

Exploring Health Impact Assessment in Europe

Matthias Wismar PhD¹, Kelly Ernst MPH¹, Julia Blau MSc¹

¹European Observatory on Health Systems and Policies Rue de l'Autonomie 4, 1070 Brussels

Correspondence to: Matthias Wismar, PhD, European Observatory on Health Systems and Policies, Rue de l'Autonomie 4, 1070 Brussels

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Abstract

Background: Health impact assessment (HIA) prospectively judges the potential health impacts of pending decisions and feeds the assessment back into the decision making process. HIA is considered as a key tool for intersectoral collaboration. This article presents selected results of a mapping exercise on HIA in Europe. The mapping exercise is complemented by the presentation of a conceptual framework on the effectiveness of HIA and illustrative examples.

Method: Two methodologies are employed in this article: First, the use of HIA across Europe is based on a survey conducted by 21 teams in 19 countries. A semi standardized questionnaire was employed, using a wide variety of sources. Second, for the discussion on the effectiveness of HIA, a conceptual framework using four types of effectiveness was employed.

Results: HIA is a common practice only in a handful of European countries. In most of Europe, HIA is at an early developmental stage. The mapping exercise, however, provides evidence that HIA can work across all sectors and at all political level, although there is currently a focus on the local level. HIA is conducted in different countries by different sets of actors and organizations, reflecting the existing setup. The evidence on the effectiveness of HIA is still inconclusive. However, single case studies and upcoming evidence suggests that HIA has the capacity to inform and influence the decision making process.

Conclusions: HIA can work and deliver. The variations in context across European countries have resulted in different forms of implementation and different dynamics of developing HIA.

Key Words: health impact assessment, HIA, decision making, effectiveness, intersectoral

Introduction: What is HIA and why are we exploring it?

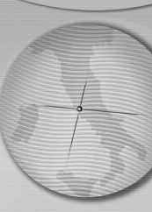
What will be the health effects of a planned new airport runway [1], the proposed incineration of old car tyres in a cement plant [2], or the implementation of the European employment strategy [3]? The expected increase in noise emission, air pollution, and job insecurity may affect the health of the population negatively. Epidemiological studies show that this can cause new or aggravate existing conditions, for example, hearing loss [4], decline in cognitive [5] and physical performance [6], myocardial infarction [7], respiratory diseases and stress [8].

Some of the proposals, however, may also have the potential to cause positive consequences on health. The new airport runway may attract new business and create new jobs and the European employment strategy may decrease levels of unemployment both with positive effects on the health of the population.

But will these effects really materialize in the given scenario? What will be the balance between the positive and the negative effects? Will the entire population be affected or will it be confined to vulnerable or specifically exposed groups like the young, the elderly, the sick, the poor, and the disenfranchised that would need specific protection?

These are pressing questions for policy makers and the potentially affected population. Should these plans go ahead or should they be dropped or modified. Either way a decision may have massive impacts on health, the economy and the social fabric of a given population. What can be done to have a better understanding of the negative and positive health consequences of pending decisions?

Health impact assessment (HIA) is a tool that addresses these questions and feeds the answers back into the decision making process. According to the definition of the Gothenburg consensus,



HIA is “ [...] 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” [9]. There are many other definitions of HIA [10;11] still, most researchers would agree on two central features as suggested by Kemm and Parry [11]:

- It attempts to predict the health consequences of different options
- It is intended to influence and assist decision makers

The development of HIA has received support both from the WHO [12;13] and the European Commission. The European Commission has supported the development of tools [14], but more importantly, it is implementing an integrated impact assessment in which health plays a role [15]. Some European governments such as the English and the Swedish have supported the development of HIA in their health policies [16;17].

These developments reflect an enthusiasm linked to the potential of HIA. Health impact assessment is considered a major opportunity to integrate health into all policies [18]. Health impact assessment has been so attractive because it promises to influence the decision making process, address all determinants of health, tackle inequities [19], and provide a new impetus for participation and empowerment in health [20]. Its capacity to influence the decision making process is linked to its prospective character.

Undoubtedly, HIA is a fascinating concept, but, beyond all of the conceptual attraction and political enthusiasm, the question needs to be answered if HIA delivers on its promises. In the following sections we address five questions:

- Is HIA a common practice in European countries?
- Is HIA applicable across all the sectors?
- Is HIA feasible at all political levels?
- Is HIA conducted by a clearly defined set of actors and institutions?
- Is HIA effective?

