It is incomprehensible to me that British physicians should, at this critical time, seriously consider purchasing professional liability protection from a commercial underwriter who has virtually no experience in the field of medical malpractice and risk management rather than continuing to rely on the experience and expertise of the societies which have served them so well for many, many decades. Such a move will surely bring to British physicians the same disastrous results that his American colleagues are now trying so desperately to overcome.

These opinions are entirely personal and do not necessarily represent the views of the American College of Legal Medicine.

E. A. REED
Chairman,
Education Committee,
American College of
Legal Medicine

Washington, DC

SIR,—I write to give my full support to Mr J K Oyston (18 June, p 1603). The defence societies give us splendid service and this is not the time to introduce a proposal which, if implemented, would damage them and could easily cause further divisions in the profession.

R E BOWERS
Ex-President,
North Gloucester Branch, BMA

Leckhampton,
Cheltenham, Glos

SIR,—Having been a member of the BMA since qualification in 1943 and having represented South Norfolk for 10 years at the end of the '50s and in the '60s, I think I can claim to be a BMA-orientated person. I have also been a member of the Medical Defence Union for the same period of time and have had the benefit of their advice when necessary.

I feel that the long experience of the MDU must very much more than make up for any present enthusiasm on the part of the BMA, now wishing to enter into the field of medical defence.

I for one would not dream of changing over.

R A M HAMERTON

Attleborough, Norfolk

SIR,—The Medical Defence Union has served me well over 33 years in numerous (fortunately for me, minor) problems and questions. I greatly value the completely independent and skilled service which it provides. It would be a sad day indeed if the BMA, as suggested, tried to enter this field. It would be a further blow to an already dangerously threatened freedom.

P E JACKSON

Stamford, Lincs

Advice for patients receiving rubella immunisation

SIR,—A pregnant woman under my care recently expressed anxiety because she had been led to believe that a rubella immunisation performed some time after her last pregnancy would protect her against rubella. She came in contact with a case of rubella at eight weeks in her present pregnancy, and, thinking that she was immune to the disease, took no further

action. Routine serological screening when she was seen for the first obstetric examination at 10 weeks showed that she was seronegative for rubella antibodies, which caused her considerable anxiety. In the event she developed no clinical or serological signs of rubella, the pregnancy and its outcome were uncomplicated, and the infant was normal. However, she felt that women receiving rubella immunisation should have follow-up serological screening in order to establish whether the immunisation has been successful or not. While it may be difficult to implement such routine follow-up screening for logistic and financial reasons, it does seem important to warn women receiving rubella immunisation that this procedure cannot guarantee immunity against the disease.

Nowadays people rightly expect to be well informed about prophylactic procedures which they are offered. It seems important that the organisers of the admirable national programme to make rubella immunisation available to all women of child-bearing age should close this small communications gap.

PETER CURZEN

Obstetric Unit,
Westminster Medical School,
Queen Mary's Hospital,
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Antepartum fetal heart monitoring

SIR,—It is gratifying to see the developing interest in antepartum fetal heart monitoring and the careful studies now being carried out at Birmingham (Dr Anna M Flynn and Mr J Kelly, 9 April, p 936).

In 1968, at Upton Hospital, Slough, the research money was provided by the North-west Regional Hospital Board for the assessment of fetal wellbeing by antepartum fetal heart monitoring, using a Hewlett-Packard 8020A apparatus. By 1969 the evidence of the value of this method of fetal monitoring was so apparent that it became standard clinical practice to monitor all antenatal inpatients by daily cardiotocography. That practice has continued and it is estimated that no fewer than 70 000 cardiotocographic records, taken antenatally, have been examined. In addition, this has been standard practice at Heatherwood Hospital, Ascot, where a new department opened some five years ago; here several thousand records have also been examined.

The principles of antenatal cardiotocography have been outlined,¹ and the findings of Dr Flynn and Mr Kelly tend to confirm our views. The value of this form of antenatal monitoring has also been communicated in an Aleck Bourne lecture at St Mary's Hospital, London, in 1974 and at the British Congress of Obstetrics and Gynaecology in 1973. At that time Campbell reported from Upton Hospital that between January 1973 and February 1974, of 2000 consecutive confinements, 560 were monitored by a combination of ultrasound, urinary oestriol, and antenatal cardiotocography. Ultrasound and oestriol were started as broad screening tests, but the precise decision to delay or induce labour was determined entirely by antenatal cardiotocography. A total of 393 patients were subjected to cardiotocography, of whom 103 were regarded as high-risk patients. In that series no monitored fetus died from intra-uterine hypoxia after 28 weeks. One baby died from hyaline membrane disease after delivery at 25 weeks.

