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22

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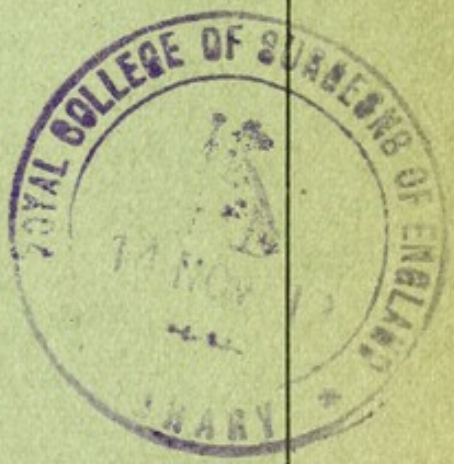

MEDICAL EDUCATION AND THE MIDWIFE PROBLEM IN THE UNITED STATES *

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When requested by the Chairman of the Committee on Midwifery of the Association for the Study and Prevention of Infant Mortality to prepare a paper on the midwife problem, I felt that important information on the subject might be elicited by interrogating the teachers of obstetrics throughout the country. Accordingly, I prepared a questionnaire, containing some fifty questions, which is appended, and which was sent to the professors in the 120 medical schools giving a full four-year course. Forty-three professors, representing schools in every section of the country, were good enough to reply.

As some of the queries were decidedly personal in character, I promised not to mention the names of those replying, nor the schools with which they are connected; but at the same time I stated that I should feel free to use whatever information might be supplied. It is with great pleasure that I take this opportunity to thank those who replied for their courtesy and frankness, and at the same time to express the hope that their cooperation has not been in vain; as I feel that it will bear fruit by arousing general interest, not only in the midwife problem, but also in the much broader question of medical education, by showing that we have as yet failed to train practitioners competent to meet the emergencies of obstetrical practice.

While the responses were not so general as might be desired, they are nevertheless sufficiently numerous to give a fair idea of the conditions existing throughout the country. Thirty-one replies came from the sixty-one

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schools which are designated as "acceptable" by the Council on Medical Education of the American Medical Association, as compared with eleven from the fifty-nine non-acceptable schools, not including one from Canada. The forty-three schools replying may be classified as follows:

Eleven of the twenty-three schools demanding two or more years of college work for admission.

Four of the twelve schools demanding one year of college work.

Sixteen of the other twenty-six acceptable schools requiring four years of high-school work.

Eleven of the fifty-nine non-acceptable schools.

One of the acceptable Canadian schools.

The one favorable general impression, which I obtained from the entire series of replies, is that the forty-three professors of obstetrics making them constitute a body of unusually frank and truthful men; as otherwise they would scarcely admit the existence of such a condition of affairs as their replies seem to indicate. For many years I have regarded the general attitude toward obstetrical teaching as a very dark spot in our system of medical education, and the majority of the replies to my questionnaire indicate that my pessimism was more than justified. Briefly stated, they indicate (a) that many professors are inadequately prepared for their duties and have but little conception of the obligations of a professorship; (b) that a considerable proportion are not competent to cope with all obstetrical emergencies; (c) that nearly all complain that their teaching and hospital equipment is inadequate for the proper training of students; and (d) most serious of all, that a large proportion admit that the average practitioner, through his lack of preparation for the practice of obstetrics, may do his patients as much harm as the much-maligned midwife.

If such conclusions are correct, I feel that those of us who are interested in safeguarding the lives of mothers and their newly born children can accomplish our purpose more speedily and efficiently by giving publicity to the facts and by insisting on the institution of radical reforms in the teaching of obstetrics in our medical schools and on the improvement of medical practice, than by attempting to train efficient and trustworthy

midwives. The former can be accomplished in time, while my knowledge of affairs in Europe makes me skeptical as to the possibility of the latter.

THE PRESENT STATUS OF OBSTETRICS

In the first part of this report I shall attempt to set forth the condition of affairs as revealed by my questionnaire; while in the second part I shall venture to indicate some of the reforms necessary to place obstetrical teaching on a proper basis, and incidentally touch on certain features of the midwife problem, in an attempt to indicate how the public may obtain better obstetrical treatment. With this in mind, I shall take up separately each question of the questionnaire, and after giving the gist of the replies as objectively as possible, I shall make whatever critical remarks I may consider indicated. It is scarcely necessary for me to state that I have endeavored to reproduce faithfully the statements of my collaborators, for which I am in no way responsible; while my own views, and possibly my prejudices, will appear in the latter part of the report.

QUESTIONS I TO IV

These need not be considered, as they were asked only for purposes of orientation.