Methodology and Definitions

In 2005, a mapping exercise on the use of HIA in European countries was carried out. The research was conducted by 21 research teams in 19 countries. The research took place between January and July 2005. The research teams were asked to complete a questionnaire by providing data on all existing HIAs at national level and from a selected reference region and reference locality. The research covered a period of 15 years ranging from 1 January 1990 to 31 June 2005.

The selection of a single definition of HIA as inclusion criteria was avoided during the study to

allow countries to report on their own domestic definitions, interpretations and practice of HIA. [18]. While, according to the project data, the ‘Gothenburg Consensus’ still provides a general framework of orientation for HIA for many countries, it is clear that countries must define HIA in a manner that fits the context in which it will be utilized. Contextual differences, implementation mechanisms and issues such as funding vary greatly from country to country. HIA draws on the experiences of a wide range of stakeholders throughout the process and the HIA model must be flexible enough to adapt to and/or address country specific situations.

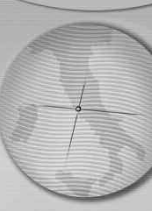
The second part of the project, “The effectiveness of HIA” involved the selection of a single HIA for each country to analyze its capacity to influence the decision making process and identify if it was adequately taken into account by the decision makers. The results of this aspect of the project were published in October 2007 in the book, “The Effectiveness of Health Impact Assessment” [21].

HIA is a common practice only in some countries

The above mentioned research identified 470 documented HIAs for the 19 countries included in the research. For 158 of the HIAs, reports could be retrieved and were included in a database for analysis. Most HIAs in this sample came from England, Finland, the Netherlands and Wales. Sweden is often referred to as a country with a high frequency of HIAs, however, only a small number of HIAs were included in the database, as the national definition employed by the Swedish public health policy defines a proper HIA to be both equity oriented and participatory. Not all HIAs are documented, especially in countries such as Sweden and Finland where HIA procedures are included in regular decision making at the local level [22].

Apart from this handful of countries, HIA is still in its infancy in Europe. It is subject to academic research or scientific pilot projects to explore the usefulness of the concept and the feasibility of its implementation in a specific national context.

Not all countries are making progress in the same direction. The Netherlands is an example which previously had a strong track record in HIA including its implementation on the national level. However, since the last general elections, capacities on the national level were reduced and HIA became more and more confined to the local level [23]. In contrast, other countries such as Lithuania have made health an important and obligatory component of their Environmental Health Impact Assessment [24].



HIA is applicable to all sectors

The examples mentioned in the introduction already refer to a diverse set of sectors, such as transport, the labour market and the manufacturing industry. This universal applicability is essential for the usefulness of HIA, since health is not only determined by health services, but also by a wide range of economic, social, psychological, and environmental factors [25,26].

According to the above mentioned mapping exercise, HIA is being carried out across all sectors. It was most commonly found in the transport, housing and urban planning, and environmental sectors. Some HIAs dealt with programmes or projects stretching across a variety of sectors.

HIA has a strong focus on the local level

The HIA mapping exercise has shown that in principle HIA takes place at all political levels. However, the results of the 158 reported HIAs showed that the greatest number of HIAs had been conducted at the local level (81), then the national level [54] and finally the regional level [24]. These results need to be interpreted with great care. Since only one reference region and one reference locality were selected per country, it is not possible to extrapolate this information within countries and/or between countries.

It should also be taken into account that institutional settings differ between countries. In some countries decision making and HIA only takes place at two levels, meaning that in addition to the national level, HIA is only taking place either at the regional or local level, as is the case in Slovenia where HIAs are carried out only at the national and regional level. Comparisons between levels have to be made cautiously as responsibilities for policies and public health functions sit at different levels in different countries.

A plurality of professions and institutions are involved in HIA

HIA is not the preserve of any one disciplinary group. Instead, it requires broad participation if a comprehensive picture of potential health impacts is to be established. The cooperation and expertise of a wide range of stakeholders (people who are involved in the project or will be directly affected by it) and key informants (people whose roles result in them having knowledge or information of relevance to the project and its outcomes) is needed. Public participation throughout the HIA is essential, both to ensure that local concerns are addressed and for ethical reasons of social justice [27].

There are a multitude of different bodies and entities serving the function as a lead agency; however, a key role is played by governments and the public sector administration or institutes. The mapping exercise shows that most countries have established "lead agencies" which can act as focal points exerting technical leadership and providing support regarding conducting, organizing, managing, commissioning and supervising the HIA.

Although governments and government agencies play an important role in the implementation and delivery of HIA, there is a large variety of other institutions and organizations involved in capacity building and the delivery of HIA including local authorities, public health institutes, health observatories and special HIA units, universities and private companies.

