

emergency caesarean section because of factors such as prolonged rupture of membranes and repeated vaginal examinations are more at risk of infections.² Fifteen patients (50%) in the group receiving prophylactic antibiotics and 23 (56%) of those not receiving prophylaxis had caesarean sections as emergency procedures. Although infection was more common in the patients having emergency operations compared with those having elective surgery, the difference was not significant ($\chi^2=1.91$, $df=1$, $0.5 > p > 0.1$). Eighty one per cent (61/80) of operations were performed using epidural analgesia. There were no respiratory infections—a measure of our anaesthetists' skill.

In the group receiving no prophylaxis the total cost of antibiotics was £Ir 98.01 while in those receiving prophylaxis the cost was £Ir 361.24, of which 85% (£Ir 307.60) was the cost of prophylactic antibiotics. However, the cost of a hospital bed (£Ir 142 per day in our unit) far exceeds the cost of antibiotics. Mean length of postoperative stay of those who received prophylaxis was 9.2 days (SD 1.5) and of those who did not 8.4 days (SD 1.4) (Wexford Hospital statistics, 1988). This difference was significant ($0.01 > p > 0.05$) and may be related to skin suture techniques. Patients not having prophylactic antibiotics had subcuticular plain catgut suture 2, whereas the others had interrupted non-absorbable sutures or clips that required removal before discharge.

HARRY MURPHY
MICHAEL SHANLEY
SIOBHAN McCABE

Department of Obstetrics and Gynaecology,
Wexford General Hospital,
Wexford,
Republic of Ireland

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AMAPI→BrAPP→FPM

SIR,—Some readers may be unaware of the reason for the change of name of the Association of Medical Advisers in the Pharmaceutical Industry (AMAPI),¹ which was simply that AMAPI as originally constituted was open only to "medical advisers to the pharmaceutical industry"—that is, employees. The change to British Association of Pharmaceutical Physicians (BrAPP) reflected a change in the constitution to allow all pharmaceutical physicians—such as those in regulatory authorities, academia, or clinical practice—to become members.

Perhaps the most important new arrival in the field is not the Faculty of Pharmaceutical Medicine but the Society of Pharmaceutical Medicine, which offers a forum to all professionals associated with the discipline. This purpose will be realised only if the various scientists concerned with the development of new drugs are aware of the society and join in its meetings.

Certainly many clinicians have responded, as for example at a recent meeting on developing antibiotics. Subjects under discussion included the clinical relevance of accepted break points in sensitivity tests, the validity of end points in lower respiratory tract infection, and the use of the usual end points for efficacy of parenteral antibiotics in the critically ill. More fundamental questions were also discussed: if the aim of clinical testing is to establish, by analysis of efficacy and safety, that a drug has an acceptable ratio of risk to benefit, then to whom should this ratio be acceptable? As things stand it is acceptable to only the manufacturer and the regulatory authority; should we not

consider other groups with a legitimate interest: clinicians, pharmacists, and—most importantly—the patients? Perhaps some of the past difficulties with issues of drug safety have been compounded by lack of consensus on what constitutes risk and what benefit. We all know patients who bitterly resented the withdrawal of practolol or benoxaprofen. They may have been wrong, but should they not have been heard?

If the Society of Pharmaceutical Medicine can raise these questions it looks to be an exciting forum that could change the face of pharmaceutical medicine. But where are the non-medics? Is there no interest from pharmacists, pharmacologists, statisticians, physiologists, biochemists?

J K DEWHURST

TIL Occam Limited,
Guildford GU2 5YN

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Looking at complementary medicine

SIR,—I would like to add my experience to the overview of complementary medicine in Europe.¹

In a population based survey conducted in Cardiff in 1986 my colleagues and I found that in one year 2.6% of the adult population in Cardiff received some form of complementary medical treatment not based in the NHS.² A higher proportion of patients who chose the treatment belonged to social classes I and II and had received tertiary education than in the rest of the population.

