Letters

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Time for a smoke? One cigarette reduces your life by 11 minutes

EDITOR—Studies investigating the impact on mortality of socioeconomic and lifestyle factors such as smoking tend to report death rates, death rate ratios, odds ratios, or the chances of smokers reaching different ages. These findings may also be converted into differences in life expectancy. We estimated how much life is lost in smoking one cigarette.

Our calculation is for men only and based on the difference in life expectancy between male smokers and non-smokers and an estimate of the total number of cigarettes a regular male smoker might consume in his lifetime. We derived the difference in life expectancy for smokers and non-smokers by using mortality ratios from the study of Doll et al of 34 000 male doctors over 40 years.[1] The relative death rates of smokers compared with non-smokers were threefold for men aged 45-64 and twofold for those aged 65-84,[1] as corroborated elsewhere.[2] Average life expectancy from birth for the whole population or subgroups can be derived from life tables. Applying the rates of Doll et al to the latest interim life tables for men in England and Wales, with adjustment for the proportion of smokers and non-smokers in each five year age group,[3] we found a difference in life expectancy between smokers and non-smokers of 6.5 years.

We used the proportion of smokers by age group, the median age of starting smoking, and the average number of cigarettes smoked per week in the 1996 general household survey.[4] We calculated that if a man smokes the average number of cigarettes a year (5772) from the median starting age of 17 until his death at the age of 71 he will consume a total of 311 688 cigarettes in his lifetime.

If we then assume that each cigarette makes the same contribution to his death, each cigarette has cost him, on average, 11 minutes of life:

6.5 years = 2374 days, 56 976 hours, or 3 418 560 minutes

5772 cigarettes per year for 54 years = 311 688 cigarettes

3 418 560/311 688 = 11 minutes per cigarette.

This calculation is admittedly crude—it relies on averages, assumes that the health effects of smoking are evenly spread throughout a smoker's lifetime, presupposes that the number of cigarettes smoked throughout a lifetime is constant, and ignores the difficulties in classifying people as either lifetime smokers or non-smokers.[5] However, it shows the high cost of smoking in a way that everyone can understand.

The first day of the year is traditionally a time when many smokers try to stop, and on 1 January 2000 a record number might be expected to try to start the new millennium more healthily. The fact that each cigarette they smoke reduces their life by 11 minutes may spur them on. The table shows some better uses for the time they save.

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Competing interests: Drs Shaw and Mitchell are non-smokers. Dr Dorling is a smoker (20 cigarettes a day).

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Opportunities gained in stopping smoking by amount smoked

Amount smoked	Life lost	Opportunity gain
One cigarette	11 minutes	Telephone call to friend; read of newspaper; brisk walk; or fairly frantic sexual intercourse
Pack of 20 cigarettes	3 hours 40 minutes	Long film (for example, *Titanic*); two football matches; one shopping trip; Eurostar journey from London to Paris, including visit to cafe; running in London marathon; or tantric sex
Carton of 200 cigarettes	1.5 days	Visit to friends or family; one very serious shopping trip; Wagner opera; flying round the world; or romantic night away

Stumbling into occupational health: the influenza conundrum

EDITOR—In his editorial Smith describes how the British government has decided on access to treatments.[1] The occupational health service of the NHS has had a similar, albeit less sophisticated, experience with respect to advising on the immunisation of staff against influenza this winter. The lack of a recognised body to give authoritative advice on occupational health has led to piecemeal arrangements by trusts.

The chief medical officer has advised that routine immunisation of healthcare workers is not recommended in the United Kingdom as part of national policy but that some health trusts may offer influenza vaccine to staff as part of their planning for winter.[2]

Subsequently, NHS employers have been advised that "Ministers had concluded that the immunisation of staff should be regarded as an acceptable part of winter planning arrangements."[3] The purpose of this planning measure is to reduce staff illness. No additional funds will be made available.

I surveyed trusts' current arrangements by contacting NHS occupational physicians

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throughout the United Kingdom on an email network. Of 14 replies from England, Scotland, and Northern Ireland, five trusts were not offering vaccinations, three were adopting a low key response, three were actively targeting groups of staff such as accident and emergency staff, and three were offering vaccinations to all their staff. The large scale vaccination programmes were being funded either by the trust or by local purchasers.