QUESTIONS V AND VI

Are you engaged in general practice, or do you limit your work to gynecology and obstetrics, or to obstetrics alone?

Seventeen professors replied that they were in general practice in addition to their college duties; twenty-one that they limited their work to obstetrics and gynecology, and five others solely to obstetrics. Accordingly, considerably more than one-third of the professors, including four in the so-called high-standard schools, are not specialists in any sense, and owing to the obligations of a large general practice have not sufficient leisure to become thoroughly versed in all of the problems of obstetrics and must necessarily take their professorial duties lightly. Moreover, five professors, including three in high-standard schools, limit their work exclusively to obstetrics; and as several of them admit that they are not competent to perform major operations, it is apparent that they cannot be ideal teachers.

From my own point of view, it is only from those who combine obstetrics with gynecology that thoroughly well-equipped teachers can be recruited; as I consider it essential that the obstetrician be a competent surgical operator and the most feasible method for him to obtain the necessary technical experience is by means of gynecologic work. On the other hand, it by no means follows that all who limit their work in this manner will be ideal teachers, as it is probable that a certain proportion are poorly equipped or regard their professorial duties as distinctly secondary in importance to the demands of private practice.

QUESTION VII

Did you serve as a hospital assistant or intern immediately following graduation?

To this question, fifteen professors, including three in high-standard schools, answered in the negative, seventeen replied that they had served for less than one year, and eleven for a longer period.

At first glance this appears far from satisfactory, but when it is remembered that many of the professors graduated twenty or more years ago, it is not quite so poor; as at that time the facilities for serving as an intern in a general hospital were much more limited than at present. Consequently, it merely indicates that many of our professors did not receive rigorous hospital training in their youth, but gained their practical experience almost exclusively from private practice.

QUESTION VIII

Why did you take up obstetrics?

The forty-one answers to this question may be divided into four categories. Eight professors deliberately chose obstetrics as their life work and endeavored to obtain as ideal a training for its pursuit as possible. Thirteen stated that they were always interested in the subject, and nine that they were very much interested before taking it up seriously. On the other hand, eleven stated that chance alone led them to teach this branch of medicine. Several accepted the professorship merely because it was offered to them, but had no special training or liking for it, while others succeeded to it after having taught various other branches with more or less success.

Similar conditions, I presume, obtain in most of our schools in all branches of medicine, as the incumbency of a professorial chair is not usually regarded as a serious matter, and is desirable only as a means of introduction to lucrative private practice. Of course, it is possible that a considerable number of those accepting professorships in this spirit may do competent work, but at the same time it is depressing to learn that only eight of the entire number of professors deliberately set out to prepare themselves thoroughly for their life work.

QUESTION IX

What was your preparation for teaching?

Prior to assuming their professorial duties, twenty-one, or slightly less than one-half of the entire number of professors, served for varying periods in lying-in hospitals. In eleven instances the service varied from one to five months, in five it extended over six months, while in five others it covered one or more years.

Such a confession appears highly depressing, but on further consideration it must be admitted that it is about what might be expected in this country; as twenty-five of the professors graduated twenty or more years ago, when very few lying-in hospitals were in existence, and those poorly equipped and offering but slight opportunity for clinical observation. Such conditions, however, are in marked contrast with those obtaining in Germany and France, where the first requirement for a professorial career is a long period of preparation in a well-equipped lying-in hospital with abundant clinical material. At the same time, it must be noted that the preparation of a considerable number of our professors was augmented by service for varying periods in more or less well-organized out-patient departments.

Even more serious than the lack of rigorous hospital training, is the appallingly slight experience which many had before being appointed to professorships. The replies indicate that only nine of the entire number had seen 1,000 or more cases of labor, and twenty-two others considerably less, while eleven obtained their practical experience solely from an indefinite number of cases in private practice. Moreover, it is interesting to note that one professor admits that he had never seen a woman delivered before assuming his professorship, while five

state that they had seen less than 100 cases, and thirteen others less than 500 cases.

Think of becoming a professor of obstetrics with an experience of less than 100 cases!

Excluding those whose practical knowledge was gained entirely from private practice, it seems permissible to conclude that two-thirds of the remainder on their appointment had less experience than assistants at the present time gain during a two-year service in a respectable lying-in hospital; which, from my knowledge of their attainments, is a very defective preparation for a responsible teaching position.

After considering the answers to this question, I think that it is difficult to avoid the conclusion that the majority of our professors entered on their duties with a comparatively poor equipment from a practical point of view, while their attainments in the underlying sciences were usually extremely faulty.

