

A Joint Urban Planning and Public Health Framework: Contributions to Health Impact Assessment

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A joint urban planning and public health perspective is articulated here for use, in health impact assessment. Absent a blueprint for a coherent and supportive structure on which to test our thinking, we are bound to fall flat.

Such a perspective is made necessary by the sheer number of people living in cities throughout the world, the need for explicit attention to land use and transportation systems as determinants of population health, and the dearth of useful indicators of the built environment for monitoring progress.

If explicit attention is not paid to the overarching goals of equality and democracy, they have little if any chance of being realized in projects, programs, and policies that shape the built environment and therefore the public's health. (*Am J Public Health*. 2003;93:118–121)

OUR JOINT URBAN PLANNING

and public health framework for use in assessing the health impacts of proposed projects, programs, and policies within and across population groups is articulated here for the first time. Of course, the connections between urban planning and public health are not new. Indeed, both disciplines arose simultaneously in the middle of the 19th century in response to the enormous increase in urban populations that accompanied industrialization and the problems of sanitation and shelter that plagued them, especially the poor.¹ Still, we are unaware of any current publication that synthesizes the contributions of the disciplines of urban planning and public health into an analytic framework for use in the 21st century, so we offer our own. Such a framework can provide a blueprint for building a coherent and supportive structure on which to test our thinking.²

No special authority, originality, or primacy is claimed. Indeed, other joint urban planning and public health frameworks may emerge that prove more useful for health impact assessment³ as well as environmental impact assessment, which has been institutionalized in the United States since 1970, through the National Environmental Policy Act,⁴ but which rarely takes into account population health effects. Our framework has been fostered by countless conversations with and vital

research published by colleagues across multiple disciplines, both in our own metropolis of New York City and more broadly.

We seek to integrate our urban planning and public health framework with other frameworks proposed for use in health impact assessment, notably those based on the ecosocial perspective,² health and human rights,⁵ the precautionary principle,⁶ and sustainable production.⁷ Together, we trust, these multiple frameworks will be “complementary and mutually reinforcing”^{8(p137)} and will do more to advance the understanding and conduct of health impact assessment than any single framework could accomplish on its own.

POTENTIAL CONTRIBUTIONS OF A JOINT FRAMEWORK

What is the “value added” of a joint urban planning and public health perspective to health impact assessment? Why add yet another framework to consider? First, the fastest growing proportion of the world's population is the urban population in the poorest countries. While the global population over the next 30 years is expected to increase at an annual rate of less than 1% per annum (i.e., 0.97%), the urbanized population of the less developed regions will increase by almost 3% per annum (i.e., 2.67%).⁹ The implications are enormous. Presently, there are

almost 2 billion people living in urbanized regions of the developing world, three quarters of whom face problems of wrenching poverty, malnutrition, inadequate or no housing, poor quality of or a severe lack of drinking water, high rates of HIV/AIDS infection and infant mortality, poor maternal and child health outcomes, and many other grave concerns.

By 2030, it is expected that the current 2 billion city dwellers will double to approximately 4 billion in a global population that, by then, will total close to 8 billion. The number of cities with more than 5 million inhabitants (“megacities”) will grow from 41 at present to an expected 59 by 2015. Most of these megacities will be located in the least developed parts of the world; indeed, only 10 of the current 41 megacities are located in developed countries, and only 1 of the expected 18 new megacities will be located in a developed country. Geographically, cities of all sizes are growing fastest in the poorest regions of the world, especially in Africa and Latin America, where urbanization is being spurred by civil wars, natural disasters, and plummeting agricultural prices.¹⁰ Thus, the sheer number of people living in cities in general, and in urban poverty in particular, demands focused attention on the connections between what is built and the health of the people who live there.

Second, a joint urban planning and public health perspective

asks specifically how land use and housing patterns, water and sanitary infrastructures, and transportation systems influence the health of urban populations. Absent explicit attention to these determinants, we may fail to pose important research questions about contributions of the built environment to the egregious disparities in health observed within and across populations.¹¹ Consider an environmental intervention in which one of us (M.E.N.) was involved that was intended to reduce the exposures of children with asthma to pests and associated allergens in poor communities of color in New York City. In response to our published report on the limited effectiveness of integrated pest management at the apartment level,¹² Elihu Richter questioned the impact and sustainability of a “segmental” approach to asthma and other urban health problems and suggested instead an “ecological” approach.¹³ In response, Patrick Kinney, the principal investigator, argued for systematic adoption of integrated pest management not only at the apartment level but also at the building, neighborhood, and city levels.¹⁴

