Letters

Influence of cholesterol on survival after stroke

Beneficial effects of cholesterol lowering on atherosclerosis may not lessen with age

EDITOR-In their study of survival after stroke Alexander G Dyker and colleagues showed that serum cholesterol concentration is inversely correlated with degree of disability and all cause mortality in a clinically heterogeneous group of elderly patients with stroke.1 Interesting though these findings are, they are likely to have only a tenuous connection with the study's stated objective of investigating the association between cholesterol concentration and cerebrovascular disease. As the authors hint in their introduction, the most consistent and direct evidence about the aetiology of stroke may come from postmortem examinations rather than clinical diagnostic groupings, even when supported by the best available brain imaging techniques.

The Akita pathology study, to which the authors refer, established a link between high cholesterol concentrations, cortical artery infarction, and widespread atherosclerosis in predominantly larger basal cerebral arteries (1.5-6.0 mm). Low cholesterol concentrations and minimal atherosclerosis were generally associated with cerebral haemorrhage, except for somewhat higher cholesterol concentrations and a substantial incidence of atherosclerosis in those with cerebral haemorrhage aged over 65. Intermediate levels of cholesterol and atherosclerosis were found in cases of penetrating artery infarction. Suspected cardioembolic strokes were classified separately.2

If these pathophysiological correlates are accepted, the authors need not invoke novel biological mechanisms to explain their results.³ Rather, if cholesterol is a crude marker for atherosclerosis, their data support the proposition that, in the age group studied, strokes related to atherosclerosis, presumably including some cases of cerebral haemorrhage, have a better prognosis than strokes related to other causes (notably arteriosclerosis).4 Recent evidence suggests that if the atherosclerotic group can be specifically targeted with lipid (low density lipoprotein cholesterol) lowering drugs before severe damage has occurred, a significant impact on stroke is achievable. Pooled data from four pravastatin atherosclerosis regression trials (coronary or carotid) indicated a reduction in the incidence of stroke of 62% (P = 0.054).⁵ There is no

a priori reason for assuming that the beneficial effects of cholesterol lowering on atherosclerosis lessen with age, though competing adverse effects might emerge.

While the study testifies to the inadequacy of current lipid lowering guidelines in relation to stroke, it cannot legitimately be taken as a contribution to the debate on the efficacy of lipid lowering on the prevention of stroke because lipid lowering (drug) interventions were not part of the design. Therefore, alternative key messages from this paper might be that clinical classifications of stroke provide an unreliable guide to pathogenesis and that the association of cerebral atherosclerosis with stroke improves prognosis in elderly people. Cholesterol's clandestine relation with stroke clearly requires further probing.

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- 1 Dyker AG, Weir CJ, Lees KR. Influence of cholesterol on survival after stroke: retrospective study. *BMJ* 1997;314:1584-8. (31 May.)
- Konishi M, Iso H, Komachi Y, Iida M, Shimamoto T, Jacobs DR, et al. Associations of serum cholesterol, different types of stroke, and stenosis distribution of cerebral arteries. The Akita pathology study. *Stroke* 1993;24:954-64.
- Akita pathology study. Stroke 1993;24:954-64.
 Hachinski V, Graffagnino C, Beaudry M, Bernier G, Buck C, Domner A, et al. Lipids and stroke. A paradox resolved. Arch Neurol 1996;53:303-8.
- 4 Miyai J, Blau AD, Reding MJ, Volpe BT. Patients with stroke confined to basal ganglia have diminished response to rehabilitation efforts. *Neurology* 1997;48:95-101.
- rehabilitation efforts. *Neurology* 1997;48:95-101. 5 Byington RP, Jakema W, Salonen JK, Pitt B, Bruschke AV, Hoen H, et al. Reduction in cardiovascular events during pravastatin therapy. Pooled analysis of clinical events of the pravastatin atherosclerosis intervention program. *Circulation* 1995;92:2419-25.

Regression to the mean may have been a factor

EDITOR—Alexander G Dyker and colleagues suggest that low serum cholesterol concentration is associated with increased mortality after stroke.¹ They classified their patients on the basis of a single measurement of cholesterol concentration, made on the morning after presentation with an acute stroke. This introduces two sources of error, one of which the authors have partially addressed but the other of which they seem to have overlooked.

Use of a single measurement renders this study subject to regression to the mean. Because of random variation in the withinindividual cholesterol concentration, the proportion of patients with a high or low concentration is overestimated at the expense of those with an average concentration. Because of this, the strength of any epidemiological relations is hard to assess.

In addition, cholesterol was measured on the morning after an acute stroke. It is well recognised that cholesterol concentration is a negative acute phase reactant; for this reason the British Hyperlipidaemia Association has recommended that it be measured within 12 hours or more than three months after myocardial infarction.² The results obtained here may thus reflect more the degree of tissue damage than the premorbid cholesterol concentration. Although the authors state that a relation between cholesterol concentration and mortality was seen independently of the severity of stroke, for each category of stroke one would expect both a greater fall in cholesterol and greater mortality with increasing severity. Inspection of the data suggests that most of the excess mortality seen at the end of the study occurred in the first three months after stroke, which is consistent with this. In addition, malignancy is common in elderly patients and produces both a low cholesterol concentration and increased mortality. Under these circumstances it is not surprising that a low concentration after stroke was associated with increased mortality.

As the authors mention, this study's findings do not reflect the findings in long term prospective trials, in which lowering of low density lipoprotein cholesterol led to an unchanged³ or reduced^{4 5} incidence of stroke. We therefore find surprising their conclusion that lipid lowering treatment after stroke cannot be justified. Further ongoing prospective studies of lipid lowering treatment should throw further light on this question.

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- 1 Dyker AG, Weir CJ, Lees KR. Influence of cholesterol on survival after stroke: retrospective study. *BMJ* 1997;314:1584-8. (31 May.)
- Betteridge DJ, Dodson PM, Durrington PN, Hughes EA, Laker MF, Nicholls DP, et al. Management of hyperlipidaemia: guidelines of the British Hyperlipidaemia Association. *Postgrad Med J* 1993;69:359-69.
 Shepherd J, Cobbe SM, Ford I, Isles CG, Lorimer AR, Mac-
- 3 Shepherd J, Cobbe SM, Ford I, Isles CG, Lorimer AR, Mac-Farlane PW, et al. Prevention of coronary heart disease with pravastatin in men with hypercholesterolemia. N Engl I Med 1995;333:1301-7.
- 4 Scandinavian Simvastatin Survival Study Group. Randomised trial of cholesterol lowering in 4444 patients with coronary heart disease: the Scandinavian simvastatin survival study (4S). *Lancet* 1994;344:1383-9.
- 5 Sacks FM, Pfeffer MA, Moye LA, Rouleau JL, Rutherford JD, Cole TG, et al. The effect of pravastatin on coronary events after myocardial infarction in patients with average cholesterol levels. *N Engl J Med* 1996;335:1001-9.

