BMJ

LONDON, SATURDAY 17 DECEMBER 1994

Out of hours

Primary care needs a properly funded, well organised night time service

In the London practice where I trained as a general practitioner in 1982 the doctors made all the out of hours home visits every day and night of the year. They believed that continuity of care and the insights offered by dealing personally with requests for home visits were distinctive responsibilities of general practitioners.

A senior partner from this practice recently told me that a commercial deputising service now handles all out of hours calls (those made from 10 pm on weekdays and 6 pm at weekends). His views have changed: he believes that being on call out of hours is unprofessional. It betokens a serious failure to maintain personal and professional boundaries, and encourages doctors to develop self destructive fantasies of omnipotence and omniavailability. He no longer feels able to justify the effects of disturbed sleep on clinical performance during the day or on family and working relationships.

Despite the growth of the 24 hour society such an about turn in attitude by general practitioners is common. Rarely has more unanimity been expressed by British general practitioners than in their views towards present contractual requirements for providing 24 hour general medical services under their NHS terms of service. A consultation exercise in 1992 in which the General Medical Services Committee canvassed the views of 35 000 general practitioners resulted in a 70% response rate; four out of five doctors expressed interest in opting out of 24 hour responsibility.[1]

Rates of night visiting per 1000 registered patients have risen progressively over the past 25 years. The further recent rise cannot be explained by the new general practice contract that extended by two hours the period for which a night visit fee could be claimed.[2] Nor is it explained by the increased night visit fee for visits made by general practitioners from a patient's own registered practice or by a doctor working in a small local cooperative rota.

Despite the growth in commercial deputising companies, which continue to be governed by a code of practice that insists that a "visit must be made if one is requested,"[3] greater use of deputies does not alone explain the rise in night visits either.[4-7] The vast bulk of night time primary medical care in Britain continues to be undertaken by general practitioners, who may offer telephone advice to some 18-59% of patients requesting visits.[8-10]

While in many rural areas general practitioners remain unable to delegate night visiting, the higher visiting fee has probably motivated some urban general practitioners to continue their own night visits. Two thirds of all night visits are done by general practitioners (p 1621)[11] paid for from net target remuneration funds, at no extra cost to the exchequer. The cost of the remaining third, undertaken by deputising services or large cooperative rotas, count as general practitioners' expenses, which attract additional funding to maintain the net target remuneration figure. Cost containment depends on general practitioners continuing to shoulder the burden.

Payment for night visits

The health policy rationale of the differential night fees must have been a belief that general practitioners from a patient's own practice or from a locally organised small cooperative perform night visits better than doctors from deputising services. However, no studies have documented a difference in medical outcome between night visits performed by general practitioners and those performed by deputies, though this topic is poorly researched. Some reports have suggested lower rates of satisfaction among patients after deputies' visits[12-14]; others have found little difference,[15] with satisfaction seeming to depend more on the length of time between requesting and receiving a visit than on the identity of the visiting doctor.[16]

The government has now made deputies who are also principals in general practice answerable to service hearings for their own acts and omissions out of hours. Nevertheless, one fifth of the sessions provided by one large deputising service are worked by deputies who are not principals (N Kaiper-Holmes, group medical director of Healthcall, personal communication), leaving general practitioners contractually responsible for the actions of these deputies. Paragraph 13 of the amended general practitioners' contract now makes explicit to general practitioners (and to hearings of service committees) that doctors may properly offer patients a consultation at a "medically appropriate venue,"[17] including primary care emergency centres. The effects of such a change on general practitioners' working practices remain to be seen, considering new research showing that difficulties with trans-

port lead to low patient attendance at urban primary care emergency centres (p 1627).[18] Such centres are never likely to become realistic alternatives to home visits in rural areas either.

The government has offered to reinstate a fixed allowance for night visits (scrapped by the 1990 contract) to be funded by the abolition of the two tier visit fee and replacing it with a single reduced fee of one fifth the current higher rate. Given a fivefold difference in rates of night visiting across Britain[11] and the diversity with which visits are currently accomplished—by principals, general practitioners from small or large rotas, or deputising services—the GMSC is right to reject proposals that were insensitive to performance and which would have unfairly benefited practices with low visiting requirements.[19] The government's encouragement of out of hours general practitioner cooperatives amounts to no more than a diversion of funds already due to general practitioners. The Department of Health's proposal for night visit pay is completely inadequate: a "nil cost option" that offers a pittance, however parcelled out as incentives and allowances, of 2·8p per patient per week.[20]

The demands of the general practitioner's day now include health gain and health maintenance, health promotion and disease prevention, target hitting and budget balancing, and provision of sophisticated clinical care. The government must understand that most general practitioners, whatever their age, whether rural or urban, and whether single handed or in group practice, have finally had enough of the unamended night time contract of the 1940s. The "primary care led NHS" requires a properly funded, well organised night time service.

