

Perspectives in Public Health

A Brief Introduction to...

The Built environment and health

The built environment through its form, layout and design has an impact on the health of individuals and populations. Indeed historically, the aims of both public health and city planning were to combat the spread of infectious diseases that had become a significant problem in the rapidly expanding industrial cities of the nineteenth century - Blake's "dark satanic mills" of overcrowded and insanitary conditions. It was recognised then and still, that there is a connection between environmental conditions and human health. In the nineteenth century, infectious diseases such as cholera, dysentery and tuberculosis were the problems that good city planning and civil engineering sought to overcome. In the twenty-first century, some of the most prominent non-communicable diseases of urbanised societies, including cardiovascular diseases, chronic respiratory diseases and type 2 diabetes have causal pathways associated with risk factors linked to urban planning and design.

The health impacts of the built environment are firstly, the direct physical impacts on health through polluted air and water, poorly ventilated and heated buildings and the hazards of road traffic. But there are also significant impacts on the wider determinants of health. These include many indirect social and behavioural effects: on the exercise we take and the people we meet; on access to housing, employment opportunities, health services and other facilities.

According to the European Environment Agency, 75% of the European population now lives in urban areas, their 2009 report on quality of life in the urban environment notes that ... 'today's trend of new, low-density approaches to urban development results in increased consumption of energy, resources, transport and land, thereby raising greenhouse gas emissions and air and noise pollution' and that 'health and quality of life has deteriorated'. The compact urban form of the inner area of many European cities is a historic legacy which can work well today to promote physical activity and social interaction, in contrast to the more recent suburban sprawl which had seemed an idyll but has led to a legacy of car-dependence and isolation.

Components of the physical environment of our settlements contribute individually and collectively to our health and perceptions of health. The urban environment is a complex system made up of a number of overlapping layers of physical, economic and social interaction. Patterns of land use, elements of the built form, its connectivity and transport infrastructure and the availability and quality of the natural environment all contribute overall to the pathogenesis or salutogenesis of the built environment and do not exist in isolation. Green space for example can encourage social interaction and greater physical activity but only if it is perceived to be safe. Proximity of greenspace also reduces health inequalities, for example in all-cause and circulatory disease mortality. Transport is a significant determinant of health both directly in terms of levels of pollution and traffic accidents but also indirectly through its impact on the layout of urban areas and effects on wellbeing. The land use mix and form will determine whether residents are able to easily access essential services and employment and can facilitate greater social interaction and more active lifestyles – impacting positively on mental health and wellbeing.

Health inequalities can be exacerbated by the poor environments in which many of the most disadvantaged live. Lack of maintenance, high levels of graffiti and littering and fear of crime can force people into more sedentary and isolated lives. A European cross sectional survey of 12 cities found that, compared to respondents from areas with low levels of litter and graffiti, those from

areas with higher levels were 50% less likely to be physically active and 50% more likely to be overweight. Lack of facilities such as public toilets and suitable areas such as benches for resting, limits the ability for certain groups such as the elderly to walk longer distances, impacting negatively on social isolation.

We can also see that public health and the sustainability of the built environment are very much connected and that addressing health issues through changes to the built environment often results in improved sustainability - for example making the urban environment accessible and inviting, and improving cycling and walking levels also helps to reduce vehicular traffic and hence air pollution, noise and carbon emissions.

Recent governments have recognised the connections between the built environment and health, particularly in relation to obesity in the 2007 Foresight 'Tackling Obesity' report and health inequalities through the 2010 'Marmot Review' of Health Inequalities which recommends as one of its six core policy objectives the creation and development of 'healthy and sustainable places and communities'. Current government policy driven by the emphasis on localism in spatial planning and the placing of public health responsibilities within the remit of the local authorities alongside their other responsibilities for place making should allow for a greater joining up of the 'wider public health workforce' which must include planners and other built environment practitioners.

Caroline Bird
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Caroline Bird is a Research Fellow in the WHO Collaborating Centre for Healthy Urban Environments at the University of the West of England in Bristol. Her research interests lie in the interdisciplinary connections between the built environment and public health and their impacts on the wider issues of environmental sustainability. She is a core member on the UWE Institute for Sustainability Health and Environment (ISHE).