QUESTION X

Have you studied abroad?

The replies show that twenty-four of the forty-three professors have visited Europe, of whom fourteen, or one-third of the entire number, worked for three months or more in some well-organized clinic. This is a fairly satisfactory showing, and indicates that many of our professors were not satisfied with their home training, which they attempted to supplement by further work in well-equipped European clinics.

QUESTION XI

Is a lying-in hospital connected with your school?

The answers to this question are in general very depressing, and show that six schools have no connection with a lying-in hospital. Of the other thirty-seven, nine have hospital accommodations for less than 100 patients per year, fifteen for more than 100 but less than 250, four for 250 but less than 500; and nine for 500 or more patients per year, including two schools with accommodations for over 1,000 patients. These figures indicate that most schools are very poorly equipped in this regard, as only nine have anything like adequate clinical material for the instruction of their students.

Moreover, with a few exceptions, even the best of our lying-in hospitals are vastly inferior, as far as the number of patients and equipment for teaching are concerned, to the clinics in the smaller German universities.

Twenty of the thirty-seven lying-in hospitals are owned and controlled by the school with which they are connected. Apparently, a most excellent showing; but closer examination shows that the conditions are not so ideal, as seven of the college-controlled hospitals have less than 100 deliveries per year, and only five out of the entire number more than 250.

In order to give an idea of the deplorable dearth of clinical material, I have tabulated the figures from ten of the smaller lying-in hospitals with from twenty-five to 125 deliveries per year, including two connected with high-standard schools. Together they have only 553 cases for the instruction of 575 students; and when it is remembered that, owing to the long summer holiday and other causes, practically one-half of the cases are lost for purposes of instruction, it is apparent that each student on an average has an opportunity to see only one woman delivered, which is manifestly inadequate. Moreover, the conditions are only slightly better, when the combined facilities of all of the twenty hospitals owned by the medical colleges are considered, as together they present a total of 5,655 deliveries per year for 1,400 students requiring clinical instruction, which means an average of only four cases per student.

Naturally, such calculations do not accurately represent the actual facts, as they are based on the supposition that only two students see and examine each woman in labor. Moreover, in certain schools the number of cases available is considerably less than the average, while in others it is greater. The actual figures show that in twenty-five schools each student sees three cases or less, in nine schools four to five cases, and in eight others five or more cases; while in some of the smaller hospitals this is possible only by having four to six students examine each patient, thereby subjecting her to unjustifiable risk of infection. Accordingly it would appear that in only eight of the medical schools under consideration do the students have an opportunity to witness anything like a satisfactory number of deliveries under appropriate clinical conditions. On the other hand, ambitious students may see a greater number of

cases provided they are willing to work in their own schools during the summer months, or can afford to take a course in one of the large institutions, such as the New York Lying-In Hospital, which are not connected with a medical school.

No one can read these figures without admitting that the situation is deplorable, and that the vast majority of our schools are not prepared to give the proper clinical instruction to anything like the present number of students. This is particularly true of the small lying-in hospitals, which are still further handicapped by the fact that the paucity of material renders it probable that years may elapse before certain complications of pregnancy and labor will be observed, and consequently, practical instruction along such lines will be lacking, to the great detriment of the student. Moreover, such restriction in material greatly hampers the development of the professor and his assistants by the absence of suggestive problems, and his inability to subject his own ideas to the test of experience.

Turning from the actual number of cases available for clinical instruction, to the opportunities afforded for training assistants, who should become the professors of the future, it is difficult to speak too strongly. In the thirty-seven lying-in hospitals under consideration, it is apparent that this function is in great part neglected, as is shown by the fact that the period of service is usually too short to permit of training well-rounded men. Thus, in thirteen institutions the assistants serve for periods varying from one to six months; in four for six months or more but for less than one year; in fifteen for one year; and in only five for a longer period, including two in which the service extends over four years. Consequently, it may be said that proper training can probably be afforded only in the five schools in the latter group, as in my experience assistants at the end of the first year are just beginning to be useful and are able to make a correct diagnosis only in the simpler cases, so that even with a comparatively large material, their experience is relatively so slight that they are not prepared to cope with serious emergencies even when they are recognized.

Notwithstanding the general lack of clinical material and the imperfect provision for training suitable assistants, practically all of the schools reply that they are

well equipped for the performance of major operations. This is probably correct, if it merely indicates the possession of suitable operating tables and instruments; but when it is remembered that less than one-half of the assistants have received no gynecologic training, it is inconceivable that they are properly prepared to assist in such operations. In my own service, in which the assistants serve for a number of years, I find that the number of major operations is so small that it is difficult to maintain the technic and team work essential to their satisfactory performance, and consequently, I encourage my men after completing their obstetric work to serve as long as possible in an active gynecologic or surgical service.