Cholesterol may be marker of inflammation

EDITOR—Alexander G Dyker and colleagues investigated the association between serum cholesterol concentration and cerebrovascular disease in 977 patients admitted to hospital with acute stroke.¹ They found that lower serum cholesterol concentrations had an independent adverse effect on survival after stroke and that its level did not correlate with the severity of stroke. According to the authors, this may simply reflect poor nutritional status, although, in a subgroup of patients, data on cholesterol did not show a downward trend because of stress or poor nutrition.

Might not cholesterol be a metabolic marker of inflammation? Lipid changes in patients after cerebral infarction are similar to those observed after myocardial infarction.² Current cholesterol concentrations during heart attack do not reflect premorbid concentrations, nor do they indicate the prognostic risk until two months after myocardial infarction.³

I would encourage the authors to ascertain from their data whether markers of inflammation (variant surface glycoprotein, C reactive protein, albumin) correlate better with survival or severity of stroke than cholesterol does.

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- Dyker AG, Weir CJ, Lees KR. Influence of cholesterol on survival after stroke: retrospective study. *BMJ* 1997;314: 1584-8. (31 May)
- 2 Mendez I, Hachinsky V, Wolfe B. Serum lipids after stroke. Neurology 1987;37:507-11.
- 3 Ryder REJ, Hayes TM, Mulligan IP, Kingswood JC, William S, Owen DR. How soon after myocardial infarction should plasma lipids be assessed? *BMJ* 1984;209:1651-3.

Effect of cholesterol on prognosis may rely on negative association with atrial fibrillation

EDITOR-In their retrospective study Alexander Dyker and colleagues found an intriguing association between high mortality after stroke and low serum cholesterol concentrations, independent of type of stroke, vascular territory and extent, age, and hyperglycaemia.1 Though the mechanism responsible for this increased death rate was unclear, the authors' recommendation that widespread application of cholesterol lowering guidelines for secondary prevention in elderly subjects should be avoided sounds appropriate, considering that the relevance of cholesterol as a pathogenic determinant of cardiovascular disease decreases in older age groups.²

In the prospective population based L'Aquila stroke registry, which recruited 1666 first ever strokes between January 1994 and December 1995, one year mortality was significantly increased (hazard ratio 1.35; 95% confidence interval 1.11 to 1.67) in patients with serum cholesterol concentrations under 5.70 mmol/1 compared with those with the higher concentrations.³ This association was still significant after adjustment for age, diabetes mellitus, cigarette smoking, coronary heart disease, packed cell volume, and type of stroke (1.28; 1.04 to 1.59), confirming the results reported by Dyker and colleagues.

In our patients low serum cholesterol concentrations were associated with a high prevalence of atrial fibrillation (P<0.0001, χ^2 test).⁴ After the introduction of atrial fibrillation in the model the hazard ratio for high serum cholesterol concentrations was no longer significant (0.87; 0.70 to 1.07), suggesting that the effect of cholesterol on prognosis may rely on a negative association with atrial fibrillation.

Stroke mostly affects elderly people, in whom selective survival may determine a spurious association between risk factors and prognosis. Accordingly, cigarette smoking, which also decreases with age, was associated with a low prevalence of atrial fibrillation (P=0.007) and reduced mortality after stroke (0.7; 0.60 to 0.91). The most likely explanation for this is lifestyle changes in patients with heart disease, which may include smoking cessation and the adoption of lipid lowering treatments.⁵

The overall benefit of lipid lowering agents in elderly people is still uncertain, considering that the relevance of serum cholesterol as a risk factor for stroke is decreased in older patients. Prevention programmes should therefore emphasise the role of atrial fibrillation, whose actiology and role in prognosis are probably still underestimated.

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- 1 Dyker AG, Weir CJ, Lees KR. Influence of cholesterol on survival after stroke: retrospective study. *BMJ* 1997;314:1584-8. (31 May.)
- 2 Krumholz HM, Scheman TE, Merrill SS, Mendes de Leon CF, Vaccarino V, Silverman DI, et al. Lack of association between cholesterol and coronary heart disease mortality and morbidity and all-cause mortality in persons older than 70 years. *JAMA* 1994;272:1335-40.
- than 70 years. JAMA 1994;272:1335-40.
 Marini C, Di Napoli M, Di Gianfilippo G, Santalucia P, Triggiani L, Carolei A. High stroke incidence in the community-based L'Aquila stroke registry: two-year results. Neurology 1997;48(suppl I):A159.
 Skalabrin EJ, Santalucia P, Marini C, Di Napoli M, Euforbio
- Skalabrin EJ, Santalucia P, Marini C, Di Napoli M, Euforbio M, De Matteis G, et al. Prevalence and comorbidity of chronic atrial fibrillation in cerebral ischemia. *Cerebrovasc Dis* 1997;7(suppl 4):40.
 Iribarren C, Dwyer JH. Serum total cholesterol, stroke and
- 5 Iribarren C, Dwyer JH. Serum total cholesterol, stroke and all-cause mortality: lessons from the Honolulu heart program. *Nutr Metab Cardiovasc Dis* 1997;7:169-74.

Authors' reply

EDITOR—Nicholas Stoy suggests that cholesterol is likely to influence preferentially the development of certain pathological subtypes of stroke, particularly large vessel atheromatous disease. This we accept, but clinical examination and even invasive investigations cannot reliably ascertain the aetiology of every stroke. Widely applicable guidelines are needed to ensure that only clinically and cost effective strategies of primary and secondary prevention are used.

The meta-analysis that Stoy refers to reported 13 strokes in patients treated with placebo (n=936) compared with five in

patients treated with pravastatin (n=955); this difference did not reach conventional levels of significance.¹ Other trials of older lipid lowering agents have also failed to show reductions in the incidence of stroke, including a meta-analysis of 36 000 patients from 11 separate trials.² While more recent studies of statins have been more encouraging, a meta-analysis of statins published since our manuscript was submitted agrees with our conclusion that the benefits of these drugs in the prevention of stroke in elderly patients have not yet been confirmed.³

Andrew Hutchesson and Steven Martin state that regression to the mean is a potential source of error, but this error would dilute rather than exaggerate the true association, as shown in studies of hypertension and the incidence of stroke.⁴ Cholesterol concentration may fall acutely after stroke, but analysis of serial samples in a subpopulation of our patients did not show this, and a prospective study has shown that measurement within 48 hours of stroke is representative of concentrations at three months.⁵

Hernán Valdés Socin's suggestion of a link between inflammatory markers and cholesterol is a helpful one. Among our patients, high C reactive protein concentrations correlate with poor outcome of stroke but not with lower cholesterol concentrations (K W Muir, personal communication).

We are intrigued by the fact that Carmine Marini and colleagues' results are similar to ours, and we have investigated the relation between cholesterol and atrial fibrillation. Our data for atrial fibrillation are incomplete, but cholesterol concentrations were not lower in patients with atrial fibrillation (sinus rhythm, 5.9 (SD 1.4) mmol/l (n = 434); atrial fibrillation, 5.8 (1.6) mmol/l (n = 69); P > 0.1).

