'Urban Vision and Public Health: Designing and Building Wholesome Places'

Howard Frumkin, MD, DrPH, Director National Center for Environmental Health / Agency for Toxic Substances and Disease Registry, US Centers for Disease Control and Prevention

Overview:
This lecture covered the relationship between urban design, particularly sprawl, public health and wellbeing.

Key ideas:
- Urban design and planning impacts on health and wellbeing
- Designing urban space and communities to improve health and wellbeing
- Sedentary lifestyles, calorific intake, disease and illness
- Land use planning and health
- Traffic, air pollution, climate change and health
- Social processes associated with urban sprawl
- Social capital and urban sprawl
- Smart growth

Summary:
In searching for the link between urban planning and health Dr Frumkin began by asking what some of the major health challenges of our time are and alluded to the great infrastructural responses such as clean water supply to the infectious disease challenges of a hundred years ago.

The list he offered, and suggested was partial, included:

- the complex of sedentary lifestyles, overweight and obesity and associated diseases.
- accidental injury, the leading cause of death in those under the age of 35.
- cardiovascular disease (CVD) for which most adult Americans now have one risk factor and multiple risk factors are very common. One million Americans die of CVD each year (about 40% of all deaths there) and 70 million Americans have symptoms.
- asthma, which is increasing in prevalence and, like the other health challenges mentioned above, varies according to income and ethnic status.

These challenges are augmented in the USA by a set of emerging uncertainties which will have an impact on health and wellbeing. These issues included population growth, an ageing population, global warming and climate change, increasing scarcity and cost of fossil fuels, more scarce water and rising health care costs.

The challenge is therefore to design cities and towns which have room for more people, are good for older people, decrease greenhouse gas emissions, decrease dependence of fossil fuels, promote active lifestyles, prevent injury, prevent CVD and asthma, promote mental health and wellbeing and rectify health disparities.

Dr Frumkin then went on to show, using a wealth of highly entertaining and absorbing data, that current design in American cities has more or less the opposite effect. Low density land use has increased dependence on the car as the main form of transport. This has been compounded by the tendency to build settlements in ways which meant that it is all but impossible to walk, cycle or use public transport effectively. This has resulted in the expansion of road building and the construction of schools and other amenities on the edge of settlements where land is cheap.

This tendency is illustrated by the poor provision of pavements along with poor maintenance and design of those which exist already alongside the provision of drive thru facilities for almost everything.

Car dependent sprawl has three main effects of health and wellbeing.

1. Firstly it increases dependence on the car. This increases air pollution, contributes to global warming and increases car related injury.

2. Secondly, the land use patterns associated with sprawl tend to decrease physical activity, decrease both the quantity and quality of water and increase the heat island effect of urban development. 'Third places' – neither home, nor work, where people gather to socialize – are usually missing from car dependent urban form.

3. Thirdly, it has an adverse mental health impact and decreases social capital through reductions in positive social contact and integration. Car dependency is often accompanied by housing development segregated by price band. There are also some indications that as trust declines, mortality rises. Dr Frumkin also suggested that a further effect of sprawl might be to interrupt healthy development of children as they are no longer able to explore their neighbourhoods freely and independently as they grow up.

He summarised these points by suggesting that we have chosen an urban development path which overemphasises the car at the expense of more active forms of transport.

Turning to signs of hope, Dr Frumkin suggested that early experience of smart growth development in the USA was promising as municipalities returned to some older patterns of development with a new understanding of health data and a new loyalty to the creation of wellbeing.

He suggested mixed land use and higher densities with the preservation and development of green space, a range of transport options including walking, cycling and transit, the integration of parks and public spaces into the urban fabric and the development of affordable housing in a wider range of locations.

Dr Frumkin finally suggested that better research in urban planning together with new partnerships, synergy and social marketing of better messages and the showcasing of successful examples of safe and healthy places would also be constructive.