With this experience in antenatal cardiotocography we are convinced that this is the most precise means of assessing fetal wellbeing during the antenatal period. The most important interpretation equates a "normal" fetal heart record with an absence of immediate risk to the fetus. This is of particular value when a "high-risk" fetus is under scrutiny at a time when premature induction is being contemplated for falling growth rate (indicated either by ultrasound or biochemistry) but contraindicated by prematurity and the risk of respiratory distress. It is also of major value when pregnancy is considered to have gone beyond term and there is increasing anxiety over the risks of postmaturity, but induction is contraindicated either by the uncertainty of dates or an "unfavourable" cervix.

We believe that when abnormalities occur on the fetal heart record and persist this is an absolute indication for delivery. When abnormalities are intermittent, provided the fetus is mature, delivery should also be expedited. When, however, the abnormality is intermittent and there is doubt as to the fetal lung maturity pregnancy may be allowed to proceed only provided there is continued close scrutiny of fetal heart records. We estimate that this assessment is needed at least twice daily. As to the mode of delivery, when abnormality is persistent delivery should be by caesarean section. When the abnormality is intermittent labour may be induced, but careful fetal monitoring is required during labour with the early application of a scalp electrode and measurement of fetal pH.

Antenatal cardiotocography will not, of course, prevent death from sudden catastrophes such as cord entanglement or acute antepartum haemorrhage, but when high-risk patients are identified and antenatal fetal heart monitoring instituted death from acute or chronic hypoxia can be avoided.

The perinatal mortality of the two hospitals mentioned in the year 1976-7 was 11, the major causes of perinatal death now being gross congenital malformation (incompatible with life) and severe prematurity. The majority of fetal deaths occurring outside these areas are due not to the signs of impending disaster being absent but to human error—failure to recognise and act on the signs.

In our view, in the present state of knowledge, there is no form of antenatal fetal monitoring that is in any sense as precise or as informative as cardiotocography.

S C SIMMONS
N R A TRICKEY

Upton Hospital,*
Slough, Bucks

¹ Simmons, S C, in *Clinics in Obstetrics and Gynaecology*, vol 1, No 1. London and Philadelphia, Saunders, 1974.

*After July 1977 this department is to be closed and converted to a geriatric day centre.

Diet and coronary heart disease

SIR,—Health education is a difficult and at times not particularly rewarding form of medical practice, but in the interests of those who practise it exception must be taken to Sir John McMichael's (4 June, p 1467) use of the noun "propaganda" in this context and in even greater degree to the use of the adjective "epidemiological" as a diminutive to describe "research."

Risk of mortality from cardiovascular disease in relation to plasma cholesterol concentration in 5616 males by age observed over five years

Plasma cholesterol (mmol/l)	No in category	Average age (years)	No of deaths ICD 390-458	Mortality per 1000	Individual risk			Community risk
					Relative risk	P*	Attributable risk	Attributed No of deaths
Age <50 years								
<6.7	2667	43.0	21	7.9	1.00	—	—	—
6.8-7.5	377	43.6	6	15.9	2.02	0.07	8.0	3.0
>7.5	165	44.0	1	6.1	0.77	0.60	-1.8	-0.3
Total	3209		28					2.7
Age ≥50 years								
6.7	1954	54.9	42	21.5	1.00	—	—	—
6.8-7.5	299	54.6	9	30.1	1.40	0.19	8.6	2.6
>7.5	154	54.8	8	52.0	2.42	0.01	30.5	4.7
Total	2407		59					7.3

*Significance levels of relative risk.

Conversion: SI to traditional units—Cholesterol 1 mmol/l ≈ 38.6 mg/100 ml.

The kind of definitive studies demanded by many who are not actively involved in epidemiological or indeed any other form of research are so large and expensive as to require national or international resources like the current trial of treatment for mild to moderate hypertension.¹ If it was feasible, this is what we would all like to resolve the lipid problem. The alternative is to review the consistency of a large number of studies which fall short of the absolute criteria needed for a definitive trial; and, as in cigarette smoking, to reach a balance of probabilities that forms a basis for preventive action. A decline in smoking-associated disease is now manifest both in Britain and North America.

