

Health impact assessment and urbanisation. Lessons from the NSW HIA Project

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Abstract: Health impact assessment (HIA) can ensure that health is a core element of sustainable urban planning. Based on the experience of the NSW HIA Project, we discuss the current strengths of HIA and challenges facing it as an urban sustainability tool across five areas: the use of evidence; integrating HIA with environmental impact assessments; including consideration of equity; recognising wider determinants of health; and building capacity.

This issue of the *Bulletin* articulates the promise of health impact assessment (HIA) as a tool to improve sustainable urban planning. The case studies show how HIA places health as a core element of sustainable urban planning, adding this to the more established social, environmental and economic elements of sustainability.¹ At the same time, the case studies demonstrate the potential of HIA to put health on the urban sustainability agenda not only as a problem to overcome, but as a solution to work towards.

However, continued use of HIA as part of sustainable urban planning requires building on this promise. Our experience of undertaking the NSW Health Impact Assessment Project (which included supporting the cases from NSW that are described in this issue) has provided insights into HIA as it develops as a lever for incorporating health within sustainable urban planning. Based on this experience, this article reflects on the current strengths of HIA and the challenges facing it as an urban sustainability tool across five areas:

- The use of an increasing evidence base linking health and urban sustainability
- Adding health equity to sustainable urban planning
- Strategically using the wider determinants of health to engage with the sustainability agenda and inform assessment of impacts

- Integrating HIA with environmental impact assessment and
- Building on the capacity of the health system to undertake HIA to engage with urban sustainability through healthy public policy.

Deeper reflection on each area encourages the further success of HIA as it develops and is promoted as a useful sustainable urban planning tool.

Use of evidence Strengths

The main purpose of an HIA is to gather and assess evidence on health impacts to support decision-making.² This use of evidence is recognised as an important value-adding component of HIA. Critical and systematic use of evidence is a major strength that health professionals, through the use of HIA, can bring to sustainable urban planning. For example, a recent report on the usefulness of HIA to local governments in NSW indicated that councils saw the evidence HIA introduced into the process as valuable as it ‘not only extended their own understanding about health impacts, but could add weight to the case being put to the Council in reports’.³

The usefulness of HIA as an evidence-based tool for urban sustainability is likely to grow in the near future. The evidence base on health and urban sustainability is growing both in Australia^{4,5} and overseas.⁶⁻⁹ Evidence is also becoming more sophisticated, linking health to sustainability issues as both a broad (associated with wellbeing) and narrow (associated with disease) concept.¹⁰ For example, an HIA on a transport plan could now incorporate evidence on both direct impacts – through exposure to toxins on respiratory illness – and indirect impacts – through car use on social capital.⁶

Challenges

However, the increasing complexity of evidence presents challenges for HIA as a tool for urban planning. Internationally, it is recognised that the value of HIA is in its influence on real world decision-making as opposed to being a scientific tool.¹¹ Real world decision-making often occurs within tight timeframes, and the consequences of those decisions can have considerable implications for health. The strength of HIA is the ability to gather and assess scientific evidence to influence such decisions. As the complexity of the scientific evidence base grows, a significant challenge for HIA will be to

meaningfully filter good-quality evidence into real-world planning decisions.

One potential way forward is the creation of a clearing-house to encourage critical appraisal of the most recent evidence by both health and other professionals involved in sustainable urban planning.¹² This central repository could reduce the complexity of the evidence on impacts by creating domains of health impacts, directly related to their determinants.¹³

Health impact assessment in relation to environmental impact assessment

Strengths

The most familiar form of impact assessment to people working in areas related to sustainability in both Australia and overseas is environmental impact assessment. Environmental impact assessment is well positioned to be the principal impact assessment vehicle to encourage sustainable urban planning. Fortunately, environmental impact assessment currently offers a number of opportunities for HIA, and HIA can add value to it.

First, HIA's similarity to environmental impact assessment (HIA was born out of environmental impact assessment) means that the concept, its aims and stepwise process are immediately familiar to sectors other than health such as urban planning. Second, HIA can add to environmental impact assessment through adding consideration of both positive and negative impacts – environmental impact assessment practice is currently focussing on mitigation of negative impacts. For example, an HIA on airport developments might recommend steps to abate noise and reduce air pollution (the common health focus of an environmental impact assessment) but also to encourage local employment opportunities and re-route roads to minimise the risk of injury for the local community.¹⁴ Third, integrating health into environmental impact assessment will encourage incorporation of core HIA values such as equity and transparent use of evidence.¹⁵

Challenges

Despite this potential for HIA within environmental impact assessment, international research has consistently found that environmental impact assessments inadequately address health.^{16–18} Reasons offered for this situation include: problems with quantifying what is meant by health; resources and time associated with assessing difficult impacts such as health; the often controversial and confidential nature of health impacts; lack of a mandatory framework covering how health should be considered within environmental impact assessment; and professional bias among environmental impact assessment practitioners.^{15,19} Given the potential importance of environmental impact assessment to sustainability, resolving these issues is of major importance to HIA practitioners interested in

urban sustainability. The challenge is to ensure that health is not sidelined when included in an environmental impact assessment and is assessed as rigorously as possible.

