in theory but impracticable in many cases because of short time-schedules, organisational problems, and costs. Of course the participant could insist on vetting his own contribution after editing, but this is time-consuming and probably of little value out of context.

When asking doctors to take part in a series of radio programmes I was keenly aware of their fears of misrepresentation and was fully prepared for many refusals. However, after carefully explaining the content of the series to them, and just how their contributions were to be used, I was pleasantly surprised to find that most agreed to take part. I was able to be confident in my reassurances because I knew the producer of the series to be a man of integrity and sensitive to the worries of the contributors. Of course there were criticisms of the programmes, but most were of form and not content, which confirms my belief that the only practical way to ensure unbiased accuracy is mutual trust and adequate communication and co-operation between the medical profession and the producers of medical programmes.

NICHOLAS C NIVEN-JENKINS
Medical student

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SIR,—With reference to your recent leading article (11 February, p 323), I was performing an amniocentesis on a patient this afternoon who was in tears before the procedure had even started. To explain her emotional state she exclaimed spontaneously, "If only I hadn't seen it on television!"

R H KERR-WILSON

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Analgesics, asthma, and prostaglandins

SIR,—After reading the interesting letter from Dr N McI Johnson and others (12 November, p 1291) I would like to add the following.

In one of our recent investigations into the role of prostaglandins (PGs) in bronchial asthma we found that PGE levels were consistently low in bronchial asthmatics during an acute attack in comparison with normal subjects.¹ In this series there was also a patient who gave a definite history of taking aspirin for headache which was followed within an hour by asthma. She had been known to have intrinsic asthma for more than six years and she was not certain, when asked, whether there had previously been any episodes of asthma after taking aspirin. Since in this case also the PGE levels were found to be low during the attack we reasoned that possibly aspirin had induced this fall in PGE level. It is well known that aspirin and other analgesics are PG-synthesis inhibitors and that under certain circumstances they may preferentially block the synthesis of PGE but not of PGF.² This raises the interesting possibility that in normal conditions a balance is struck between PGE and PGF, a bronchodilator and a bronchoconstrictor respectively, in the lungs and, if so, whether the antigen-IgE interaction or the taking of analgesics can upset this balance.³ The finding that plasma levels of 15-keto-13,14-dihydro-PGF_{2α} were increased after allergen-provoked asthma⁴ tends to support this thesis, as does our finding that PGE levels were low during acute attacks of asthma.¹ Since PGE is also known to have some regulatory role in the immune response⁵

it is quite possible that prostaglandins are intimately involved in the pathogenesis of asthma.

U N DAS

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¹ Das, U N, and Padma, M C, *Journal of the Association of Physicians of India*. In press.

² Maddox, I S, *Biochimica et Biophysica Acta*, 1973, **306**, 74.

³ Das, U N. Submitted for publication.

⁴ Green, K, Hedqvist, P, and Svanborg, N, *Lancet*, 1974, **2**, 1419.

⁵ Das, U N, and Padma, M C. Submitted for publication.

X-ray examination of NHS employees

SIR,—As one who regularly encounters an average of three new cases of active pulmonary tuberculosis each week I find it surprising that the Department of Health and Social Security can justify its recent issue of circular HC(78)3, which recommends limitation of requirements for chest x-ray of pre-employment and in-service NHS personnel. It has always been accepted that the risk of tuberculous infection to staff is greater from the undiagnosed tuberculous patient in a general ward than from known tuberculous patients segregated for treatment in wards where the staff are specially protected and monitored. During the past year also I have diagnosed open pulmonary tuberculosis in an immigrant nurse who had been working for the previous three months in general wards, including children's wards. This circular from the DHSS can only increase the risk of such an occurrence.

Self-referred persons attending at our open-access chest x-ray centres in Leeds and Bradford in 1976 showed a prevalence of two cases of active tuberculosis per 1000 examined (actually, 14 cases in 7048 examined). One may ask how many of these people came to our centres following "medical" advice that a chest x-ray was unnecessary.

J B DEASY

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Heart-rate response to standing as a test for autonomic neuropathy

SIR,—We read with interest the paper by Dr D J Ewing and his colleagues (21 January, p 145) on the effect of autonomic neuropathy on the immediate heart-rate response to standing. This simple non-invasive test promises to be of value in the investigation of autonomic dysfunction in old age. We investigated its practicability by performing it on six controls with ages ranging from 26 to 36 and on seven patients in a geriatric unit with ages ranging between 69 and 90. For technical reasons we modified the test so that the electrocardiograph was switched off while the patient was getting on his feet, switching it on once he was erect, but ensured that the interval was no more than five seconds.