What is the explanation? The case that routine influenza vaccinations will reduce staff absences remains to be made. Indeed, a recent review of NHS staff absences during the influenza epidemics of 1993-4 and 1996-7 found that absenteeism was not affected.[4] Preventing nosocomial infection of susceptible patients merits study but has nothing to do with the millennium holiday. The main focus of risk assessment, therefore, seems to be the prospect of embarrassment should planning go awry. Some trusts are responding by minimising the risk of being criticised, others are taking professional advice and acting accordingly. Scotland and Northern Ireland are interested observers. This is a curious example of postcode prescribing but a familiar example of postcode occupational health in the NHS.

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Lack of funding will inhibit evidence based commissioning of cancer treatments

EDITOR—We welcome the appointment of a cancer tsar to improve the treatment of patients with cancer in the NHS.[1] However, more resources and greater transparency in their allocation will be necessary to improve survival rates in the United Kingdom in relation to its comparable European neighbours.[2]

We have previously reported our efforts in evidence based commissioning of cancer services for 1997-8.[3] Since then we have repeated the exercise in the 1998-99 and 1999-2000 contracting rounds. However, most available growth monies have been absorbed by large increases in activity and pay awards. Little money has been left for new expensive cancer drugs, despite strong evidence of their cost effectiveness and the increasing willingness of clinicians to set priorities between cancer treatments. We conclude that a randomised controlled trial of evidence based medicine versus shroud waving (as standard practice) is urgently required.

This process of evidence based commissioning was comparatively resource intensive. Unless there is some perceived benefit for clinicians and commissioners of care, it will wither on the vine. We do not expect all cost effective new treatments to be funded automatically. However, there should be scope for the evidence to have a greater impact on the system and for the emerging National Centre for Clinical Excellence to be able to say yes as well as no to costly treatments.

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Decisions to withdraw treatment

Values histories are more useful than advance directives

EDITOR—Winter and Cohen recognise one of the problems with advance directives when they correctly state: "The advance refusal of treatment is legally binding provided certain conditions are met.... A problem still exists unless they are precisely worded."[1]

Traditional advance directives are becoming less and less useful, partly as a result of lack of data on when treatment becomes futile in different clinical scenarios. When advance directives were first introduced, the application of standard "heroic measures," often without reasonable expectation of result, was far more common than it is today. In that situation, a general advance directive about refusing, say, cardiopulmonary resuscitation, was an appropriate statement of common sense. The situations facing modern intensive care units are far more complex. The tendency towards precise wording in advance directives to make them legally binding has made it difficult for them to keep up with the pace of medical technology.[2]

An alternative approach that is finding increasing favour, either as an adjunct to the advance directive or as a stand alone instrument, is the "values history." Values histories relate to the declarant's values rather than instructions. Patients' values are recorded as a basis for decisions on medical treatment (rather than including explicit instructions on specific treatments). They identify core values and beliefs in the context of terminal care that are important to the patient.[3 4]

Values histories take a goal based rather than prescriptive approach, giving guidance on a policy to be implemented rather than the medical means to the end. The legal persuasiveness of them is less strong, but they may be useful adjuncts when a person is seeking to have an advance refusal respected or they may provide valuable guidance in their own right.[5] In general, the trend towards greater use of values in advance statements is more useful to patients and intensive care doctors than is the trend towards increasingly specific wording of treatments to be refused. Use of values histories should therefore be encouraged.

Further details on values histories may be obtained from the Living Will and Values History Project, BM 718, London WC1N 3XX.

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Treatment can sometimes be withdrawn at home

EDITOR—In their article on withdrawal of treatment in the intensive care unit Winter and Cohen rightly emphasise the importance of ensuring the comfort of dying patients as well as caring for the family.[1] The intensive care unit can be noisy and stressful for grieving relatives. It may be difficult to provide a comfortable and private environment for families and patients who are terminally ill.

In appropriate circumstances it is possible to take patients to their home and withdraw treatment there. Since 1996 we have taken six patients from our unit home to die. The table gives details of the last four patients.

In all cases the relatives found this approach helpful. Relatives often state that, given the choice, the patient would prefer to die at home rather than in hospital. Moreover, relatives seemed better able to cope with their grief in the familiar surroundings of their homes.

