

## Commentary

# What can health impact assessment add to comparative risk assessment in decision-making?

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Kjellstrom et al. make a very valid point by advising that comparative risk assessment (CRA) should be used to describe different health risks according to their common source (or driving source). This new use of CRA would inform about the health impacts of existing policies, such as transport policies, and about important health risks that may be overlooked by these policies.

The authors' recommendation that CRA should be combined with health impact assessment (HIA) outlines the benefits of CRA, but says relatively little about what HIA (HIA) can add to the combination (apart from engaging with stakeholders). This information is relevant for those who may consider using the combination of the two methods and is the focus of this commentary.

HIA is a systematic methodology used to inform about the health relevance of policy decisions. Quantitative assessments of risks, such as CRAs, are used in one of the stages of HIA.

HIA begins by clarifying which policy options are to be compared with respect to their expected health impacts. Those policies are screened to identify whether a need for a health assessment exists. When a health assessment is required, the range of health concerns and issues raised by those policies is identified (scoping), with consideration given to the current scientific knowledge and the concerns and expectations of stakeholders about how the policies may affect their health. These steps allow relevant questions to be identified, and these are then addressed in a stage that involves appraisal of the health impacts. A brief or more detailed appraisal can use a CRA to compare existing quantitative information on health risks. Formal reporting of the results follows, and at this stage, stakeholders again have the opportunity to debate the findings and their implications for decisions on policy options, including mitigation measures. Monitoring of health impacts follows the policy implementation, so that the effectiveness of the process can be assessed and any unexpected results identified.

HIA has parallels with and draws on the experiences of environment and social impact assessments. The procedure involved in a HIA follows the same steps as those in environmental impact assessment and strategic environmental assessment. This process facilitates comparisons with the assessment of other (non-health) impacts of policies. It therefore is suitable for use as one of the safeguards when introducing new policies — for example, as used by development banks in attempts to avoid unwanted effects of investment decisions. It is also a tangible and practical way to pursue healthy public policies (as began in the European Union, see article by Hübel & Hedin in this issue of the *Bulletin*).

What can HIA (a policy-driven process) contribute in addition to CRA (a science-driven process) when bringing

evidence to decision-making? HIA helps to frame and formulate the relevant health questions by examining the situation from a wider base than science alone. It brings transparency to the use of evidence in decision-making, as policy options are clarified and the procedures followed in each step of the assessment can be checked. It facilitates stakeholder debate and participation when the questions to be considered are identified and when the policy options are discussed in view of the results of the health appraisal. The required monitoring allows decision-makers to learn about the implications of using evidence for decision-making.

The real test of the value of using a combination of HIA and CRA in decision-making has to come from evaluation of actual practice. The descriptions provided by Kjellstrom et al. and those in this commentary are about the potential benefits of a good practice combination of CRA and HIA. Whether such a combination actually delivers an improvement in the use of evidence for policy-making, beyond rhetoric, needs to be tested in practice. This is an area that needs research.

Readers are advised to look further for examples of HIAs of transport policies, such as those used to assess transport alternatives in Edinburgh and London or and for the extension of airports in Manchester and Finningley (see [http://www.hia-gateway.org.uk/Resources/completed\\_hia\\_database/completedhialist.asp](http://www.hia-gateway.org.uk/Resources/completed_hia_database/completedhialist.asp)) or elsewhere (1). Kjellstrom et al. give only one example of a HIA of roads in Australia, and that failed to include air pollution (i.e. bad practice). Their second case is an example of the failure to incorporate health aspects in environmental impact assessments — that is, it is a limitation of environment impact assessments not of HIAs. Their third and fourth cases are good examples of health risk assessments of air pollution attributed to transport; they are not HIAs, however, because they did not relate to policy options, did not address other risks from transport, did not include the required stages of HIA (screening, scoping, etc.), and did not involve stakeholders when the questions were framed or the policy options discussed. These analyses pointed out the importance of air pollution as a risk factor to health and estimated the proportion of health impacts from air pollution attributed to transport, but they did not make connections with specific policy decisions. One of these analyses by Künzli et al. (2) was commissioned as part of a larger effort on transport environment and health that did make those wider connections (3).

Kjellstrom et al. raise some key issues in HIA and CRA that may need further clarification. These issues are well worth debate, in view of the relevance of both methods in bringing evidence into policy-making. ■

**Conflicts of interest:** none declared.

## References

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