Equity

Strengths

Equity is a core value underpinning HIA,²⁰ enabling consideration of the differential distribution of potential impacts of a proposal on different population groups that are both unfair and avoidable.²¹ In HIA this means considering whether the benefits of the proposal may be experienced by one group and not others, and similarly whether the negative impacts of a proposal may be experienced by one group and not others.²² At the same time, the consideration of equity is recognised providing a fundamental (yet often unconsidered) dimension to sustainable urban planning.⁷

In addition, equity is not far removed from the urban planning concept of 'environmental justice', the basic premise of which is that all people have the right to live and work and play in safe, healthy places and communities.²³ Human health has been a central concern of the environmental justice movement, and HIA can build on this opportunity by strengthening the focus of environmental justice on the distribution of health inequality.²⁴ An example would be assessing the potential anticipated and unanticipated differential health impacts of introducing urban regeneration programs across age, gender, culture, socio-economic status and disability.

Challenges

Despite equity being a core value of HIA, in practice the consideration of differential distribution of equity has proved more difficult.²⁵ Reasons for this include:

- Lacking definitions concerning which potential impacts are unfair and whether proponents of a proposal are in a position to influence their elimination
- Lack of awareness of which population groups to consider in an HIA, and
- Lack of available data to assess whether these groups experience differential impacts.

Given the value of adding equity to urban sustainability through HIA, it is important to note that these difficulties are not insurmountable.

- Lack of definition on what is unfair and avoidable requires thinking through who is responsible for what actions on what impacts.²²
- Concerning population groups, at a minimum it is recommended that age, socio-economic position, ethnicity and culture, locational disadvantage, and disability or other health status are considered (for an example of this in practice see Harris et al.²⁶).

- Where data are lacking, the potential for inequity should nonetheless be reported (along with the lack of data).

Wider determinants of health

Strengths

The increasing recognition within the health sector of the wider determinants of health^{27,28} is providing the health sector a valuable rationale for HIA. For example, the well known ‘rainbow’, based on the work of Dahlgren and Whitehead,²⁷ provides a tangible link to the impact of other sectors on health and health inequalities. Moreover, such frameworks can add depth to assessment of impacts in a HIA.²² For example, impacts on children can be linked to education, or air quality can be linked to transport.

Challenges

There are several challenges to using determinants of health frameworks as part of HIA.

The first is that determinants of health should be considered on the causal pathway to health inequalities, rather than being ends in themselves. Often HIAs are distracted by one or two elements of such frameworks, forgetting differential distribution of impacts. For example, planning a development that addresses the determinants of social cohesion to encourage a sense of community should not distract from considering the need for affordable housing within the development to reduce the impact on poorer groups.

The second challenge is to make such frameworks of direct relevance to the everyday work of other sectors while retaining the importance of health. A useful example for urban sustainability has been developed in Europe, where urban planners have interpreted the Dahlgren and Whitehead framework to assist the design of healthy and sustainable communities based on an ecosystem model (and underpinned by equity).²⁹ The explicit intent of this work is to ‘provide a focus for collaboration across practitioner professions and across topics’.

Third, HIAs should not be limited to simplistic use of the social determinants of health. Determinants themselves are rooted in the economic and political systems in which we live, and are therefore subject to inequitable distribution. Failing to address this in HIA can lead to an unrealistic assessment and the potential to perpetuate inequity.

Health sector capacity

Strengths

In NSW, we have had a stable period of investment by NSW Health to build the capacity of the system to undertake HIA. This investment was in response to the need of the health system to engage with others to reduce health inequities.²¹ This capacity is now reflected in HIA being

endorsed in several policy directions for NSW Health.^{30,31} This will provide the impetus for continued use of HIA as a tool for intersectoral engagement in NSW for the foreseeable future. Furthermore NSW now has the capacity to undertake HIA as directed by these documents.

Challenges

However, it would be unrealistic to expect HIA to become an accepted sustainable urban planning tool without a concerted effort on the part of health professionals, supported by the health system. This effort needs to focus on issues underpinning urban sustainability that are as diverse as land-use planning, transport, environment and conservation, housing, water and energy use. Building the capacity to collaborate on these issues requires a shift towards healthy public policy, which means promoting policies and practices within health and non-health sectors that will in turn protect and promote health and reduce health inequalities.

A recent review of the NSW HIA project highlighted national and international experience suggesting that long-term use of HIA needs to be seen in a wider policy context of healthy public policy.³² This is likely to hold true for HIA as an urban sustainability tool, given the varied dimensions of sustainability. At the same time, however, it should be noted that HIA is recognised as a tool that can bring the rhetoric of healthy public policy to action.^{33,34} Instead of alluding to the interrelatedness of health and other sectors, HIA provides a transparent mechanism for making these relationships clear.³²

Conclusion

Based on our experience of running the NSW HIA project, this paper has outlined key strengths and challenges relating to HIA as a tool for sustainable urbanisation: across the use of evidence; HIA within environmental impact assessment; equity; the wider determinants of health; and building capacity. By doing so, the article offers a picture of what is now in place and what further work is required if HIA is to grow as a useful tool in the sustainable urbanisation agenda.

Our future is an urban future. In NSW, HIA is now in a strong position to influence the impact of that future on health.

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