Assessing health impact assessment: multidisciplinary and international perspectives

N Krieger, M Northridge, S Gruskin, M Quinn, D Kriebel, G Davey Smith, M Bassett, D H Rehkopf, C Miller, and the HIA "promise and pitfalls" conference group*

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Health impact assessment (HIA) seeks to expand evaluation of policy and programmes in all sectors, both private and public, to include their impact on population health. While the idea that the public's health is affected by a broad array of social and economic policies is not new and dates back well over two centuries, what is new is the notion—increasingly adopted by major health institutions, such as the World Health Organisation (WHO) and the United Kingdom National Health Services (NHS)—that health should be an explicit consideration when evaluating all public policies. In this article, it is argued that while HIA has the potential to enhance recognition of societal determinants of health and of intersectoral responsibility for health, its pitfalls warrant critical attention. Greater clarity is required regarding criteria for initiating, conducting, and completing HIA, including rules pertaining to decision making, enforcement, compliance, plus paying for their conduct. Critical debate over the promise, process, and pitfalls of HIA needs to be informed by multiple disciplines and perspectives from diverse people and regions of the world.

Health impact assessment (HIA) seeks to expand evaluation of policy and programmes in all sectors, both private and public, to include their impact on population health outcomes^{1–3} (table 1). While the idea that the public's health is affected by a broad array of social and economic policies is not new and dates back well over two centuries,^{4,5} what is new is the notion—increasingly adopted by major health institutions, such as the World Health Organisation (WHO) and the United Kingdom NHS^{3,6,7}—that health should be an explicit consideration when evaluating all public policies. At issue are the possible health consequences of myriad public and private sector activities primarily concerned with commerce, housing, transportation, labour, energy, education, etc, and their implications for meeting official targets for improving population health and reducing social disparities in health.

Starting in the mid-1990s, an emerging literature on HIA—chiefly written by and for public

health professionals and advocates in the United Kingdom, Canada, and Europe—has begun to articulate why and how HIA ought to be done.^{1–3, 6–12}

As an activity focusing attention on governmental obligations to health, HIA has much in common with and builds on "environmental impact assessment"^{1,2,13} and also has less recognised but salient links with the field of "health and human rights"¹⁴ and the concept of "human rights impact assessment."¹⁵ By definition, HIA challenges traditional disciplinary boundaries by asking for the broadest possible evaluation of health impacts of programmes and policies lying well beyond the traditional purview of public health. Is, however, HIA an apt approach to addressing these issues?

To spur debate on this query, below we present critical perspectives on the promise, process, and pitfalls of HIA developed during one of the first multidisciplinary and multi-region international meetings focused on this topic (co-sponsored by the Harvard Center for Society and Health and the Harvard University Committee on Human Rights Studies and held at the Harvard School of Public Health, Boston, MA, Aug 16–17 2002). Explicit frameworks invoked to guide discussion were those of social epidemiology (including ecosocial theory),^{16,17} health and human rights,^{14,15} environmental and occupational health (including the precautionary principle and sustainable production),^{18,19} and urban planning and public health.²⁰

THE PROMISE OF HIA

- Enhance recognition of societal determinants of health—and of intersectoral responsibility for health—among a broad audience, inside and outside the field of public health.
- Engage health professionals, policy makers, policy analysts, and affected communities in structured discussions about the public health implications of public and private sector activities, so as to inform strategic planning involving members of all of these groups.
- Encourage interdisciplinary work by health professionals, intersectoral work by policy makers and policy analysts, and creation of advocate-academic-policy initiatives to spur informed action to promote health and reduce health disparities, within and across diverse populations.

See end of article for authors' affiliations

Correspondence to: Professor N Krieger, Department of Health and Social Behavior, Harvard School of Public Health, 677 Huntington Avenue, Boston, MA 02115, USA; nkrieger@hsph.harvard.edu

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* Members of the HIA "promise and pitfalls" conference group are listed at the end of the article.

Abbreviations: HIA, health impact assessment; EIS, environmental impact statement

Table 1 Definitions and characteristics of “health impact assessment” (HIA) as a “concept”, “process”, and “tool” to promote “evidence based policy making”