There are several conditions that should be satisfied before a patient in intensive care can be taken home to die. There has to be medical consensus that continued intensive therapy is futile, and withdrawal of ventilation or cessation of inotropes should

Details of four patients who had intensive treatment withdrawn at home

Age (years) and sex	Diagnosis	APACHE II score	Length of stay (hours)	Ventilated
51, male	Cellulitis, septic shock	33	79	No
54, female	Pneumonia	32	19	Yes
61, male	Cardiac arrest outside hospital	24	52	Yes
58, male	Cerebellar haemorrhage	24	436	Yes

Written consent was obtained from relatives for publication of patients' details.
APACHE=acute physiological and chronic health evaluation.

preferably lead quickly to death. Organ donation should not be an option, and the patient's death should not require referral to the coroner. Ideally the patient should live locally. An intensive care nurse and doctor need to be available to accompany the patient and to manage the process of withdrawal of treatment once at the patient's home. Transport needs to be booked in advance.

A clear drug palliation plan should be formulated that uses opiates and benzodiazepines to ensure that the patient is sedated and absolutely comfortable. It is essential to discuss the plan with the patient's general practitioner so that ongoing care for the family can be instigated. Under certain circumstances the general practitioner may issue a death certificate.

Once all the conditions are satisfied the possibility of taking the patient home can be offered to the family. The process should be discussed in detail and they should be told of the risk of death during transfer. It is essential that all family members agree before the patient is transferred.

We believe that when intensive care is deemed futile, consideration should be given to withdrawing treatment in the patient's home.

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Most decisions are based on subjective appraisal

Editor—Winter and Cohen's review of withdrawal of treatment in intensive care touched on several issues that continue to pose vexing problems to intensive care doctors.[1] These ethical problems apply to both adult and paediatric intensive care. We agree with the authors that death in intensive care often follows a process of withholding or withdrawal of treatment and that these issues are becoming increasingly common as well as complex.

In a prospective audit of deaths over nine months in a paediatric intensive care unit in the United Kingdom, we found that 44 (84%) of the 52 deaths resulted from a process of withholding or withdrawal of treatment. Withdrawal of active treatment, such as inotropes or renal replacement therapy or extubation from mechanical ventilation, was by far the commonest process. These decisions were often made on the basis that death was imminent or that prolonging treatment was futile. A combination of worsening severity of illness, minimal response to aggressive treatment, and poor future quality of life were often the stated reasons for withdrawal. However, our objective analysis of these deaths using severity of illness measurements with the paediatric risk of mortality (PRISM II) score, showed that 22 (50%) of these children had mortality risks $>50\%$ and only 10 (23%) had mortality risks $>80\%$. Twenty (45%) had conditions that were associated with extremely poor long term prognosis. Therefore it seems that most decisions concerning futility of treatment were based on subjective appraisal of the child's deteriorating condition. A study in a paediatric intensive care unit in Malaysia has shown that personal bias of the intensive care doctor and the patient's sociocultural background may influence these decisions.[2] The concept of futility may differ quite substantially among intensive care doctors and also among patients.

We disagree with Winter and Cohen that it is easier to withhold a treatment than to withdraw it once it has been instituted. We often find ourselves in situations where the inappropriateness of intensive care and limitations of treatment have not been discussed with the family before referral to the intensive care team. In the current audit all the patients had received mechanical ventilation and a variable period of aggressive intensive care before treatment was withdrawn.

With advances in critical care these ethical dilemmas are expected to intensify. Until such a time that objective criteria for futility become sufficiently accurate for individual patient prognostication, we agree with the authors that the principles that guide intensivists on end of life decision making should be based on beneficence and non-maleficence to our patients.[1 3]

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Courts can help resolve disagreement in difficult cases

Editor—In the same issue as Winter and Cohen's article on withdrawing treatment in intensive care,[1] Clare Dyer reported on a recent Court of Appeal case involving the treatment of a 12 year old child.[2 3] One important aspect of the case was the view expressed by the court and by Michael Wilks, chairman of the BMA's ethics committee, that if there was fundamental disagreement between the parents and doctors an application to the family division of the High Court could be an appropriate way forward. This is an important point to bear in mind when faced with the problems identified by Winter and Cohen.[1]

The idea of futility is a quagmire.[4] Despite this I would agree that in most cases careful and sensitive discussion does lead to a resolution of any disagreement. As the recent case[2] shows, however, the disagreement sometimes cannot be resolved without the benefit of the views of the court. Doctors should be sensitive to the existence of such situations and be aware that a short notice application to the court is a potential course of action in these cases.

