of the past, nothing stands still. A general practitioner can no longer be seen as the lone friend and confidant of the patient, fighting his or her corner regardless of responsibilities to society. It is unreasonable to view the patient in isolation, with expense being regarded as of no importance and the needs of others irrelevant. We do not need to see ourselves in a mystical, priestly role, interceding on behalf of the patient from the surgery confessional. Rather, we should work with our primary health care teams, hospital colleagues, and health authorities. Together we can mould a service for patients that is both affordable and equitable.

There has always been rationing in the NHS. To date it has been managed by waiting lists. Fundholding has empowered general practitioners to apportion priority, with clinical input from specialists. This is an uncomfortable role, but general practitioners are best placed to make these decisions.

As fundholders we have forged links with our local hospitals and health authorities that never previously existed. We have persuaded hospitals to provide new services for all general practitioners in our area and have successfully defended threatened services in community nursing and community psychiatric nursing. Our consultant colleagues perhaps listen to us more closely.

If fundholding is dismantled general practitioners will be disempowered and patients will be disadvantaged. Locality purchasing commissions will be mere talking shops where we will be politely listened to but essentially ignored. A general practitioner with a chequebook is considerably more powerful than one without.

As care devolves to the primary sector we need as much influence as possible. Fugelli and Heath are surely mistaken in believing that the traditional model of general practice will always be valid. The new team model is the democratic option: less paternalist; less authoritarian; realistic; and, hopefully, affordable. We should abandon the blinkered central intercessional role and become pivotal team members. General practitioners will feel undervalued only if they fail to adapt to change.

All Luddites end the same way—irrelevant. We must not oppose change but see it as an opportunity, embrace it, and mould the future to our vision in close liaison with all other health care professionals—clinicians, nurses, and managers alike.

ANDY MOORE General practitioner

Mid Sussex Health Care, Health Centre, Hassocks, West Sussex BN6 8LY

1 Fugelli P, Heath I. The nature of general practice. BMJ 1996;312:456-7. (24 February.)

### Favouring a mythological traditional orthodoxy is absurd

EDITOR,—As chairman of Warwickshire general practice commissioning group, a course organiser for a vocational training scheme, and a fundholding general practitioner, I wish to respond to Per Fugelli and Iona Heath's editorial on the nature of general practice.<sup>1</sup>

General practice is evolving rapidly; nearly half of all British practices are fundholding, and over a quarter are part of commissioning structures. Consequently, many general practitioners have gained new skills to improve the care of their patients and their populations. For many these are acceptable and pragmatic methods of advocacy. To suggest that all of these skills should be abandoned in favour of some largely mythological traditional orthodoxy is absurd.

General practice must deliver care to all patients. Every consultation and every episode of care must be part of an overall structure of accountability. They cannot simply be islands unto themselves.

KEITH EDGAR General practitioner

The Surgery, Barr Lane, Brinklow, Warwickshire CV23 0LN

1 Fugelli P, Heath I. The nature of general practice. BMJ 1996;312:456-7. (24 February.)

## General practitioners are not as beleaguered as they were

EDITOR,—In their editorial on the nature of general practice Per Fugelli and Iona Heath describe the values that they believe should inform the way in which general practitioners work. They are correct to draw attention to the central importance of family doctors' long term knowledge of their patients and their role as gatekeepers, but their assertion that general practitioners can walk away from the implications of managerial change in the NHS is questionable.

Fugelli and Heath perpetuate the myth that fundholding general practitioners are concerned primarily with their own power and ambition. They go on to say that the emphasis of gatekeeping has shifted from the interests of individual patients to those of the general population and, by implication, those of taxpayers. Nowhere do they cite any evidence to support these propositions. Finite resources have to be allocated to meet ever increasing demands and needs. The purpose of fundholding is to gain a place at the table where the decisions are made about the service our patients receive.

The problem for general practitioners is the gulf that exists between the expectations placed on us and our ability to meet those expectations. The collapse in recruitment is at least partly due to the perception of general practitioners as beleaguered and overworked. Yet it doesn't have to be that way. Considerable progress has been made on the out of hours issue, paperwork, and the handling of complaints. This success has been achieved by general practitioners working with managers, patients, and politicians to develop a shared language and common agreement on the objectives we are trying to meet.