The heart-rate response in young adults was similar to that noted by Dr Ewing and his colleagues (see figure). Because of differences in our technique the trough in R-R intervals was at 5 beats rather than 15. In the elderly patients there was no early troughing of the R-R intervals. Means $\pm$ 2 SEM for ratios of R-R intervals at 20 beats to those at 5 beats for patients and young adults were 0.99 $\pm$ 0.050 and 1.21 $\pm$ 0.098 respectively.

Mean R-R intervals in young adults and elderly patients

This difference is similar to that recorded between young adults and patients with a diabetic neuropathy. Further work is required to determine whether our observation indicates a high prevalence of parasympathetic dysfunction in sick old people and whether this represents an effect of disease or aging.

W J MACLENNAN
A E S RITCH

University Department of Geriatric Medicine,
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SIR,—The observation of Dr D J Ewing and his colleagues (21 January, p 145) regarding heart-rate response on standing in diabetics may not have taken into account the effect of blood pressure. Their results indicate vagal damage in the group of "older" diabetics with proved autonomic neuropathy. They are effectively measuring the integrity of the baroreflex arc.

There is an association between baroreflex sensitivity and hypertension.¹ It would be interesting to know what were the mean pressures in each group and whether the "older" diabetics had histories of hypertension, since baroreflex resetting related to hypertension appears to be irreversible. High pressures may lead to an "apparent" neuropathy of the baroreflex arc via central and peripheral resetting² which would make the heart-rate response on standing an inadequate test of generalised autonomic neuropathy.

LAWRENCE OPPENHEIMER
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¹ Gribbin, G, et al, *Circulation Research*, 1971, **29**, 424.
² Sleight, P, *Cardiology*, 1976, **61**, suppl 1, p 31.

Help for parents after stillbirth

SIR,—My wife and I were extremely interested in the draft of a leaflet for parents whose child has been stillborn (21 January, p 172), since our daughter has recently suffered this misfortune and the emotions connected with it are still very fresh in our minds.

First of all we would like to say how glad we are to know that such a pamphlet is in preparation. The mere fact that it exists ready to give to parents who have suffered loss will reassure them that their case is not unique, and all the points it makes seem to us to give very clear and supportive guidance. There are

three points which we would like to put forward for further consideration.

(1) Our daughter found it of very great help that most of the people who knew she was expecting a baby were told about the death by someone else before she came home and had to meet them. In her case the most useful agents for passing on the information beyond the family circle proved to be the vicar and the local baby-sitting club (which naturally includes most of the local young mothers). Obviously circumstances vary enormously, but most parents will know someone who can help in this way, and our observation of the relief caused by knowing that the ground had been prepared for meeting people without embarrassment does make us feel that the point is worth mentioning in the pamphlet.

(2) It may also be worth mentioning that grandparents, too, can feel bereaved. My wife and I were, I think, surprised at the depth of our own sense of loss. The main point here, of course, is that if this is ignored or repressed it can lead to family resentments such as those mentioned in the draft, but if it is faced and shared it can provide strength to both parents and grandparents and can, as with husband and wife, deepen relationships within the family, in this case the wider family.

(3) The members of our family most closely involved did in fact derive much strength from their Christian faith. We quite realise that it may not seem appropriate to speak in such terms as this in a secular pamphlet, but we would like to suggest that some such phrase as "or other minister of religion" might be inserted after "chaplain" if only to remind people that in many cases an understanding priest or minister whom one knows may prove to be one of the most valuable sources of help.

I hope that these comments based on very recent experience may be of some service.

W J H EARL

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Antenatal education

SIR,—Professor R. Beard and others have suggested an information leaflet for patients who have stillbirths (21 January, p 172).

The Rotunda Hospital, Dublin, has just analysed the value of a similar education leaflet but given to antenatal patients. We endeavoured to provide basic information to women in the lower socioeconomic groups by a simple handout given just before the onset of labour in an effort to improve knowledge and attitudes to the event. Knowledge, pain, and anxiety scores in the group receiving the handout (82 patients) and in a matched control group (110 patients) were assessed by the completion of a postnatal questionnaire. The results are shown in the accompanying table.

It can be seen that the educated group (A) had significantly lower anxiety and higher knowledge scores than the control patients (group B). Dropout and non-attendance rates at formal education classes were similar in both groups, as was the length of labour and

operative delivery rate. Although previous studies have shown that informed patients progress more smoothly to delivery,^{1,2} our patients with the highest anxiety scores did not in fact have an increase in the length of labour, a point observed by Wood *et al*³ in a similar study.

While such a method of delivering knowledge is far from ideal it has been shown that the various methods of antenatal education complement each other.⁴ For patients who will not or who cannot attend formal classes it would appear that information leaflets given before labour and containing clear information about the forthcoming events are of definite value as a teaching and anxiety-alleviating aid.

We can endorse the approach of Professor Beard and his colleagues.

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¹ Van Auker, W B, and Tomkinson, D. *American Journal of Obstetrics and Gynecology*, 1953, **66**, 100.