We are pleased that the correspondents agree with us that a prospective randomised trial of lipid lowering treatment in patients with cerebrovascular disease is required. We are currently planning a multicentre study and invite interested clinicians to contact us.

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- 1 Byington RP, Jukema WJ, Salonen JT, Pitt B, Brushke AV, Hoen H, et al. Reduction in cardiovascular events during pravastatin therapy. Pooled analysis of clinical events of the pravastatin atherosclerosis intervention program. *Circulation*, 1995;92:2419-25.
- 2 Hebert PR, Gaziano M, Hennekens CH. An overview of trials of cholesterol lowering and risk of stroke. Arch Intern Med 1995;155:50-5.
- 3 Blaw GJ, Lagaay M, Smelt AHM, Westendorp RGJ. Stroke, statins and cholesterol. A meta-analysis of randomised, placebo-controlled, double blind trials with HMG-cOA reductase inhibitors. *Stroke* 1997;28:946-50.
- 4 Collins R, Peto R, MacMahon S, Hebert P, Fiebach NH, Eberlein KA, et al. Blood pressure, stroke and coronary heart disease. Part 2. Short-term reduction in blood pressure: overview of randomised drug trials in their epidemiological context. *Lancet* 1990;335:827-38.
- pressure: or or new or randomset dug trats in their epidemiological context. *Lancet* 1990;335:827-38.
 Butterworth RJ, Marshall WJ, Bath PMW. Changes in serum lipid measurements following acute ischaemic stroke. *Cerebrovasc Dis* 1997;7:10-3.

Gonorrhoea and ethnicity

Audit supports findings

EDITOR-Lacey et al and Low et al describe a high incidence of gonorrhoea in black people in Leeds and inner London.¹² Data from the national audit development project in sexual health indicate that their findings are likely to be valid elsewhere in the United Kingdom. We surveyed all genitourinary medicine clinics in the United Kingdom about cases of gonorrhoea diagnosed in the first three months of 1995 and received data on 1308 cases, 59% of all cases (2197) reported in the quarter. Of those cases with data on ethnicity, 30% were in black people (290/980), who make up only 1.6% (891 000/54 889 000) of the United Kingdom's population. Moreover, for patients attending clinics in London and large provincial clinics, which provided nearly half of all cases, the proportion of black patients was 47% (216/459).

This audit was retrospective and drew on ordinary clinic notes, which failed to provide data on ethnicity in a quarter (328/1308) of cases and did not systematically record details of occupation or other socioeconomic details. Our results confirmed the anecdotal impression of genitourinary physicians that gonorrhoea has become predominantly a problem of young black urban men. The results were circulated to all clinics in the United Kingdom in 1996 with a recommendation that further research should be done and new strategies developed for health promotion in this group of patients. They were not publicised more widely partly because it was thought that the conclusions were so important, and the potential for misuse and stigmatisation so great, that they needed to be backed up by the sort of careful socioeconomic analysis that Low et al and Lacey et al have now provided.

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- 1 Lacey CJN, Merrick DW, Bensley DC, Fairley I. Analysis of PLacty CJA, MERKE DW, Bellacty DG, Palitey P. Analysis of the sociodemography of gonorrhoea in Leeds, 1989-93. *BMJ* 1997;314:1715-1718. (14 June.)
 Low N, Daker-White G, Barlow D, Pozniak AL. Gonorrhoea in inner London: results of a cross sectional
- study. BMJ 1997;314:1719-23. (14 June.)

Collaborative surveillance system is a model for the future

EDITOR-We agree with Low et al that the incidence of gonorrhoea in south London is increasing.¹ Since 1995, a disaggregate sexually transmitted disease surveillance system has been operational in the 13 clinics of the former South West Thames region through a collaboration of all genitourinary medicine physicians. Data are retrieved from genitourinary medicine clinics and analysed quarterly at the Public Health Laboratory Service Communicable Disease Surveillance Centre. The data show a 43% increase (from 203 cases to 290) in the diagnosis of uncomplicated gonorrhoea against a background of a 23% increase (from 22551 cases to 27 875) in all diagnoses made in the first six months of 1996, compared with the same period in 1995. We estimate that the rate of gonorrhoeal infection, in our region in 1996, was 10 times higher in residents of London than in those from outside London.

From 1995 to 1996, in 15-24 year old residents of London, the estimated rate of gonorrhoeal infection increased from 91 to $133/100\ 000$, and the rate ratio for residents of London compared with those from outside London in the same age band was 17; the rate ratio was 3 for chlamydial infection.

We agree with De Cock and Low that it is most important to understand the characteristics, including ethnic group, of those most affected by infectious diseases, including sexually transmitted diseases, in order to target local resources appropriately.² Using the 1991 census classification in all our genitourinary medicine clinics, we found that while 9% (n=2584) of all diagnoses were among black ethnic minority groups, these groups accounted for 30% (n = 101) of diagnoses of gonorrhoea.

We believe that our collaborative disaggregate surveillance system, which allows timely and relevant feedback to genitourinary medicine and public health staff in the region, offers a model for the future development and improvement of national surveillance.

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- Low N, Daker-White G, Barlow D, Pozniak AL. Gonorrhoea in inner London: results of a cross sectional 1 study BMI 1997-314-1719-93 (14 June)
- 2 De Cock KM, Low N. HIV and AIDS, other sexually transmitted diseases, and tuberculosis in ethnic minorities in United Kingdom: Is surveillance serving its purpose? BMJ 1997;314:1747-51. (14 June.)

Improving ethnic data within surveillance must be priority

EDITOR-We endorse Kevin M De Cock and Nicola Low's call for the routine collection of further risk data, including ethnic group, to strengthen surveillance for HIV infection, other sexually transmitted diseases, and tuberculosis.1 The value of capturing such data is shown by AIDS reporting, in which ethnic group is gathered routinely and has appeared in public data presentations since 1990. These have indicated that black African men and women are at particularly high risk of AIDS, which, with other data, has led to the prioritisation of this group for prevention and care.² As cases of AIDS reflect past transmission of HIV, gathering ethnic data in the unlinked anonymous HIV prevalence programme would also provide information on current pattern of transmissions in ethnic groups in Britain.12

Surveillance for sexually transmitted diseases would particularly benefit from the inclusion of ethnic data. Black people in some areas are at greatly increased risk of gonorrhoea, and, in the light of the recent substantial increase in gonorrhoea, the generalisability of such local findings has taken on great importance.3 Routine returns from sexually transmitted diseases clinics do not include information on ethnic group; they were designed to provide administrative rather than surveillance data.

The importance of ethnic group and country of birth in the epidemiology of tuberculosis is well recognised, and these have been monitored in the national tuberculosis notification surveys in England and Wales. The occurrence of rapid changes in the epidemiology of tuberculosis recently has been one of the reasons for the development of proposals for continuous enhanced tuberculosis surveillance. The contribution of the HIV epidemic to tuberculosis in England and Wales was estimated in the 1983 and 1988 national tuberculosis surveys, and a further estimate was made in the 1993 survev.4 The proposals for continuous enhanced tuberculosis surveillance creates the possibility of continuous monitoring of the extent of the interaction between tuberculosis and HIV.

