

Table Comparison of relative risk (RR), risk odds ratio (OR), incidence rate ratio (IRR), prevalence odds ratio (POR) and prevalence ratio (PR). An index (A or B) refers to a specific subpopulation. The hypothetical populations are assumed to fulfil necessary stationarity assumptions.

| R_A^* | R_B^\dagger | RR | OR | IRR | $D_A \ddagger = D_B \S = 1$ | | $D_A = D_B = 4$ | | $D_A = 4; D_B = 1$ | |
|---------|---------------|------|------|------|-----------------------------|------|-----------------|------|--------------------|------|
| | | | | | POR | PR | POR | PR | POR | PR |
| 0.60 | 0.50 | 1.20 | 1.50 | 1.32 | 1.32 | 1.17 | 1.32 | 1.07 | 5.29 | 1.92 |
| 0.60 | 0.30 | 2.00 | 3.50 | 2.57 | 2.57 | 1.82 | 2.57 | 1.34 | 10.3 | 2.99 |
| 0.60 | 0.10 | 6.00 | 13.5 | 8.70 | 8.70 | 5.02 | 8.70 | 2.65 | 34.8 | 8.24 |
| 0.40 | 0.10 | 4.00 | 6.00 | 4.85 | 4.85 | 3.55 | 4.85 | 2.26 | 19.4 | 7.04 |
| 0.20 | 0.10 | 2.00 | 2.25 | 2.12 | 2.12 | 1.92 | 2.12 | 1.59 | 8.48 | 4.96 |
| 0.20 | 0.05 | 4.00 | 4.75 | 4.35 | 4.35 | 3.73 | 4.35 | 2.77 | 17.4 | 9.65 |

* R_A = Risk of developing illness in subpopulation A during 1 time unit.

R_B = Risk of developing illness in subpopulation B during 1 time unit.

$\ddagger D_A$ = Mean duration of illness in subpopulation A (time units).

$\S D_B$ = Mean duration of illness in subpopulation B (time units).

their notation, prevalence rate ratio (PRR) is used instead of prevalence ratio (PR), which seems confusing, as prevalence and rate are different concepts. The fundamental flaw in their argumentation, however, is that they place, in some respects, cross sectional studies on an equality with longitudinal studies by considering a PR as a relative risk and a POR as a risk odds ratio when comparing the effect measures; as is seen in the table, this is certainly not true. Contrary to their conclusion, by estimating the ratio of the mean durations, D_A/D_B , a POR can easily be converted into an incidence rate ratio (under certain stationarity assumptions),¹ whereas a relation between the PR and some aetiologically understandable effect measure may be more difficult to see through.

Moreover, Lee and Chia's description is imperfect in another respect: the reader is left with the impression that the POR is the only effect measure possible to estimate under a logistic regression model; if a PR is desired instead, it can always be obtained from the estimated probabilities of study illness for different covariate patterns, based on the model.³

It should be stressed that restricted stationarity assumptions underlie the derivation of the mentioned relations between prevalence, incidence, and duration and hence limit the applicability of these known relations. As far as I know, there are no empirical studies that show to what extent departures from these assumptions may influence the effect estimates. In practice, the underlying mechanisms that affect the outcome of a cross sectional study are complex. Hopefully, recent theoretical work^{4,5} will somehow improve our ability to analyse and interpret data from cross sectional studies.

ULF STRÖMBERG

Department of Occupational and Environmental Medicine,
University Hospital,
S-221 85 Lund, Sweden

- 1 Feeman J, Hutchison GB. Prevalence, incidence and duration. *Am J Epidemiol* 1980; 112:707-23.
- 2 Greenland S, Thomas DC. On the need of the rare disease assumption in case-control studies. *Am J Epidemiol* 1982;116:547-53.
- 3 Hosmer DW, Lemeshow S. *Applied logistic regression*. New York: Wiley, 1989.
- 4 Keiding N. Age-specific incidence and prevalence: A statistical perspective. *Journal of the Royal Soc A* 1991;154:371-412.
- 5 Alho JM. On prevalence, incidence, and duration in general stable populations. *Biometrics* 1992;48:587-92.

NOTICES

Reminder

Symposium on health hazards of glycol ethers. 19-21 April 1994, Abbay de Port-à Mousson, Nancy, France

(More details appear in *Br J Ind Med* 1993;50(November):1056) For further information contact the Symposium Secretariat, International Symposium on Health Hazards of Glycol Ethers, INRS, Avenue de Bourgogne BP 27 F54 501 Vandoeuvre Cédex France. Tel (33) 83 50 20 27, Fax (33) 83 50 20 96.

Fourth International Conference on Education and Training in Occupational Health, 24-28 April 1994, Amsterdam, The Netherlands.

The conference is organised by the Amsterdam School of Occupational Medicine, Corvu and will take place in the buildings of the Universiteit van Amsterdam. It aims at those involved in teaching professionals in the field of occupational health, safety, and wellbeing. The scientific programme consists of oral presentations, workshops, poster sessions, and, as a new element, demonstration lessons. It is built up along two lines. Firstly, the establishment, performance, and evaluation of an education and training programme. Secondly, the establishment, performance, and evaluation of an occupational health and safety programme in a company. During the whole conference there will be an information market and a sponsor market. The fee is DFL 820 (members of ICOH may register for DFL 780).

For more information, contact the Conference Office, Universiteit van Amsterdam, PO Box 19268 1000 GG Amsterdam, The Netherlands, fax +31-20-5252771 or email congres@bdu.uva.nl.

NEW BOOK ANNOUNCEMENTS

Health promotion in the Workplace: Alcohol and Drug Abuse

Report of a WHO Expert Committee
Technical Report Series No 833.

1993, v +34 pages (available in English; French and Spanish in preparation).
ISBN 92 4 120833 3.

Sw fr 7.-/US \$6.30.

In developing countries: Sw fr 4.90.

Order No 1100833.

Electromagnetic Fields (300 Hz-300 GHz)

Environmental Health Criteria No 137.

1993, 282 pages (English, with summaries in French and Spanish).

ISBN 92 4 157137 3.

Sw fr 34.-/US \$30.60.

In developing countries: Sw fr 23.80.

Order No 1160137.

1,3-Dichloropropene, 1,2-Dichloropropane and Mixtures

Environmental Health Criteria No 146.

1993, 261 pages (English, with summaries in French and Spanish).

ISBN 92 4 157146 2.

Sw fr 31.-/US \$27.90.

In developing countries: Sw fr 21.70.

Order No 1160146.

Methyl Parathion

Environmental Health Criteria No 145.

1993, 244 pages (English, with summaries in French and Spanish).

ISBN 92 4 157145 4.

Sw fr 28.-/US \$25.20.

In developing countries: Sw fr 19.60.

Order No 1160145.

Correction

Radiographic abnormalities and mortality in subjects with exposure to crocidolite (1993;50:902-906).

During printing fig 2 (p 905) was inadvertently changed. The correct fig 2 is given here:

