THE TEACHING OF OBSTETRICS AND GYNECOLOGY

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Allow me to express to you my gratitude for the honor you have done me in inviting me to read a paper before you. The ability and the outstanding merit of my audience have made the choice of subject particularly difficult, and so it has been with some trepidation and much thought that I have selected as my theme, "The Teaching of Obstetrics and Gynæcology," with particular reference to the system followed in the Faculty of Medicine of the University of Toronto. Nor have I chosen this theme because I felt that we have solved the problem, but because the whole subject of medical teaching has been arousing considerable attention throughout the English-speaking world, and we have in our department of obstetrics and gynæcology tried out a system which has attained a fair measure of success.

As I have said, the teaching of medicine has of recent years been the subject of much consideration, and the present system of instruction, which divides the medical course into two parts, confining the fundamental sciences to the primary years and the clinical subjects, with pathology, hygiene and so on, to the final years, has met with a great deal of unfavorable criticism. The report of the Edinburgh Pathological Club, in 1918, disapproved what it described as a water-tight compartment system of teaching, and advocated not only the coördination of the teaching of practical and theoretical work in a given subject, but also the coördination of the teaching of that subject with the teaching of other subjects.

In the report of the Carnegie Foundation for 1921 on Medical Progress, H. S. Pritchet, the president, states that the student learns anatomy by a tedious process of dissection upon which he spends a large amount of time, but that he has a very good opportunity to forget most of it before seeing in practice the application of his anatomical studies; and further remarks that the fundamental sciences can be taught, "Not as something apart from the medical practice, but as a part of it."

At the Congress on Medical Education in Chicago, in 1922, Dr. Frank Billings maintained that it was a mistake to have separated

the fundamentals of medicine from the clinical branches, so that there is no real coördination between them. Moreover, at a recent meeting of the Educational Section of the American Medical Association, Dr. E. S. Ryerson proposed a tentative curriculum of coördinated study which he had worked out in detail, on a vertical basis, as opposed to the horizontal basis of the present curriculum.

Australia, too, has expressed dissatisfaction with existing conditions of medical education and has advocated some proposals for the reform of the system.

The keynote of all this criticism and advocated reform of the present-day methods is a desire for coördination of the fundamental and the clinical subjects and for coöperation between departments, with a view to diminish the load of the student by preventing duplication of work and to increase his interest by combining theoretical principles with their practical application. And while the substitution of the Ryerson scheme for the present-day curriculum would be highly revolutionary and would require time to accomplish, still the tendency toward coördination is already evidenced by the number of schools in which the allied subjects of obstetrics and gynæcology have been combined. Dealing, as these subjects do, with the female reproductive organs under all conditions of physiological and pathological change, it is natural to assume that they can be taught more satisfactorily together than apart, to the greater advantage of the student and with a lessened expenditure of time.

Let us examine a practical illustration at the University of Toronto: Existing conditions there made it possible, eleven years ago, to combine these two departments under one head, and since that time an organization has been evolved through which the training has been carried on much more efficiently than in former years. The responsibility of the dual department rests with the head, and with him are associated two senior and several junior assistants and demonstrators. The service is a rotating one, by which a one-sided development of the staff is avoided. The junior assistants alternate every three months in obstetrics and gynæcology, while continuity of the service is maintained by having one member of the staff permanently responsible to the head for the proper administration of each of the following subdivisions: out- and in-patient services in obstetrics, out- and in-patient services in gynæcology and the pathological laboratory, which is maintained distinct from the department of general pathology. The staff, as a whole, is on a part-time basis, but two demonstrators and one resident are on a full-time basis and are engaged in research work as well as in assisting with the teaching. The resident fellow obtains his appointment as such after having served satisfactorily for one year as interne on a rotating service in a general hos-

pital, one year as senior interne in obstetrics and gynæcology and one year in general pathology and bacteriology. He may later be taken on the staff as a full-time demonstrator and in due course be appointed to the visiting staff of the hospital and of the medical faculty.

This, in brief, is the organization of the department of obstetrics and gynæcology of the University of Toronto and of its teaching hospital. Complete harmony exists among the members of the staff itself and uniformity of teaching methods is arrived at by regular staff meetings. The establishment of our own special museum and pathological department has been considered inadvisable by some, but it has proved to be a very satisfactory means of rounding out the departmental unit. Monthly conferences are held with the department of pathology for the purpose of maintaining a uniform system of teaching this subject, stabilizing the nomenclature and developing a distinctive school of thought.

A metabolic unit has also been established in the obstetric wards, and investigations of the toxemias of pregnancy are being carried on in coöperation with the department of pathological chemistry. It will be seen, therefore, that the clinicians and the laboratory workers are being brought into intimate touch with each other, with the result that each group of teachers has obtained an increased breadth of view and a more sympathetic understanding of the others. There is a closer community of interest, more hearty coöperation between the departments and greater possibilities for efficient work.

Besides the staff the other factor involved in the teaching of students is the patient, and it is important that she should be treated with tact and humane consideration and that the student should be taught the necessity for gentleness as well as for painstaking care in her examination. We must protect her as far as possible during clinics and allay her fears in order to gain her coöperation. For this reason no clinics are held in the gynæcological wards. In both our in- and out-patient services all clinic patients are placed on an examining carriage, completely draped and brought into the clinic room, part of which is curtained off for their reception. At no time do they see the students, and when required they are wheeled forward, head and chest remaining behind the curtain. The method of pelvic examination is taught with the patient lying on her back, legs flexed on thighs, soles of the feet together and the knees falling apart. Only gynæcological patients are used for the purpose of instruction in the examination of the pelvis, and on these the student learns the use of the pelvimeter, the out-patients in gynæcology being measured internally and externally as a routine by the student for the purpose of instruction and practice.

Waiting patients in the obstetrical wards are made use of for teaching abdominal palpation and external pelvimetry, but not for instruc-

tion in bimanual examination, the student being warned concerning the danger of introducing infection. We have found that so long as the student is impressed with the idea that while making his examination he is dealing with a human being who comes seeking relief and not with a model of clay there is no difficulty in getting the coöperation of the patient.

In Toronto, as elsewhere, the student commences the study of obstetrics and gynæcology late in his course, and as he must approach this subject from an anatomical and physiological point of view, it is to be regretted that the present arrangement of study does not permit him to carry out his dissection of the female pelvis and his course in the physiology of reproduction concurrently with his introduction to the study of obstetrics and gynæcology. As it is, he has taken his course in anatomy years before and has for the most part forgotten it at a time when it would be of definite value to him, with the result that we have to spend hours in repeating instruction already given by the anatomist and physiologist.

Our course in obstetrics and gynæcology is confined to the final two years. In the first of these the whole of the subject is covered by a series of lectures and demonstrations. Ninety lectures in all are given on the principles and practice of obstetrics and gynæcology, while twenty demonstrations are given in history-taking, mechanism of labor, pelvic measurements, use of instruments, pathology and so forth, one-sixth of the class at a time attending each demonstration. When the classes are small the demonstrations are of much greater value than when they are large. Our difficulty at the present time is in dealing with large classes. At the close of the war many returned men entered medicine and the following year a larger number entered the first year in order to come under the five-year régime and thus avoid the necessity of taking the six-year course, then about to be introduced. The result is that in each of our final years we have over two hundred students, much too large a number for satisfactory work. With the establishment of the six-year course the number permitted to enter medicine was limited to one hundred and twenty each year, so that our present difficulty is only temporary. However, just now the full value of the demonstrations is lost, owing to the size of the class—the student is not brought close enough to his subject. He cannot handle the models, the instruments and so on and use any other of his senses than those of sight and hearing, with the result that the demonstration is lowered to the level of a didactic lecture, which is the least valuable means of imparting knowledge, no matter how many aids, such as lantern slides, charts, films, etc., are employed to add to its interest and fix the attention of the student.

The bedside clinic is the ideal method of teaching, but it, too, has

its limitations, as its effectiveness depends on the number of students and the amount of clinical material available. The larger the class the less opportunity there is for personal contact with the patient, and the clinic itself ceases to be a clinic and becomes a conference or a lecture.

While our junior year is largely didactic, we have endeavored to make our final year almost entirely clinical. The class is divided into six groups, each of which devotes five weeks wholly to obstetrics and gynæcology. During that time the students have their headquarters in the obstetrical building and absorb the atmosphere of the department. They attend all cases of labor occurring in the public wards of the hospital during their term, and each student lives in the hospital until he conducts at least 1 case of labor under supervision. While the requirements of the course call for attendance at 20 cases, the average number seen is about 35.

Each of the six groups above mentioned is subdivided into five small groups of seven students, and the timetable is arranged so that each student obtains instruction in every branch of obstetrical and gynæcological practice. Special attention is paid to his training in antenatal care, abdominal palpation and pelvic examination, and the course is made as practical as possible for him. The laboratory side of his training is not neglected, however, and gross and microscopical specimens of conditions under discussion are demonstrated at the clinics. Clinical and pathological conferences are held once a week and cases assigned to each student to follow up and report in full at the end of his term. Plenty of time is given for him to study the pathological specimens in the museum, and he is encouraged to read, independently of his clinics, notes of all of which he is required to turn in when his course is finished.

In addition to the instruction of each group a clinical lecture is given to the whole year once a week, by means of which the student is kept in touch with the subject during the periods when he is not intensively studying it.

While the system of intensive study may be open to criticism, we feel that it has worked out satisfactorily in the few years in which it has been in practice in Toronto, and we are turning out students who have a proper conception of the necessity for prenatal care and who know how to make a pelvic examination—two things which go far toward making a good start in general practice.

DISCUSSION

Dr. John Osborn Polak, Brooklyn, New York.—In order to obviate one of the difficulties that Dr. Hendry has spoken of in regard to correlation, we have in the last two or three years made an arrangement with the Department of Physiology by which we are allowed to start in with obstetrics in the last semester of the second year, when our students are getting both embryology and their fundamentals in the physiology of obstetrics. We believe that in this way we have men coming to the junior year who are better equipped to understand obstetrics, and this freshens their mind, so to speak, in correlation between embryology and obstetrics. That has been a decided advantage.

Another innovation we have made in the last few years has been a division of the class into three trimesters, each extending over a period of ten weeks when they have cases of obstetrics to deal with. The very introduction of this has been to make gynecology elective, only allowing men who have the highest percentages in obstetrics to elect gynecology, and the proportion of students that have tried the elective course has been encouraging. We find the psychology of making gynecology elective has been one of the best things we have ever introduced. In this way we have been able to reduce the number of men who are taking gynecology, and as a result of that we feel we have been getting better obstetrics and better gynecology.

I look on obstetrics, the teaching of it and its correlation, as the most important proposition we have to deal with. Unfortunately in the past it has been relegated to a secondary position. We have insisted that we shall have equal rights with the surgeon and medical man under the trimester arrangement