The use of hexachlorophane for bathing infants and for hand washing by people working in nurseries controlled staphylococcal colonisation in maternity units when it was common. The knowledge that this antibacterial substance is absorbed through the skin of the immature, and deposited in brain substance, led to its withdrawal from use in very low birth weight infants. Triple dye, or an antibacterial spray containing drugs not used at all in systemic treatment, applied to the umbilicus is probably an acceptable alternative. The mainstays of prevention, however, whether in hospital or at home must be as scrupulously clean an environment as possible and the full understanding by all concerned with the newborn that their conscientious and effective hand-washing, particularly in hospital, is one of the most important measures in safe neonatal care. The overuse of antibiotics is nowhere to be more deplored than in the newborn nursery, for it leads to colonisation with multiple resistant organisms in the first days of life. Changes in the balance of bowel flora may have played some part in the serious outbreaks of necrotising enterocolitis that have occurred among low-birth-weight infants in newborn units in recent years.

Finally, the successful promotion of breast-feeding goes far towards protecting babies from invasion by bacteria.

Appendix

SUGGESTED DOSAGE FOR NEONATAL BACTERIAL INFECTION

Drug Single dose (intramuscular or intravenous) Ampicillin 50 mg/kg Benzylpenicillin 50 000 U/kg Carbenicillin 100 mg/kg Cloxacillin 25 mg/kg Methicillin 25 mg/kg

Drug Single dose Amikacin* 7.5 mg/kgGentamicin* 2.5 mg/kg 7.5 mg/kg (increase to 10 mg/kg Kanamycin* after first 48 hours of life in term infants and after first week in preterm) Tobramycin* 2.5 mg/kg Chloramphenicol* 25 mg/kg

Co-trimoxazole sulphamethoxazole 15-20 mg/kg† trimethoprim 3-4 mg/kg†

> (the intravenous solution should be diluted immediately before use with 7 to 10 volumes of physiological saline and given not more than 12-hourly)

Frequency (except where stated)*

For term infants (>37 weeks' gestation)

Every 12 hours in first 48 hours Every 12 hours in first weeks of of life

and two weeks Six-hourly if over two weeks For preterm infants (<37 weeks' gestation)

life Eight-hourly between three days Eight-hourly between one and four weeks

Six-hourly after four weeks

Intraventricular dosage: gentamicin 1-2 mg, kanamycin 2-3 mg—the smaller doses for preterm infants. If marked hydrocephalus is present, however, much larger doses may be necessary.

*Should not be given more than eight-hourly.

†The smaller dose for preterm infants.

Note: Intramuscular injections should be given into the anterolateral thigh and not buttock muscles. Intravenous injections should be given as a very slow bolus.

Drug concentrations in blood (and CSF where relevant) should be checked whenever possible because of the many variables affecting drug metabolism and excretion in ill newborn infants.

Letter from . . . Chicago

Continuing education

GEORGE DUNEA

British Medical Journal, 1978, 2, 679-681

Two eminent Chicago surgeons looking back on their successful careers in a widely publicised interview last year declared that medicine was not what it used to be-and said that they would not become doctors if they had to live their lives all over again, nor would they advise their children to do so. Complaining in particular about the changing character of medical practice and the erosion of the doctor-patient relationship, they pointed to the growing encroachment of Federal bureaucracy and to the constant disparagement of doctors by consumer groups. "Almost everything written about doctors tends to be negative," said one of the surgeons, "and the few bad apples in the profession are cited to tar the overwhelming number who are honest, conscientious, and moral." The surgeons blamed the modern teaching hospital for destroying the warmth and trust of the doctor-patient relationship and thought that full-time physicians lacked the patient orientation of the doctors in practice and would not "inspire young men in medical school with the realisation that curing sick people is what medicine is all about."1

Loss of bedside teaching

Echoing the surgeons' misgivings was Dr William Regelson,² who recently mourned the death of Oslerian tradition with its emphasis on bedside teaching by clinicians with a broad knowledge of medicine in a setting dominated by concern for the patient as an individual and an orientation towards broad-based academic humanism. Today in most schools patient care has become less important as a primary professional responsibility, writes Dr Regelson, and the practising physician is no longer a

680 BRITISH MEDICAL JOURNAL 2 SEPTEMBER 1978

model, his place being taken by academic physicians pursuing laboratory interests, writing papers, or applying for grants, so that the students are increasingly basing their attitudes on house staff who demand independence and are given almost total control over the patients. With the widespread availability of subspecialty consultations the general attending physicians tend to become redundant, and with the prevailing system of rotating attendances for one month at a time they no longer play a part in providing continuity of care. Instead, their main role becomes one of signing the resident's notes to enable the department to collect funds from government and third party insurers, while the junior resident makes major clinical decisions after consultation with a specialist who has reluctantly taken time from the animal laboratory and whose vision of the patient may extend no further than the serum electrolytes and the arterial blood gases.

