This month • practice formularies • self-help groups • deafness in children • sudden death

Practice formularies — who likes them?

IT is known that prescribing habits may be changed by introducing a practice formulary and providing educational feedback to the general practitioners involved. The staff of Aldermoor health centre (department of primary medical care, Southampton University) have now gone a step further by evaluating the acceptability of a formulary to themselves and their patients. During 1983 the general practitioners held eight one-hour meetings to devise a formulary to cover 10 common drug groups. They had been primed by a principal pharmacist from the local drug information centre who provided them with relevant review publications one week before each meeting. Two other local practices used the formulary and a fourth local practice was observed as a control. Patients from the practices who were receiving repeat prescriptions were visited by a research assistant to assess their satisfaction with their prescribed drugs.

The general practitioners at the Aldermoor health centre increased their prescribing of formulary drugs over the two-year study period from 72% to 81%. Most (seven out of 10) found the discussions held to devise the formulary the most useful aspect of the study. However, they became more positive in their views on the use of a practice formulary during the course of the study. Overall the 878 patients interviewed were very satisfied with their prescribed drugs throughout the study in all practices. However, patients who had their medication changed were less satisfied. Surprisingly 51% of patients felt they had too little or no information given to them about their drugs and there was evidence of increasing dissatisfaction in all practices with this aspect of repeat prescribing. It is concluded that better drug information may be the key to improving patient satisfaction and this would be more easily provided in association with an agreed practice formulary.

(F.S.)

Source: Field J. How do doctors and patients react to the introduction of a practice formulary? *Fam Pract* 1989; **6**: 135-140.

Benefits of self-help groups

THE number of self-help groups has increased rapidly in recent years and organizations such as MIND, CRUSE and Alcoholics Anonymous demonstrate the strength of self-help groups in medicine. This paper attempts to determine the aims, methods and effectiveness of 113 self-help groups in Hamburg. It is not surprising that 42% of the groups refused to participate since many were set up as a result of hostility to doctors or the perceived indifference of doctors.

The goals and aims of the group were categorized according to their range and the wider the range, the more frequently it was reported that goals were only partially attained. Only 73% of members felt the wide goals of their groups, such as changing institutions, were attained, but 98% felt that short range goals, such as support of other group members and finding people to talk to, were achievable.

The symptom relief effects achieved by the groups were mainly psychosocial. Reduction of emotional stress was reported by 70% of members and 58% discovered more self-confidence and new capabilities such as a sense of responsibility for others suffering from their disease. However, 40% of members reported improvement of the main symptoms of their disease during group membership.

The groups had helped 72% of the patients to improve their knowledge of the character and causes of their own disease, 75% to reduce their medication and 63% to 'use' doctors more rationally for their problem.

Self-help groups appear to help patients to express themselves and become more willing to look at the services provided in a critical fashion. The groups do not compete with but complement the doctor's work. General practitioners can use this resource safe in the knowledge that the majority of members of self-help groups report great benefits.

(J.A.)

Source: Trojan A. Benefits of self-help groups: a survey of 232 members from 65 disease-related groups. *Soc Sci Med* 1989; **29**: 225-232.

Deafness in infants

A REVIEW article in the *Journal of the Royal Society of Medicine* has considered the causes of deafness in young children. About one in every 1000 children born in western Europe is born deaf, or becomes deaf in early childhood. If untreated they will not be able to communicate and will be 'deaf and dumb'. Suitable treatment, usually with a hearing aid should be started as early as possible, so that the child can develop normally.

Deafness can be discovered in the immediate postnatal period. A mother may notice that her baby on the second day of life does not jump like other babies when a tray is dropped in the maternity ward. Babies blink when they hear a noise, and this should be demonstrated when the mother is discharged from postnatal care. In the Strykar hearing test, which is usually performed at an assessment clinic when the child is seven to nine months old, the baby sits on its mother's lap, and its attention is drawn to a toy by someone sitting about six foot away. A soft noise, such as a slight crumpling of paper, behind and to one side of the baby should make it turn its head immediately. There are other tests, and all have limitations, but the general practitioner, the health visitor or the clinic doctor should make sure the baby has been tested.

Deafness in infancy may be genetic, prenatal or acquired at birth, and it is often difficult to find the cause. About half of the causes are hereditary in origin — 30% of these are autosomal recessive and 10% autosomal dominant.

Rubella has accounted for some 15% of deafness in children. If the mother develops rubella in pregnancy (often without symptoms), deafness, sometimes in only one ear, may be the only congenital defect. Let us hope that this preventable cause of deafness will soon be a thing of the past. Intrauterine infections with the cytomegalovirus or congenital toxoplasmosis may cause deafness, and congenital syphilis accounted for 16 deaf patients in a report from Belfast in 1983 (*J Laryngol Otol* 1983; **97**: 399-404).

Neonatal jaundice is no longer the usual sequel of rhesus incompatibility; it may be associated with prematurity or may be 'physiological jaundice'. All jaundiced babies should be treated with phototherapy as a safe level of bilirubin has not been established with certainty (*Pediatrics* 1982; **69**: 399-407).

Meningitis in babies is sometimes very difficult to diagnose in the early stages. Pneumococci, meningococci, and *Haemophilus influenzae* may all cause deafness, even in a baby receiving treatment. Unfortunately streptomycin, kanamycin or gentamicin may have to be used for the bacterial infection, and these drugs are potentially ototoxic.

