

P144

EVIDENCE-BASED SEARCH STRINGS FOR THE STUDY OF FARMERS' OCCUPATIONAL DISEASES

Stefano Mattioli,¹ Laureta Delaj,¹ Davide Gori,¹ Alberto Baldasseroni,² Lara Ricotta,¹ Stefania Curti,¹ Andrea Farioli,¹ Francesca Zanardi,¹ Francesco Violante¹ ¹*University of Bologna, Bologna, Italy;* ²*CeRIMP, Florence, Italy*

10.1136/oemed-2011-100382.358

Objectives The aim of the study was to identify efficient PubMed search strategies to retrieve articles regarding putative occupational determinants of farmers' diseases.

Methods Based on Medical Subject Heading (MeSH) definitions and expert knowledge, we selected the MeSH term agricultural workers' disease and, as candidate search terms, five MeSH terms describing farm work (pesticides, agriculture, rural population, rural health, agrochemicals NOT pesticides) alongside 25 other promising terms. Using random samples of abstracts retrieved by each term, we estimated proportions of articles containing potentially pertinent information regarding occupational aetiology in order to formulate two search strategies (one more "specific", one more "sensitive"). We applied these strategies to retrieve information on possible occupational aetiology among farmers of knee osteoarthritis, multiple sclerosis and kidney cancer. We evaluated the number of abstracts needed to read (NNR) to identify one potentially pertinent article in the context of these pathologies.

Results The more "specific" search string was based on the combination of terms that yielded the highest proportion (40%) of potentially pertinent abstracts. The more "sensitive" string was based on use of broader search fields and additional coverage provided by other search terms under study. Using the specific string, the NNR to find one potentially pertinent article were: 1.3 for knee osteoarthritis; 1.3 for multiple sclerosis; 1.1 for kidney cancer. Using the sensitive strategy, the NNR were 1.8, 2.4 and 1.4, respectively.

Conclusions The proposed strings could help healthcare professionals explore putative occupational aetiology for farmers' diseases (even if not generally thought to be work-related).