TYPES OF HEALTH IMPACT ASSESSMENTS

CARMEN DOMNARIU

"Lucian Blaga" University of Sibiu

Abstract: Health impact assessment (HIA) is a formal approach used to predict the potential health effects of a policy, with particular attention paid to impacts on health inequalities. It is applied during the policy development process in order to facilitate better policy-making that is based on evidence, focused on outcomes and includes input from a range of sectors.

Keywords: health impact assessment, approach, health effects, health inequalities, policy

Rezumat: Evaluarea impactului stării de sănătate (HIA) constituie o abordare formală folosită pentru a prezice posibilele efecte asupra sănătății în ceea ce privește o anumită politică de sănătate, cu o atenție deosebită acordată impactului asupra inegalităților în materie de sănătate. Aceasta este aplicată în timpul procesului de dezvoltare de politici, în scopul facilitării elaborării de politici mai bune, bazate pe dovezi, orientate pe rezultate și cuprinzând informații din mai multe sectoare.

Cuvinte cheie: evaluarea impactului stării de sănătate, abordare, efecte asupra sănătății, inegalități în sănătate, politică

Health Impact Assessments can be carried out on policies, programmes, and specific projects. These may be at a national, regional, district or a very local level. They can be carried out for a number of reasons, for example, to appraise a number of options, to lobby for particular outcomes, to bring decision makers and/or users together, and to develop an evidence base.

HIA's can also take place at different times:

- as part of the project or policy development process. These are **prospective assessments**, carried out before significant decisions and actions have been taken on a policy or project and designed to ensure that positive health impacts are maximised and negative impacts minimised. To be influential, the HIA needs to be carried out early enough to have an effective input into decision making process, but late enough that the proposals are sufficiently firm to enable an assessment.(1)
- whilst a policy, programme or project is being implemented. Concurrent assessments can provide an opportunity to "tweak" the operation and delivery of a programme, policy or project to enhance health

outcomes and to generate data and evidence that might not be available once the activity has ended. A concurrent HIA is carried out during the implementation of a proposal, and may be of long duration, for example several years, involving the monitoring of changes in health determinants and possible in health status. The aim is to identify as they occur, which is important if a proposal has some potentially serious health impacts that are unknown or uncertain because the HIA enables prompt action to be taken. A secondary aim is to evaluate the accuracy of predictions made during a related prospective HIA undertaken previously.

• after a programme or project has been completed, a retrospective assessment can be used to calculate benefits and inform the development of future plans and programmes. A retrospective HIA is carried out after a proposal has been implemented. It aims to identify the actual impacts on health outcomes after implementation. It differs from evaluation, which monitors the extent to which the proposal's objectives were achieved.(2) While it is unable to influence the intervention, the HIA can suggest additional actions that may now be required. It can also make a contribution to the evidence base, thereby informing similar proposals in future.

In addition to time, HIA's can also vary by the scale of resources available. Resources can include evidence, skills, information, expertise, funding, and time.

- A **rapid assessment** can be done in half a day by a group of informed people using their judgement. Any evidence used will be from existing sources, such as local authority and health statistics or local evaluations and from the experiences of those making the assessment. Information will be needed on which groups of people are being targeted for the assessment (young, old, ethnic minorities, men between 50 and 65 etc) and on the design and operation of the policy, programme or project being assessed. A rapid HIA can "score" a number of options for their health impact and help to identify gaps and ways to improve health outcomes at little cost. One of the outcomes of a rapid appraisal may be the recognition of the need for a more substantial assessment.
 - An intermediate assessment uses readily accessible

and routinely collected data but can also involve a literature search for appropriate evidence and indicators. This work may be combined with a workshop for interested parties that uses and/or sets the specification for the data collected.

• A comprehensive assessment tends to require the collection of new data, significant involvement and consultation with a wide range of stakeholders, systematic reviews of existing evidence and secondary analysis of existing data. "Control" populations may also be used. The process can take several months, require specialist skills, and demand significant resources.

Related types of assessments

The impact on health is included to some extent in models of environmental and social impact assessment. Synergy between different impact assessments may be attained, and overlap or overburden with various impact assessments can be prevented by coordination and cooperation. Whether to carry out separate HIA or to combine this with other impact assessments is just one of the critical questions facing policy-makers.(3)

Environmental Impact Assessment (EIA) was initiated by the National Environment Policy Act (NEPA) (4,5) in 1969 in the USA () and has since been introduced widely throughout the world. An Environmental Impact Statement (EIS) is the summary of the results of an HIA. A draft EIS is made available for the public consultation process, after which a final version is prepared and this forms part of the subsequent decision making process.(6) EIA is generally carried out at a project level. In principle, consideration of human health outcomes should form part of the assessment but this is frequently omitted or appraised in a manner this is not considered satisfactory by the public health specialists. However, an EIA can provide data that are useful for health, for example, on air pollution. The results of a proposal on determinants of health (for example, air pollution) are often referred to as effects, with consequent results on health being called impacts. Limitations of EIA are that project level assessment may be too late in the process to influence broader policy, and the responsibility for EIA is taken by the proponent of the project, so that its dependence may be compromised.

