There is, indeed, no wonder that the number of women of all classes seeking institutional accommodation for their confinements is steadily increasing. For this there are good reasons, and among them the freer availability of analgesia is not the least. The availability of analgesia and/or anaesthesia for parturient women is truly a worthy objective.

The attractions and advantages of maternity hospitals notwithstanding, the conduct of, and the equipment for, domiciliary midwifery will remain the centre of the whole problem, and will, in the main, control the mortality and morbidity rates.

Administration

As regards administration some would urge that, as the Rochdale example would seem to indicate, with sustained good will and co-operation on the part of all the personnel and institutions concerned, strikingly good results may accrue even without further legislation than exists at present. This may be true on the small scale, even after making due allowance for the change to be brought about by the Midwives Bill when it becomes an Act, but the majority view is that, for a national service, both central and local advisory bodies with suitably representative membership and with responsible status would be necessary if that indispensable element to success is to be fully enlisted—namely, the confidence of the doctors, of the midwives, and of the public.

MATERNITY SERVICES: THE PART PLAYED BY EDUCATION OF MEDICAL STUDENTS*

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In dealing with the teaching in the medical schools and the ways in which it may be improved I have felt it necessary to present not merely my own views but also, so far as possible, those of other teachers. For the purposes of this discussion, therefore, I sent a questionnaire to chiefs of maternity departments in twenty-two medical schools in Great Britain and Northern Ireland. In all twenty questions were asked, but space will only allow me to indicate in a general way some of the more important results.

Let us start with the assumption that whatever is to be the future of maternity work in this country the services of the general practitioner are at present indispensable. An increasing number of the leaders of thought in these matters see the ideal scheme as one staffed by highly trained specialists, but for the time being the personnel to work such a service does not exist, and to attempt to start it on a large scale with people inadequately trained would be to court disaster. Further, there is no doubt that many patients, especially of the better class, will continue to demand the moral support of their family doctors in one of the greatest crises of their lives. The service can thus at best be only an alternative one. I shall therefore try to indicate the ways in which undergraduate teaching and experience may be improved.

Clinical Experience

An increase in the number of beds is, I contend, urgently necessary. In the twenty-two schools to which my questionnaire was sent there is an annual entry of 1,800 students, but only 1,400 obstetric beds are available for teaching them—that is, less than one bed per student. Half the schools have fewer than fifty beds. In two the number of beds is twelve, and in one it is thirteen, yet these three schools between them admit 142 students annually, or four students to each midwifery bed. It is generally agreed that a hospital of less than fifty beds will not provide sufficient variety of material to enable any number of students, however small, to be trained properly.¹ If our voluntary hospitals are unable or unwilling to provide an adequate number of beds for the training of students one of the chief reasons for their continued existence will have disappeared.

Recommendations of the General Medical Council

Compliance with the recommendations of the General Medical Council should be enforced. I believe I am right in saying that not a single school in this country complies with these recommendations in so far as the teaching of midwifery is concerned. Let us look at one or two of them. One of the most important is that the maternity student should live for at least two months in the hospital or in quarters adjacent thereto. This condition is fulfilled in only nine of the twenty-two schools to which the questionnaire was sent. Again, it is recommended that six months should be devoted to clinical obstetrics and gynaecology including child welfare, but in only half the schools is the time *nominally* six months. The student should devote the whole of that six months to these subjects with the exception of the time necessarily taken up with attending systematic lectures, yet this condition is complied with in only ten of the twenty-two schools.

Again, the student's time should be so divided that approximately two-thirds is devoted to midwifery and one-third to gynaecology. Only four fulfil this requirement; in the others far too much time, sometimes much the greater part, is spent on gynaecology, and in several medical and surgical paediatrics are studied at the same time. The recommendations also provide that the student should attend and personally deliver at least twenty lying-in women. The average number in the twenty-two schools is about seventeen, and in some the number is as low as five or six. Is it surprising that only four of the twenty-two chiefs of departments who replied to the questionnaire described themselves as satisfied with the teaching as it is done at present, or that one despondently expressed himself thus: "Gifted with an uneasy conscience in endeavouring to discharge my duties as a teacher adequately for the past sixteen years, I only succeed in undermining my health and producing a second-rate race of obstetricians"?

You may agree with me in wishing that the General Medical Council would begin to exercise the great powers it possesses under the Medical Act of 1858 and "put the general interest of medical education before the particular and limited interest of the bodies or institutions" its individual members represent. If the Council does not regard the statutory powers it possesses as sufficient, it should seek them, for peaceful persuasion has obviously failed.

Teaching in Relation to the Needs of the General Practitioner

Opinion is divided regarding the value of systematic lectures, and the practice of schools varies widely in this respect. Some teachers give fifteen lectures yearly, and

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think the number excessive ; others give eighty and think it not too much. Personally, I am a believer in teaching the principles of midwifery thoroughly in systematic lectures, and I gain support for my views from no less an authority than T. H. Huxley.³ Probably there is much truth in the opinion expressed by one of my correspondents: "Lectures, in my opinion, are so much a question of the personality of the lecturer that ten may be too many or 100 not enough." I think, too, that attendance at lectures should be optional. If students do not find it worth while to attend it is worse than useless to compel them to do so. Some years ago at University College Hospital we introduced "junior clinical midwifery," which runs concurrently with the systematic lectures. The class, confined to those students who have not yet done any clinical midwifery, meets once weekly for nine or ten weeks in the hospital wards, and cases illustrating the subjects being dealt with in the lectures are demonstrated. For example, in the week in which the signs and symptoms of pregnancy are being discussed the junior student has them demonstrated to him in the ante-natal wards, and the same procedure is adopted with abdominal palpation, normal labour, the puerperium, etc. By thus bringing the student early into contact with patients his interest is aroused and maintained in a way that is impossible by lectures alone.