Definition	Source
“Health impact assessment is a means of evidence based policy making for improvement in health. It is a combination of methods whose aim is to assess the health consequences to a population of a policy, project, or programme that does not necessarily have health as its primary objective.”	Lock (2000) ²
“Health impact assessment is defined as any combination of procedures or methods by which a proposed policy or program may be judged as to the effects it may have on the health of a population.”	Frankish <i>et al</i> (1996) ⁸
“HIA can best be described as a decision-making tool, one that is designed to take account of the wide range of potential effects that a given proposal may have on the health of its target population. Thus, it is a process that: <ul style="list-style-type: none"> • considers the scientific evidence about the relationships between a proposed policy, programme or project and the health of a population; • takes account of the opinions, experience and expectations of those who may be affected by a proposed policy decision; • highlights and analyses the potential health impact of the proposed policy decision; • enables decision makers to make fully informed decisions and to maximise positive and minimise negative health impacts; and, • enables consideration of effects on health inequalities.” 	UK National Health Service (2001) ⁷
“HIA is a developing approach that can help to identify and consider the potential—or actual—health impacts of a proposal on a population. Its primary output is a set of evidence-based recommendations geared to informing the decision making process.”	Taylor and Quigley (2002) ¹¹
“HIA provides a structured framework to map the full range of health consequences of any proposal, whether these are negative or positive. It helps clarify the expected health implications of a given action, and of any alternatives being considered, for the population groups affected by the proposal. It allows health to be considered early in the process of policy development and so helps ensure that health impacts are not overlooked.”	WHO, European Region (2002) ⁶
Characteristics Scope: variously categorised along a continuum, ranging from “mini” or “rapid”, to “intermediate” or “standard”, on up to “comprehensive” and “long term” Timescale: prospective, concurrent, retrospective Type of data: qualitative and/or quantitative; epidemiological and/or ethnographic	

Key points

- Health impact assessment (HIA) has the potential to enhance recognition of societal determinants of health and of intersectoral responsibility for health, but pitfalls of HIA warrant critical attention.
- Greater clarity is required regarding criteria for initiating, conducting, and completing HIA, including rules pertaining to decision making, enforcement, and compliance.
- Improve the environmental impact statement (EIS) development process²¹ by encouraging: (a) inclusion of health impacts on human populations as part of EIS, (b) public input from the start, rather than only at the end of the process, and (c) follow up assessment of the predictions of EIS (which rarely, if ever, is done).
- Aid the further development of human right impact assessment¹⁵ by providing guidance regarding useful criteria, structures, and processes for conducting these assessments.
- Increase awareness of the need for transparency and accountability in the policy making process and of governmental action or inaction in addressing issues identified through HIA.

THE PROCESS OF HIA

- Greater clarity is required regarding criteria for initiating, conducting, and completing HIA, including rules pertaining to decision making, enforcement, and compliance:
 - Who or what initiates the conduct of an HIA? Is it mandated by law if certain conditions are met (as occurs for environmental impact assessment in the United States), or is it conducted on an ad hoc basis?

- Who pays for the HIA? Do they have control over who conducts the HIA?
- Who determines who will be involved in the HIA? By what process are members from affected populations, diverse academic and professional disciplines, policy makers and policy analysts, and other relevant actors chosen? Will the HIA be led by a neutral party without a direct interest in the outcome?
- Who defines who constitutes the “affected populations”? Is there recognition of heterogeneity and inequalities within these populations, especially as related to the impacts being assessed?
- What is the process by which agreement is reached on the approach and scope of HIA, including choice of theoretical models, methodology, and spatial and temporal scales delimiting the impact assessment? Who ensures the HIA’s conduct as an interdisciplinary and intersectoral activity that takes into account the legal and policy, and also economic, social, and cultural context in which it is conducted?
- Who has the authority to determine if the HIA has been adequately and ethically conducted and is complete and accurate? If the parties involved in an HIA disagree on its quality or comprehensiveness, who has the authority to adjudicate disagreements?
- Who ensures that results of an HIA are made available to the general public, rather than kept confidential?
- If an HIA is done and the results are ignored, will there be any consequences?
- Procedurally, HIA should, from the outset, involve researchers, policy makers and analysts, and members of the affected population(s) in joint discussions regarding: (a) which kinds of questions should be asked, from what theoretical perspectives, and (b) what kinds of data are needed.

Policy implications

- Health impact assessment (HIA) seeks to expand evaluation of policy and programmes in all sectors, both private and public, to include their impact on population health outcomes.
 - Mandates to conduct HIA and the costs of providing data for “evidence based policy” could potentially impede efforts to improve population health and reduce health disparities.
 - Critical debate over the promise, process, and pitfalls of HIA needs to be informed by multiple disciplines and perspectives from diverse people and regions of the world.
- Methodologically, HIA has the potential to improve diverse approaches (including community based participatory action research²³) to developing, testing, validating, implementing, and disseminating research on policies that affect population health.
 - Adequate conduct of HIA requires careful consideration of the probable time lag between when a given policy may be enacted and its expression in diverse health outcomes (that is—etiological period). It also requires adequate baseline data and continual monitoring of the health profile of the population(s) at risk over a sufficient time period in order to assess (in quantitative or semi-quantitative terms) the actual impacts on population health, including among vulnerable subgroups.