As evidence supporting the balance of probabilities in favour of a change in dietary lipid intake grows epidemiologists are sustained or not sustained in their own hypotheses by the evidence of their own data. In the West of Scotland the Mass Health Examination Unit of the Glasgow Mass Radiography Service is conducting cohort studies of census-identified samples of the general population into the natural history and prevention of the cardiorespiratory diseases.² The accompanying table describes the risk of mortality from cardiovascular disease in 5616 males observed over five years. The values of distributions of fasting serum cholesterol, measured by a laboratory using techniques standardised and tested with an international reference centre, below and above 50 years were made by taking the 80th and 95th percentiles as cut-points for the combined ages and relating the number of deaths from cardiovascular disease according to the *International Classification of Diseases* (8th revision) rubrics 390 to 458. Although numbers are small, particularly in the younger group, the individual relative risk ratios and attributable (excess) risk rates and also the community attributed number of deaths, show a small trend in the older age group which independently tends to support, albeit at a preliminary stage, the contribution made to the multifactorial aetiology of coronary heart disease (CHD) by cholesterol. Moreover, of the 10 (16%) deaths which might have been prevented in the community more than half (9%) of the excess might have been prevented by some form of action among the large numbers in the middle range of plasma cholesterol concentration, 6.8-7.5 mmol/l (261-290 mg/100 ml). Taken with experience in studies elsewhere these findings support the view taken by the Joint Working Party of the Royal College of Physicians and the British Cardiac Society³ that in the current epidemiological situation in CHD the cost of inactivity was

greater than that of giving advice on preventive measures to the public now, particularly where one or more risk factors coexist.

Sir John McMichael and his distinguished colleagues must accept the fact that health education, to be effective in an informed and articulate society, must have a public forum. Ex-cathedra statements based on undocumented debate in private sessions are no substitute for research data, epidemiological or otherwise, and must not be allowed to inhibit perfectly legitimate, sincere, and well-founded initiatives aimed at altering the lipid component of the diet in the United Kingdom until definitive evidence supporting a contrary policy emerges.

V M HAWTHORNE

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Community Medicine,
Ruchill Hospital,
Glasgow

¹ Medical Research Council Working Party on Mild to Moderate Hypertension, *British Medical Journal*, 1977, **1**, 1437.

² Hawthorne, V M, Greaves, D A, and Beevers, D G, *Community Studies of Hypertension in Glasgow: Epidemiology and Control of Hypertension*, ed O Paul, p 537. London, Stratton International, 1974.

³ Joint Working Party, *Journal of the Royal College of Physicians of London*, 1976, **10**, 213.

Lactulose in baby milks

SIR,—From inquiries received since the publication of our brief paper on "Lactulose in baby milks causing diarrhoea simulating lactose intolerance" (7 May, p 1194) it would appear that there is some confusion as to which products contain lactulose. To the best of our knowledge all the currently available prepacked liquid baby milks contain lactulose, while all the available powdered milks are free of this product.

"Baby Milk Plus" and "Premium" were singled out for mention in our paper because these are the products in routine use in this hospital. The paper could well have been based on any other liquid prepacked milk on the market.

R G HENDRICKSE

University Department of Child
Health,
Alder Hey Children's Hospital,
Liverpool

Cataract management today

SIR,—I feel that I must challenge the view expressed in your leading article on this subject (25 June, p 1616). No doubt enzymatic zonulolysis, the cryoprobe, and the microscope

have made the operation for cataract safer, though none of these can properly be described as "new concepts." Intracapsular extraction of cataract was described in 1866, so that is not exactly new either.

I do not think that I can be alone in believing that the only indication for an intraocular operation on both eyes at one sitting is bilateral acute glaucoma and that it is foolhardy to remove both cataracts at the same time. I have no experience of phakoemulsification, but its originator's description does not impress me. It would seem that its effect is the same as that of extracapsular extraction, which in a mature cataract is a perfectly satisfactory operation. The admittedly considerable advantage of the very small incision must be balanced by the doubtful effect in immature cataract, by the further doubt as to whether a hard nucleus can be emulsified, and by the possible dangers of high-energy ultrasound to the eye, or indeed to the operator—I believe that Raynaud's disease has been noted in those who handle such apparatus.

So far as optical correction is concerned, I regard the intraocular prosthetic lens as too dangerous for routine use, while the correction of unilateral aphakia by a contact lens is by no means always successful even in the younger patient. Thus the indication for operation in the average case turns out to be failing sight in the better eye, as it has been for many years.

IAN W PAYNE

Plymouth, Devon

SIR,—I was most interested to read your leading article on this subject (25 June, p 1616). Some surgeons would think that you give an altogether too optimistic view of the role of intraocular implants. Although they undoubtedly have a place, they should still be regarded as being on trial and I would strongly advise your readers to note the editorial in the May number of your sister journal, the *British Journal of Ophthalmology*,¹ which takes a more restrained view of the present position of intraocular implants and the use of contact lenses in aphakic eyes.

A C L HOULTON

Oxford

¹ *British Journal of Ophthalmology*, 1977, **61**, 307.

SIR,—As you say in your leading article (25 June, p 1616) patients are better informed and more articulate than formerly and I am writing this both as an aphakic patient and as a district community physician.