



Advancing the practice of health impact assessment in Canada: Obstacles and opportunities



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ABSTRACT

Health Impact Assessment (HIA) is recognized as a useful tool that can identify potential health impacts resulting from projects or policy initiatives. Although HIA has become an established practice in some countries, it is not yet an established practice in Canada. In order to enable broader support for HIA, this study provides a comprehensive review and analysis of the peer-reviewed and gray literature on the state of HIA practice. The results of this review revealed that, although there is an abundance of publications relating to HIA, there remains a lack of transparent, consistent and reproducible approaches and methods throughout the process. Findings indicate a need for further research and development on a number of fronts, including: 1) the nature of HIA triggers; 2) consistent scoping and stakeholder engagement approaches; 3) use of evidence and transparency of decision-making; 4) reproducibility of assessment methods; 5) monitoring and evaluation protocols; and, 6) integration within existing regulatory frameworks. Addressing these issues will aid in advancing the more widespread use of HIA in Canada.

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1. Introduction

The World Health Organization (WHO) defines health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 1948). This is considered an ideal to strive for, and it forms the basic principle upon which Health Impact Assessment (HIA) is based. Historically, health has been a secondary consideration, if it is considered at all, in many policy/project decision-making processes. When it has been included, it tends to be limited to an evaluation of health impacts associated with environmental contaminants. More recently, it has been acknowledged that a wider range of health issues can arise from implementation of policies and projects originally thought to be outside of the scope of more traditional environmental assessment methods (NCCHPP, 2013). These issues include both direct and indirect stressors that can be distributed both temporally and geographically across a population. Often referred to as the ‘social determinants of health’ this collection of factors related to health status ranges from biological characteristics (i.e., age, gender, genetics, etc.) to socioeconomic factors (i.e., education, income, lifestyle factors, etc.) as well as distribution of health impacts and overall perceptions of well-being (Whitehead and Dahlgren, 1991; Fig. 1).

There are a number of different ways that health can be implicated from the execution of policy, program or project decisions. Additionally, personal values and public perceptions, attitudes and behaviors can influence health via actual or perceived impacts (Frankish et al., 1996). The complexities that surround each of these determinants and their interactions, make it particularly difficult to evaluate potential changes that may result from policy or project decisions. Despite this difficulty, these are important aspects of overall health and well-being that are currently lacking in many of the traditional assessment methods.

1.1. The HIA process

WHO (1999) has identified the four core values that form the foundation of HIA. These include: democracy, equity, sustainable development and ethical use of evidence. Democracy is introduced into the HIA process by allowing people to participate in policies or projects that may impact their health. There are varying levels of public participation in the HIAs conducted to date (Wright et al., 2005a). Equity is an inherent part of HIA since it focuses not only on the presence or absence of potential impacts but also on the distribution of impacts across populations, including vulnerable groups (Heller et al., 2014). Sustainable

development can be addressed in HIA by carefully considering the extent of impacts, both short and long term to evaluate the full effects of a particular undertaking. Finally, ethical use of evidence is an important aspect of HIA since every assessment should be based on the best available qualitative and quantitative evidence and conducted using sound methods (WHO, 1999). However, there is often a high degree of variability among HIA reports with respect to the quality of evidence and rigor of the methodology.

WHO (1999) defines HIA as “a combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population.” However, they note that there is no ‘correct’ definition of HIA since those provided by various government and health agencies place emphasis on different aspects of the process. For example, the United States National Research Council (NRC, 2011) provides a more prescriptive definition of HIA as “a systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program or project on the health of a population and the distribution of those effects within a population. HIAs provide recommendations on monitoring and managing those effects.” Another description published by Lock (2000) highlights the interdisciplinary nature of HIA and points out the quantitative and qualitative aspect of the process: “A structured method for assessing and improving the health consequences of projects and policies in the non-health sector. It is a multidisciplinary process combining a range of qualitative and quantitative evidence in a decision making framework.” It is apparent from these and other definitions, that HIA is a process that has yet to be consistently and clearly defined and although the basic idea is similar, the details and specific methods remain inconsistent and unclear (Joffe and Mindell, 2005). Adding to this lack of consistency and clarity within the practice of HIA, is the fact that there are different approaches to the process as a whole. Birley (2011) presents the HIA spectrum that ranges from the highly technical to the highly social. Similarly, Harris-Roxas and Harris (2011) identify four models of HIA that are typically applied including mandated, decision-support, advocacy, and community-led HIAs. Each of these models serves a different purpose and the end product can appear quite different, although the authors argue that these differing approaches serve different purposes and lend themselves to the flexibility of the HIA process.

The one area where there is general consensus among HIA practitioners is the required steps or key components of an HIA (Eckerman, 2013; Taylor and Quigley, 2002; Wernham, 2011). The HIA process consists of a series of steps that are intended to provide a structural framework around which the assessment will be conducted (Fig. 2). Although guidance documents from around the world have slight variations on these steps, the process is fundamentally the same. The first step is to conduct a screening to determine, through a rapid review of available evidence, whether an HIA is warranted (Ross et al., 2014). If it is decided that an HIA is the appropriate course of action, the assessment must be scoped. The purpose of the scoping step is to plan the overall approach to the HIA including methods, content and logistics. Feedback from stakeholder engagement initiatives plays a key role in identifying important issues for consideration in the HIA. The next step is the assessment, which can vary widely depending on the project, policy or program in question. The assessment step is where all of the planning in the scoping phase is carried out to “identify whether impacts are likely to occur and then to quantify or characterize the predicted impacts” (Ross et al., 2014). Based on the findings of the assessment, specific recommendations may be made in an attempt to mitigate negative impacts and enhance positive impacts to the extent that they are politically, socially and technically feasible. The reporting step involves dissemination of the methods and results to key stakeholders. Monitoring is intended to ensure that the control measures and health predictions in the HIA are accurate and effective. However, this is one of the least well-defined steps of HIA and is seldom implemented. Although not always

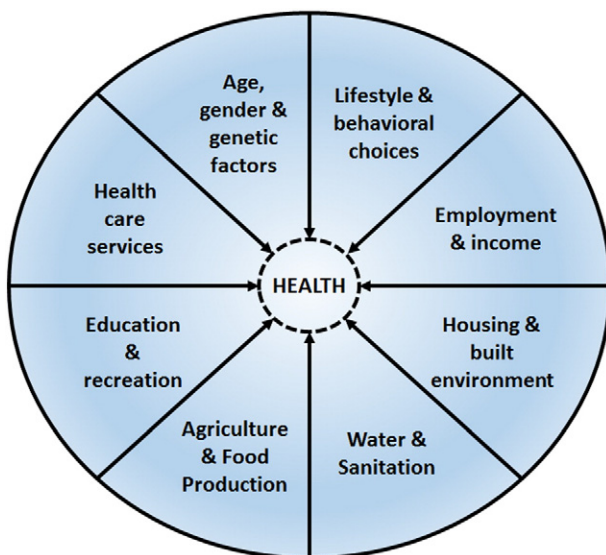


Fig. 1. Determinants of health. Modified from Whitehead and Dahlgren (1991).

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