Non-Ionizing Radiation & Children's Health

International Joint Workshop
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POSTER ☒

PLATFORM PRESENTATION ☐

The Information System EMF-Portal: Overview Of Scientific Publications On Children's Health And Non-Ionizing Electromagnetic Field

Dagmar DECHENT

Research Center For Bioelectromagnetic Interaction (Femu), Rwth Aachen University, Aachen, Germany

The internet information system "EMF-Portal", free accessible at www.emf-portal.org, provides publication data of all published scientific studies in the area of bioelectromagnetic interaction and detailed summaries on experimental medical/biological as well as epidemiological studies in the whole range of non-ionizing electromagnetic fields (EMF).

The aim of the presentation is to give an overview on the functionality and structure of the EMF-Portal as well as to show specific search strategies to find publication on children's health and non-ionizing electromagnetic fields.

Up to now, approximately 14,000 papers published in the last 30 years mainly from peer-reviewed scientific journals have been collected in the database, categorized into different subject areas as well as frequency ranges and provided online with their bibliographic data. Studies in the research area of electromagnetic interaction with biological organisms or medical systems, epidemiological studies, reviews, and international recommendations are classified and summarized in a database structure developed for this purpose only. Currently, there are detailed summaries of about 2,180 out of 5,960 experimental medical/biological studies and about 210 out of 560 epidemiological publications.

The EMF-Portal provides a sophisticated search tool to find publications on specific endpoints within different frequency ranges. Keywords are linked with the glossary whereby similar words are automatically included. The search can be separately performed in all types of studies.

Regarding the current topic of children, the search for epidemiological studies on children reveals publications with different endpoints such as childhood cancer, childhood leukemia, behavioural problems or cognitive function. Furthermore, it is possible to focus the search on specific exposure sources, e.g., power transmission lines and railroad traffic in the range of extremely low frequency electromagnetic fields, and e.g., mobile phones or radio and television transmitters in the radio frequency range. Additionally, medical/biological studies can be similarly searched for prenatal or postnatal exposure on different endpoints. These search tools allow the user to find literature on children's health and non-ionizing electromagnetic fields and to get information on the studies by reading the detailed summaries.

The EMF-Portal supplies up-to-date information on the published scientific studies in the area of bioelectromagnetic interactions and detailed summaries on experimental medical/biological as well as epidemiological studies. The overview of the literature on children shows the research focus in the some ranges of electromagnetic fields and different endpoints during the past decades. The EMF-Portal provides an instrument for scientists and policy makers for future research direction.

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