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So much time for so little: Italy's pharmaceutical industry and doctors' information needs

Editor—Two local experiences in northern Italy may be relevant to the discussion following the recent editorial by Griffith on doctors' reasons for not seeing drug representatives.[1]

In 1992, eight general practitioners from Guastallae evaluated the amount of time spent with pharmaceutical representatives. On average, each doctor had 435 visits per year from 102 different companies and spent a total of 58 hours every year talking to pharmaceutical representatives. To reduce this time, four doctors allowed up to two visits per day, and four allocated a single weekly session, allowing up to eight visits, but this approach did not lead to the desired results (table).

In 1994, four of these general practitioners contacted 102 drug companies, asking to receive information based on systematic evaluation of available evidence rather than glossy booklets and favourable trials only. Nothing changed except that staff specialists joined the visit. In 1996, drug companies were asked to send their representatives only when invited or when relevant information was available in advance. Most representatives stopped visiting doctors' surgeries, and

Interactions between drug representatives and eight general practitioners in Guastalla, Italy, in 1992-3

Mode of access	No of visits per year	Mean duration (min)	Total GP time (hours/year)
Unrestricted (1992)	435	7	58
Maximum two visits/day (1993)	400	8	55
Group appointment (6-8 visits per week) (1993)	340	10	50

only three out of 102 agreed to answer specific questions.

In 1992, four general practitioners from Imola, after the publication of a drug formulary,[2] asked 105 drug companies to submit only clinically relevant information and answer doctors' specific questions. This put a complete stop—which still persists—to visits from drug representatives.

We analysed some typical "information packages" and found that "drug oriented" information is often flawed, biased, or misleading[3 4]: protocols of ongoing studies are used as evidence of clinical benefits; unpublished data on file are quoted as reliable references; pharmacological or molecular effects are overemphasised; and all this is almost regularly accompanied by an invitation to gather your own experiences with this drug and then judge. This is not patient oriented information drawn from a systematic evaluation of available evidence.

Transforming advertising into reliable information is probably impossible. Pharmaceutical companies are well equipped to produce and disseminate information about their drugs, and they are one of the main sources of information for doctors. Health authorities should arrange a similar system, using dedicated professionals to provide doctors with valid and unbiased information. Interventions of this sort should be included in the current effort by Italy's health service to produce and implement practice guidelines. Local centres could be used to make this information easily available to doctors and to determine and evaluate the best strategies for dissemination and implementation.[5]

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Effect of temazepam on ventilatory response at moderate altitude

Editor—Dubowitz's study of the effect of temazepam on oxygen saturation at high altitude found that benzodiazepines do not have a depressant effect.[1] He explains the discrepancy between his findings and those of previous studies by the fact that other studies have investigated the effect of long acting benzodiazepines.[2] Dubowitz's probands were investigated after altitude acclimatisation while walking to Everest base camp, whereas climbers in Europe mainly engage in short periods of mountaineering. We therefore evaluated the effect of 10 mg temazepam on respiration in non-acclimatised Alpine climbers at moderate altitude.

We performed a randomised, double blind, placebo controlled, crossover trial in seven healthy men aged 21 to 27. Participants at 171 m altitude were randomised to receive either 10 mg temazepam or placebo. Three days later the men were given the same medication and taken by cable car to 3000 m. The procedure was repeated after one week, with the men crossed to the other arm of the study. Arterial blood samples were obtained from the ear lobe before and one hour after temazepam or placebo was taken.[4] Arterial oxygen partial pressure and carbon dioxide partial pressure were analysed on an IL Synthesis 25 blood gas analyser (Instrumentation Laboratory, Milan, Italy). Differences in blood gas concentrations before and after temazepam or placebo at each altitude were analysed by paired *t* tests.

The table shows the results of blood gas analysis before and after temazepam. At 171 m blood gas concentrations did not change significantly after temazepam. At 3000 m the arterial oxygen pressure decreased and carbon dioxide pressure increased significantly after temazepam. The mean decrease in arterial oxygen concentration between altitudes was 0.77 (95% confidence interval −8.02 to −3.69) kPa ($P<0.01$) and the mean increase in arterial carbon dioxide concentration was 0.3 (0.46 to 4.11) kPa ($P<0.05$). Placebo did not affect blood gas concentrations at either altitude.

Although we did not measure respiration directly, our data indicate that a low dose of a short term benzodiazepine can impair respiration at moderate altitude. These findings seem to contradict Dubowitz's conclusion. Treatment with temazepam at stable conditions after altitude acclimatisation may not impair respiration, but initial stages of acute respiratory adaptation to hypoxia at altitude are inhibited. Similar results were found after 50 g alcohol at moderate altitude.[5] Caution in the use of benzodiazepines to treat sleep disorders at altitude is therefore necessary, especially in the initial stages of altitude acclimatisation.