J HOPKINS Fundholding general practitioner

Parkgate Health Centre, Darlington DL1 5LW

1 Fugelli P, Heath I. The nature of general practice. BMJ 1996;312:456-7. (24 February.)

# Service is abused because it is perceived as being free

EDFOR,—I agree with many of the points that Per Fugelli and Iona Heath make about the nature of general practice. I believe that general practice should lead the shift from an authoritarian to a democratic model of decision making. This model, however, must emphasise the joint responsibility of the doctor and patient in the careful and judicious use of scarce resources.

I prioritise the future in a different way from that of Fugelli and Heath. The problem with being the humanist of the NHS and practising in a holistic fashion is the amount of time it takes. General practitioners' time is already superscarce. The article speaks of ideals. I believe that we must define the current nature of general

practice accurately before we can move on.

Firstly, our terms of service are so undefined that they make us the dumping ground for any work—medical, social, or administrative—that no one else wants or "owns." We must agree on a core job description for our principal role as primary health doctors. This does not mean that we have to accept being social workers, counsellors, or managers.

Secondly, it is naive to ignore the financial costs that occur throughout primary care. Rather, we must begin to incorporate financial management more closely into some aspects of primary care. It is anachronistic that we are perceived to be a free service. Is there any other service that is free nowadays?

The culture of consumerism so rules the world that people—both managers and patients—abuse us because our time is not costed. If our time were costed then people would think far more about things such as the transfer of care from secondary care, inappropriate requests for home visits, and consultations out of hours. Changes in dentistry and eye checks are recent examples that have resulted in increased work for general practitioners because we are the free alternative. General practitioners must do hours of social services work each year because we are free.

We already know that a major crisis is developing in the recruitment and retention of general practitioners. Morale is rock bottom and good will exhausted. Society seems to want a 24 hour service without the costs. I believe that we must debate these areas now and act soon to protect the nature of general practice.

JON TUPPEN General practitioner

Avenue Road Surgery, Brentwood, Essex CM14 5EL

1 Fugelli P, Heath I. The nature of general practice. BMJ 1996;312:456-7. (24 February.)

#### Nostalgia doesn't help recruitment

EDITOR,—Per Fugelli and Iona Heath describe a utopian model of general practice that I find it difficult to identify with.¹ The vision of a paternalistic doctor who shields his patients from the dangers of modern medicine and steers them through various life crises single handedly seems to ignore reality.

Patients in the late 20th century are sophisticated: they demand the latest in technology to diagnose their symptoms, and if it is available why shouldn't they? There are enough missed diagnoses to make us all feel humble at times. And isn't it more appropriate for a nurse to perform a cervical smear test and a health visitor to check a child's development? It is certainly appropriate for administrators to deal with paperwork, fund managers to deal with contracts, and young people on youth training schemes to make coffee. It is arrogant of doctors to think they can do it all themselves.

My relationship with my patients is stronger if I can not only refer them for special treatment but reassure them about how and when it will be done. My responsibility does not end with a referral letter but extends to their secondary care. And it makes more sense to arrange that care in an annual round of discussions for all my patients than to have to telephone every time someone has to wait too long for treatment. I can explain to a patient why she cannot expect funding for removal of a tattoo because I know the opportunity costs, instead of commiserating with her about the rationing imposed by the health authority.

Most general practitioners have views about the health service beyond their individual practices, and they should exercise their power to make that service better rather than indulging in nostalgia. It doesn't help recruitment.

> NINA LEECH General practitioner

37 Beaufort Road. Bristol BS8 2JX

1 Fugelli P, Heath I. The nature of general practice. BMJ 1996;312:456-7. (24 February.)

#### Patient centred model of practice is unsuited to reforms

EDITOR,-Per Fugelli and Iona Heath argue that "affirmation of the traditional model of general practice demands the rejection of those changes which threaten it." The debate has done little to clarify the definition of the traditional model of general practice as practised by general practitioners themselves. From an educational perspective, the model that has been taught in many vocational training schemes for registrars in general practice has been based on patient sensitive<sup>2</sup> or patient centred3 consulting styles. This is in contrast to the biomedical model that forms the basis of much teaching in medical schools.