Environmental Health Impact Assessment (EHIA) has been proposed, which explicitly includes consideration of health outcomes, within the framework of an Environmental Impact Assessment, to address the historical neglect of health in HIA.(7) However, linking health to EIA has the drawback that some proposals may have implications for health an its determinants yet would not trigger an EIA, either because it is not statutorily required or when there are not considered to be potential environment impacts.

Whereas EIA refers to single projects, **Strategic Environmental Assessment (SEA)** refers to policies, plans and programmes. Compared with an EIA of a local project, the environmental impacts considered are more general, relating to global and regional impacts, but less detailed. The objectives of SEA are to ensure the full consideration of other policy options, including the "do nothing" option, at an early stage; enable consistency across different policy sectors, thereby facilitating trade offs; ensure the more complex, distal and unintended consequences are considered, so that adverse impacts can be prevented; assess the environmental impact of policies without an overt environmental dimension; and to include environmental as well as economic and social concerns in decision making.(8)

Social impact assessment (SIA) is concerned with estimating prospectively the likely social consequences of a specific policy or government actions.(9)

"By social impacts, we mean the consequences to human population of any public or private actions that alter the ways in which people live, work, play, relate to one another, organize to meet their needs and generally cope as members of society." The Interorganizational Committee on Guidelines and Principles, 1994.(9)

SIA resembles EIA both in process and in the assumption that its purpose is to identify potential adverse impacts in advance in order to mitigate them.(9) SIA usually includes public involvement (10) and consideration of the distribution of impacts in the population and the effects on vulnerable groups (9) The main impacts considered are population characteristics, community and institutional structures, political and social resources, individual and family changes and community resources.(9)

Integrated assessment: HIA is often not the only type of assessment that is indicated. Typically, the officials who are responsible for developing the proposals for an intervention are faced with the need to assess the proposal for several major types of impact, for example, social, economic, environmental, and/or health. This could involve a formal EIA or SEA and/or SIA, but it could also include for example, assessing the potential impact on gender relations, small business etc.

Magnitude of impact

As an HIA aims to assess how a population's health status would be affected by the implementation of a proposal, it has an affinity with certain concepts that are being developed by the WHO.

The burden of disease is the total quantity of ill health caused by a particular disease of risk factor. WHO have a programme that estimates this for the main causes of mortality and major morbidity, measured using the "disability adjusted life years" or DALY's. The attributable health impact is similar: the amount of ill health that can be attributed to a particular risk factor.

The achievable health impact (or avoidable burden of disease) is the change in health status that would be expected to follow specified change in the level of a risk factor in relation to an intervention.

REFERENCES

1. Mindell J, Ison E, Joffe M. A glossary for health impact assessment. J Epidemiol Community Health 2003;57:647/651.

- Milner S, Marples G. Policy appraisal and health project. Newcastle Health Partnership, Phase 1 – a literature review. Newcastle: University of Northumberland at Newcastle, 1997.
- 3. Health Impact Assessment: main concepts and suggested approach, Gothenburg consensus paper, December 1999.
- Weed DL, McKeown T. Ethics in epidemiology and public health I. Technical terms. J Epidemiology Community Health 2001;55:855-7.
- Acheson D. Report of the independent inquiry into inequalities in health. London: TSO, 1998. http://www.officialdocuments.co.uk/document/doh/ih /ih.htm (accessed 29 Jan 2003).
- Kemm JR. Developing health impact assessment in Wales. Better health, better Wales. Cardiff: Health Promotion Division, National Assembly for Wales, 1999.
- 7. Birley M, Bloand A, Davies L et al. Health and environmental impact assessment. An integrated approach. London: Earthscan Publications, 1998.
- 8. Therivel R, Wilson E, Thomson S et al. Strategic environmental assessment. London: Earthscan Publications, 1992.
- Interoragnizational Committee on Guidelines and Principles. Guidelines and principles for social impact assessment. Impact assessment 1994;12:107-52.
- Banken R. From concept to practice: including the social determinants of health in environmental assessments. Can J Public Health 1999;90:S27-30.