

Edinburgh 2007: Towards a Smokefree Society

PROGRAMME <http://www.smokefreeconference07.com/programme.php>

Time & Date: 02:00 03:15pm 10th September 2007

Session: 2a

Title: **PARENTAL SMOKING AND RESPIRATORY HEALTH OF CHILDREN**

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The objective was to study the relative impact of pre- and postnatal exposure on respiratory symptoms and functions of primary school children in a wide range of geographical settings. In a pooled analysis, on 53 879 children from twelve cross-sectional studies, including spirometric data from a total of 22,712 children from eight countries, effects were estimated, within each study using linear and logistic regressions, controlling for individual risk factors and study area. Heterogeneity between study-specific results, and mean effects were estimated using meta-analytical tools. Adverse effects of both pre- and post-natal parental smoking on children's respiratory health in Europe and North America were confirmed. There was strong evidence linking parental smoking to wheeze, asthma, bronchitis and nocturnal cough, with mean odds ratios all around 1.15, with independent effects of pre-natal and post-natal exposures for most associations. Asthma was most strongly associated with maternal smoking during pregnancy (OR 1.18, 95% CI 1.08-1.28), and even in healthy children with decreases in lung function between -1% (FEV₁) and -6% (MEF₂₅), indicating long-lasting harmful effects of smoking during pregnancy. Independently, parental smoking later in the child's life increased bronchitis, wheeze and nocturnal cough and also impaired respiratory function, ranging from -0.5% (FEV₁) to -2% (MEF₅₀). A 4% lower MMEF associated with smoking during pregnancy corresponded to a 40% increase in the risk of poor lung function (MMEF less than 75% of expected). True effects of parental smoking are expected to be even higher because of exposure misclassification in this study and inherent weaknesses of cross-sectional approaches which do not capture behavioral effects (e.g. parents giving up smoking because of a diseased child). Also selection bias must be taken into account when studying healthy pupils, having survived early adverse health effects of parental smoking (e.g. abortus, SIDS, bronchiolitis and pneumonia in infancy, etc.)

Born Sept 14, 1946 in Vienna, Austria. Married to a general practitioner, one daughter (ophthalmologist).
Current position: Full professor of Environmental Health at the Center of Public Health, heading the Department of Preventive Medicine at the Institute of Environmental Health at the Medical University of Vienna.
Qualifications: 1971 M.D. (University of Vienna) and ECFMG graduate. Completion of residency in Internal Medicine 1977 and Public Health (Hygiene & Preventive Medicine) 1980. Postgraduate training in environmental medicine, occupational medicine and epidemiology (certification as a specialist in occupational medicine 1997). Certified court surveyor for environmental, occupational and preventive medicine 1997.
Former leading positions: senior physician, heading a medical department in a Viennese hospital, 1989-92 deputy director of the Institute of Environmental Medicine of the municipality Vienna, then deputy director of the Institute of Environmental Health at the University of Vienna.
Research: 390 scientific publications, mainly on health effects of air pollution, cancer epidemiology and lung disease, including pioneer work in human biomonitoring and round robins (COHb, heavy metals in cord blood, etc.):
<http://www.meduniwien.ac.at/user/manfred.neuberger/daten/LIST.htm>
Consultancies: WHO: International Programme on Chemical Safety of (member and chairman of task groups), International Agency Research on Cancer (member of working groups), United Nations Development Programme (clinical toxicology, environmental and occupational medicine).
Board member of: International Society of Environmental Medicine, International Council for Scientific Development, Austrian Society of Hygiene, Microbiology and Preventive Medicine (treasurer), Austrian Society of Occupational Medicine, Austrian Society of Pneumology, Austrian Society of Toxicology, Austrian Council on Smoking & Health, Austrian Society for Air and Soil Pollution Prevention (vice chair). Member of: International Commission on Occupational Health, International Academy of Science (Health & Ecology), Society of Hygiene, Environmental and Public Health Sciences (Advisory Council), Austrian Academy of Sciences (Clean Air Commission), European Network on Smoking Prevention (national representative).