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Guidelines are needed if drug testing of those arrested by the police becomes compulsory

Editor—The prime minister's announcement at the last Labour Party conference that the government proposes to introduce compulsory drug and DNA testing for people arrested for indictable offences before they have been convicted will raise some important ethical issues for healthcare professionals if it does eventually become law.[1] As pointed out in the *Economist*,[2] the upshot of compulsory DNA testing might be that every alleged shoplifter could be held down forcibly while a mouth swab is taken.[2] Collecting sweat for a drug test by wiping the forehead of a restrained and resisting subject with a swab would be no more dignified.

Arterial oxygen (Pao_2) and carbon dioxide ($Paco_2$) concentrations (kPa) of seven men before and one hour after 10 mg temazepam at 171 and 3000 m

	Pao_2				$Paco_2$			
	171 m		3000 m		171 m		3000 m	
Case No	Before	After	Before	After	Before	After	Before	After
1	12.2	12.2	9.3	8.6	4.5	4.3	4.3	4.4
2	11.2	11.6	8.6	8.4	4.7	4.9	4.4	4.7
3	12.1	12	8.9	8.2	4.4	4.5	4.4	4.7
4	11	11.4	9.1	4.9	4.9	4.8	4.0	4.3
5	10.9	11	8.5	8.1	4.7	4.4	4.1	4.4
6	12.5	12.2	9.1	8.1	4.5	4.8	4.4	4.7
7	12	12.2	9.4	8.4	4.4	4.5	4.0	4.8
Mean (SD)	11.7 (0.63)	11.8 (0.48)	9 (0.29)	8.3 (0.2)	33.4 (1.4)	34.6 (1.8)	4.2 (0.19)	4.5 (0.2)

The BMA has issued helpful guidelines for police surgeons who have been asked to examine people in police custody when consent for such examination is not forthcoming.[3] I hope that similar guidelines will be produced for medical practitioners who may be asked to participate in collecting body fluids for drug testing from arrested people without their consent and in analysing, interpreting, and using the results in samples obtained in this way.

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1 Another fine mess [editorial]. *New Law Journal* 1999;149: 1429.
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Incidence of venous thromboembolism in users of combined oral contraceptives

Methods for identifying cases and estimating person time at risk must be detailed

Editor—Lawrenson et al reported a crude incidence of venous thromboembolism of 38 per 100 000 women who used combined oral contraceptives, based on information derived from the General Practice Research Database, without describing how they derived their estimate.[1] This estimate is closely similar to the incidence reported in a prior publication of theirs, which was based on a different automated medical database.[2] In their letter they provide no details on the validity and specificity of the diagnosis of venous thromboembolism or the presence of medical risk factors and no information on the person time at risk for current users of oral contraceptives.

An incidence must be based on person time at risk. Despite apparent deficiencies, the authors provide an incidence that is roughly twice as high as the incidence that colleagues and I reported in a paper derived from the General Practice Research Database; we included only idiopathic cases of venous thromboembolism (those possibly related directly to use of oral contraceptives).[3] Lawrenson et al conclude that our reported estimate was substantially lower than the true incidence.

On the basis of their previous publication,[2] Lawrenson et al seem to have included both outpatients and inpatients with any one of five computer recorded diagnoses as patients with venous thromboembolism, without documentation from clinical records. The five diagnoses include a computer recorded diagnosis of thrombophlebitis. Colleagues and I found that, on the General Practice Research Database, over 90% of subjects with this computer recorded diagnosis alone were treated as outpatients, so clinical histories were not available; we did not find any of the remaining patients with this diagnosis to have idiopathic deep vein thrombosis after review of clinical histories.[3] Thus we concluded that many young women with a computer diagnosis of thrombophlebitis do not have documented idiopathic deep vein thrombosis.

The results from the General Practice Research Database provided in Lawrenson et al's letter are uninterpretable because, firstly, it is unclear whether the general practitioners reported incidence according to number of users rather than person time at risk, and, secondly, presumably the diagnosis of venous thromboembolism was not validated from clinical records. By contrast, cases of venous thromboembolism that we reported were validated as idiopathic from clinical records.[3]

An interpretation of estimates of the incidence of venous thromboembolism related to current use of oral contraceptives requires that the method for identifying relevant cases as well as the method for estimating person time at risk be clearly detailed,[4] as in our paper.[3] In the absence of such information, comparison of rates of illness between different reports is unjustified and surely misleading.