BRIAN HURWITZ
General practitioner

London N1 3NG

1 Electoral Reform Ballot Services. *Your choices for the future, a survey of GP opinion. UK report.* London: Electoral Reform Ballot Services, 1992.
2 Salisbury C. Visiting through the night. *BMJ* 1993;**306**:762-4.
3 Department of Health and Social Security. *Health service development. General practitioner deputising services.* London: DHSS, 1984. (HC(FP)(84).)
4 Hobday PJ. Night visiting in general practice. *BMJ* 1993;**306**:1068.
5 Godwin JC. Night visiting in general practice. *BMJ* 1993;**306**:1068.
6 Buxton MJ, Klein RE, Sayers J. Variations in general practitioner night visiting rates: medical organisation and consumer demand. *BMJ* 1977;i:827-30.
7 Cartwright A. Night visiting in general practice. *BMJ* 1993;**306**:1069.
8 Sheldon MG, Harris SJ. Use of deputising services and night visit rates in general practice. *BMJ* 1984;**289**:474-6.
9 Livingstone AE, Jewell AJ, Robson J. Twenty four hour care in inner cities: two years' out of hours workload in east London general practice. *BMJ* 1989;**299**:368-70.
10 Bain DJG. Deputising services: the Portsmouth experience. *BMJ* 1984;289:471-3.
11 Hallam L, Cragg D. Organisation of primary care services outside normal working hours. *BMJ* 1994;**309**:1621-3.
12 Cartwright A, Anderson R. *General practice revisited.* London: Tavistock, 1981.
13 Sawyer L, Arber S. Changes in home visiting and weekend cover: the patient's view. *BMJ* 1982;**284**:1531-4.
14 Bollam MJ, McCarthy M, Modell M. Patients' assessment of out of hours care in general practice. *BMJ* 1988;**296**:829-32.
15 Dixon RA, Williams BT. Patient satisfaction with general practitioner deputising services. *BMJ* 1988;**297**:1519-22.
16 Allen D, Levey R, Marks B. Survey of patients' satisfaction with access to general practitioners. *Br J Gen Pract* 1988;**38**:163-5.
17 General Medical Services Committee. *GPs "out of hours responsibility."* London: BMA, 1994. (NMSD5/IGB/SB/WP1.)
18 Cragg DK, Campbell SM, Roland MO. Out of hours primary care centres: characteristics of those attending and declining to attend. *BMJ* 1994;**309**:1627-30.
19 General Medical Services Committee. *Response to the Department of Health's proposed package of changes to the arrangements for paying GPs for out-of-hours services.* Appendix II. London: BMA, 1994.
20 Beecham L. Out of hours deal rejected by general practitioners. *BMJ* 1994;**309**:1392.

Fire retardants, biocides, plasticisers, and sudden infant deaths

The message of the "back to sleep" campaign holds until the chemistry has been worked out

Recent television programmes linking the sudden infant death syndrome to the antimony added to the plastic of cot mattresses has concerned the public and health care professionals alike. Unfortunately, the programmes and their fallout have been stronger on opinion and invective than on accurate information. There is a danger that the message of the government's "back to sleep" campaign, which has been followed by a dramatic fall in sudden infant deaths in Britain in the past three years,[1] may be obscured by incomplete, inaccurate, and sensationalist reporting.

Barry Richardson, a consulting scientist, proposed in 1989 that fire retardants in cot mattresses might contribute to the sudden infant death syndrome.[2] The essential component of his hypothesis was that, under the right conditions of warmth and humidity and in the presence of traces of organic material (for example, from sweat or urine), certain fungi (such as *Scopulariopsis brevicaulis*) can metabolise constituents of infants' mattresses (phosphorus, arsenic, or antimony) and produce the highly toxic trihydrides—phosphine, arsine, and stibine. These trihydrides, by acting as anticholinesterases, might then kill infants by inducing cardiac or respiratory failure of rapid onset.

S brevicaulis is common and can degrade nitrogen-containing compounds in organic material (for example, in meat, cheese, and leather), so that ammonia (nitrogen trihydride) is released. Phosphorus, arsenic, and antimony are—like nitrogen—in group V/Vb of the periodic table of the elements, and Richardson's hypothesis is that their trihydrides may be similarly produced. Such a degradation process was recognised in the 19th century as leading to deaths from arsine poisoning. (In damp conditions *S brevicaulis* degraded arsenic contained in wallpaper pigments and paste.[3]) Although cot mattresses do not usually contain arsenic, they commonly contain organophosphates and antimony trioxide, which are added during manufacture to the polyvinylchloride coverings (as plasticisers and fire retardants respectively). Although the foam and woven fabrics used in cot mattresses do not contain antimony, they often contain phosphates.[3,4]

This hypothesis is compatible with many of the features of the sudden infant death syndrome in Western countries, particularly the association with the prone sleeping position and heavy wrapping, and with the pronounced falls in incidence when infants do not sleep prone.[5,6] Stibine, being heavier than air, would be most likely to cause toxicity to infants sleeping face down under heavy wrapping. The association of the sudden infant death syn-