A joint urban planning and public health perspective, however, would involve asking the following questions: What are the public health consequences of inadequate housing? How are inadequate housing and homelessness distributed among subgroups of the population, including children and their families? and How do policies and interventions designed to provide safe and affordable housing influence health outcomes, including asthma? Urban planners and public health researchers at Columbia University are currently

working with colleagues from Harlem Children’s Zone, Inc, and Harlem Hospital Center in a collaborative initiative designed to do just that.¹⁵

Finally, a joint urban planning and public health framework can help in the selection of useful indicators of the built environment to monitor progress and assess the effectiveness of proposed projects, programs, and policies in reaching their stated goals. For instance, Communities Count 2000 is a collaborative effort of community residents and technical experts across many disciplines in the private and public sectors to develop a set of social, economic, and health indicators for King County in the state of Washington.¹⁶ While 29 indicators were selected to monitor the health and well-being of King County communities on an ongoing basis, the last page of the published report, devoted to “ease of access to shops and services,” is all but empty, as no data were found to measure this indicator. If we are to hold institutions and agencies accountable—e.g., through “clawback” provisions that require public funds to be returned if recipient companies fail to deliver on the stipulated promises of their business subsidies¹⁷—then it is essential to have the requisite tools to determine whether the stated goals of proposals were achieved and to assess the long-term consequences of present-day decisions.

DEFINING URBAN PLANNING AND PUBLIC HEALTH

Rather than presume agreement on what urban planning and public health mean, we prefer to define these terms as we

use them, along with certain closely aligned concepts. By being explicit about our biases, others can better assess the contributions of our joint urban planning and public health framework and the questions it allows one to pose.⁸ In essence, *urban planning* is the process of superseding market forces in guiding the development of the built environment.^{18(p433)} To be effective, we contend, urban planners must be public authorities with the political will to exercise the necessary restraint on the private market and thus protect the public from its worst excesses. While the regulatory framework of urban planning cannot, by itself, guarantee the creation of vital and viable human settlements, research suggests that it may provide a greater range of benefits than the haphazard outcomes of speculative construction.¹⁸

Simply stated, the *built environment* is that part of the physical environment made by people for people. According to Health Canada’s recent report *Health and Environment*, the built environment encompasses all of the buildings, spaces, and products created, or at least significantly modified, by people.¹⁹ All cities and every physical aspect of cities are therefore, by definition, part of the built environment—indoors and outdoors. The remainder of the physical environment is the *natural environment*, although even the natural environment has been modified by human endeavors, as global climate change makes only too clear.

Urban planners apply the knowledge of social science and urban design at the intersection at which the physical environment meets the social environ-

ment. They are concerned with the unseen yet real social, political, economic, and historical processes that generate the visible physical configurations of land use patterns, transportation infrastructure, open space, and density, all of which can plausibly be considered as important determinants of population health. At this point, certain research methods (e.g., multilevel analysis) and tools (e.g., geographic information systems) are available to assist in testing for purported connections between the built environment and health. Lacking are explicit conceptual frameworks for asking the pertinent research questions, interpreting the obtained findings, and intervening where possible to improve the health and well-being of urban populations.

By *public health*, we mean literally “the health of the public.” We believe that it is imperative to reinvigorate the historic link between urban planning and public health that led to improved sanitation and safer housing for *all* urban residents in the late 19th century. In this sense, we resonate with those in Canada and Europe who have promoted the term *population health* as a framework for thinking about why some people are healthier than others²⁰—and regularly use it. Nonetheless, we aim for institutional change and greater public support for increased attention on a broad range of health determinants, and thus we choose to retain the term *public health* as our focus.

The importance of reinvigorating this link cannot be overstated. We conduct our joint work in a time when—even as the problems of global urbanization become more acute—there is a pervasive and conscious cam-

campaign to foster disbelief in the effectiveness of government and collective actions that are not organized by markets. By renewing the link between urban planning and public health, we seek to resuscitate a belief in the possibility of democratic political action—the type of action that brought meaningful urban and public health reform in the closing decades of the 19th century and the opening decades of the 20th century.

To be successful, we will also need to renew the scientific basis of professional decisionmaking. While it is true that appeals to science have been used to justify deplorable urban development and public health actions, it is also true that humane and progressive science has been the basis for many of the advances societies have made in promoting healthy living conditions at increasingly high levels of density—the essence of urban civic life. To make future gains, we must reverse a cynicism that views every act of public regulation as “political” and hence unworthy of support, even as it drains our civic life of vitality and conviviality.

