Preface

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Biographical notes: Alessandro Alimonti is a Senior Researcher at the Department of Environment and Primary Prevention, Italian National Institute of Health. His research interests are mainly focused on the role of chemical elements in health and environmental problems, encompassing the evaluation of markers of exposure, effect and susceptibility, the development of validated analytical methodologies and the assessment of reference values for elements in biological materials for use in life sciences. At present, he is a participant in and/or responsible for several national and European research projects, in particular, he is a Coordinator of PROBE, the National Network of Biomonitoring of the exposure of the general population. He is the author or coauthor of more than 180 scientific contributions.

Stephan Böse-O'Reilly is a Paediatrician and Master of Public Health with a special degree in environmental medicine. He is working as a Assistant Professor at the Institute of Public Health in Hall, Austria. Since 1999, he has been responsible for the environmental health assessment within six projects in developing countries for United Nations Industrial Development Organization (UNIDO). The issue of concern was the improper use of mercury for gold mining. His main field as a senior scientist is the area of children's health and

environment, where he is mainly involved in developing and implementing training programmes for healthcare providers. He is responsible for the development of guidance on mercury and children's health for WHO.

Hanns Moshammer studied medicine at the University of Graz, Austria and has become a Medical Doctor in 1984. He is specialised in hygiene and preventive medicine with diplomas in public, occupational and environmental health. Since 2000, he has worked at the Institute of Environmental Health at the Medical University of Vienna, mainly in the field of environmental epidemiology. He participated in several international and EU-funded projects on air pollution and respiratory health of children, health impact assessment of air pollution, environmental impact assessment and tobacco control. He is the President Elect of the International Society of Doctors for the Environment (ISDE) and member of several scientific associations.

Peter Jan van den Hazel, MD, MPH, is trained in environmental health. He is specialised in consulting on a broad range of environment and health problems. He has been the President of the Dutch Association of Environmental Medicine, 1988–1998 and the President of the International Society of Doctors for the Environment, 2001–2003. He is the Founder and Chair of the Board of the International Network on Children's Health, Environment and Safety (INCHES) since 1998. As a Special Advisor to Commissioner Wallström of the EU on the pre-work of the SCALE process, he got interested in building bridges between science and policy. He has worked on this issue as a Coordinator of EU-funded projects PINCHE (QLK4-2002-02395), CHEST (DG-Sanco-2003310) a project on training in children's health, environment and safety, and currently of PRONET (FP6-044159).

This issue of the *International Journal of Environment and Health* focuses on children. 'Why children?' some might ask. Many environmental hazards and risks (such as anthropogenic chemical and physical factors) are major determinants of children's health and well-being. However, there are many differences in countries around the world. Hazards may be determined by local or regional activities, living conditions or even geographical situation. Most hazards are unrecognised because the causal link to health is still missing. Some hazards such as noise, fine particles and passive smoking, are considered important by both medical and environmental experts, but are still largely unknown to the general public. New environmental threats to children's health will emerge, and the scientific community has to be careful to include the protection of vulnerable groups in their research and recommendations.

The environment of children faces some more important issues: nutrition, housing and traffic and public media. Especially these broad issues in society warrant attention by a broad range of stakeholders. The tasks of identification and problem-solving need to be tackled by a mixture of experts and disciplines. Most action can be seen in relation to acute and visible problems. However, the fact is that society (governments, administration, industry and consumers) is disregarding the long-term sustainability of their actions and behaviour. This limited approach to protecting the environment by producing short-term policies endangers the future of our children and grandchildren. This approach is in contrast to the existing declarations and official international action plans. These plans give a broad overview of the needs to protect children in the future and include training, capacity building and awareness raising activities. The bright side of children's environmental health is the growing amount of experts, researchers and

educators working to improve the environment for children. The presenters at the 4th International Conference on Children's Health and Environment in Vienna (2007) were good representatives of this point. However, there are still mainstream scientific fields not involved with children's environmental health. This point needs to be addressed. In the near future, the ranking of priorities for research, policy and actions will remain necessary, taking into account costs and effectiveness since resources to be invested certainly will remain limited, but it would be a major step forward if the focus on children were to be included in this process.

The main difference of this journal from previous issues is the broad range of disciplines from which the authors stem. They represent not only the health and environment scientific fields, but also the social, policy or communication scientific disciplines.

The papers in this issue discuss the threats to children on a global scale (see the paper by Neira) or on a national level as in the paper by Corra. This paper also shows the multidisciplinary approach to develop a children's environmental health national profile. The efforts of the European Commission to facilitate exchange and evaluation of national and regional interventions on environment and health exposure reduction measures on a regional level and promote implementation of successful initiatives in other regions of Europe are exemplified by the project PRONET described by van den Hazel et al.; Jedrychowski and Polańska discuss issues related to prenatal and postnatal exposures to environmental factors. Few papers describe the impact of settings on children's health. Wendel et al. discuss the designing and building of healthy places, Moshammer discusses household influences on children's lung function, and Kistnasamy et al. as well as Rudnai discuss the respiratory problems in children in relation to their school or home environment. Conrad et al. examine children's health consequences of involuntary tobacco smoke consumption at home by means of interview-guided questionnaires and analysis of urinary nicotine and cotinine. Paramesh shows data on the seasonal variations in asthma in children in India, acknowledging the role of the ambient air in these variations. A number of papers take exposure to certain environmental stressors as a starting point. Grandjean and Perez describe the role of methylmercury on neurodevelopment in children. Leijs et al. discuss the perinatal dioxin exposure in The Netherlands and call for preventive measures before conception. Conti et al. review the knowledge on the environmental exposure to platinum released by automotive catalytic converters and its possible health implications. Dargan et al. describe the potential risk of heavy metal poisoning from Ayurvedic traditional medicines and the need for appropriate education of the public.

Finally, we know that in our society, despite, or maybe because of, the multitude of information and disinformation, children's environmental health lacks the scientific and public attention it deserves. Special issues like this one contribute to improving that situation.