Challenges of the Health Impact Assessment (HEI) in Environmental Impact Assessment (EIA) in the 21st Century

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What is an Health Impact Assessment (HIA) within an Environmental Impact Assessment (EIA)?

- “a practical approach used to evaluate the potential health effects of policies, programs, or projects on a population, particularly on vulnerable groups or disadvantaged groups.”

The Role of Health Impact Assessment

“an activity that helps policymakers understand health as a concept much broader than the healthcare system and treatment.”

Cole BL, Fielding JE. "Health impact assessment: a tool to help policy makers understand health beyond health care." Annual Review of Public Health. 2007;28:393-412.

Basic Values of Health Impact Assessment

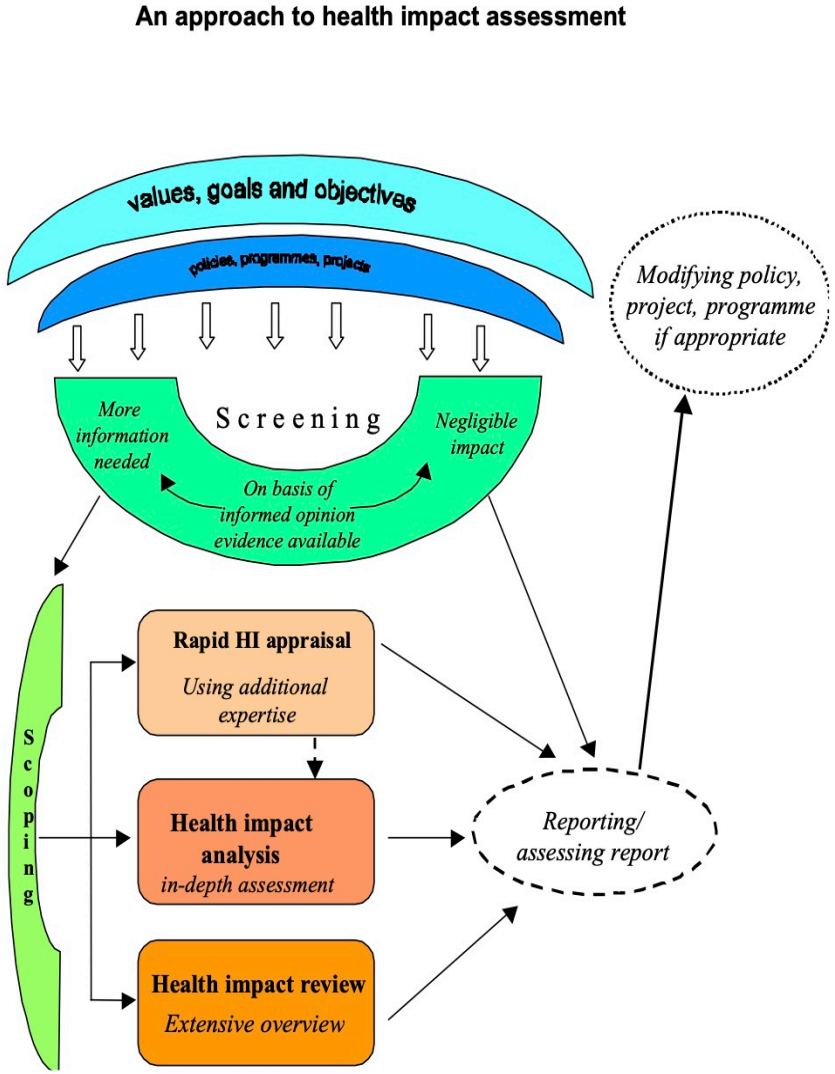
The approach is grounded in four interconnected values:

- democracy (ensuring stakeholder participation),
- equity (addressing impacts across the entire population),
- sustainable development,
- and the ethical use of evidence

International Legally Binding Framework for the Implementation of Environmental Health Impact Assessments

- *Convention on Environmental Impact Assessment in a Transboundary Context*
- *Strategic Environmental Assessment (SEA)—Protocol on Strategic Environmental Assessment under the Convention on Environmental Impact Assessment in a Transboundary Context (Kyiv Protocol)*
- *Amendments to EU Directive 2014/52/EU*

Gothenburg Consensus Paper



Key Questions

- Will the project's health impacts be significant in terms of the number of affected individuals and/or the magnitude of the impact?
- Are there adequate methods, expert analyses, and evidence available to assess the project's impact on health?
- What data sources can be used for this assessment?

Methodology

- • the use and analysis of surveys, interviews, and focus groups;
- • field observations;
- • statistical analyses of health data and GIS mapping;
- • interpretation of data;
- • identification and citation of evidence supporting the recommended measures for reducing health risks.

Limitations in Methodology and Data for New and Emerging Risks

- 1. Lack of Uniform Frameworks
- 2. Various Methods of Assessment
- 3. Expertise Gaps and Resource Limitations
- 4. Considerations for Equity
- 5. Governance Challenges -Risks of Stakeholder Conflict

Lack of Uniform Frameworks

- • There are gaps in assessing long-term health risks because life cycle assessments (LCAs) of technologies lack data on supply chain emissions, particularly during the disposal phase.
- • There are no widely recognized metrics for quantifying health impacts across environmental domains such as soil pollution or biodiversity loss, especially for non-climate-related factors

Various Methods of Assessments

- Experience from developed countries shows a persistent conflict between research-focused HIA, which relies on numbers and models, and step-by-step HIA, which relies on stakeholder input, complicating the integration of EIA procedures.

Expertise Gaps and Resource Limitations

Sometimes, especially when new technologies are applied , there is a lack of sufficient expertise in multidisciplinary epidemiology, environmental science, and economics—skills essential for conducting integrated assessments (HIA within EIA).

Considerations for Equity

- • Vulnerable populations (including low-income communities, farmers at risk of losing their land and livelihoods, and biologically sensitive groups such as children and the elderly) face disproportionate exposure to environmental hazards. Yet they are often underrepresented in impact analyses. There is no available data on possible positive (or negative) economic impacts of the project.
- • Environmental changes that displace families, particularly agricultural workers and farmers, often place additional burden on women, leading to gender-related disparities. These social determinants of health have not been examined in the available studies.

Governance Challenges-Risks of Stakeholder Conflict

- Reliance on “information conduit" techniques, whereby industry-provided environmental data is assessed by industry-funded experts, may skew evaluations in favor of corporate interests.

Precautionary Principle

- • Act even in the face of scientific doubt
- • Preventing serious or permanent damage
- • Integration with health and environmental law
- • Directing risk evaluation and decision-making
- • Application in public health

Conclusion

- Health impact assessment (HIA) must be the part of environmetal impact assessment (EIA)

- It is necessary to open wide multidisciplinary scientific, expert and policy making discussion on all existing challenges related to the conduction of HIA, rather than not conducting HIA due to mentioned numerous challenges

Дуже дякую!

Thank you very much!