Particular difficulties may occur in obtaining ethnic data, and despite guidelines⁵ not all NHS institutions have done so uniformly.1 The quality of ethnic data is improving, but the public health benefit from collecting ethnic data within surveillance needs to be maximised. Further improvement and standardisation of these data, and their mode of collection, are a priority if more than lip service is to be paid to reducing the higher disease burdens experienced by some ethnic groups.

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- 1 De Cock KM, Low N. HIV and AIDS, other sexually transmitted diseases, and tuberculosis in ethnic minorities in United (scasos, and unrellators) in curine innovaes in United isingdom: Is surveillance serving its purpose? *BMJ* 1997;314:1747-51. (14 June.)
 2 Department of Health, Public Health Laboratory Service,
- Institute of Child Health. Unlinked anonymous HIV seroprevalence monitoring programme in England and Wales. Report from the unlinked anonymous surveys steering group. Data to the end of 1995. London: DoH, 1996.
- 3 Fenton K, Johnson A, Nicoll A, Race, ethnicity, and sexual health. BMJ 1997;314:1703-4. (14 June.)
- 4 Kumar D, Watson JM, Charlett A, Nicholas S, Darbyshire JH. Tuberculosis in England and Wales in 1993; results of a
- national survey. *Thorax* (in press).
 5 NHS Executive. *Collection of ethnic group data for admitted patients*. Leeds: NHS Executive, 1994. (EL (94)77.)

Funding of drug treatment of multiple sclerosis should not be delayed

EDITOR-I disagree with Hughes that it is appropriate to delay decisions on funding a treatment for multiple sclerosis.¹ I can comment on the points that Hughes made in relation to the trial of interferon beta-lb.2-

Firstly, the blinding in the trial was performed as efficiently as possible. We used two different neurologists, one to screen for side effects and the other to determine efficacy. The neurologist who determined efficacy was blinded from seeing the skin reactions and did not talk to the patients about side effects. In addition, there were two doses of the drug, only one of which was effective in reducing the number and severity of relapses. The fact that two doses were used ensured the blinding for the high dose. No such low dose was used in the trial of interferon beta-1a.5

Secondly, the differences between the two trials in the results of magnetic resonance imaging is easy to understand. Different methodologies were used for the quantitation. The two studies cannot, therefore, be compared in a direct fashion.

Overall, what we as neurologists need to do now is to impress on third party payers that budgets should include a specific allocation for drug treatment of multiple sclerosis. The secondary issue is which drug should be chosen. In the past year we have seen several putative new treatments for multiple sclerosis fail in clinical trials. At this point, however, we would do well to concentrate on getting the most that we can out of the interferon betas. The several studies of the interferon betas have generally confirmed each other, showing effectiveness.

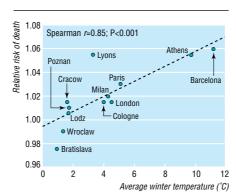
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- Hughes R. Wait for further evidence confirming effect of interferon beta in multiple sclerosis. *BMJ* 1997;314:1763. (14 June.)
- 2 IFNB MS Study Group. Interferon beta-lb is effective in relapsing-remitting multiple sclerosis. I. Clinical results of multicenter, randomised, double-blind, placebo-controlled
- trial. Neurology 1993;43:655-61. 3 Paty DW, Li DKB, UBC MS/MRI Study Group, IFNB MS Study Group. Interferon beta-lb is effective in relapsing-remitting multiple sclerosis. II. MRI analysis results of a
- multicenter, randomised, double-blind, placebo-controlled trial. *Neurology* 1993;43:662-7.
 4 IFNB MS Study Group, UBC MS/MRI Analysis Group. Interferon beta-lb in the treatment of multiple sclerosis: final outcome of the randomised controlled trial. Neurology 1995;45:1277-85.
- 5 Jacobs L, Cookfair D, Rudick RA, Herndon R, Richert J, Jacobs L, Cookiar D, Kudick KA, Herndon R, Richert J, Salazar A, et al and the Multiple Sclerosis Collaborative Research Group. Intramuscular interferon beta-la for disease progression in relapsing multiple sclerosis. *Ann Neurol* 1996;39:285-94

Heterogeneity of air pollution effects is related to average temperature

EDITOR-The APHEA project (air pollution and health: a European approach) found that the effects of daily variation in air pollution on mortality were significantly stronger in western Europe than in eastern Europe.¹ The authors have put forward several explanations for this inconsistency, all of which, generally speaking, suggest that the small effects found in eastern Europe are an artefact. We propose a less dismissive explanation.



Correlation between relative risk of death per 50 μ g increase in sulphur dioxide/mm³ and average winter temperature

Inspired by the Eurowinter study,² we plotted the relative risk of death in cities in the APHEA project¹ against average winter temperatures (taken from a previous report³). Spearman correlation coefficients were 0.85 for sulphur dioxide (12 cities, P < 0.001; figure) and 0.72 for black smoke (eight cities, P = 0.045). Correlations with average annual temperatures were 0.77 and 0.61, respectively. This observation is the more convincing, because the relation is continuous: estimates from western European cities lie between those from southern and eastern Europe.

We can only speculate about the mechanisms underlying this observation. There may be an interaction between air pollution and climate: an identical increase in pollution may not be equally harmful at different climatic conditions. In the APHEA project, effects of air pollution were stronger in the warm season.1 Ambient concentrations in warmer cities or seasons may also reflect more closely personal exposures.

A residual confounding by climatic factors may also have a role. Daily temperatures are inversely correlated with daily concentrations of sulphur dioxide and particulates and with mortality. The slope of the association between low temperature and mortality is steeper in places with warmer winters, probably because of inadequate protection against cold in the latter.² In consequence, any residual confounding by temperature would be stronger in warmer cities, leading to higher estimates of pollution effects. The statistical adjustment may not be sufficient to remove entirely all the effects of temperature or climate; other aspects (for example, daily minima or variations) may be important as well. This explanation is also biologically plausible. Effects of temperature on mortality are most pronounced for cardiovascular and respiratory causes, and more so among elderly people⁴-remarkably similar to the reported effects of air pollution.5

The heterogeneity in air pollution effects in the APHEA project seems genuine and related to temperature. It is unlikely that all the short term effects of air pollution on mortality are spurious. Some of them, however, and part of the inconsistencies

between studies, may be due to the role of temperature or climate. Existing data should provide the answer to this important question.