A PASSION FOR CITIES

In “Urbanism as a Way of Life,” an article first published in 1938 in the *American Journal of Sociology*, Louis Wirth defined urbanism as “that complex of traits which make up the characteristic mode of life in cities.”^{21(p98)} While some have co-opted the term to mean something narrower,²² we use *urbanism* to mean broadly “a passion for cities.”

This is not to say that we disagree with the new urbanists²¹ or the proponents of smart growth²³—indeed, we embrace

many of their design principles—but the overarching goals of our joint urban planning and public health framework are *equality* and *democracy*. By invoking *equality*, we draw on the health and human rights framework that is “premised on recognition of rights and state obligations to respect, protect, and fulfill rights in relation to vulnerability to ill health and to policies and programs which protect health.”^{8(p139)}

This moves us past Paul Davidoff’s humanistic, grassroots, pluralistic approach to city planning and the “equity planners” of today who advocate to meet the needs of underrepresented groups.²⁴ While *equity* refers to fairness in the distribution of wealth,^{18(p432)} *equality* means the state of enjoying equal civil, political, economic, social, and cultural rights as stipulated in international human rights documents, which may be used to hold governments accountable.⁵ By *democracy*, we mean more than participation of the governed in their government; we mean instead a redistribution of power that enables those who are presently excluded from political and economic processes to be deliberately included in the future.²⁵

Sherry Arnstein makes a critical distinction between going through an empty ritual of participation (i.e., informing, consultation, and placation, which all amount to tokenism) and having real power to affect the outcome of a process (i.e., partnership, delegated power, and citizen control, which she considers “citizen power” on the highest rungs of the ladder of citizen participation).²⁵ Absent explicit attention to the goals of equality and democracy, these goals have little if any chance of being realized in

the projects, programs, and policies that are being proposed, funded, and carried out.

In the United States, recent attention has focused on 2 issues that have helped spur the development of our framework. The first is *sprawl*, that is, random development characterized by poor accessibility of related land uses such as housing, jobs, and services, including schools and hospitals.²⁶ The second is *infill*, a term used to describe focusing investment in existing urban centers and older suburbs rather than in outlying areas.²⁶ There are many reasons to oppose sprawl and favor infill, whether or not they result in poorer or better population health.

Yet the arguments that have been invoked (e.g., that sprawl causes obesity) often fail to take into account the social, political, economic, and historical processes that have generated these physical configurations or the distributions of disease within and across population subgroups and how they are changing over time. We have been stymied by an overreliance on biomedical explanations for disease and health, which fail to account for the egregious and widening disparities in health by race/ethnicity, social class, age, gender, and sexuality that have been well documented. New frameworks for the 21st century are needed.²

PLANNING FOR HEALTHY CITIES

To effectively plan for healthy cities, we need to hone our respective scientific expertise even as we work collaboratively, monitor progress and setbacks with selected indicators even as we conduct formative research to inform our surveillance systems,

and work to implement a broader social and economic restructuring of society even as we demonstrate what’s possible in the current climate of global inequalities, exploitation, and oppression. Other goals of our joint urban planning and public health framework are to move toward mixed land use (vs segregated land use), long-term sustainability (vs short-term expediency), mass transportation and walking (vs automobile dependency), urban redevelopment (vs urban removal), and a viable, functioning public sector (vs an unregulated market and vested interests).

Stephen Wheeler defines *sustainable* to mean a world in which both human and natural systems can continue to exist long into the future.^{27(p435)} He also argues that each development or planning decision must be evaluated in terms of its effects on the health of human and ecological communities. According to Wheeler,

In this age of entrenched economic and political forces opposing sustainability, no single planning effort is going to set cities on a path towards a healthy long-term future. Rather, the need is for a long-term strategy emphasizing consensus processes, public education, political organizing, policy tools such as indicators and performance standards, development of vision documents and “best practice” examples, and the creation of institutions that can more effectively address physical planning and equity issues. Together, such efforts can develop the knowledge, political will, and institutional capacity to bring about change.^{27(p443)}

Our role in this process is to make explicit the links between urban planning and public health in order to gain legitimacy for our joint work, conduct the strongest possible science to bet-

ter guide effective public policy, and work collaboratively with a broad range of partners conducting both environmental and health impact assessments to better ensure that the overarching goals of equality and democracy are realized in the projects, programs, and policies we approve and undertake. ■

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