The four most popular forms of treatment (in descending order) were osteochiropractic, herbal medicine, homoeopathy, and acupuncture. Almost everyone receiving treatment was required to pay for some or all of the treatment, and about half of those receiving complementary care paid more than £25. Interestingly, three quarters of patients were satisfied with the treatment they received, and in just over half of the cases the general practitioners were not informed of their patients' treatment.

In view of the increasing popularity of complementary medicine more studies are urgently needed to look into the various aspects of this subject—for example, the possibility of implementing some form of complementary medical treatment within the national health care system.

BERNARD YUNG

Llandough Hospital,
Penarth,
South Glamorgan CF6 1XX

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Hospital admissions before and after shipyard closure

SIR,—Mr Lars Iversen and colleagues have taken advantage of a "natural experiment" (a shipyard closure in 1983) to investigate the relation between unemployment and morbidity.¹ Their results, however, do not seem to justify their conclusions. Firstly, the all cause admission rate decreased in the study group and increased in the control group and the relative risk of admission for the study group decreased. Thus, as the authors conclude and try to explain post hoc, their expectation of an increase in admissions in the study group after the shipyard closure was refuted. Secondly, for circulatory diseases (with digestive diseases considered by the authors to be related to stress and

expected to show an increased rate and risk of admission in the study group after the closure) the admission rate increased in both groups and there was a non-significant increased risk of admission in the study group. Thirdly, for digestive diseases the admission rate was unchanged in the study group and increased in the control group. Thus the risk of admission decreased in the study group. Fourthly, for musculoskeletal diseases (with accidents considered by the authors to be related to the work environment and expected to show a decreased rate and risk of admission in the study group after the closure) the admission rate increased in both groups. There was a small non-significant decrease in the risk of admission in the study group. Finally, for accidents the admission rate decreased in the study group and increased (by a greater percentage) in the control group. There was a borderline significant decrease in the risk of admission in the study group.

According to Mr Iversen and colleagues, the changes in the admission patterns after redundancy are probably a consequence of a change from the effects of a high risk work environment to the effects of psychosocial stresses such as job insecurity and unemployment. Such conclusions seem difficult to justify when the changes in the study group's admission rates support the authors' hypotheses on only two of five occasions and the changes in the control group's admission rates are mostly larger but totally unexplained. Further, of the five changes in risk of admission only one (accidents) achieves significance in the direction that supports the authors' hypotheses, whereas two change in the direction that is contrary to the authors' hypotheses and four owe at least as much to unexplained changes in the control group as to inadequately explained changes in the study group.

PETER SAINSBURY

Liverpool L25 7TF

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AUTHORS' REPLY,—As the basis of our conclusion we focused in particular on admissions in connection with accidents and cardiovascular diseases. Accidents are directly associated with the work environment, and we found a significant reduction in the number of admissions due to accidents in the study group. Cardiovascular diseases have, in a number of studies, been associated with unemployment and company closures. In our article, but not in table III, we analysed admissions specifically due to hypertension, ischaemic heart diseases, and symptomatic heart diseases. In these diagnoses stress may be an aetiological factor; the relative risk of admissions increased in the study group from 1.0 to 2.6 in the follow up period, which we think is a further indication that it is possible that there is a connection between the closure and admissions due to cardiovascular diseases.

As far as the two other diagnostic groups—digestive diseases and diseases of the musculoskeletal system—are concerned we have not seen these surveyed in reports of company closures and unemployment; this is why we did not have any precise a priori expectations as regards the development in the number of admissions due to these causes. We have primarily included the two groups of diseases because there was a reasonable number of admissions and because they might be of interest from a descriptive point of view.

As mentioned in our article, the size of our study population constitutes a problem when we study events, such as admissions, that are relatively rare. We find that an interpretation of our results, based only on the criterion of statistical significance ($p < 0.05$), is inadequate and not particularly productive. Therefore we cautiously conclude that