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- 2 Eurowinter Group. Cold exposure and winter mortality from ischaemic heart disease, cerebrovascular disease, respiratory mortality, and all causes in warm and cold regions of Europe. *Lancet* 1997;349:1341-6. 3 APHEA Project. Short term effects of air pollution on
- A FIEA FIGEL SHOTLETH ELECTS OF AT POILUDO ON health: a European approach using epidemiological time series data. *J Epidemiol Community Health* 1996; 50(suppl 1):S1-80.
 Bull GM, Morton J, Environment, temperature and death math. *A A science* 107:87-2910 047.
- rates. *Age Ageing* 1978;7:210-24. 5 Ostro B. The association of air pollution and mortality:
- examining the case for inference. Arch Environ Health 1993;48:336-42.

Mental health assessment

Open and closed questions are often confused

EDITOR-It is a pity that the first article in the ABC of mental health misleads readers on a fundamental matter, which may well be at the root of misunderstanding between workers in mental health, to the detriment of patients' care. One of the first lessons in courses on communication skills is how to distinguish open from closed questions. Open questions usually begin with "how," "what," "when," "where," "who," "which," and "why" (though "why" can sound threatening and should be used sparingly). Closed questions invite yes/no answers or short factual replies (for instance, "What is your date of birth?"). They can seem like an interrogation.

Teifion Davies wisely advises that open questions should come first.¹ He does not seem clear, however, about the distinction between the two kinds of question. The examples of open questions that he gives include two that are technically closed-for example, "Are there any questions you want to ask me?" invites a yes/no answer and may not prompt disclosure from a vulnerable patient. (An open version of this might be "What are the other things that are on your mind?") The examples of closed questions that Davies gives include four that are open-for example, "What do you think caused these problems?"---and two that are in fact leading questions-for example, "At times like these, do you think of killing yourself?"

Fortunately, Davies provides a useful list of voluntary organisations that may be helpful, including the Samaritans, who I understand are trained to elicit whether or not suicide is in the mind of the client. He does not suggest that the practice counsellor (if there is one) might also take referrals of some of the less severely ill patients; many patients prefer counselling to psychiatric treatment.2 8

It is important that mental health workers, whether medically trained or not, should have a common language and respect each other's skills. If they cannot communicate with each other then the patient is the loser.

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- 1 Davies T. ABC of mental health: mental health assessment. *BMJ* 1997;314:1536-9. (24 May.) 2 Priest RG, Vize C, Roberts A, Roberts M, Tylee A. Lay
- people's attitudes to treatment of depression: results of opinion poll for defeat depression campaign just before its launch. *BMJ* 1996;313:858-9.
- 3 Scott AIF, Freeman CPL. Edinburgh primary care depression study: treatment outcome, patient satisfaction, and cost after 16 weeks. BMJ 1992;304:883-7.

Author's reply

EDITOR-Heather Goodare is right to emphasise the importance of good interview technique and clear communication. Unfortunately, the distinction between open and closed questions is not as clear cut as she implies. Just as closed questions often elicit more than yes/no answers, so open questions should encourage the patient to expand on his or her answer. An interview that is intended to gather information and start the treatment process will usually require a gentle transition from more open to more closed questions as the interview proceeds. It is worth noting that open questions can be perceived as threatening, as in the example that Goodare gives: "What are the other things that are on your mind?'

On the critical issue of suicidal thoughts and plans, all evidence suggests that direct ("leading") questions should be used if other forms of question have failed to clarify the matter. This is also true when the patient is suspected of harbouring thoughts of harming someone, as is reinforced in later articles in the series.

Some health professionals may be well versed in good interview technique, but articles in the ABC series are aimed primarily at general practitioners and other doctors who may have received little or no training in interview skills. The intention of the article was to encourage doctors to reflect on the importance of their interview technique and, if necessary, attempt to improve it.

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Aciclovir in herpes simplex gingivostomatitis

Children studied were not representative of those seen in casualty departments

EDITOR-Amir et al's paper on the treatment of primary herpes gingivostomatitis covered a common clinical problem in young children¹; few randomised placebo controlled studies have been carried out of treatment for the condition. It is disappointing that this paper has misleading key messages and is unhelpful for those who have to decide how to treat this problem in casualty departments.

The study looked at a select population referred to a tertiary paediatric hospital within 72 hours of the first appearance of lesions. Altogether 84% of the children had < 20 lesions. In my experience, few children present to casualty departments in this manner. In a study of 31 children with gingivostomatitis due to herpes simplex virus type 1 who presented to the casualty department of a children's hospital in inner city London, 84% had had lesions for over 72 hours (range 1-7 days (mean 5 days)).² Sixty eight per cent had multiple lesions and would have been classified by Amir et al as having severe disease (>20 lesions), including three of the five children with a history of illness of <79 hours

Aciclovir inhibits viral replication, and thus it is not surprising that a beneficial effect was found in children who presented early in their illness with mild disease (< 20Aciclovir decreases antibody lesions). response to herpes simplex virus proteins in primary genital herpes infections and has been associated with earlier and more severe recurrences when treatment groups were compared with placebo groups.34 It is a shame that Amir et al's study did not address these two issues in detail.

Despite aciclovir being an expensive drug that is given five times a day at recommended intervals of four hours, it is often readily prescribed for herpes simplex gingivostomatitis by junior doctors in paediatrics. Until further randomised placebo controlled clinical trials are performed, particularly looking at children with multiple lesions or late presentation, it would seem prudent to reserve aciclovir for patients who have altered immunity and instead ensure that pain relief is given in all cases.

Helen M Goodvear Consultant paediatrician Birmingham Heartlands Hospital, Birmingham **B9 5SS**

- 1 Amir J, Harel L, Smetana Z, Varsano I. Treatment of herpes simplex gingivostomatitis with aciclovir in children: a ran-domised double blind placebo controlled study. *BMJ* 2 Goodyear HM, Wilson P, Cropper L, Laidler PW, Sharp IR,
- Thaker U, et al. Rapid diagnosis of cutaneous herpes sim-plex infections using specific monoclonal antibodies. *Clin Exp Dermatol* 1994;19:294-7.
- 3 Bernstein DI, Lovett MA, Bryson YJ. The effects of acyclovir on antibody response to herpes simplex virus in primary genital hermetic infections. *J Infect Dis* 1984;150: 7-13.
- 4 Ashley R, Mack K, Critchlow C, Shurtleff M, Corey L. Differential effect of systemic acyclovir treatment of genital HSV-2 infections on antibody responses to individual HSV-2 proteins. *J Med Virol* 1988;24:309-20.

Folic acid may be beneficial in aphthous stomatitis

EDITOR-Amir et al report the efficacy of aciclovir in treating herpes simplex gingivostomatitis in children.1 This prompts me to draw attention to what I believe is an effective, but little known, treatment for the symptomatically similar, but aetiologically distinct, condition of severe aphthous stomatitis. Patients with this condition may be similarly and as severely disabled as children with herpes simplex gingivostomatitis. Clinical features distinguishing the aphthous from the herpetic disease include the preponderance of female patients and the older age group affected in the aphthous disease plus a lack of extra oral lesions, fever, and infectivity.

