

Health impacts of urban development: key considerations

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Abstract: The urban environment is an important determinant of health. Health impact assessment is a tool for systematic analysis of the health consequences of urban development and management. This paper identifies key considerations, including opportunities for physical activity, food access and local economic development. Time use by urban residents has health implications. The schedule for infrastructure development in new release areas (in particular transport, education and health infrastructure) also has health implications. Health impacts should be considered a primary outcome of urban development and management.

Health impact assessment provides a framework to improve decision-making about plans, policies and programs.¹ The framework has been used to assess impacts of urban development, in both urban regeneration projects and new release areas (see Vohra in this issue). Currently, there is renewed interest in the health impacts of urban development because of an improved understanding of relationships between urban environments and contemporary epidemics of chronic disease (cardiovascular disease, diabetes, chronic respiratory disease and some cancers), injury and depression.²

Contemporary priorities

Our modern maladies are consequences of human–environment interactions.³ There are three principal problems with our current pattern of urban development: limited opportunities for incidental physical activity and associated sedentarism; concentration of food retail in regional centres and associated local food insecurity; and physical separation of residential areas from employment. Three main urban planning responses are needed.

1. Improved opportunities for incidental physical activity

To improve conditions for walking and cycling in cities, it is necessary to ‘re-conquer’ the city, pushing back cars.⁴ Gehl argues that public space has always served as meeting place, marketplace and traffic space. In many cities, car traffic and parking have gradually usurped public space in streets, parks and squares. This resulting situation can make it unpleasant and unsafe to walk and cycle because of noise, air pollution and risk of injury. Gehl is currently advising the City of Sydney on a new direction for city spaces and ways to promote active transport (walking and cycling). Several tools to support design and planning for active living are available on the Internet.^{5,6}

2. Planning for healthy food choices and sustainable food production

Some parts of our cities have a vibrant food culture with cafes, restaurants, farmers’ markets, supermarkets, bakers, greengrocers, butchers, fishmongers and delicatessens. In other parts of our cities, local food supply may be restricted to a retail store at a petrol station and some fast food restaurants. Healthy food choices may only be available in a regional shopping centre. With the seeming inexorable expansion of urban areas, a large amount of our fertile agricultural land is being covered with housing and opportunities to grow food locally are being lost. Urban plans consequently should address food supply by promoting sustainable food production and improving access to healthy food.^{7,8}

3. Suburban economic development and a return to localism

In post-industrial societies like Australia, there is no longer a public health imperative to separate most employment from residential areas.³ Planners now advocate mixed-use development and more emphasis on suburban economic development.⁹ Public health workers should support this advocacy because there are health benefits from living close to work (shorter travel times and improved prospects for walking or cycling to work). There is a strong case for a return to localism within cities,¹⁰ enabling people to meet their daily needs in their local area. This will have benefits for both the health of people and the health of the environment.

Time as a metric for health and sustainability

Time use choices have health impacts.¹¹ One important use of time for urban residents is for transport to work, education, recreation and social activities. If the transport

mode is active, such as walking and cycling, opportunities for incidental physical activity are provided. If the transport mode is sedentary, such as a car, and particularly if the travel times are long (more than 30 min), the time available for recreation, for family and for community participation is reduced. Time use is potentially an important metric for healthy and sustainable cities and warrants greater emphasis in urban and transport planning.

Timetabling infrastructure in large-scale urban developments

Plans for large-scale urban development usually include plans for infrastructure, such as transport, schools, higher education institutions, health and other services. The timetable for delivery of infrastructure is an important issue in urban development as delays in construction of transport infrastructure, such as a railway line, will affect people's transport choices. Transport patterns are difficult to change once they are established. If mass transit is provided from the outset, it is likely to increase the proportion of no-car and one-car households, with benefits for the health of people and the health of the environment. Consequently, it is important that essential infrastructure is delivered early and on time.

Thinking ahead

A focus on healthy urban planning is important because once a development is built retrofit changes are difficult and costly. Health impact assessment has utility for large-scale urban development projects. Importantly, planners should also consider health impacts in everyday decision-making, because the cumulative impacts of small decisions can be as important as the decision on a large project.

Health is not just relevant to urban planning and development. Health should also be considered a key outcome of the ongoing management of cities. The ecological concept of 'adaptive management' is relevant.¹² The garden cities paradigm of urban planning was a response to health concerns in the 19th Century. In the 21st Century, Australia has a population of more than 20 million. It is neither healthy nor sustainable for us all to live in garden cities. Certainly, alternate models of urban development, including aspects of 'new urbanism', may have unintended

health consequences. It is therefore essential to monitor outcomes and to adapt over time.

Our habitat (now increasingly urban) is a determinant of our habits (including health behaviours). Planners and public health workers should join together and advocate for due emphasis on human health impacts in urban decision-making.

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