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Competing interests: None declared.

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Risk is particularly high with first use of oral contraceptives

Editor—Lawrenson et al show that the risk of venous thromboembolism during use of oral contraceptives might be higher than estimated by the Medicines Commission of the United Kingdom's Department of Health.[1] That is especially likely for first use.

In a paper that was published at about the same time Herings et al found an incidence of 90 per 100 000 woman years in the first episode of use of third generation oral contraceptives; for second generation contraceptives the figure was 24 per 100 000; for the youngest ages and during the first year of use the incidences became higher than 100 per 100 000.[2] These data are in line with those found in earlier case-control studies.

A stratified analysis of the World Health Organisation's study found a 21.6-fold increase in the risk of venous thrombosis among first ever users of third generation oral contraceptives during the first year of use (relative to never use); this relative risk was 9.1 for second generation oral contraceptives.[3] In the Leiden study we found fourfold to sevenfold risk increases for third versus second generation oral contraceptives among younger women (most new users would be young); this was over and above an overall threefold to fourfold risk increase for second generation oral contraceptives.[4]

Jick et al found 9.2-fold and 5.6-fold increases in risk between third and second generation oral contraceptives during the first six months of use.[5] Multiplying these cumulative relative risks with an overall baseline incidence of, say, 5 per 100 000 woman years yields incidences of the order of magnitude found by Herings et al,[2] thereby confirming the suspicion that the incidences are higher than generally believed, especially in young and first time users.

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Competing interests: Professors Vandenbroucke and Rosendaal have no competing interests. Dr Bloemenkamp has been involved in, and Dr Helmerhorst has supervised, studies sponsored or assigned by various pharmaceutical companies that manufacture oral contraceptives, but none of these companies has funded their studies on the comparative merits of second and third generation oral contraceptives.

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Authors' reply

Editor—Our letter in response to the Department of Health's statement calculated an incidence of idiopathic venous thromboembolism of 36.5 per 100 000 exposed woman years in users of combined oral contraceptives. This was based on a structured review of published papers and compared well with the findings from our recent study, for which we used the General Practice Research Database. That study included only cases of diagnosed venous thromboembolism with supporting evidence of anticoagulation treatment. Further information from general practitioners showed that in 83% of cases there was supportive evidence (venograms, Doppler ultrasound scans, or lung scans).

We have argued that general practitioners in the United Kingdom do not treat patients with anticoagulants without the support of diagnosis by a hospital consultant.[1] The general practitioners' responses indicated that all our cases had been referred to hospital, although for a fifth this had not been recorded on the General Practice Research Database. We believe that the strategy used by Jick et al of requiring a computer record of hospital admission led to a 20% underestimate of cases.[2] In all our studies of combined oral contraceptives we have used person time at risk for calculating incidences, based on a 28 day pack. Jick et al used 30 days, which would have led to a further 7% error.

Vandenbroucke et al cite a further study by Herings et al that supports our assertion of a higher incidence of venous thromboembolism than that reported by the Department of Health. Their letter cites examples of higher incidences of venous thromboembolism among users of third generation compared with second generation combined oral contraceptives. We agree that new users of combined oral contraceptives seem to be at an increased risk of idiopathic venous thromboembolism; this is important when considering the risk ascribed to third generation combined oral contraceptives.

In our studies we have compared users of levonorgestrel 150 µg plus ethinyloestradiol 30 µg with users of formulations of combined oral contraceptives containing desogestrel and gestodene and found no difference in risk of venous thromboembolism between the formulations. Interestingly, a further analysis has shown that, despite a large change in prescribing practice since November 1995 from third to second generation formulations, the overall risk of venous thromboembolism in users of combined oral contraceptives has not changed.[3]

The key point of our letter was that the true rate of venous thromboembolism in users of combined oral contraceptives is probably nearer 37 per 100 000 exposed woman years and that the figures quoted by the Department of Health are underestimates.

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Competing interests: The department in which the authors work has received funding from Organon and Schering for investigating venous thromboembolism in women using oral contraceptives.

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Some patients are happy for doctors to make decisions

Editor—I agree with Bastian that the relationship between doctors and their patient is fundamentally changing and that many patients should be more closely involved in the decision making regarding their health needs.[1] I do, however, not accept Bastian's statement that doctors do not have a sophisticated understanding of the consultation process and wish to raise a point that is often overlooked by many people in consumer organisations.

