometimes illegal ways, by pipe and wire-tapping;

- population figures are lost or ignored in official census and electoral-roll counts;

- new urban development is undertaken gradually by customary means that create community spaces and access-paths; and

- local mobile telephony services develop, obviating older-generation wire-based telephone systems.

One only has to glance at these two lists to appreciate the challenge of managing the urban development of these cities.

The ability of the public sector to manage the process of urban development has been weakened in most countries by an expanded role of the private sector in urban development and the provision of urban services. Many public-private partnerships and corporatised public services have the same effect. Decentralisation of administrative authority to local jurisdictions, and less public willingness to coordinate metropolitan development through state mechanisms, weaken the ability even further.

To many health analysts, particularly from North America, a 'city' is less a physical or social artefact than a municipal jurisdiction with responsibility for the delivery of health services, transportation, housing, education, infrastructure for commerce, utilities and urban planning. In this case, urban development is seen as more to do with the state and its relationship to civil society within city bounds. For such a city to be 'healthy' implies effective delivery of a wide range of services rather more than building cities for health.

This conception of the city is behind the effort to localise the Millennium Development Goals, to translate global and national targets into local programmes, including those directly in the health sector or intrinsically linked to health, such as the incidence of extreme poverty. There is good documentation on why and where this is failing and why and where it is succeeding. But in any case, the top-down approach used to implement the MDGs could easily miss the essential character of more autonomous local development. It is at the local level that voice and power are able to contribute to health outcomes. The Millennium Development Villages, a localised effort to achieve the MDGs village by village, especially in Africa, is an interesting counterweight to the pure top-down approach. This has been championed by Professor Jeffrey Sachs and

Professor Pedro Sanchez, from Columbia University, backed by the Millennium Challenge Fund established to support their development.

The physical explosion of urban areas has spread beyond most municipal borders, so that traditional metropolitan governance is proving to be inadequate for regional management. As John Friedmann (2006) puts it, the economic, social and cultural assets of cities that foster the conditions for healthy life are best managed within the metropolitan region, but must be sustained by social capital and cultural resources. It is the organisation of the civil society side of this partnership where difficulties are most pressing and where creative thinking is most needed.

5.3 Urban governance, planning and management

Where there is an effective urban development and control system (primarily in cities in developed areas) and where urban development is new are the easiest places to encourage a health perspective in urban planning. Even here, though, public-sector coordination of public infrastructure is no longer so powerful a management tool for urban growth as it once was when the object was, for example, keeping sewage out of drinking water. Nevertheless, as demonstrated by the actions of the mayor and the health authorities in New York City, concerns about the effects of passive smoking and the use of trans fatty acids by food retailers can be brought under the umbrella of city councils and urban authorities. Particularly with regard to smoking, the design of public and commercial buildings and public spaces can strengthen legislative intent to keep urban air free of tobacco smoke.

In older established cities where there are fragmented patterns of infill (the development of vacant areas in built-up areas), redevelopment or refurbishment of established urban areas, and also in new urban development characterised by informal settlements, formal centralised and government-supported urban planning and development control stands little chance of being effective.

Here, planning and development rely on an astute understanding of the forms and processes of urban governance and, in particular, the means of collective decision-making that can enable the actions of households, enterprises, civil society organisations and the institutions of the state to improve the urban environment, often in incremental ways.

The fragmentation – jurisdictional, social and physical – that is characteristic of established urban areas may not support comprehensive urban or metropolitan

planning. Nevertheless, it may enable more appropriate local matches between social and economic needs and the built environment. New communication technology, which presents a splendid array of planning choices drawn from worldwide experience, is enabling more district infrastructure solutions to develop (see Graham and Marvin 2001).

Health-enhancing environments are often created in the shadows of official urban plans rather than as a result of them.

The best way to build such an environment is not necessarily the low-tech path: there are examples around the world of local social movements tying in to advanced technologies to compensate for the characteristic under-counting in the census and undervaluing of poor people's urban settlements. The New Sajay Amar Colony in eastern New Delhi maps community resources and priorities for the future into advanced data sets through processes that are determined on the ground by people's needs. This simple data-gathering is integrated into a sophisticated pattern of public participation for creating safe and healthy local environments (Hoyt et al. 2005). The technical capacity in our hands is indeed remarkable, with GoogleEarth putting images of almost any neighbourhood on the planet at our fingertips.

This raises the question as to what health outcomes are produced by the character of the places in cities, which occur in particular urban environments but not as a result of them, and what health outcomes are unrelated to urban areas.

6 The geographic setting

Two sets of concerns derive from the geographic setting:

- Issues **of** place can be addressed through the physical or cultural planning of a place, and in forethought in new urban areas in the developed cities or gated communities in developing cities, or in the planned redevelopment of places.