² Davis, C D. *American Journal of Obstetrics and Gynecology*, 1962, **84**, 1196.

³ Wood, C, *et al*, *Australian and New Zealand Journal of Obstetrics and Gynecology*, 1974, **14**, 210.

⁴ Chamberlain, G, and Chave, S. *Community Health*, 1977, **9**, 11.

"Baby and Child"

SIR,—While I am grateful for the space allocated to a review of my book, *Baby and Child* (28 January, p 228), and grateful for crumbs of comfort like "In general, her advice . . . is difficult to fault," Dr D P Addy has charged me with giving some "inaccurate or potentially dangerous information." Please allow me the right of reply to what is almost an accusation of negligence.

I do not state that "allergy . . . is due to an inability of the body to differentiate between harmless and harmful substances." I point out, as part of a lengthy discussion attempting to elucidate a difficult subject for lay people, that people who are subject to allergic disorders manufacture antibodies against substances which cause no reaction in non-susceptible subjects.

I do not say that asthma "can be treated by using a nasal spray." Sprays, aerosols, and inhalants are mentioned as among the possible routes by which *prescribed* drugs may be administered to children by parents when the doctor does not consider it necessary to attend recurrent attacks personally. Aerosol bronchodilators and disodium cromoglycate by inhalator are obvious examples. I do not specify them as I do not wish the book to encroach on the role of the doctor, who must decide what treatment is suitable for any particular patient.

I do not suggest "treatment of a severe attack of stridor . . . before calling for help." I describe the frightening symptoms of severe croup and, starting with the words "you need a doctor urgently but if you are alone in the house," suggest the optimum way to get a seriously distressed child a little extra oxygen while that doctor, an ambulance, etc, are on

their way. To say that this advice "could be fatal in acute epiglottitis" is absurd. In such a life-threatening emergency what else can a lone parent do but try to keep the child breathing while help comes?

I do say that febrile convulsions "seldom last more than a minute or two"—a manner of speaking, perhaps, but part of the overall message, which is, "Don't leave the convulsing child. As soon as the spasms cease, send for your doctor." How can it be dangerous to omit to mention the minute percentage of such convulsions which last for longer?

I do say, "If a child seems perfectly well and has a normal appetite you can disregard the diarrhoea." The paragraph refers to a single episode of loose stool. Careful discussion of the possible importance of continued diarrhoea has already taken place and the paragraph is immediately followed by a list of associated symptoms which should lead a parent to seek medical advice. There is a further reminder of the hazard of dehydration if vomiting occurs simultaneously.

Finally, Dr Addy refers to the final part of the book as a "medical encyclopaedia" and implies that he knows it was not "checked by a doctor." The book is about child development and care. The section of which he complains is an A-Z of all kinds of information, only part of which is medical. It has been read by several doctors. And I have never done the *Times* crossword puzzle in my life.

PENELOPE LEACH

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Physical deformity of Richard III

SIR,—May a non-medical man add a coda to your contributors' speculations on Richard III's anatomy?

After Professor Philip Rhodes's carefully balanced article (24-31 December, p 1650) it was odd to find Drs B Wolman and Gordon Dale (28 January, p 234) paying so little heed to the fact that Shakespeare was a writer of fiction and, in his *Richard III*, one busily engaged in constructing a melodramatic villain to rival Marlowe's. Not only is there no contemporary evidence that Richard III suffered from any deformity, but even the alleged unevenness of his shoulders is uncertain. When the Windsor Castle portrait was on loan to the National Portrait Gallery for a special exhibition in 1973 an x-ray revealed that the raised shoulder-line was an over-painting by a later hand.

Richard has been reported as "small in stature," and no doubt he didn't make much of a showing beside his brothers Edward and George. But which of us would have? They were both burly six-footers. The journal of Nicolas von Poppelau, a man of great strength but unknown height, tells us, however, that Richard was taller than Nicolas by three fingers, although slighter in build. This suggests not "certainly small" (Dr Dale's phrase) but possibly tall and thin.

Shakespeare's literary genius should surely not be allowed to lull us into forgetting that the deformity of Richard III was a Tudor myth rooted in political necessity. When Richard lay dead at Bosworth there were 29 people still alive with a better claim to the throne than Henry Tudor's. His usurping dynasty could maintain itself only by insisting on absolute submission to the crowned and anointed sovereign lord. How then could it excuse its

Knowledge, pain, and anxiety scores (mean $\pm$ SD)

Group	Knowledge	Pain	Anxiety
A (n=82)	6.7 $\pm$ 1.71	3.80 $\pm$ 1.22	2.38 $\pm$ 1.38
B (control) (n=110)	2.6 $\pm$ 1.47	4.93 $\pm$ 1.26	4.17 $\pm$ 1.45
	P < 0.001		P < 0.01