Clinical Instruction

Clinical instruction should not aim at making the student an obstetric expert. It is, I believe, impossible so to train the undergraduate as to make him fitted by skill and judgement to deal with all obstetric emergencies, and in this opinion my correspondents were unanimous. We can, however, do much to make him safer than he is to-day. In the first place, we can instruct him well in constructive ante-natal care and in the timely recognition of abnormalities. Secondly, we can give him a thorough drilling in the conduct of normal labour, in obstetric analgesia and anaesthesia, and in the principles of antisepsis and asepsis as applied to the parturient and lying-in woman. Thirdly, we can teach him to recognize his limitations ; to realize that his province is the care and supervision of normal pregnancy, labour, and puerperium ; to give his patient confidence ; to administer analgesics and anaesthetics ; to repair a torn perineum ; to treat the simpler emergencies such as post-partum haemorrhage ; and, when necessary, to apply low forceps. We should not attempt to train him in the details, but only in the principles of the treatment of the graver emergencies, *nor should examiners require such knowledge*. Principles are permanent, but details of treatment vary from time to time and can always be acquired by the practitioner from his own reading at a time when, if ever, he is in a position to use his acquisition in practice.

So far as domiciliary midwifery is concerned we are living in times that differ radically from those of thirty years ago, due to the ubiquitous telephone and motor car, which make it possible to obtain skilled assistance, and even teams of assistants,⁴ within a reasonably short time. Above all, it must be impressed upon the student again and again that premature intervention is the mother of disaster. In the application of forceps he might well learn from the plumber, who, when he has to do a job of work, first comes to inspect it and then leisurely departs to fetch his tools. He should not carry forceps ready sterilized in his bag, for if they are ready the temptation to use them may be too great to resist. I believe it is a big mistake to divorce the general practitioner from normal midwifery, for it is only by frequent attendance on, and responsibility for, normal labour that he can learn what nature can accomplish.

The Instructor: an Obstetrician

I am convinced that such instruction and supervision as this is not the work of a teacher whose chief interest and practice lies in gynaecology. It should only be undertaken by an obstetrician whose main interest is obstetrics, and who gives to it his whole time, resides in the hospital, and has an adequate staff. Even then it will tax his energies and resources to the utmost. He should, however, be allowed to carry on private practice in obstetrics and gynaecology *within the hospital*. There are several reasons for this that I cannot enter into here.

There is one further point that is of the greatest importance in this undergraduate teaching—perhaps more important than any other—namely, that the delivery of abnormal or dangerous cases in the teaching hospital should not be left to a house-surgeon or other junior member of the staff without supervision. If the student witnesses this pernicious procedure it is not a matter for wonder that he considers himself equally competent to undertake difficult cases as soon as he is qualified. In this respect actions speak louder than words, and such examples will be remembered and copied long after our precepts are forgotten. Slightly to change the famous phrase of Emerson: "What you *do* speaks so loud that I cannot hear what you *say*."

With such teaching as I have outlined above it is questionable whether post-graduate experience as a house-surgeon in a maternity hospital is necessary. It might even be dangerous if such experience, insufficient to give real skill in difficult work, should lead the practitioner to regard himself as an expert, and to undertake emergencies that are beyond him. If, however, it taught him the better to recognize abnormalities and his own limitations such experience could do nothing but good. Equally good, or even better, for it entails more actual attendance throughout and therefore the acquirement of greater skill in the conduct of labour in private practice, would be a period of a year or two of service as qualified assistant with a good general practitioner who might well be selected by our College for this purpose. Finally, there will be many who will contend that such training will prove quite inadequate, that it will do little or nothing to reduce maternal mortality, and that this can only be accomplished by a maternity service staffed by experts. I have already given reasons for believing that such a service is impracticable at the present time. I would suggest, however, that one such unit might be established at once in one of the so-called black areas. It would thus have an opportunity to justify itself. If it did so, and all else failed, the scheme could be gradually extended. Such a unit might be utilized for post-graduate teaching.

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- ² *British Medical Journal*, 1936, i, 1004.
- ³ Huxley, T. H.: *Discourses Biological and Geological*, 1908, p. 217.
- ⁴ Murray, E. Farquhar: *British Medical Journal*, 1936, i, 375.

L. Ugelli (*Il Policlinico*, Sez. Prat., June 15th, 1936, p. 1106) states that in 1934 he collected from the literature up to 1933 106 cases of accessory pancreas which had come to operation, as well as five under his own observation. Since then he has collected ten more cases from the literature, and also a personal case in a man, aged 42, admitted to hospital as a case of duodenal stenosis. Laparotomy revealed considerable dilatation of the stomach, a cicatricial zone on the anterior aspect of the duodenum, and a nodule the size of a walnut situated in the pyloric region and first part of the duodenum. Duodeno-pyloro-gastric resection was performed, and recovery took place. Examination of the nodule showed that it was an accessory pancreas which had caused the formation of a duodenal diverticulum.