An appreciable body of patients in the community is more than happy to offload the decision making about their treatment to the doctor. Many of these patients are intelligent, motivated people who approach the medical profession for advice based on knowledge and experience. As an anaesthetist I have spent much time discussing with patients the pros and cons of one form of perioperative analgesia versus another, and, almost invariably, when I ask the patient about their preference the response is, "Whatever you think best, doctor" or "Which one would you have?"

Every patient we see is unique and should be treated as such. Some patients clearly gain reassurance from the medical profession adopting the politically incorrect paternalistic approach, and these people must not be forgotten.

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Long term vascular complications of *Coxiella burnetii* infection

Cardiovascular risk factors cannot be ignored

Editor—In their paper on the potential for infection by *Coxiella burnetii* to be a risk factor for cardiovascular disease Lovey et al suggest that the established mode of transmission of *C burnetii* is unlikely to be associated with risk factors for cardiovascular disease. They also say that the unavailability of baseline data on such risk is unlikely to influence their findings.[1] However, in an outbreak of Q fever pneumonia affecting 147 patients in the United Kingdom in 1989 (not referred to by Lovey et al) we found that of 110 patients in whom smoking history was available for the time of the infection, 60 were current smokers, 28 were ex-smokers, and only 22 had never smoked.[2 3]

A subsequent case-control study in this cohort confirmed smoking to be a risk factor for Q fever.[4] Follow up of 87 (59%) patients in clinic nine years after the original outbreak identified 31 (35%) as current smokers (mean age 51.2 (SD 10.2)), with a mean smoking burden of 33.0 (15.8) pack years. In this group one patient had had a cerebrovascular accident and three had ischaemic heart disease. Thirty five (40%) patients were ex-smokers (mean age 57.0 (13.4)), with a mean smoking burden of 26.4 (18.8) pack years. In this group one had had a cerebrovascular accident and six had ischaemic heart disease. Only 17 (20%) patients (mean age 53.8 (9.1)) had never smoked, and none of these had vascular disease.

These results suggest that smoking is a risk factor for Q fever and show that in our patients it has been the current or ex-smokers who have developed cardiovascular disease. It is therefore essential that current and past cigarette smoking are added to a reanalysis by the Geneva group before *C burnetii* can be taken as the explanation of the excess cardiovascular morbidity and mortality observed.

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1 Lovey P, Morabia A, Bleed D, Peter O, Dupuis G, Petite J. Long term vascular complications of Coxiella burnetii infection in Switzerland: cohort study. *BMJ* 1999;319: 284-6. (31 July.)
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Authors' reply

Editor—The data reported by Wildman et al cannot be interpreted as evidence that smoking is a risk factor for Q fever. The prevalence of current smoking in these 110 patients was unusually high (55%), even compared with the general local population of East Birmingham (35%).[1 2] These patients had mostly been admitted to hospital and been identified on the basis of a recent diagnosis of pneumonia or fever of unknown origin. Smokers may therefore have been overselected simply because they were more severely affected by respiratory disease. This overrepresentation of smokers among cases may in turn explain the positive association of smoking and Q fever observed in the study by Ayres et al, in which 71 patients with Q fever were compared with patients in general practice who were free of febrile illness.[3] By comparison, in the Swiss outbreak of 1983, 191 patients had fever, but 224 others were identified by serum analysis of the general population (n = 3036).[4] Q fever pneumonia affected only 68 patients (36% of the patients with symptoms and 16% of the whole group). Only 8 of the 415 patients (2%) were admitted to hospital.

Wildman et al also argue that cardiovascular disease does not occur in patients infected with Q fever who never smoked. Three cases of ischaemic heart disease in 31 smokers may, however, not be different from no cases in 17 people who have never smoked. Their numbers (31 + 35 + 17) do

not add up to 87, nor the proportions (35 + 40 + 20) to 100%.

Overall, the direct evidence for a possible confounding effect of smoking on the relation between Q fever and coronary heart disease and stroke is weak. Moreover, smoking does not seem to have been a strong confounder in other studies that investigated the infectious origin of cardiovascular disease.[5] We therefore think it unlikely that a confounding effect of smoking, if it exists, could be strong enough to fully explain the observed association between acute infection with *Coxiella burnetii* and the incidence of coronary heart disease and stroke.