After a chance observation I suspected that folic acid could produce rapid resolution of the lesions of severe aphthous stomatitis. Thereafter, for this condition I offered folic acid 5 mg orally three times daily for two weeks after a preliminary injection of vitamin B-12. I gave the vitamin to guard against the remote possibility of inducing subacute combined degeneration of the cord should the patient have incipient pernicious anaemia (even though the results of routine blood tests were negative). I treated only severely distressed patients with extensive oral ulceration who were showing no sign of spontaneous improvement. In all patients the lesions cleared during the course of treatment, and I was not aware of relapse in any case after the end of treatment. Although the numbers were small (under 10), the response was so rapid and consistent that I believe that the treatment had a specific rather than a placebo effect.

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1 Amir J, Harel L, Smetana Z, Varsano I. Treatment of herpes simplex gingivostomatitis with aciclovir in children: a ran-domised double blind placebo controlled study. BMJ 1997;314:1800-3. (21 June.)

Tobacco manufacturers did not orchestrate media interest in possible ban on tobacco sponsorship

EDITOR-In his article about the media interest in the issue of tobacco sponsorship, Douglas Carnall describes me as "indefatigable." 1 I suppose that is not too bad an epithet by some standards, but in truth I had absolutely nothing to do with the comments by, or the pictures of, directors of sporting organisations or these organisations' sports stars in response to the government's proposal to ban tobacco sponsorship. The newspapers or programme producers decided to contact or choose such people presumably because it was thought that they could have something relevant to say or illustrate.

I have a few friends in the media after so long associated with the sphere, but I am not quite in the spin doctor league when it comes to orchestrating media coverage of events.

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¹ Carnall D. Anatomy of a media backlash. BMJ 1997;314: 1631. (31 May.)

Approval of SHO posts is rarely withdrawn but is often given for limited time

EDITOR—In her editorial on disillusioned doctors Richards reports discussions on this subject held at the Royal Society of Medicine.¹ She writes: "In addition, it was suggested, the accreditation committees of the royal colleges could and should act more decisively. Not infrequently the inspectors who prepare detailed reports of senior house officer posts found them to be inadequate, but the colleges seldom withdrew recognition of these posts."

It may be helpful if I quote some statistics in relation to the approval of senior house officer posts by the Royal College of Physicians. Each quarter the director of training submits to the council a report on posts visited. If everything is in order a post is given approval for five years. For the quarter to 12 March 1997, however, three posts were given four months' limited approval, 36 six months' limited approval, 176 one year's limited approval, 173 two years' limited approval, and none were given the full five years' approval.

The purpose of limited approval is to give time for deficiencies to be corrected, and this usually has the desired effect. After repeated assessment visits we are certain that educational programmes for senior house officers, educational supervision, and standards of accommodation have improved. I doubt whether Richards is fully aware of the implications of withdrawing recognition of posts. We did in fact withdraw approval from seven posts in 1996, but this has not only an impact on training but also serious repercussions for the provision of services. Such a step is therefore taken only when absolutely essential, but it is a duty that is not shirked when it is necessary.

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1 Richards T. Disillusioned doctors. *BMJ* 1997;314:1705-6. (14 June.)

Steroids should never be given until possible herpes zoster infection has been excluded

EDITOR-I believe that a recent brief report of a case by S Ali Raza and C P Fielder in Minerva contained inaccuracies; in addition it failed to mention the most important practical clinical implication of the condition that is described.1 The authors report that a 66 year old woman presented with palatal pain and facial weakness; on examination she had a facial nerve paralysis and vesicles on the left side of her palate. This is a well recognised condition called Ramsay Hunt syndrome. The report states that the hyperaemia of the soft palate corresponded with the distribution of the glossopharyngeal nerve. This is inaccurate because the erythema pictured in the figure is in the distribution of branches of the maxillary



Hyperaemia of soft palate in distribution of branches of maxillary division of trigeminal nerve

division of the trigeminal nerve (figure). The oral surface of the soft palate does indeed receive an input of sensory fibres from the glossopharyngeal nerve but only on its lateral border. The supply certainly does not correspond to the dermatome shown in the figure.

I was surprised that the report, coming from the specialty of otolaryngology, did not mention the need to look at the external auditory meatus for evidence of herpes zoster vesicles. Its main weakness, however, was its failure to mention that steroids, often given to treat Bell's palsy, should never be given until possible herpes zoster infection has been excluded.

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1 Ali Raza S, Fielder CP. Minerva. *BMJ* 1997;314:838. (15 March.)

Marfan's syndrome might have been factor in acute dissection of aorta in amphetamine misuser

EDITOR—In their report of a case of dissecting aneurysm of the aorta associated with the use of amphetamines, W C Dihmis and colleagues are wrong in stating that such an association has not been recorded before.¹ Davis and Swalwell reported three cases of aortic dissection and four of ruptured berry aneurysm in amphetamine users, postulating, as Dihmis and colleagues do, that dissection is precipitated by the sudden rise in blood pressure and pulse wave that can occur with amphetamine use.²

Hypertension is a major precipitating factor in any aortic dissection, but degenerative change in the wall is probably even more important. Degeneration of the media, with loss of elastic fibres and accumulation of glycosaminoglycan, is a normal aging process but can occur at a much earlier age in people with Marfan's syndrome. We wonder whether such disease, or at least a form of it, was entirely excluded in the reported case, particularly as the patient was a 27 year old man. No mention is made of whether the surgically removed specimen was examined histologically or whether a postmortem examination was later carried out; either of these would have shown any abnormality in the wall and, thus, whether hypertension induced by amphetamine was the sole causative factor in the dissection.

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- Dihmis WC, Ridley P, Dhasmana JP, Wisheart JD. Acute dissection of the aorta with amphetamine misuse. *BMJ* 1997;314:1665. (7 June).
 Davis GC, Swalwell CI. Acute aortic dissections and
- 2 Davis GG, Swalwell CI. Acute aortic dissections and ruptured berry aneurysms associated with methamphetamine use. *J Forensic Sci* 1994;39:1481-5.

Future of international health

WHO is taking proactive role in advancing policy of health for all

EDITOR—A recent article on the new world order and the future of international health and an editorial on reform of the World Health Organisation are valuable contributions to discussions about the future of international health.^{1 2} Within the WHO substantial progress has been made over the past 18 months in addressing issues raised in the renewal of the Health for All process.³ However, the richness and breadth of this process were not captured in Fiona Godlee's editorial, which focused on selected internal and external debates without indicating that they have been formally and informally linked to the renewal process.²

Role of WHO in 21st century

• Be world's health conscience: be advocate for health, advance global health equity, and identify policies and practices that are beneficial or harmful for health

- Provide leadership to a global alliance for health
- Provide technical cooperation, with special attention being given to poorest countries and communities
- Global ethical and scientific norms and standards
- Global surveillance and early warning systems for transnational threats to health
- Global eradication, elimination, or control of selected diseases
- Foster use of and innovation in science and technology for health
- Mobilise and be advocate for resources for poorest countries and communities

The WHO regards the renewal process as integral to the future course of world health. This view is shared by its member states and its governing bodies. During the 50th World Health Assembly in May, discussion on renewal overlapped with the issues raised in the article and the editorial.12 Furthermore, during the subsequent session of the executive board, members expressed support for fundamental actions that should form the basis of the new policy and for specific future roles for the WHO (box). These fundamental actions include the establishment of a universal Health for All value system that explicitly considers the pursuit of human rights and health security, equity, ethics, and a gender perspective, thereby making health central to development. The complexity of future health demands requires consideration of a broader agenda for global health action, not one that is narrow and disease specific.

