Science, policy and children’s health: Where are we going

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Rationale

• Question:
  – “What is the evidence on EMF”?
  – “What is the best course of action to protect and maximise health?”

• Rapid advancement of technology

• Organisation of society increasingly complex

• Multiple, complex pathways to health
Protection of public health

• Traditionally based on a paradigm of exposure-disease associations (adverse effects)

• Risk assessment
  – Risk identification
  – Risk characterisation
  – Dose-response, exposure profiling
  – Quantitative estimation of risk

• Risk Management
A broader perspective

• The risk factor – health outcome association is often over-simplistic
• Broad model of health (WHO definition of 1948)
• Context is important
  – Multiple factors (confounding, synergies, interactions,…)
  – Adaptive responses
  – Variable vulnerability
  – Socio – economically mediated effects
• Divide between assessment and management difficult to draw
• “Chapters” of physical environment, such as radiation, less workable
• From “environment” to “sustainable development”
Science – policy interface

• Need to study the health consequences of policies, plans, development, etc

• Interest in “upstream” health determinants

• Art 152 of the Amsterdam Treaty of the EU: all new Community policies should ensure a high level of human health protection

• Aim at “evidence based policy making”, but recognise other elements (values, cultural background, perception etc)
Budapest 2004: “The Future of our Children”

- Fourth Ministerial Conference on E&H, 23-25 June
- Children’s health; future generations’ health; sustainable development
- Attended by 52 Member States, IGOs, NGOs
- Main political outcomes:
  - Ministerial Declaration
  - Children Environment and Health Action Plan for Europe (CEHAPE)
CEHAPE: Four regional priority goals

1. Prevent and reduce morbidity and mortality from gastrointestinal disease, improving access to safe water and sanitation

2. Prevent and reduce health consequences from accidents and injuries and address lack of adequate physical activity

3. Prevent and reduce respiratory disease due to outdoor and indoor air pollution

4. Reduce risk from exposure to hazardous chemicals, physical agents and biological agents
## Action on EMF

<table>
<thead>
<tr>
<th>Environmental health objective</th>
<th>Code</th>
<th>Specific action</th>
<th>Type of evidence</th>
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<tbody>
<tr>
<td>Reduce exposure to electromagnetic fields (EMF)</td>
<td>L</td>
<td>Consider, taking into account the most updated literature, the application of prudent avoidance policies, to reduce exposure to EMF</td>
<td>3,3,2,3</td>
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<td>E</td>
<td>Educate children, caregivers and teachers about the desirability of limiting exposure to EMF in childhood, particularly that associated with the use of mobile telephones</td>
<td>3,3,2,3</td>
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<td>L</td>
<td>Enact/enforce legislation on safety thresholds and basic restrictions on non-ionizing radiation as established by the International Commission on Non-Ionizing Radiation Protection (ICNIRP)</td>
<td>3,2,n/a,3</td>
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Role of uncertainty

• CEHAPE largely based on evidence on burden of disease
• Uncertain health threats also addressed
• Role of precautionary principle
• Provision made by policy and legislative framework, e.g., art 174 of EC Treaty:
  “Community policy on the environment […] shall be based on the precautionary principle […] that preventive action should be taken…”
• Strongly advocated by many Member States
• Emphasis on implementation and action
WHO’s objectives

• Guidance and recommendations on:
  – Concrete use of the precautionary principle in health and environment decision making, with special reference to questions that affect children’s health and sustainability
  – How to adopt precaution in the early stages of the policy and technology development process
  – How the PP can help identify priorities of research, thus stimulating scientific development rather than hampering it
  – Preventing misuse of the precautionary principle
Monograph

The PP: protecting public health, the environment and the future of our children
M. Martuzzi and J. Tickner, eds

WHO EURO, 2004

Working paper

Dealing with uncertainty – how can the pp help protect the future of our children?

EUR/04/5046267/11

www.euro.who.int/budapest2004
17a. We welcome the work done in WHO on the precautionary principle and more generally on precautionary considerations. We [acknowledge] [note] the WHO document *Dealing with uncertainty – how can the precautionary principle help protect the future of our children?*

17c. We call upon WHO to ensure that guidelines are developed with the aim of balancing the distribution of benefits and costs of environmental health measures and weighing up the health improvements and other benefits against anticipated costs, as well as possible legal constraints and impediments to free trade.
17b. The proposed approach in the WHO document has relevance to the whole risk assessment, management and communication process, and can be based on simple steps and policy actions such as:

• improving and expanding the range of scientific tools;
• increasing the transparency of decision-making, expanding the range of stakeholders and legitimate factors involved in decision-making processes;
• increasing our ability to identify early warnings of risks;
• establishing research and education programmes to address gaps in knowledge;
• developing and implementing safer and cleaner production and sustainable consumption patterns.
Precautionary Principle

- Taking action in the face of scientific uncertainty
- Reversing the burden of proof
- Openness
- Analysis of alternatives
Children’s E&H, PP: upcoming events

- 22 June 2004, Pre-Conference Workshop *Children in Their Environments: Vulnerable, Valuable & at Risk: The Need for Action* organised by EEA, WHO/Europe and the Collegium Ramazzini

- EC’s SCALE strategy on environment and health launched in Budapest

- Symposium on PP at 2004 ISEE Congress, 1-4 August, New York
Conclusion

What is the best course of action to protect and maximise health?

• Engage in answering
• Consider realistic context
• Clarify terms of question
• Promote science as main criterion
• Make the most of available tools