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“There is a primary difference of opinion, some holding that the sole knowledge necessary is derived from experience, others propounding that practice is not sufficient except after acquiring a reasoned knowledge of human bodies and of nature... I am of the opinion that the art of medicine ought to be rational.”


It would be difficult to improve upon this succinct statement of the relative importance of theoretical instruction and experience in the practice of medicine. It should, furthermore, be remembered that Celsus wrote at a time when there was relatively little of value for the teacher to impart, and the passage of the years has only emphasized the truth of his words.

Anaesthesia is not the only specialty which departs from the standpoint of Celsus, relying to a disproportionate extent on unsupported experience for teaching. Although it is an approach with certain virtues, a previous Editorial has argued the case for the combination of experience with theoretical instruction (March 1964).

It is commonplace to remark on the acceleration of progress in medical research, but the fact remains that advances in knowledge of anaesthesia within the last decade have outstripped the absorptive capacity of most of us. Most research workers have experienced the chagrin of discovering that many of their colleagues are unaware of the existence of their published work, which they often believe to contain matter of overt clinical significance. The failure of communication can seldom be ascribed to the research workers, many of whom are guilty of repetitive publication, with the same work appearing thinly disguised in a number of journals. Neither can responsibility reasonably be laid at the door of the reader. Which of us can cover the literature relevant to anaesthesia, even with the aid of abstracting services and a journal club? The solution to the problem is disarmingly simple. It is the teacher.

Teachers of anaesthesia have existed since 1846 but few can meet the full requirements of the student. The practical exponent of the “art of anaesthesia”, and the popular lecturer on “my method” have both a part to play but neither can tell the whole story. They require powerful reinforcement from those who are prepared to undertake the arduous and unglamorous task of remaining conversant with the basic sciences and other subjects relevant to the field of anaesthesia. They must be prepared to deliver a series of ever-changing lectures and tutorials, acting as interpreter between the research worker and the anaesthetist. Often they are greatly helped by review articles, symposia and monographs but they must accept the considerable responsibility of separating the true from the false and deciding what is of sufficient importance to impart.

The difficulties of teaching anaesthesia are not solved simply by assembling a cadre of dedicated teachers. The pupils are engaged in arduous and difficult work, in which the requirements of teaching take second place to discharging the clinical task. Furthermore, we must remember that the majority of young anaesthetists are employed away from teaching centres in small hospitals which lack the equipment and staffing structure which is required for systematic postgraduate teaching.

The first solution to this impasse was the development of full-time courses lasting a period of months. First-class contributions have been made by the World Health Organization at Copenhagen, the Royal College of Surgeons, and the Postgraduate Medical School at Hammersmith. However, these courses require that the student not only forgoes his salary but also in some cases must
meet the fee of the course. Such is the scale of the remuneration of the young specialist that few British graduates are able to avail themselves of the opportunities unless they are actively supported by their employers. Such support is seldom forthcoming, with the notable exception of the Armed Forces who have a keen appreciation of the importance of trained staff. Overseas students are in a happier position. Canadian and Australasian graduates appear able to accumulate sufficient fat for their support while other Commonwealth countries have been generous in financing the postgraduate education of their young specialists. A different approach has been that of the University of Liverpool which has for many years been running a part-time continuous course with systematic instruction in the morning and practical experience in the afternoon. Clearly important factors for success are the willingness of the authorities to grant a full salary for part-time clinical work, and the extent to which Regional Hospital Boards are being encouraged to permit a generous allowance of time off for trainees to attend courses. This principle seems to be gaining acceptance.

None of this is helpful to the registrar working in a peripheral hospital of this country, who depends upon his salary for the support of his family. Apart from what may be available in his own hospital, he may be able to attend meetings within the vicinity of his hospital. The Londoner here enjoys a tremendous advantage and the provincial must lean more heavily on short courses, of which the most important is that run by the Faculty of Anaesthetists of the Royal College of Surgeons. It is difficult to underestimate the importance of this course, which is for many the only formal postgraduate education they receive.

The most effective solution must undoubtedly lie within the regions and the appointment of Deans of postgraduate Education is an expression of this fact. Liverpool has long been the pioneer in regional systematic postgraduate education for anaesthetists in clinical appointments, and similar developments are under way in several other centres. It is not clear how much systematic instruction should be offered to the trainee anaesthetist but 100 lectures a year is probably the minimum worthwhile contribution to anaesthesia, a subject which overlaps so many branches of medicine. Let no one underestimate the task of preparing lectures on this scale. It can surely be accomplished by devoted clinicians but it may be asked whether this is not a job for the University Department of Anaesthesia acting in rapport with the Dean of Postgraduate Studies.

It is very doubtful whether postgraduate education should be relegated to evenings and weekends. After a day in the theatre, receptivity is low and staff are more difficult to attract; and anaesthetists are not alone in feeling the need of weekends for relaxation and for essential property maintenance that our incomes policy require the young doctor to carry out himself. The solution seems to be day or half-day release. There is no need to recoil from this revolutionary concept; nurses and technicians have been released for instruction for many years. It is perhaps more appropriate to wonder why trainee specialists have been denied this well-tried facility.

Finally we must consider the trainee in remote hospitals who cannot attend lectures at the University in his region. First, his plight must be recognized and steps taken to limit the duration of his stay in the periphery. Second, he should be generously considered for periodic study leave. Third, might it not be appropriate to consider the development of teaching machines for use in these circumstances? Many aspects of anaesthesia could be taught by this means, although the labour involved would be so great that economy would demand the widest possible distribution of the tapes.

Above all there should now be a general acceptance of the fact that unsupported clinical apprenticeship is not enough. Let us rather accept the challenge of providing systematic instruction under the difficult circumstances of anaesthesia and explore the means by which it may be achieved.