For this state of affairs Dr Regelson blames at least in part the new brand of department chairman, who is expected to be a good bookkeeper, administrator, politician, and researcher, and who may have neither time nor inclination to spend time on the wards and serve as a model for the young men whom he is supposed to inspire. And it is also to the decline of the "chief" system of teaching and leadership in medicine that Dr John F Burnum³ last year attributed much of the unrest, uncertainty of identity, and loss of élan that is currently discomforting the profession of internal medicine. In discussing "the malaise in internal medicine" Dr Burnum reminds us of the importance of the department heads of former times, such as William Osler, Henry Christian, and Soma Weiss, who in effect were tribal chiefs, omnipotent and revered, with their sacred power being passed down personally to their successors, so that the myth remained inviolate and the tradition was transmitted to the next generation.

This erosion of traditional clinical medicine has been a matter of concern for several decades and probably dates back to the greatly increased support for science after the second world war. The potential conflict between the clinical tradition and the experimental or laboratory approach has been since then the subject of innumerable papers. "Although the two fields are complementary to each other, they attract different kinds of people, require different kinds of organisation, and are based on different philosophies," wrote Dr Jurgen Ruesch in 1962 in decrying the "declining clinical tradition," and he commented at the time that directors capable of obtaining a good press and attracting large grants were not necessarily the people who would "transmit medical skill or knowledge that is of any use to the younger generation." At the time Dr John Herman⁵ also pointed out that it was "almost impossible for the clinician to be a laboratory man as well," and suggested a division of labour between clinical and research chiefs, since the goals of medical schools and university hospitals must be firstly to train doctors to practise medicine, and only secondly to discover facts that will eventually improve the health of mankind. But in 1978 the dilemma remains unresolved, the emphasis is away from the Oslerian tradition, and internal medicine, now as 15 years ago, remains under stress.6

Long battle against obsolescence

The stress is greatest for the general internist trying to keep up with the enormous expansion of medical knowledge. The weight of medical knowledge, as reflected by the weight of the *Index Medicus*, had remained relatively stable at 2 kg between 1879 and 1930 but rose to 4 kg by 1955, and has increased since then to about 30 kg. ⁷ Internists, being obsessive, highly motivated, and driven to be up-to-date and complete physicians, feel increasingly trapped, depressed, and angry as their professional lives evolve—at least according to Dr Alan Morgenstern, a psychiatrist who has spent much time studying the problems of troubled internists. ⁸ He believes that this obsessional

concern with keeping up limits the internist's contact with the other members of his family, who eventually learn to do without him and who, incidentally, are not likely to be as impressed by his authority as his patients. In addition, the internist work is concerned mainly with chronic illnesses that require long-term support, lend themselves to amelioration rather than to cure, and lack the drama of the all-cure miracle drug or surgical cure—so that the patient's fears and frustrations are often taken out on the general internist. Thus reaching a plateau in his career as well as an unsatisfactory home life, the internist tends to develop a sense of futility and depression, contends Dr Morgenstern, whose private practice includes a considerable number of internists as well as their families.

But while a physician's life remains a constant and losing battle against obsolescence, the problem is more serious with the practising doctor. While doctors in academia at least retain the option of spending a considerable portion of the day reading in the library, the practising doctor does not have this opportunity and often tends to fall hopelessly behind. But his determination to keep abreast with recent advances has recently received a boost from the development of continuing medical education programmes at most hospitals and medical centres—so that even the alumni of the class of 1928 are now earnestly attending lectures to obtain the credits required for relicensure.

In fact the continuing education drive has become a stampede,9 attendance being required by numerous medical societies, specialty boards, insurance companies, and by more than half of the States. The programmes tend to be formalised, the rules generally requiring that doctors be capable of presenting evidence of having completed a prescribed minimum of educational exercises and thus earned the necessary credits. The doctors are required to state on their application form for relicensure that they have indeed earned the credits, and could be asked to produce evidence of having fulfilled the requirements. Almost all hospitals now have educational programmes, usually in the form of weekly lectures or case discussions, often by visiting speakers recruited and reimbursed by the drug companies. The doctors sign in at the lecture, the hospital keeps count of the credits to provide end-of-year statements similar to those issued by the banks, and the doctor who has faithfully attended all the prescribed educational exercises should have no difficulties with an audit, though he may do well to retain an accountant experienced in dealing not only with the internal revenue service but also with continuing medical education.

