2. Breast: including stethoscope examination
3. Other: full abdomen, some orthopaedic tests, some ophthalmoscopy
4. Verbal extended consultation on sexual relations.

Total	530	%
Breast	76	*14*
Genital	67	*13*
Other	87	*16*
Verbal	9	—

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MIGRAINE AND THE SPREADING CORTICAL DEPRESSION OF LEAS

Sir,

Leas in 1944 described a phenomenon of a wave of complete electrical inactivity of the cortex initiated by a strong repetitive stimulus. The wave spread at about 0·5 mm per second in all directions but would not cross the midline. Its advancing edge is a zone of intense electrical activity. In migraine the visual disturbance is often a field loss with fortification spectra around its margin.

The points of similarity between the two phenomena are obvious so that it is reasonable to advance the hypothesis that migraine is the subjective aspect of spreading cortical depression. Since spreading cortical depression can easily be produced in the experimental animal it holds promise of a new method of pharmacological investigation of the treatment of migraine.

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REFERENCE

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CHEWING GUM

Sir,

As a long-time gum chewer and research mathematician, I would like to add a mediating note from across the ocean to the apparent contradiction raised in the letter from Dr T. Paine referring to the study by Dr Godfrey D. Ripley.

First it should be noted that there are a number of ways to analyse a given set of data. The stated results of one in six appears to come from performing a "Z" test on the numerical differences between the number of colds in the base and test years in the two groups. However, since the research was designed to investigate the prophylactic effects of chewing gum and since cold frequencies vary from year to year, a more plausible analysis would be to compare the number of subjects in each group who experienced a decreased number of colds in the test year. Dr Ripley's Table I becomes:

	chewer	*non-chewer*
Decreased number of colds in test year	31	23
Same or increased number of colds	9	17

Using the formula for chi-square corrected for continuity we calculate a value of 2·79 ($p < .05$—1 tail, since the difference is the hypothesised direction).

Thus, we obtain a result which is significant at the cherished five per cent level. However, even if an alternate analysis were not possible, I would question Dr Paine's implicit notion that either you have significance at the five per cent level or you have nothing meaningful. It seems clear that if there is any reasonable chance of a prophylactic effect from something as easy and pleasurable as gum chewing that the benefit to risk ratio is very high. Additional studies would therefore seem to be very worthwhile.

The crucial point is that statistical significance level should be based on the relative costs of the type I and type II errors, not on any arbitrary fixed standard. I hope the preceding will provide the reader with something significant (!) to chew on.

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GENERAL PRACTITIONERS AND CONTRACEPTION

Sir,

I feel that Dr A. J. Dalzell-Ward, Chief Medical Officer of the Health Education Council, (January *Journal*) is not taking sufficient account of the lamentable failure rate of so many contraceptive methods. Ann Cartwright, in her study, *Parents and Family Planning Services,* found that two fifths of the mothers in her sample said they had become pregnant, at least once, at a time when they and their husband were using some method of birth control.

While it is true that by no means all unwanted conceptions result in unwanted babies, it is probably also true that the majority of unwanted babies begin as unwanted conceptions, and that

this is an undesirable situation, and an avoidable one.

I feel sure that the profession as a whole, and the Health Education Council in particular, should show their awareness of this situation, and that contraception and family-planning services should be firmly based on the methods which are really reliable, even though this adds a further burden to the load of work in family practice.

In other words, the medical profession, and the Health Education Council, should work together to encourage couples to rely on the Pill to postpone their first baby, to rely on the Pill to space their children, and then, when the family is complete, to give serious consideration to vasectomy as a means of 'family completion'.

The Pill is in this way used for comparatively short periods, and is therefore much more acceptable. There will still remain a small place for intrauterine devices, particularly since the advent of the copper 7.

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HEALTH CENTRE IN WORCESTER

Sir,

Writing privately and not as secretary of the local medical committee about the Worcester Health Centre (December *Journal*), in the Rev D. G. Millar's article, I was disappointed to find his data insufficient and he missed certain factors in his nine-page article.

He only interviewed 75 patients from the 18,600 at risk and no one over 70 was interviewed from either practice. Sociologists are aware of observer bias creeping into surveys unaware and I would like to know how this was counted in his questionnaire, interview, and analysis.

The author concluded that the policy of the six doctor group produced " barriers which impeded a patient's approach were rather too high to be compatible with the method of working ", yet 20 per cent were seen at once without appointment. Without descending to wrangling over details, I believe other factors were working. After all, the sales of ice cream at seaside beaches correlate with the figures for drowning, but no one supposes they are causative.

I contend the two practices at the time of survey differed. Practice A's highly respected senior partner, with a loyal following, has had ill-health and those who have known him for over 35 years will never feel the same over admirable junior partners. Practice A did not, like Topsy 'just grow', but amalgamated; two partners provide, as clinical assistants, the backbone of our city's geriatric hospital, as we await locally the appointment of a trained young consultant geriatrician.

Practice A provides a clinical assistant in paediatrics, whose value to the medical community is widely recognised by all other practices. Not only does this work outside the practice put organisational strains on Practice A, but one of their partners was, in March 1971, a new entrant to general practice, who like all junior partners, was initially 'on approval' to conservative patients who have known the seniors for years.

On the other hand, Practice B, at the time of the survey, was just completing a period of consolidation before recruiting a junior partner. Practice B originally had three partners, only two of whom elected to enter the health centre, so all patients that accompanied them, did so by a deliberate decision. Both partners have over 21 years' experience in Worcester general practice, being in a similar happy position to Drs Fry and Dillane of Beckenham (*Update*, 1973). Their extra practice activities, such as chairmanship of our local medical committee, did not clash with surgery sessions.

From these brief details, I am sure many of your readers, who have appreciated the pangs of amalgamation, the problems of retirement, or ill-health, the difficulties of recruitment, with 'running in' and introducing a new partner, whilst recalling the years of bliss when their practice was in a peak steady state, will comprehend more was going on than was described in the article.

There is a debate necessary with the growth of group practices which are here to stay, like supermarkets. However people hanker for the old uneconomic single-handed doctor, or the little shop at the corner, recruits are not forthcoming, nor does the public seem willing to pay more for more inefficient methods of delivering service.

Some health centres, like that of Dr Michael Dale, in Walsall, have shared overheads and have a rigid personal list, except for out of duty emergencies. This may be fine, but how does the teenager, brought into the world by her doctor, dare to ask him for the Pill, as she has fantasy fears he may tell daddy at the golf club, or how does the junior partner, fresh from the midwifery job, pick up most of the confinements? A further view of practice B after their third partner has been introduced, might reveal that, with the introduction of a new face, they resemble practice A far more closely.

This letter has been seen by the two partnerships concerned, as I believe that if anything about a practice is published the partners should always be aware of this before they see it in the *Journal*. I am also sufficiently old fashioned to feel that having enjoyed hospitality, a brief acknowledgement of gratitude at the end of an article is pleasant to see.

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REFERENCE

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