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Internet helps communication between doctors and patients

Editor—I found the articles by Jadad and Shepperd et al on using the internet to provide patients with information helpful.[1 2] The internet is beginning to transform health care, but there is fear that clinicians may remain ill prepared unless action is taken now. Jadad was unable to identify my article on this subject.[3] I have developed the concept of cyberclinics in rheumatology and osteoporosis with active participation of patients and am now able to offer consultation and advice on the net.[3 4]

The internet can provide vast amounts of information, but the material is variable in quality. I have created one of the first departmental websites in rheumatology and osteoporosis (www.smuht.man.ac.uk/rheumat/), which features information that I have written personally or selected (after studying it online) and consider reliable so that patients can access this information with confidence. A further point raised by Jadad—strategies to increase "health literacy" in general—is also important. I have recently held a "road show" to demonstrate to patients the basic aspects of computers and the internet, and how the internet can be used to access information relating to health care. Patients were able to participate and gain hands-on experience. My overall impression was that even elderly people would accept such new technology if they were shown how to use it.

Jadad mentioned email, which is another facility I offer to my patients and local practitioners for rapid response to any queries or anxieties they may have and to avoid delays caused by post and telephones.[5] It is vital to ensure equal access to technology and information. Even comparatively poor countries may be able to afford telecommunications facilities as the costs are coming down, but they paradoxically remain unable to afford clinical expertise because of a lack of trained specialists in such countries. Cyberclinics of the type I have developed may enable patients from these countries to obtain medical advice in a more cost effective way than in many other formats of telemedicine currently available, which can be constrained by cost and technical failure.

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New guidelines for urgent referral of patients with cancer are waste of energy

Editor—Guidelines have recently been sent out by the Department of Health for wide consultation in the United Kingdom.[1] The aim is try to reduce mortality from cancer in the United Kingdom by guaranteeing that all patients who present to their general practitioner with symptoms possibly due to cancer are seen in a hospital clinic within two weeks. But there is no evidence whatsoever that delay in diagnosis is a large problem in the United Kingdom. Efforts to implement the so called two week policy are misplaced. The guidelines themselves represent a reasonable distillation from basic medical textbooks, but they are patronising to doctors, who have the longest university training of any professional group. Most copies are likely to end up in the bin.

Those in the United Kingdom know that it continues to lag behind its European neighbours in cancer survival. Politicians must be educated about this rather than be allowed to continue with their obsession about waiting list targets. The whole exercise is reminiscent of the man who loses his keys on the dark side of the road and looks for them under the light across the street. In the United Kingdom the shortage of cancer specialists is more than 500; £1.2bn is needed to bring radiotherapy equipment up to date; and an extra £170m a year is needed for chemotherapy. Facilities for good psychosocial care are few, and people rely heavily on the charity sector for palliative care. The Calman-Hine network is only partially and patchily implemented, with little new funding. There is still gross inequity in the quality of cancer care in the United Kingdom. And there is no National Cancer Centre to set the gold standard.

Ominously for the NHS are the clear signs that there will be major improvements in cancer treatment over the next decade. Next year will see the licensing of herceptin for breast cancer by the European Medicines Evaluation Agency. This will be the forerunner of sophisticated targeted treatments that will require integrated molecular and therapeutic solutions. The human genome project, scheduled for completion in 2003, will lead to new ways of predicting which people are at high risk of developing cancer. In the United Kingdom the basic cancer services need urgently to be put in order to meet these new challenges, allowing British patients to reap the benefits of global progress. If the NHS cannot do it the private sector will—but at a price.

The National Cancer Forum is a derivative of the Calman-Hine group and is convened irregularly. At its most recent meeting this topic was raised, but the forum was told that "ministers have gone too far down the road on this one." Why? It has never been on the agenda of the forum. During my two years with the World Health Organisation I have visited many countries in different economic environments. Nowhere does a state health department have a two week policy or send out such gratuitous advice to doctors—yet many have better outcomes for cancer care.

Although streamlining the diagnostic process and improving treatment resources makes good sense, these new targets are a waste of energy. Along with NHS Direct and its latest variant—its interactive website—they are simply window dressing. A significant effort to improve the quality of cancer care is essential if we are really going to make an impact and save lives.

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1 Department of Health. *Referral guidelines for suspected cancer—consultation document.* London: DoH, 1999. (HSC 1999/241.) (www.doh.gov.uk/cancer)

Correction

Breast feeding and obesity

Two biometricians should have been included with Johannes Hebebrands as authors of the second letter in this cluster. They are Frank Geller and Andreas Ziegler, both from the Institute of Medical Biometry and Epidemiology at Philipps-University of Marburg at Marburg in Germany.