

The Accuracy of Occupational Exposure Histories By Questionnaire Interviewers

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The object of the study is to determine the accuracy of occupational histories, including exposures at the workplace, taken by standardized questionnaire interviewers. Seven thousand pregnancy women were taken their occupational histories by three mutually standardized interviewers using structured questionnaires. Each woman was asked about her job titles and several specific exposures at her workplaces, including lead, mercury, organic solvents, plastics, and soldering operation. To verify the accuracy of our measurements, we have randomly selected 143 subjects out of 4340 working women for site visits. Because the site visit was performed several months after delivery, we found that 26 subjects had already resigned before or after delivery, 30 subjects either moved to other places or changed their phone numbers and could not be located, 5 subjects with their factories closed, 6 subjects with factories which refused to be inspected although the main reasons are unrelated to occupational exposures, and there were 4 subjects whom we were unable to reach their workplaces. We have successfully determined the occupational titles and exposures on 72 subjects (50%). Using the assessment of an experienced occupational physician as the golden standard, we have found that the accuracy of interviewers were 96%, 93%, 86% and 75% for major division, division, group, and item of international classification of occupations, respectively. And job titles were as accurate as 93%, 81%, and 79% for major division, division, and group of international classifications. The sensitivities of exposures to lead, organic solvents, plastics, soldering and mercury were 100%, 67%, 0%, 100% and 0% respectively, while the specificities were all 100% except lead exposure, which was 98.6%. We conclude that occupational histories with a specific operation (e.g. soldering) taken by interviewers were relatively accurate. Occupational exposures to well-known toxic metals such as lead tended to be over-reported by working women, while those of organic solvents and poorly-defined terms such as plastics tended to be underreported. (*Natl J Public Health Assoc (ROC)* 1987; 7(1): 35-42)