

Correspondence

Rates of sickness absenteeism among employees of a modern hospital: the role of demographic and occupational factors

Sir,—In a recent paper (1985;42:326-35), Pines *et al* have shown that sickness absenteeism among hospital workers was significantly related to their occupation after standardisation for age, sex, marital status, and duration of employment. By contrast, they showed that age or sex affected the number of days of sick leave much less than the occupational factor. It is thus surprising that their proposal to reduce sickness absenteeism should be directed towards groups defined by their demographic characteristics. As they mentioned, there have not been enough studies on health problems and related absenteeism in association with working conditions of hospital personnel. Some results, however, show clearly the links between those working conditions, specific disorders, and sick leave; we will give four examples to illustrate this point.

Low back pain is common in hospital workers¹⁻³; in a French sample of hospital workers (including doctors), 10% had at least one sick leave for low back pain over a year.¹ This proportion increased dra-

matically with age, and this disease accounts for a large part of absenteeism in older workers. It also varied according to working conditions and was 15 times more frequent among manual workers and nursing staff than among doctors.¹ In another study a similar observation was made for cleaners using a certain type of machine for waxing floors.⁴

Psychological difficulties in relation to the types of patient are also a source of sick leave. We have compared the frequency and duration of sick leave in two departments of a pediatric hospital—neuropaediatrics and endocrinology.⁵ Over one year, 60% of the staff of the neuropaediatrics department had at least one sick leave compared with 34% in the endocrinology department; the average number of days of sick leave was also higher in the former. There was no difference in age, family status, duration of employment, or work time between the staff of the two departments. The main difference originated from the type of patients treated in each department and the psychological difficulties of the staff in the neuropaediatric department in relation to the condition of their patients.

Several studies have also shown that nurses on shift work or on night work have more frequent and longer sick leaves; such results have been found, for instance, by Colligan *et al* (ref 11 in the paper of Pines *et al* and Logeay *et al*).⁶

A study of pregnant women working in hospital has

Sick leave and hospital admissions during pregnancy and preterm deliveries according to occupation and indicator of strenuous working conditions

Occupation and indicator of working conditions*	No	Average No of days sick leave†	Hospital admission (%)	Preterm delivery‡ (%)
Nurses:				
0 or 1	190	43	17	7
2 or 3	25	53	32	8
		NS	NS	NS
Auxiliaries:				
0 or 1	73	40	18	4
2 or 3	23	43	28	17
		NS	NS	NS
Ancillary staff:				
0 or 1	63	36	11	6
2 or 3	48	55	48	30
		p < 0.01	p < 0.001	p < 0.01
Other occupations:				
0 or 1	151	29	17	4
2 or 3	16	40	19	20
		NS	NS	NS
All women:				
0 or 1	477	37	16	6
2 or 3	114	50	35	21
		p < 0.001	p < 0.001	p < 0.001

*Accumulation of three strenuous working conditions: carrying heavy loads, long standing position, heavy cleaning tasks. Indicator varies from 0 to 3 according to whether the occupation includes none, one, two, or all three strenuous working conditions.

†Including the additional two weeks of antenatal leave in cases of pathological pregnancy.

‡Birth occurring before eight months and no weeks since the presumed date of conception (which corresponds to 36.5 completed weeks since the first day of the last menstrual period).

shown that three working conditions, especially when cumulated by the same woman, were risk factors for preterm delivery: working in a standing position, carrying heavy loads, and heavy cleaning tasks.⁷ This result was observed in all occupational groups (table). The same working conditions were also associated with the number of days of sick leave, and the rate of hospital admissions during pregnancy (table). These results are particularly interesting: if a working condition is putting a pregnant woman at risk of preterm delivery, it could well be an indication of the stress of work and be a source of risk for workers in general.⁸

Without denying the influence of social and demographic factors in determining sickness absenteeism, from the available evidence we think that any programme aiming to reduce sickness absenteeism among hospital staff should focus primarily on their working conditions.

M ESTRYN-BEHAR

Hôpital St Vincent de Paul, Paris.

M KAMINSKI

*Epidémiologiques sur la Mère et l'Enfant,
INSERM Unité 149 – Villejuif.*

References

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- ² Cust G, Pearson JLG, Mair A. The prevalence of low back pain in nurses. *Int Nurs Rev* 1972;19:169-79.
- ³ Dehlin O, Hedenrud B, Horal J. Back symptoms in nursing aides in a geriatric hospital. *Scand J Rehabil Med* 1976;8:47-53.
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- ⁵ Estry-Behar M, Kaminski M. Pathologie du personnel hospitalier et conditions de travail: résultats d'une enquête pilote. *Revue Française Santé Publ* (in press).
- ⁶ Logeay P, Lert F, Chastang JF, Monod H. *Les temps des infirmières: des contre-temps à la santé*. Paris: CNRS, 1984.
- ⁷ Saurel-Cubizolles MJ, Kaminski M, Llado-Arkhipoff J, et al. Pregnancy and its outcome among hospital personnel according to occupation and working conditions. *J Epidemiol Community Health* 1985;39:129-34.
- ⁸ *Santé et conditions de travail: une recherche à développer*. Paris: INSERM - Documentation Française, 1983.

Notices

Toxicology and the clinic course, British Postgraduate Medical Federation, University of London, 11/12 March 1986

This two day meeting is designed to cover the whole spectrum of toxicology. The topics chosen will interest pathologists, clinicians, and basic scientists concerned with the development of drugs and industrial processes, and those concerned with basic cellular mechanisms. Fee: (which includes catering) £95.00. Details and application forms from: Secretary to the Toxicology Course, British Postgraduate Medical Federation, 33 Millman Street, London WC1N 3EJ. Telephone: 01-831 6222, extension 39.

Fifth international cadmium conference to examine markets and environmental questions, San Francisco, 4-6 February 1986

The three day conference, jointly sponsored by the Cadmium Association (London), the Cadmium Council (New York), and the International Lead Zinc Research Organisation (New York), will explore such topics as: cadmium supply and demand, the range of markets for cadmium and its products, cadmium's indispensable role in industrial applications, biological monitoring of cadmium levels in people, cadmium in the environment, and health criteria and government actions involving cadmium.

The Second International Nickel-Cadmium Battery Seminar will be held on 4 February as part of the larger conference. The seminar will cover marketing, technological, and recycling aspects. For more details of the conference and advance programme contact SA Hiscock or DN Wilson, Cadmium Association, 34 Berkeley Square, London W1X 6AJ.

Pb86: Ninth International Lead Conference, Goslar, W Germany, 19-22 October 1986

Pb86 will continue the successful series of triennial meetings begun in London in 1962. There will be a comprehensive programme covering all aspects of lead including technical developments and markets throughout the world. For further details contact the Lead Development Association, 34 Berkeley Square, London W1X 6AJ.