THE PITFALLS OF HIA

- HIA can—and often has—been conducted without clear elaboration of the theoretical framework(s) guiding its implementation, and without interdisciplinary expertise, thereby producing only partial assessment of the potential health impacts and potentially protecting decision makers from unanticipated consequences.
- HIA tends to emphasise policies that enact changes rather than policies that facilitate neglect (that is—commission rather than omission), focuses on the consequences of policies rather than the determinants of policies, and also typically does not take into account policies that have been hazardous to health for extended time periods.
- While many hold that HIA is best undertaken prospectively and from a multilevel vantage, its appropriate (or optimal) timing is hard to define, and complexities of conceptualising and measuring health determinants and outcomes at multiple levels in relation to multiple pathways cannot be underestimated.
- HIA might lead to an erroneous impression that impacts can be precisely measured or predicted, hence there is a need for sensitivity analysis along with explicit consideration of plausible biological pathways connecting the policy under scrutiny to its hypothesised health impacts.
- HIA might inadvertently imply that health is the key arbiter of all policy decisions, rather than promote recognition of health as one of many outcomes meriting policy attention; charges of “health trumping all” can harm efforts to promote intersectoral and interdisciplinary work.
- HIA might become another mandated checklist activity mired in bureaucracy, rather than a catalyst to engage affected populations, academics, and policy makers and analysts in a genuine participatory process of strategic planning to improve population health and reduce health disparities.
- Costs of HIA can be very high, and it is unclear who will bear this burden or provide the necessary staff; if HIA is required as a state obligation, it could further strain

resources for addressing health problems in poorer countries and poorer areas of wealthier countries.

- HIA could be a significant waste of money, time, and effort, in part because evidence of impacts is only one of many factors affecting implementation of policies.
- HIA might be an impediment to action if an emphasis on “evidence based policy” ends up precluding informed analysis of policies that cannot be studied as randomised trials²³ or whose probable impact extends over a long time-frame.

In summary, HIA has the potential to be a promising tool for promoting awareness of societal determinants of health and reducing social disparities in disease, disability, death, and wellbeing. Realising this promise, however, will require considerable work and careful attention to both process and identified pitfalls. It will also require reckoning with the ultimately political nature of HIA. Whether the public's health will concretely benefit from implementation of HIA remains unknown; achieving this objective will minimally require engaged and sustained dialogue and debate, among and between researchers, practitioners, affected populations, and policy makers and analysts, about the utility, limitations, and practice of HIA.

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Participants included individual academics, members of non-governmental organisations, staff of a governmental statistical office, and technical advisors to WHO and the Joint United Nations Programme on HIV/AIDS (UNAIDS), who together represented (in alphabetical order) over 10 disciplines (economics, environmental health, history of public health, human rights, occupational health, public health surveillance, social epidemiology, sociology, statistics, and urban planning) and 10 countries (Australia, Brazil, Canada, Ecuador, France, India, Malawi, South Africa, United Kingdom, and the United States).

HIA “PROMISE AND PITFALLS” CONFERENCE GROUP (in alphabetical order)

L Badgett (University of Massachusetts, Amherst, USA), A-E Birn (New School University, NYC, NY, USA), P Braveman (University of California, San Francisco, USA), J Breilh, (Centro de Estudios y Asesoría en Salud, Quito, Ecuador), P Carter (HSPH, Boston, MA, USA), P Epstein (Harvard Medical School, Boston, MA, USA), S Koch-Weser (HSPH, Boston, MA, USA), S Kunitz (University of Rochester, NY, USA), J Lynch (University of Michigan, Ann Arbor, MI, USA), M Maluwa (UNAIDS, Geneva, Switzerland), S Marks (HSPH, Boston, MA, USA), T McMichael (Australian National University, Canberra, Australia), J Pitanguy (CEPIA, Rio de Janeiro, Brazil), T K Sundari Ravindran (WHO, Geneva, Switzerland), E Sclar (Columbia University, NYC, NY, USA), F Sihlongonyana (University of Witwatersrand, Wits, South Africa), A Scott-Samuel (University of Liverpool, UK), M Shaw (University of Bristol, UK), D Tarantola (WHO, Geneva, Switzerland), C Victora (Federal University of Pelotas, Brazil), M C Wolfson (Statistics Canada, Ottawa, Canada)

Authors' affiliations

N Krieger, S Gruskin, D H Rehkopf, C Miller, Harvard School of Public Health, Boston, MA, USA
 M Northridge, Columbia University, NYC, NY, USA
 M Quinn, D Kriebel, University of Massachusetts, Lowell, USA
 G Davey Smith, University of Bristol, UK
 M Bassett, New York City Department of Health and Mental Hygiene, NY, USA

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