Requirements of health information and intelligence can be quite demanding. Information on population health status and health determinants must be available at each level the HIA is to be conducted at. Clearly, in many countries, HIA practitioners have received little support in regard to HIA related health intelligence. They must rely on their personal experiences and their own networks when planning and conducting HIAs, or they have to use intelligence provided by other countries which may not translate to their own setting.

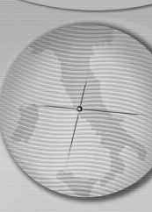
A lack of resources and finances for HIA has exacerbated the problems surrounding health intelligence as well as capacity building of adequately trained staff. In some instances, a budget for HIA is reserved within the general budget of national or regional institutes. Money to conduct HIAs often comes from the regular budget of institutes or local administrations.

Capacity building provides specific input for the HIA system. Key aspects are the production and training of HIA practitioners, and the establishment of support units. There can be a close link between capacity building and health intelligence, since support units may provide health intelligence required for conducting HIA.

Countries need to build on the resources they have available to conduct HIAs. Those without the necessary resources can undertake HIAs at a lower level of detail than those with the necessary budgets and infrastructure.

Exploring the effectiveness of HIA

Until the recent publication on the results of the effectiveness analysis, there was no comprehensive or conclusive evidence on the effectiveness of HIA. The available evidence on the effectiveness of HIA



is still rather anecdotal. Singular case studies are difficult to compare due to differences in the conceptual frameworks and the definition of effectiveness.

In the second part of the project's research, on which this article is based, effectiveness has been defined as the HIAs capacity to influence the decision making process. Starting from this assumption, four types of effectiveness were distinguished.

The first type, direct effectiveness, refers to cases in which the HIA has contributed to a modification in a pending decision. In theoretical terms, this category is in line with the rational model of policy making. In this model, research and information plays an important role in filling knowledge gaps [28]. Recently published research produced by the project provides clear evidence on the effectiveness of HIA. One example shows that the assessment has limited the night flight permission of a metropolitan airport due to the potential health impacts. In other cases, modifications introduced by the HIA were meant to prevent the worst case scenario, e.g. not allowing construction to go ahead around the clock. However, in no case was a complete drop of the pending decision seen.

General effectiveness, the second type, comprises of cases where the results of the HIA have been adequately taken into account by the decision makers but did not result in a modification of the pending decision. This may be the case if there is a trade-off between health and other perspectives. Policy makers may argue that, for example, employment or mobility are more pressing issues or more important than health. They will accept the negative health consequences in exchange for other benefits. In this respect, the HIA's function was to make the health consequences explicit, accessible and transparent to the wider public. The need to justify a decision in light of projected negative health consequences implicitly acknowledges the importance of health in other policies and constitutes a general positive effect. There are other cases that can be subsumed into this category. For example, when an HIA fails to confirm health concerns to the disappointment of the (non) affected population [1;2]. General effectiveness can also be observed when it helps decision makers to understand the relevance of health issues. Diverse examples refer to this general effectiveness: opening up of contacts within each organization, the development of local working relationships, the exchange of knowledge, the sharing of expertise, the

opportunity to address a wide range of health impacts, greater credibility of the assessment during discussion with the decision makers, the pooling of resources, and greater ownership of the assessment [29].

Opportunistic effectiveness can be seen when the HIA "seems to have" an effect on the decision. In fact, the HIA was only brought into the equation to justify or support a decision that was already determined. This means, that the assessment reported by the HIA was never adequately acknowledged. While the outcomes in terms of health gains may be positive, it remains arguable if the HIA was exploited on the grounds that the results were predictably in line with the dominant political force.

The last category comprises all cases in which the HIA has neither changed the decision nor was the evidence adequately acknowledged. The HIA may not have had effects because either it was unwanted, or the scientific robustness of the results was disputed or it was not delivered on time to influence the decision.

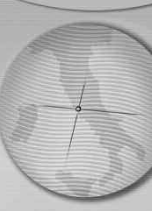
Conclusion

But what about the examples mentioned in the introduction? The burning of old car tyres in a cement plant was assessed as being harmless from a health point of view, much to the disappointment of the local population which had pressed for the HIA. The Finningley Airport HIA reported a positive net result of health effects. While the assessment of the implementation of the European Employment Strategy demonstrated that, when implemented in Germany, the net effect would be negative and the effects would be distributed over different sub-populations. HIA is a decision support tool that informs decision-makers on the positive and negative health consequences of pending decisions.

It has the capacity to promote health in all policies, and it also has the potential to mediate conflicts and provide for rational debate.

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