Of these two models of practice, the biomedical model with its scientific rationale can tolerate the addition of other scientific disciplines-for example, health economics and management science. To be economically efficient and effective general practitioners must practise in a highly doctor centred and task oriented way. There is little room for the premises of health economics in a patient centred, behavioural consultation style.

Howie et al have suggested that patient centred doctors may be more stressed when their partners practise in a different way and there is a mismatch between personal and organisational factors.4 If the proportion of trained general practitioners who are stressed in this way is substantial it is not surprising. Our education in general practice has not prepared us for the current health care reforms.

There is a paradox. Patient centred doctors are forced to comply with a mechanistic system that they do not believe in. They have choices. They should alter working practices, get further education, or get involved in medical politics.5 For those about to enter general practice, if the system isn't going to change then training must. The Royal College of General Practitioners should take note.

> CHRIS ROBERTS General practitioner

Department of General Practice, University of Sheffield, Northern General Hospital, Sheffield S5 7AU

- 1 Fugelli P, Heath I. The nature of general practice. BMJ 1996;312:456-7. (24 February.)
- 2 Pendleton D, Scofield T, Tate P, Havelock P. The consultation: an approach to learning and teaching. Oxford: Oxford University Press, 1984.

  3 Neighbour R H. The inner consultation. Lancaster: MTP Press,
- 1987
- 4 Howie JGR, Porter M, Heaney D. Attitudes to medical care, the organization of work, and stress amongst general practitioners. Br J Gen Pract 1992;42:181-5.
- 5 McBride M, Metcalfe D. General practitioners' low morale: reasons and solutions Br J Gen Pract 1995;45:227-9.

### Myocardial infarction at work cannot be regarded as an accident

EDITOR,—M C Petch argues that sudden cardiac death or myocardial infarction occurring within hours of unaccustomed physical effort may justify a claim for benefit payments or occupational injury. Although the mechanism of the final thrombosis may indeed be related to exercise,<sup>2</sup> these patients have pre-existing arterial disease, and most previous claims have been for "acceleration of heart condition" after physical exertion.3 The long term benefits of exercise in reducing the progression of atherosclerosis and risk of myocardial infarction are well established.4

It is alarming that Petch considers that "a myocardial infarction occurring at work may be regarded as an accident." Despite a routine declaration at the start of work that employees have no known heart disease, underlying coronary artery disease may well be present and would still be undetectable by a simple test such as resting electrocardiography. Should all employers who engage staff for heavy lifting duties arrange for coronary angiography to protect themselves against future claims or simply not employ anyone over the age of 30? (The incidence of sudden cardiac death in male joggers aged 30-63 in Rhode Island, in the United States, has been reported to be 1 in 7620 and in joggers younger than 30, 1 in 280 000.5) Should hospital trusts screen all doctors for undiagnosed cardiomyopathies in case one of them might have a sudden cardiac death while running for an arrest call? Are the police liable if they chase a mugger who then suffers a myocardial infarction?

The inclusion of myocardial infarction or sudden cardiac death (except that due to direct chest trauma) as an "accident" at work makes a mockery of scientific knowledge of the pathophysiology of myocardial infarction and the legitimate claims for certain occupational diseases.

> U I KIRKPATRICK Clinical research fellow C N MCCOLLUM Professor of surgery

Department of Surgery. University Hospital of South Manchester, Manchester M20 8LR

- 1 Petch MC. Triggering a heart attack. BMJ 1996;312:459-60. (24 February.)
- 2 Lin H, Young DB. Interaction between plasma potassium and epinephrine in coronary thrombosis in dogs. Circulation 1994;89:331-8.
- 3 Kemp and Kemp. The quantum of damages. London: Sweet and Maxwell, 1992
- 4 O'Connor GT, Hennekens CH, Willett WC, Goldhaber SZ, Paffenbarger RS, Breslow JL, et al. Physical exercise and reduced risk of nonfatal myocardial infarction. Am J Epideniol 1995;142:1147-56.
- 5 Pelliccia A. Outer limits of physiologic hypertrophy and relevance to the diagnosis of primary cardiac disease. Cardiol Clin 1992;10:267-97.