There are many causes of deafness in

infants, and investigation, advice and treatment must be provided by specialists. However, this review is a useful summary for general practitioners of these causes and emphasizes the need to be alert to the possibility of deafness in young children.

(G.P.)

Source: Cremers CWRJ, van Rijn PM, Hageman MJ. Prevention of serious hearing impairment in the young child. *J R Soc Med* 1989; **82:** 484-487.

Sudden cardiac death without warning

'HE dropped dead while playing squash — there wasn't any warning at all.' This may sound like an advert for private medical screening but this thoughtful paper points out that the majority of people who drop dead suddenly from myocardial infarction have previously normal electrocardiograms on exercise testing and those with 'silent ischaemia' develop symptoms of angina long before any sudden acute event. Why?

In up to 50% of patients suffering sudden myocardial infarction without preliminary angina, the degree of stenosis of the coronary arteries may be less than 70%. The acute event is caused by a thrombus building up suddenly on this mild plaque of atheroma. Those with more severe stenosis may have built up collaterals before thrombosis in response to ischaemia and, when they develop a clot, there is less deterioration in left ventricular function.

A prospective study of 900 healthy men was carried out. They were divided into two groups: those with ischaemia on exercise testing and those with normal electrocardiograms. In the ischaemia group 20% of the first coronary events were sudden death or myocardial infarction compared with 73% in the group with normal electrocardiograms. Despite the fact that those with more severe stenosis are more likely to suffer a thrombus, less severe stenoses are more common, so the absolute number of total occlusions in those with mild stenosis is twice that in those with more severe stenosis.

The majority of patients with 'silent ischaemia' develop angina before sudden death or myocardial infarction. Collaterals may explain this, but a hydrodynamic principle which defines an exponential relationship between the severity of stenoses and resistance to flow may be important. There is a critical point in luminal narrowing when very small increases in stenosis lead to large increases in resistance. So those with severe stenosis and ischaemia will develop angina more quickly with the same percentage change in stenosis than those with mild stenosis.

What this means is that exercise testing may identify some patients who are at risk of catastrophic events, but not the majority. The authors believe that testing is futile since the majority of patients with 'silent ischaemia' will get angina before sudden death; they support prevention of coronary artery disease before plaque formation. So if a stressed executive asks whether an exercise electrocardiogram is a worthwhile screen for sudden coronary events, the answer based on this paper must be no.

(J.A.)

Source: Epstein SE, Qyyumi AA, Bonow RO. Sudden cardiac death without warning. Possible mechanisms and implications for screening asymptomatic populations. *N Engl J Med* 1989; **321:** 320-323.

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INFECTIOUS DISEASES UPDATE: AIDS

Fifth international conference on AIDS: part 2

As predicted, much of the proceedings at this year's conference in Montreal were dedicated to epidemiological issues, particularly those relating to HIV testing. Widespread approval was given to promoting anonymous unlinked testing (without consent) on blood specimens taken for other clinical reasons. Such studies are relatively inexpensive and uncontaminated by participation bias. Indeed further evidence was presented that voluntary HIV testing can underestimate the prevalence of the virus. It is clear, however, that voluntary testing should not be discarded as it still provides useful epidemiological data which anonymous unlinked testing cannot provide. Of further interest on the question of serological surveys is the recognition of the value of finger-prick testing as an alternative to venepuncture. It was concluded that collection of finger-prick samples and storage and shipping of dried blood on filter paper is simple to perform, cost effective and does not significantly compromise the accuracy of HIV serological tests.

Since the beginning of the AIDS epidemic much research has been conducted in areas which had previously attracted little if any attention. Prostitution is one of these and each year it becomes more apparent that this area of research is rapidly increasing. In addition to the use of street workers and 'shopfront drop-in centres' to enable contact with this group, research teams have now realized the value of mobile facilities (bus outreach) particularly in large cities such as New York and Sydney where prostitute pick-up points are scattered over wide areas. Of value in this high-risk setting might be the female condom barrier which is due to be released to the North American and Scandinavian markets. There is now some evidence that the combined risk of leaks, tears and spillage is less when using the female condom than when using the male equivalent. Such innovative measures highlight the creativity of effort that is currently being channelled into all aspects of AIDS research.

Although research into drug use and homosexual behaviour in relation to seroprevalence continues to be plentiful, there is still little work being done to gather data on sexual lifestyles of populations as a whole. Indeed our continuing dependency on Kinsey's work of the 1940s demonstrates this paucity of knowledge. Meanwhile, a British pilot study has shown encouraging results and it is hoped that this will lead to a national study of 20 000 individuals throughout the UK.

Some other issues of note included the further recognition of the value of needle/syringe exchange for injecting drug users, the difficulties in achieving satisfactory levels of behavioural change in both high and low risk groups and the appreciation that more attention must be focused on the care of uninfected children of infected women.

Since the conference there has been an announcement by the Wellcome Foundation concerning the use of zidovudine in high risk asymptomatic HIV infected people. An American-based trial has demonstrated that early treatment with zidovudine can slow disease progression without significant side effects in HIV infected persons with fewer than 500 T4 cells who are asymptomatic. This is clearly a major step forward in clinical AIDS research and demonstrates the remarkable speed with which progress is now being made.

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