

Short reports

Accuracy of occupational histories obtained from wives

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Case-control studies of fatal diseases often rely on occupational histories provided by next of kin, but little is known about the accuracy of information obtained in this way. As an adjunct to a survey of occupation and cancer in men under the age of 55, we have compared employment histories elicited independently from a sample of middle aged men and their wives.

Methods and results

The study was conducted at two Southampton hospitals during evening visiting periods. Female patients under the age of 55 who were being visited by their husbands and who were well enough to take part were asked to complete a self administered questionnaire giving their husband's lifetime occupational history. Simultaneously, one of us interviewed the husband and requested the same information. To ensure that the histories from husbands and wives were independent, the interviews and questionnaires were completed in separate rooms as soon as the study had been explained, and on any single ward not more than one couple was approached in the same week.

Thirty one couples agreed to take part in the study (one pair refused), the ages of the husbands ranging from 33 to 68 with a median of 46. Employment

histories were coded using the Registrar General's 1966 classification of occupations¹ and 1968 classification of industries.² These coding systems classify occupations and industries at two levels. Occupational and industrial "orders" are aggregates of more specific categories known as "units." For example, the occupational order "woodworkers" comprises five units—"carpenters and joiners," "cabinet makers," "sawyers and woodworking machinists," "pattern makers," and "woodworkers not elsewhere classified."

For each couple we counted the number of different occupations and industries reported by the husband alone, by both partners, and by the wife alone. Of 122 occupations detailed by the husbands only 62 were accurately reported by their partners (see table). Some discrepancies arose from minor differences in the wording used to describe jobs—for example, one man described himself as an electrical fitter where his wife stated that he was an electrician—and this was reflected in a higher level of agreement for occupational orders than for occupational units. The concordance rates for industrial units and orders were higher than for occupation. For only one couple did the histories agree completely.

Comment

Occupational data recalled from memory are difficult to validate because there is rarely a reliable

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Jobs reported by husband alone, by both partners, and by wife alone

	<i>No of occupations/industries described by</i>		
	<i>Husband alone</i>	<i>Both partners</i>	<i>Wife alone</i>
Occupational units	60	62	22
Occupational orders	33	62	9
Industrial units	43	85	17
Industrial orders	29	78	11

standard against which their accuracy can be assessed. This investigation compared two sources of information, neither of which was completely reliable. If the same error occurred in the histories of both a husband and his wife it will not have been detected, and if a couple disagreed there is no certainty which, if either, was correct. Probably, however, most discrepancies arose from errors, particularly omissions, in the information provided by wives. Most jobs that the wives failed to report had been held early in their husbands' working lives.

There is no doubt that occupational histories elicited from relatives can be a valuable source of information. The risk of nasal cancer associated with dusty work in boot and shoe factories was discovered in part from data of this type.³ Nevertheless, our findings illustrate the limitations of histories obtained by proxy, particularly through self adminis-

tered questionnaires. When studies are based on occupational data recalled from memory, allowance must be made for the source of the histories, and negative results must be interpreted with caution.

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References

- ¹ General Register Office. *Classification of occupations (1966)*. London: HMSO, 1966.
- ² Central Statistical Office. *Standard industrial classification*. London: HMSO, 1968.
- ³ Acheson ED, Cowdell RH, Jolles B. Nasal cancer in the Northamptonshire boot and shoe industry. *Br Med J* 1970;i: 385-93.