MS INTEROCC – collaborative study on brain cancers

196 EVALUATION OF THE QUALITY AND COMPARABILITY OF JOB CODING ACROSS SEVEN COUNTRIES IN THE INTEROCC STUDY

David McLean,[1] Martie van Tongeren,[2] Lesley Richardson,[3] Brigitte Schlehofer,[4] Rodrigo Villegas,[3] Geza Benke,[5] Avital Jarus-Hakak,[6] Martine Hours,[7] Louise Nadon,[8] Florence Samkange-Zeeb,[9] Anne Sleeuwenhoek,[2] Elisabeth Cardis,[3] The INTEROCC study group[1] *[1]Massey University, Wellington, New Zealand; [2]IOM, Edinburgh, UK; [3]CREAL, Barcelona, Spain; [4]DFKZ, Heidelberg, Germany; [5]Monash University, Melbourne, Australia; [6]Gertner Institute, Ramat Gan, Israel; [7]Université Lyon 1, Lyon, France; [8]University of Quebec, Montreal, Canada; [9]BIPS, Bremen, Germany*

10.1136/oemed-2011-100382.196

Objectives In case-control studies exposure is generally inferred from self-reported job histories coded to occupation and industry classifications. In the INTEROCC study, a hygienist from each of seven countries coded local jobs reported (39 613 total jobs) to assign chemical and extremely low frequency (ELF) exposures through linkage with two job-exposure matrices. To maximise the quality and comparability of coding between countries, two comparison trials were conducted.

Methods After establishing guidelines for coding, and a group training exercise, a first trial assessed coding on 50 randomly selected subjects (241 jobs) and differences were evaluated and discussed. A second trial of 50 jobs was completed after coding finished. Pair-wise agreement between each coder was assessed, and an analysis of variance (ANOVA) was used to evaluate comparability of exposures assigned to selected chemical agents and ELF.

Results Pair wise agreements between coders for ISCO 68 and ISCO 88 showed improvement of at least 10% between trials. Although differences were observed in the numbers of jobs assigned with exposure to the chemical agents and ELF, and in the mean cumulative exposure estimated for given agents, none were significant in either trial.

Conclusions Exposure misclassification in occupational epidemiology has the potential to bias results and complicate interpretations. This study showed that the reliability of occupational coding could be improved by providing clear guidelines and using a web forum to discuss difficult cases. The remaining variability may reflect true inter-country differences; however, the difference in coding did not result in significant differences in exposure assignment.