- Issues **in** place are not directly related to the design or spatial characteristics of a place; they are about the people, and relate to characteristics such as socioeconomic status, ethnic identity and class. Many issues such as the governance of services and policy settings that influence the life and health of people in particular areas are not geographically distinctive as they are based upon the structure of society.

Issues **of** place in cities are related to urban systems, elements (households; establishments; environments) and their interrelationships (transport and communications; infrastructure). The development of new urban places – easier in cities where there is planned control over the physical and social makeup of living areas – can include the following with an eye on improving health:

- maximising transit use and non-motorised transport;

- avoiding road trauma and environmental hazard;

- attracting or growing jobs that contribute to local self-sufficiency;

- enabling healthy food distribution; and

- providing education and health services that support patterns of living that minimise chronic disease.

The redevelopment of existing urban areas can also include a focus on these issues.

Phenomena occurring **in** those places, are less amenable to design or planning interventions. This is especially true of those phenomena related to socioeconomic patterns of stratification in society, such as poverty/socioeconomic status, ethnicity, gender or caste. Other policies are needed to address the roots of ill-health that are manifest locally but related to these structural causes. These policy options are well developed, and specified internationally by the WHO, but are not really a matter of urban design.

7 Strategies for further discourse and development through OxHA

In this workstream, we might be wise to look for the simple solutions and practices that reduce the risk factors for chronic disease in place rather than grand plans to solve the complexity of urban development issues more generally. The reconstruction of environments, of place, requires a concentration of political will, economic incentive, administrative capacity and professional endorsement too rarely available, except in newly planned developments, usually in developed countries.

Success stories of in place interventions, according to UN-HABITAT, include efforts in Tunisia and Morocco that have addressed the health issues associated with urban settlement as part of their MDG work.

Many national and international bodies recognise a chain of events that lead to healthy cities. One way to think ahead is to follow the causation of different risk factors – such as obesity, sedentary living and road trauma – back to suspected urban determinants. This may identify actions that are in pursuit of other goals, such as sustainability, that overlap with efforts to prevent chronic disease.

7.1 Specific issues for further consideration

a. Of place
Sharing the lessons across sectors:

- Best-practice case studies can be disseminated through electronic dialogue among countries, both developed and developing, particularly those case studies relating to the fastest growing cities.

- OxHA could usefully engage with programmes such as the Dubai Award and the urban observatories to collate best-practice strategies that integrate health-enhancing characteristics, relevant to chronic disease prevention.

- OxHA could develop a documentation and promotion strategy focused on urban health enhancement in the lead-up to the 2007 Summit in Sydney.

Urban Health Index:

- OxHA could consider establishing an Urban Health Index, like the Consumer Price Index or star-rating of movies – a tool applicable to any city. It would rank the health of that city on several (say, six) scales that would be connected to chronic disease prevention.

- The Australian Health Policy Institute, an OxHA regional centre, is currently planning a research programme to design and test such a tool. It will involve finding ways of describing urban settings that are comparable, measurable and, if possible routinely collected for other purposes. There are several planning concepts such as walkability (can you walk there?), mix-use ratios (work, learn, shop) and characteristics such as food type and availability (can you buy fresh fruit and vegetables?), recreational and transport options and environmental amenity (noise and air pollution).

b. In place
Reaching beyond the nation state:

- The new squatter cities are outside the control, or in some cases the interest, of traditional governments. They are outside the sphere of influence of the Millennium Development Goals.

- If we are to take action to reduce the rise in chronic disease that is due to these urban settings, public health actors and international organisations will need a strategy of positive engagement with the representatives of these communities.

- The invisible army that is building our cities is only just becoming recognised as a basis of viable engagement. Multinational organisations are often focused on grand plans, whereas small schemes – such as providing mosquito nets to prevent malaria or helmets to children to prevent motorcycle passenger road trauma, or initiating treatment programmes for hypertension and smoking – have a greater impact on the ground than global, national and local plans with little practical implementation.

Innovative technology and partnerships:

- The rapid spread of technologies acts as a virus-like diaspora, moving innovative ideas and strategies across economic and geographic boundaries with little regard to formal planning or governance processes.

- There is potential here for creating healthier environments in cities, including poor cities, through partnerships with companies and civil society organisations – Slum Dwellers International is a prime example.

Formal structures:

- The formation of policy and intervention programmes outside government and corporate auspices, involving both these sectors but non-governmental organisations as well, has been demonstrated to work in health (Framework Convention of Tobacco Control) and in urban development (UN Global Compact Cities Program).

- Such programmes engage national governments and can provide direction for their decisions in investment, foreign aid and trade.

- More than anything, they can bring pressure to bear on international bodies, such as the World Trade Organization, to consider trends that might have an adverse impact on local health outcomes. This might be particularly relevant in land-use planning for industrial agriculture and food production and for the emerging global trade in 'lifestyle' travel, tourism and products.

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