In Illinois the CME regulations state that after April 1978 doctors will require 100 credits every two years. These credits are of different kinds, at least 50 of the mandatory 100 hours being in category 1-mainly attending formally accredited lectures but also teaching medical students or postgraduate trainees, or participating in medical audits, patient care evaluation, utilisation review, or Professional Services Review Organisation activities. The other 50 hours may be obtained in category 2, and include going to medical meetings; attending teaching rounds, grand rounds, lectures, and hospital meetings; participating in learning experiences that "facilitate physician performance"-such as computerised medical records, health administration or education; publishing or presenting papers; or "verifiable self-instruction, including use of teaching devices and medical literature." "The Department of Registration and Education will rely on each applicant's integrity in certifying his compliance" but may demand further evidence of completion and even conduct hearings, which only further reinforces the need for accurate records and a good accountant. And though it is reported that some doctors read their journals in unmentionable places, there is no excuse in this enlightened age for not keeping accurate records of the duration and category of the educational exercise.

Obviously, then, continuing education promises to be an immense success. The patient will rest assured that his general practitioner is well-informed and clearly understands the indications for every injection that he administers in the office. The politicians and legislators may derive a definite feeling of

2 SEPTEMBER 1978 BRITISH MEDICAL JOURNAL

achievement in having promoted the return to learning of the medical profession. The leaders of organised medicine may congratulate themselves at having fended off consumerist and demagogic outcries for recertification and other government controls; and the drug companies would rather pay for education than for calendars and doctor's bags. There is, in addition, in these days of economic stagnation, the prospect of creating many new jobs for professionals, administrators, and clerks-who will do nothing in particular but do it very well. And undoubtedly before long other professions such as lawyers, pharmacists, plumbers, watchmakers, and legislators should join in the learning stampede and develop their own continuing education programmes, complete with categories, hours, criteria, credits, and self-evaluation feedback mechanisms.

References

- Snider, A J, Chicago Daily News, 16 August 1977.
- Regelson, W, Journal of the American Medical Association, 1978, 239, 317.
- Burnum, J F, Archives of Internal Medicine, 1977, 137, 226.
- Ruesch, J, Journal of the American Medical Association, 1962, 182, 110.
- Herman, J R, Journal of the American Medical Association, 1965, 191, 1022.
 Adams, W, Journal of the American Medical Association, 1963, 186, 934.
 Durack, D T, New England Journal of Medicine, 1978, 298, 773.
- Stacey, J, American Medical News, 14 March 1977.
- ⁹ Frederick, L, Medical World News, 28 November 1977.

How to do it

Organise an international medical meeting

III: Registration and its problems

IAN CAPPERAULD, A I S MACPHERSON

British Medical Journal, 1978, 2, 681-683

Registration is central to the organisation of any conference and, along with the budget, forms the framework around which the conference is constructed and the timetable devised. It is an exercise in production management, a straight line along which a vast array of details, events, and people have to be programmed. The design of a system of registration is an excellent opportunity for any organising committee to think their project through to the end and, as such, is worth not a little calm and careful thought.

First stages

Ideally preparation for a large international conference should start two years before the event, and throughout this paper the timing of the various stages of preparation will be given in the number of months away from the opening date.

ORGANISING SECRETARY

A large conference requires an organising secretary who needs a permanent office and staff. On a two-year time scale, the organising secretary should ideally be engaged at 24 months, and certainly by the 18-month mark at the very latest. He is in charge of the conference secretariat, in sole charge of registration, and responsible to the local organising committee chairman and to him alone. The organising secretary services all local

organising committee meetings and liaises closely with the chairmen of all subcommittees. He must be kept informed on all aspects of the conference. Policy is decided by the local organising committee and executed by the organising secretary and committee members. Minutes must be kept, listing the duties assigned to the committee members concerned. The organising secretary does not have a vote at committee meetings.

Communication of the conference's requirements to the "outside world" is the most important single function of the organising secretary and, in this respect, we cannot emphasise sufficiently the value of paying a personal visit to everyone whose services will be needed to make the meeting a success. This is especially so with lay people on the committee. In the early days, time will be available for this purpose and it will ease the path towards the final stages when more and more has to be done by telephone. The secretariat will need its own headed paper and telephone number.

The secretarial duties described here assume that the organisation of accommodation-whether in hotels or in university halls of residence—and the allocation of tour tickets are the responsibility of a travel agent, in which case the secretariat need hold only a record of delegates' requirements.

THE OFFICE

The conference office should be as near as possible to the site of the conference. In the closing few weeks there is an infinite variety of reasons why it is convenient to be near the scene of the final preparations. The office must be large enough to house at least small meetings—say, six people attending—and to store various consignments of conference literature.

THE STAFF

A personal secretary who has knowledge of a foreign language is a boon, especially when multilingual delegates are expected. All outgoing correspondence, however, may safely be conducted

Ethicon Limited, Sighthill, Edinburgh IAN CAPPERAULD, FRCSED, research director

The Royal Infirmary, Edinburgh A I S MACPHERSON, FRCSED, FRSE, consultant surgeon