The largest number of retrieved journal articles was in the topic area of work environment and health, followed by papers on environmental exposures and environmental illnesses. These three main topics were the primary focus of environmental health research in 73% published papers. Less research efforts were directed to topics, such as environmental-health hazards, environmental-health risk management and risk assessment. The least represented in the review main topics was environmental-health policy research.

There are marked differences between countries with regard to their research publication outcomes. Three countries: Germany, Sweden, Italy, contributed 40.1% of all research published papers and 10 countries as much as 80%. Large majority of environmental-health research is focusing on identification of environmental-health hazards, exposures and environmental etiology of diseases and significant advances have been made during recent years in understanding associations between health and environment, but relatively little research effort is oriented towards strengthening environmental-health policy and to solving public health related problems.

Scientific data and knowledge are spread among different networks and databases. More collaborative research is needed in order to link these areas of data and knowledge in a more effective way and for a better use in planning future environmental-health research.

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Can we track the long-term consequences of public-health interventions?

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Surveillance, the ongoing tracking of factors affecting health and of indicators of public health, has long been central in strategies to improve the health of the public. While originally applied to infectious diseases, the concept has proved useful for chronic diseases as well. This presentation addresses the use of the concept of surveillance to characterize the longer-term effects of interventions, regardless of their modality, on health. Fundamental to the application of this approach is data on the profile of population exposure over time and on the associated risk. Both are needed to estimate and track the burden of disease. Increasingly, policy makers and stakeholders are calling for evidence on whether interventions have led to anticipated health benefits. The term “accountability” is now used in regard to determining the benefits of regulatory and other measures intended to improve environmental quality. With regard to air pollution, for example, as levels have declined in many developed countries, an accounting of the benefits has been called for. This presentation addresses the approaches for such assessments, drawing on the examples of air-pollution management and tobacco control. For both, multiple interventions have been made, beginning as early as the 1950s in some countries. Experience with these two major public-health problems illustrates the challenges of characterizing the consequences of particular interventions. For some types of exposures (e.g., climate change and health), modeling of scenarios is inherently the only approach for addressing the consequences of intervention. The presentation will make clear the need for methodological work to strengthen tracking approaches.

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