QUESTION XII

Do you maintain an outdoor obstetrical service?

The following answers were received: Five, none; six, small services without data as to number of patients; sixteen, with less than 250 deliveries; six, with between 250 and 500 deliveries; five, with between 500 and 1,000 deliveries; and five, with 1,000 or more deliveries per year.

At first glance these figures appear much more satisfactory than those for lying-in hospitals, as they show that ten of the schools have a fair out-patient material. At the same time, I have learned from my own experience that the value of such a department for teaching purposes is dependent on so many factors that the mere number of women cared for gives no idea of its adequacy. In order to be efficient for teaching, an out-patient service must be held in rigid discipline, be organized as an integral part of the regular obstetric service, and conducted through the lying-in hospital. Moreover, the students should not be sent to the homes of the patients alone, but should always be accompanied by an assistant to demonstrate the case, as well as by a trained nurse to prepare the patient properly and to render her surroundings as sanitary as possible. Under such conditions, out-patient material may be utilized for teaching purposes almost as satisfactorily as ward patients. On the other hand, if the organization and discipline is lax, and the student is not accompanied by a doctor and nurse, it has but little value, as attention is not directed to the necessary points, and the student is apt to fall into slipshod methods.

On analyzing the detailed replies in this regard, it is found that twenty of the thirty-eight services send assistants to all cases, but that only fourteen send nurses, so that considerably less than one-half are organized on a proper basis. Further analysis also reveals the interesting fact that the ten larger services are as a rule much better organized than the twenty-eight smaller, as the replies indicate that assistants are sent to all cases by nine of the former, as compared with eleven of the latter; while nurses are utilized in five of the large and in nine of the small services.

In order to give an approximate idea of the total amount of clinical material available, I have calculated the total number of ward and out-patient cases in the various schools, on the supposition that two students see and examine each in-door, and one student each out-door patient. The following table shows a progressive decrease in the number of cases in each of the four groups, according as the schools require for entrance two years, or one year of college work, or merely a high school education, or less:

I. 10 cases to each student, with extremes of 2 and 21 cases
II. 7 cases to each student, with extremes of 3 and 10 cases
III. 6 cases to each student, with extremes of 1 and 27 cases
IV. 3 cases to each student, with extremes of 0 and 12 cases

At the same time, it must be admitted that the average for the first group is considerably too high, which is due to the fact that one of the schools in this category has an immense hospital and out-door service.

QUESTION XIII

What are your relations with the gynecologic service both in the medical school and the hospital?

Answers obtained from forty-two schools show that in twenty-four there is no cooperation, in five cordial cooperation, while in thirteen the two departments are more or less closely united. In the last category, the chairs of obstetrics and gynecology are united in eight schools; in two the chairs are separate but are held by the same incumbent; while in three the professor has a joint hospital service, but teaches only obstetrics.

From the standpoint of training students and assistants, such a lack of cooperation is greatly to be deplored, more particularly as it prevents the development of broad-minded professors, who are able to cope with all complications arising from the female generative tract. In hospitals in which there is no cooperation between the two departments, the obstetrician is generally looked down on by the gynecologist and is usually afforded markedly inferior facilities for his work. From my own experience, both in this country and abroad, I am convinced that it is essential that the obstetrician be a competent surgical operator; and, as the number of radical operations in obstetrics is comparatively limited, the most natural method of obtaining the requisite facility is by means of gynecologic surgery. I hold that one may be a fair gynecologist with only an elementary knowledge of obstetrics, but that no one can be a competent obstetrician without being at the same time a trained gynecologist. For these reasons, I consider from the standpoint of teaching that the schools in which the two chairs are fused will possess a considerable advantage. Further development along these lines is imperative if obstetrics is to occupy the position it deserves, and with this in view every effort should be directed toward the founding and endowment of women's clinics in every true university medical school, more or less along the same lines as in Germany. That such a fusion is necessary will be incidentally demonstrated by the answers to the next two questions.

QUESTION XIV

Are you competent to operate on any complications arising from the female generative tract?

To this thirty-five professors answered "yes," and eight "no"; and these figures I imagine, are much more favorable than the actual facts. Several professors frankly admit that they are not prepared to perform Cesarean section.