The Health for All consultation process has been deliberately wide. The early call for dialogue, both through formal consultative documents⁴ and through the World Health Forum round table (which drew on a wide range of global reviews⁵), has resulted in a draft policy. This policy incorporates the views of countries, non-government organisations, leading academics, United Nations bodies, and the private sector. The guidelines contained in this draft, however, will need substantive discussion at country level before specific priorities for action can be decided. The draft policy is now available on the WHO's web site (/www.who.ch). Consultations planned until late October include meetings with countries during the meetings of the regional committees in September and October, and with UN bodies, the World Bank, the World Trade Organisation, and a wide range of non-government organisations.

The WHO is taking a proactive role in defining actions that will advance the policy and ensure that it leads to tangible improvements in the health of populations. It is committed to continue working with all who share a common vision of Health for All.

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- Frenk J, Sepulveda J, Gomez-Dantes O, McGuinness MJ, Knaul F. The new world order and the future of international health. *BMJ* 1997;314:1404-7. (10 May.)
- Godlee F. WHO reform and global health. *BMJ* 1997;314:1359-60. (10 May.)
 Antezana FS. Health for all by the year 2000. *BMJ*
- Antezana FS. Health for all by the year 2000. BMJ 1996;313:1331.
 World Health Organisation. Renewing the health-for-all
- 4 World Health Organisation. Renewing the health-for-all strategy. Elaboration of a policy for equity, solidarity and health. Geneva: WHO, 1995. (WHO/PAC/95.1.)
- 5 Yach D. Renewal of the health-for-all strategy. World Health Forum 1996;17:321-6.

WHO, governments, and non-government organisations must work together

EDITOR—It is heartening to note the growing international debate about the future direction of the World Health Organisation and other international health institutions.^{1 2} Despite the practical difficulties, any re-evaluation of the role of the

WHO must incorporate input from those institutions that can have an impact on health in the poorest countries. As the Seventh Consultative Committee on Primary Health Care Systems for the 21st Century points out,¹ priority should be given to countries and peoples in greatest need. The corollary of this is that they should be able to influence the development of any new agenda, which, if it is to be successful in tackling problems of world health, must benefit them most.

To ensure that access to effective, efficient, and culturally acceptable health care is seen as a universal human right, an effective coalition needs to be developed, including the WHO and non-government organisations. Non-government organisations often have practical experience in working with deprived communities as well as technical skill, and their active collaboration with the WHO could greatly enhance the impact of the WHO's resources. As part of the renewal of the Health for All process,3 before the recent World Health Assembly a consultative meeting was held between the WHO and a range of non-government organisations concerned with health. Both sides were enthusiastic for closer collaboration, which augurs well for a new partnership to tackle the impacts of poverty on health.

If coordination for controlling the "transfer of health risks" ² is to be effective, new control mechanisms will need to be developed on a global scale. For example, climate change-a substantial threat to human health in the next century4-is determined by the production of greenhouse gases. However, the WHO, although consulted on technical matters, does not have direct influence on the negotiation of the United Nations Framework Convention on Climate Change. In addition, there are weak links between country representatives of the conference of the parties of the framework convention and their counterparts at the World Health Assembly, which tends to focus on healthcare issues rather than broader determinants of health. The support of both non-government organisations and governments will be essential to develop mechanisms for controlling such diffuse and pervasive threats to health.

Although it does need reform, we should not assume that the WHO needs to be slimmed down. The operating budget was \$650m (£420m), less than a fifth of the budget of one health region in Britain. It is in the self interest of the governments of industrialised countries to strengthen their support for a reinvigorated WHO.

Andy Haines Professor of primary care Department of Primary Care and Population Sciences, Royal Free Hospital School of Medicine, London NW3 2PF 4 McMichael AJ, Haines A, Slooff R, Kovats S, eds. *Climate change and human health*. Geneva: WHO, 1996.

End of life decisions

Good care aims at ending patients' suffering, not their life

EDITOR—"The acid test for any society that claims to be civilised is whether it really protects the life and promotes the wellbeing of its most vulnerable citizens ... certainly the mentally impaired." Thus started the editorial by van der Maas.¹ Having coauthored the so called Remmelink report on the practice of euthanasia in the Netherlands in 1990,² van der Maas, with van der Wal, produced a second government sponsored report on euthanasia in the Netherlands in 1995,³ giving the proportions of end of life decisions both in 1990 (40% of total deaths) and in 1995 (43%).

We must conclude that the Netherlands is becoming less and less civilised. Originally, the Dutch euthanasia movement opposed the idea that incompetent people could ever have their lives shortened, because euthanasia should be allowed only if it was voluntary. But according to van Thiel et al's paper on end of life decisions in mentally handicapped people in the Netherlands, the estimated proportion of end to life decisions in this category of people in 1995 (44%) equalled the proportion in the whole Dutch population.⁴

Unfortunately, van Thiel et al's paper does not distinguish between treatment aimed at ending the patient's life and medical treatment around the end of life, or between decisions aimed at ending the patient's life (which are non-medical) and decisions that treatment would be disproportionately burdensome to the patient, as death seems inevitable. The two reports coauthored by der Maas do make this distinction: in 1990 the proportion of cases in which the doctor had the (explicit or implied) intention of shortening the patient's life was 15.4% (almost 20000 cases, in almost 11 000 cases at the patient's explicit request). In 1995 the figure was 19.6% (almost 27 000 cases, in over 13 000 cases at the patient's explicit request).

It is tragic that van Thiel et al's paper includes the phrase "caring for mentally handicapped people" in its heading. Really good care aims at ending patients' suffering, not their life.

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- Van der Maas PJ. End of life decisions in mentally disabled people. *BMJ* 1997;315:73. (12 July.)
 Van der Maas PJ, van Delden JJM, Pijnenborg L. *Euthana*.
- 2 Van der Maas PJ, van Delden JJM, Pijnenborg L. Euthanasia and other medical decisions concerning the end of life. Amsterdam: Elsevier, 1992.
- 3 Van der Wal G, van der Maas PJ. Euthanasie en andere medische beslissingen rond het levenseinde. The Hague: SDU, 1996.
- 4 Van Thiel GJMW, van Delden JJM, de Haan K, Huibers AK. Retrospective study of doctors' "end of life decisions" in caring for mentally handicapped people in institutions in the Netherlands. *BMJ* 1997;315:88-91. (12 July.)