### Redefining authorship

#### Drug industry is increasingly allowing employees to be named as authors

EDITOR,—I look forward to the meeting to discuss authorship and the debates that may arise from it.1 While those in academia often focus on "gift" authorship, when undeserving names swell the lists of authors, those of us employed in industry are concerned with the opposite problem—that of the disappearing author. Although most journals require that funding for studies must be acknowledged, sponsoring companies are often keen to emphasise the contribution of independent investigators and may discourage employees from being named as authors despite their fulfilling accepted criteria.

In drawing up company guidelines on this issue I did a small survey to see if I could detect any trends within the industry. I chose three journals that happened to be in the company library and that published a high proportion of studies sponsored by industry, and I looked to see how often the authors of such papers were employees of the funding company. In all three journals I found an increase in the proportion of sponsored studies that included at least one author whose address was that of the sponsoring company. The figure increased from 10 (37%) to 17 (50%) between 1988 and 1993 in Alimentary Pharmacology and Therapeutics; from 14 (36%) to 33 (55%) between 1977 and 1993 in the British

Journal of Clinical Pharmacology; and from 6 (27%) to 13 (59%) between 1976 and 1993 in Current Medical Research and Opinion. (The total number of papers scanned was 393, of which 204 acknowledged support from the industry; a total of 1671 authors was listed.) In these three journals 48-76% of the reported studies are funded by the pharmaceutical industry, so I had fewer papers to scan than if I had chosen a journal such as the BMJ, which carries a smaller proportion of funded studies.

This simple survey, reinforced by anecdotal evidence from other companies, led me to believe that, at least in the past, scientists employed by the industry were probably omitted from lists of authors despite fulfilling accepted criteria. It also suggested, however, that the situation is improving and that companies are becoming increasingly willing to allow their employees to be named as authors when this is appropriate Although this problem may be diminishing, I do not believe that it has disappeared altogether. I suggest that we should remember it when we debate the definitions of authorship and advise those who formulate policy to ensure that authorship is fairly allocated.

> ELIZABETH WAGER Medical writer

Janssen-Cilag, PO Box 79. Saunderton, Buckinghamshire HP14 4HJ

1 Horton R, Smith R. Time to redefine authorship. BMJ 1996;312:723. (23 March.)

#### Relative contribution should be given after each author's name

EDITOR,—Richard Horton and Richard Smith's editorial addresses the continuing problem of authorship.1 The authors suggest that a "film credit" style of authorship might be possible. This would be unwieldy. An even less plausible alternative is the use of font size to indicate relative contribution to a scientific paper.2 This would result in visually interesting title pages but would not solve the problem because this method has no upper bound.

We propose another, more practical solution. This would be simply to record after each author's name his or her fractional (or percentage) contribution to the paper in question. There would be no further need for the faintly embarrassing statement, "these authors contributed equally to the work" (on what basis is priority therefore decided?), as it would be clear that the percentage contribution was the same, and then all the authors could be listed alphabetically. This new method would also lessen the need for "senior" (that is, last) authors to resign from positions of responsibility when papers published under their name are discovered to be fraudulent. If their contribution was marked as 1% they could claim 1% of the credit when things went well and 1% of the blame when everything went sadly awry. As a British Conservative cabinet minister might ask-"Is that a resigning issue?"

In the spirit of this enterprise, one of us (WF) wrote this letter, which is on a topic that both of us have often discussed over the past year or so. So, by mutual agreement, WF scores 0.7 and NN scores 0.3.

This proposal would, of course, create another problem, since the fractional contributions would have to be argued over. But it would at least allow those interested to make more useful estimations of relative contributions.

> WILLIAM FOULKES (0.7)Medical scientist NORAH NEYLON (0.3)

51 Lansdowne Gardens, Pointe Claire, QC, Canada H9S 5B9

- 1 Horton R, Smith R. Time to redefine authorship. BMJ 1996;312:723. (23 March.)
  2 Cohen EP, Mutsaers SE. Size matters. *Nature* 1996;379:765.

BMJ VOLUME 312 1 IUNE 1996 1423