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Severe acute renal failure in the community

Studies of acute renal failure conducted in renal units give a false picture of the disease in the community. On p 481 Feest *et al* report the incidence of the disease in a community of 445 000 people studied over two years. Patients were identified by reference to the serum creatinine concentrations recorded in laboratories serving the population. The diagnosis was made from the patients' hospital notes or after consulting general practitioners. The cause of acute renal failure was identified and progress up to two years after diagnosis monitored. The commonest cause was prostatic obstruction (31 (25%) cases), which affected one third of males. Even after exclusion of such cases men outnumbered women. The incidence of severe acute renal failure rose with age from 17/million yearly in adults under 50 to 950/million yearly in those over 80. Prognosis, however, was the same. Many older people were not referred for a nephrological opinion, although this might have been beneficial.

Fat and female fecundity

Being underweight causes disruption of menstruation and obesity is associated with menstrual disorders but the effect of distribution of fat tissue in regularly menstruating women on the ability to conceive is unknown. Zaadstra *et al* (p 484) measured the ratio of waist to hip circumference in women attending a fertility clinic. After adjusting for other variables affecting ability to conceive they found that "apple shaped" women had a lower fecundity than "pear shaped" women. The effect of waist-hip ratio was more significant than those of age and obesity. It seems that in women trying to conceive distribution of fat is more important than fatness itself.

The difficulty of keeping symptom diaries

Diary recordings of symptoms and measurements are often used to monitor chronic diseases such as asthma because they rely less on recall. Hyland *et al* issued 24 patients with asthma with both paper diaries and an electronic diary (which covertly marked the time of entry of data) and found that over 14 days patients often missed entering symptoms and peak flow measurements into either diary, particularly in the evenings, and often (on 32 occasions) entered it retrospectively (p 487). Three quarters of the patients made at least one entry that differed between the electronic and paper diary. There was a correlation between the number of days of missing data and variability in peak flow. The authors conclude that it may be asking too much of patients to fill in diaries.

Near death episodes in infants

Infants and young children who suffer apparent life threatening events and receive resuscitation are at increased risk of sudden death. Current management comprises the exclusion of congenital and acquired disease and the provision of home apnoea monitors. Abnormal findings between events do not necessarily indicate the mechanisms responsible, and apnoea monitors have never been shown to detect life threatening events effectively. On p 489 Samuels *et al* report a new approach to management in 157 infants who had suffered such episodes, including the use of multichannel recordings to document the physiological changes during episodes. Over a third of hospital recordings and over half of home recordings showed abnormalities in oxygenation. These physiological patterns helped to explain the cause of such episodes and resulted in appropriate management, including the use of home oxygen monitoring, additional inspired oxygen, anticonvulsant treatment, or child protection procedures. Of concern, a third of diagnosed cases turned out to be some form of child abuse.

What determines GPs' prescribing patterns?

The prescribing unit has been used as a notional indicator for comparing general practice prescribing for several years. On p 496 Purves and Edwards show that it does not take into account the age and sex differences in prescribing patterns that they found by analysing the computer records of two practices over one year. They used the data to form a new index adjusting for Körner age groups and sex. The results of comparing 80 practices' prescribing behaviour with family health services authority averages were similar after using the prescribing unit and the new index to adjust the data, although the results were different for practices with skewed age-sex distributions. It seems that age and sex do not account for the differences in prescribing patterns among practices and other factors need to be considered.

Prevention of congenital abnormalities

Infant mortality is now so low in most of Europe and North America that congenital abnormalities have become a leading cause of infant death. Affected children who survive, however, live longer than before and may have serious physical or mental handicaps, making prevention the optimal way of providing as healthy a life as possible for newly born infants. The Hungarian database of congenital abnormalities has achieved a good international reputation; Czeizel *et al* (p 499) used its data to estimate the efficacy of different primary, secondary, and tertiary preventive methods. Preventive interventions are currently available in 70% of types and groups of congenital abnormalities. When these preventive approaches are widely and effectively used, 52-60% of congenital abnormalities are preventable; thus these abnormalities do not make up an "immovable" fraction of perinatal or infant mortality. Congenital abnormalities do not represent a single pathological category, so there is no single strategy for their prevention—but it is possible to improve further the efficacy of prevention.

family health services authority average by 50% for cost and yet decreased the relation for items by 1% (fig 3). The variations from family health services authority averages calculated by the two methods differed by over 5% in 11 (14%) practices for items and in 27 (34%) practices for costs. The overall variation mean was −0·29 (SD 4·08)% for items and 0·01 (9·92)% for costs. Variation from authority averages by the two methods differed not only in size but in direction. For example, one practice had its relation to the authority average increased by 30% for cost and decreased by 10% for items (fig 3).

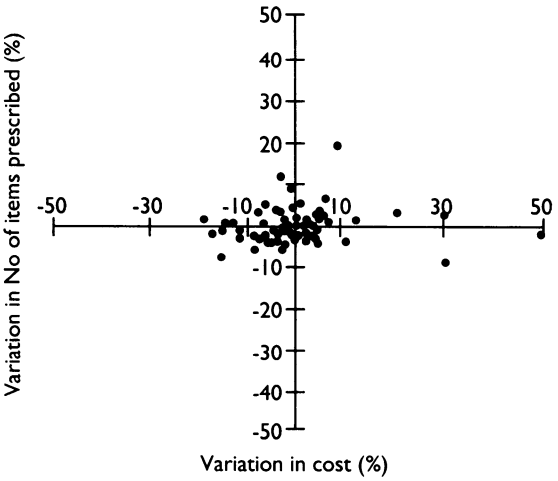

FIG 3—*Change in relation of practices' cost and item data with family health services authority average when data were adjusted with Newcastle prescribing index rather than prescribing unit*

Discussion

The trends in the number of prescribed items and drug costs with age and sex reflect previous findings.[5 6 8 9] By using an accurate new index (the Newcastle prescribing index) to adjust for the effect of patient sex and age on prescribing in the North East we have shown that a practice age and sex demography does not explain interpractice variation in prescribing habits. Adjustment of prescribing data with the Newcastle prescribing index was more accurate than with the prescribing unit for practices with a skewed age and sex demography.

The prescribing unit was originally devised according to the differential in the number of items prescribed in elderly and non-elderly populations and does not take drug costs into account. Extrapolations for drug costs cannot be made from the prescribing unit because of the age and sex related differences in costs per item that we have shown.

We believe that using the prescribing unit to adjust practice data for factors outside the practice's control and subsequent comparisons with family health services authority or national averages is unhelpful. Questions need to be asked. Firstly, are the influences on general practice prescribing tangible and quantifiable? Several factors may modify prescribing such as the patient (morbidity, deprivation, health education, and expectations), the doctor (workload, repeat prescription systems, consultation style, and prescribing formulary), and external criteria (therapeutic advances, primary/secondary care interface, and drug company marketing). The equation needed to adjust for practice demography will be difficult to validate. Secondly, is the family health services authority average a good marker of quality? In the blossoming environment of audit and acceptable peer review, general practitioners need a benchmark against which they can assess the quality of their prescribing. Further work is required to create a model practice based on a panel of rational prescribers with which general practitioners can compare their data.

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