¹ Seventh Consultative Committee on Health Care Systems for the 21st Century. Health care systems for the 21st century. *BMJ* 1997;314:1407-9. (10 May.)

DM 1997;314:1407-9;10 May.)
 Frenk J, Sepulveda J, Gomez-Dantes O, McGuinness MJ, Knaul F. The new world order and international health. BMJ 1997;314:1404-7. (10 May.)

Yach D. Renewal of the health-for-all strategy. World Health Forum 1996;17:321-6.
 McMichael AJ, Haines A, Slooff R, Kovats S, eds. Climate

Future of vulnerable people is threatened by euthanasia

EDITOR-In a news item Linda Beecham reported that at the BMA's annual representative meeting in Edinburgh in July, a proposal that euthanasia should be legalised was overwhelmingly rejected by the doctors present.¹ The publication of two editorials (yet again from abroad) promoting euthanasia in successive issues of the BMJ shows the journal's editorial bias.^{2 3} If the doctors at the annual representative meeting are representative of the membership of the BMA then it may be fairly concluded that these editorials were not welcome to the journal's readers.

"Protecting vulnerable life may not mean prolonging it"² but surely does not mean extinguishing it; supporting the lives of those who are vulnerable means caring for them enough to help their pain or anguish. I am curious to read that if mentally impaired people say that they want to go to heaven or to be left alone then this is interpreted as a request to have their life terminated.⁴ Surely we need to be careful in how we interpret such statements. The question in one of the subheadings in Churchill and King's editorial³ – "A slippery slope?"-could be answered by examining what has happened since the 1967 Abortion Act was passed: 500 "vulnerable lives" are ended in Britain every day, this action being sanctioned by the ethical view (developed since the act was passed) that they are not persons and so can be disregarded. If legislation permitting euthanasia is passed, who can assure us that, in 30 years' time, elderly, mentally impaired, or incurably ill

Advice to authors

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When deciding which letters to publish we favour originality, assertions supported by data or by citation, and a clear prose style. Letters should have fewer than 400 words (please give a word count) and no more than five references (including one to the BMJ article to which they relate); references should be in the Vancouver style. We welcome pictures.

Letters, whether typed or sent by email, should give each author's current appointment and full address. Letters sent by email should give a telephone and fax number when possible. We encourage you to declare any conflict of interest. Please send a stamped addressed envelope if you would like to know whether your letter has been accepted or rejected.

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Letters will be edited and may be shortened.

people will not also fail to fulfil the criteria of personhood?

Van der Maas tells us that the acid test for a society that claims to be civilised is whether it protects the life and promotes the wellbeing of its most vulnerable citizens.² As far as the unborn are concerned, we have failed this test. If the BMJ continues this editorial bias we may also fail when the care of very frail or elderly people is considered.

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- 1 Beecham L. BMA opposes legislation of euthanasia. BMJ 1997;315:80. (12 July.)
- Van der Maas PJ. End of life decisions in mentally disabled people. *BMJ* 1997;315:73. (12 July.)
 Churchill LR, King NMP. Physician assisted suicide, euthanneutich known with known and the province of the second se
- nasia or withdrawal of treatment. BMJ 1997;315:137-8. (19 July.)
- 4 Van Thiel GJM, van Delden JJM, de Haan K, Huibers AK. Retrospective study of doctors' end of life decisions" in caring for mentally handicapped people in institutions in the Netherlands. *BMJ* 1997;315:88-91. (12 July.)

Many people who disapprove of abortion nevertheless think it should be legal

EDITOR-Ross misunderstands the findings of the recent poll on abortion.¹² There is no contradiction between the finding that 64% of people agree with the statement that "abortion should be made legally available for those who want it" yet just 34% approve of abortion when the woman cannot afford to have a child and 42% approve when she does not want a child for whatever reason.

It is possible to disapprove of abortion while still maintaining that it should be legal. The poll found that of those who agreed that abortion should be legal to all who want it, 11% disapproved of abortion when the child would be mentally disabled and 10% when it would be physically disabled, 15% disapproved when the woman was under 16, 39% when she could not afford to have a child, and 26% when she did not wish to have a child for whatever reason.

Most people are prepared to tolerate many things of which they disapprove. For example, most people disapprove in principle of extramarital affairs, but few would argue that they should be made illegal. Many people who personally disapprove of abortion are prepared to allow others to act in accordance with their own judgment.

Abortion is sometimes seen by women as wrong, but the right thing to do. It is not uncommon for a woman who opposes abortion in principle to seek an end to her own pregnancy because she believes that in her particular circumstances it is less wrong than bearing a child that she does not want or with which she could not cope. To a woman with an unwanted pregnancy, abortion is a practical solution, not an abstract ethical issue.

Ross is right to say that "this issue should be the domain not of extremists but of a

responsible society." A responsible society must consider that half of conceptions are unplanned, and studies show that two thirds of women seeking abortion became pregnant while using contraception.3 If society expects women to have a full role within it then it must accept that women need the means to regulate their fertility and some may need access to abortion to do this. There is no evidence showing that women in Britain use abortion as a first choice method of family planning, but it is understandable that many women and their doctors find abortion an acceptable alternative to reluctant pregnancy.

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- Ross S. Abortion must not be advocated as preventive solution to unwanted pregnancy. *BMJ* 1997;314:1623-4.
 (31 May.)
- 2 Wise J. British public supports legal abortion for all. BMJ 1997;314:627. (1 March.)
- 1997;314:027. (1 March.) 3 Bromham RD, Cartmill RSV. Are current sources of contraceptive advice adequate to meet changes in contra-ceptive practice? A study of patients requesting termina-tion of pregnancy. *Br J Fam Plann* 1993;19:179-83.

Royal Medical Benevolent Fund asks for donations for Christmas

EDITOR-One of the most rewarding duties of the president of the Royal Medical Benevolent Fund is the preparation of the annual Christmas appeal. As one who can enjoy Christmas with an extended family, I find it grieving to contemplate those dependants of doctors, and doctors themselves, who have fallen on hard times and for whom the approach of Christmas may be a time of anxiety. We all want to enjoy Christmas and to make it a memorable time for children and grandchildren.

The Christmas appeal makes it possible for the fund to send extra finance to those whom we help. The many letters and cards that the fund receives are testimony to the appreciation of our beneficiaries and especially their children. We therefore hope that the generosity of recent years will be equalled or even exceeded in 1997.

"Christmas Contributions marked appeal" may be sent to the secretary, Royal Medical Benevolent Fund, 24 King's Road, London SW19 8QN or to the treasurer or medical representative of doctors' local guild of the fund.

Josephine Barnes President Royal Medical Benevolent Fund, London SW19 8QN

Correction

Graded exercise in chronic fatigue syndrome An editorial error occurred in the table in the fifth letter in this cluster, by Peter D White and Kathy Y Fulcher (11 October, p 948). The bottom row of the table shows the median (interquartile range) duration of illness, not the mean duration as stated.