Consider that such a condition of affairs means that the professor is merely a man-midwife,who is unable to carry a complicated case of labor to its legitimate conclusion! Or, imagine the effect on a patient, who places herself in the hands of a professor of obstetrics in a respectable medical school, when she is told that he can

conduct the case satisfactorily if it is ended by the unaided efforts of Nature, or merely requires some slight interference, but in case radical interference is demanded he will be obliged to refer her to a gynecologist or surgeon. Think of the impression such an admission must make on the student, who cannot be blamed for believing that obstetrics is a pursuit unworthy of broadly educated men, but is suitable only for midwives or physicians of mediocre intelligence. This is not the place to go into the details of this question, but I have no hesitation in asserting that a professor of obstetrics, who is not prepared to perform a Cesarean section or other radical operation is not competent to undertake the care of a case of labor complicated by pelvic contraction, and is not fitted to teach modern obstetrics.

QUESTION XV

Can you care for a case of ruptured uterus, advanced extra-uterine pregnancy or excision of the pelvic veins, as well as your gynecologic confrère?

To this thirty-two respondents answered "yes," and eleven "no." If one-fourth of the professors, including three in the high-class schools, make such an admission, it is safe to assume that a much larger number should be included in the same category. Moreover, when it is recalled that seventeen professors are engaged in general practice, and that five more limit their attention solely to obstetrics, and accordingly have but little opportunity to perfect themselves in operative technic, it is safe to assume that at least one-half of those replying to the questionnaire are unable to cope satisfactorily with these legitimate obstetrical complications. Such being the case, can anyone be surprised that obstetrics is looked down on by the other departments of the medical school and is not regarded seriously by most students and practitioners?

QUESTION XVI

Do you consider your hospital and teaching equipment satisfactory?

To this fourteen respondents answered "yes," and twenty-nine unhestitatingly "no." In other words, the professors in two-thirds of the schools frankly admit that the conditions are highly unsatisfactory. If this

were all it would be a grave admission; but the actual conditions are worse, and there is no justification for many of the affirmative answers.

I think that I am fairly conversant with the existing conditions, and as far as I know there is only one medical school in the country which is properly equipped for teaching obstetrics and gynecology along the lines of a well-conducted German woman's clinic. And I regret to say that it is not at the Johns Hopkins Hospital, whose lying-in department is very inferior, and far below the standard maintained by the other departments of that institution. At present, plans are being perfected in one of the eastern cities for the construction of an almost ideal woman's clinic, but unfortunately, it will be merely affiliated with, and not controlled by, the medical school. Three other fair-sized and well-equipped lying-in hospitals are also affiliated with medical schools, but are equipped only for practical clinical work and not for investigation.

On the other hand, in my opinion the favorable verdict concerning the equipment of the other nine schools is unjustifiable, and the fact that it is designated as satisfactory shows to what a slight extent many professors comprehend the obligations of a teaching position. A few examples will, I think, make this contention clear. One so-called satisfactory clinic has only thirty-five cases a year for the instruction of forty students. In three others the period of service for the assistants is, respectively, one and one-half, three and six months. Another lying-in hospital has no free beds, and the clinical instruction is given entirely in a large out-patient service. In a sixth "satisfactory" school the professor admits his inability to do a Cesarean section; in still another the director knows so little of his department that he is unable to give the number of beds under his control; and finally, the last school in this category stands low in the non-acceptable list, and is notorious for its poor equipment and the frequent failure of its students before state boards throughout the country.

QUESTION XVII

What is necessary to make your equipment satisfactory?

Leaving out of consideration the fourteen "satisfactory" schools just mentioned, the answers reveal an

extremely depressing condition of affairs. On this occasion it would lead us too far afield to enter into details, but I imagine that the mere enumeration, under the following headings, of the main needs mentioned will suffice to prove that the conditions are far from ideal:

A. Need everything.
B. Need a lying-in ward.
C. Need a lying-in ward controlled by the school.
D. Need accommodations for more patients.
E. Need more intelligent assistants who serve for longer periods.
F. Need more money for current expenses or endowment.
G. Need better-prepared students.

On the other hand, no one mentioned the need of broad-minded, scientifically trained teachers, or of properly equipped laboratories for investigative work.

QUESTION XVIII

Have you ever trained a man who, you felt, was competent on leaving you to become professor of obstetrics in a first-class medical school?

Twenty-six respondents answered in the negative, while one naively replied "that he had never been called on to do so." On the other hand, seventeen professors answered in the affirmative, and several stated that they had trained a number of men of professorial caliber. As so imposing an output was somewhat of a surprise to me, I analyzed the replies with some interest.

If the figures are correct, it is pertinent to inquire what has become of the young professors! I do not know where they are located; and, as there are not seventeen first-class medical schools in the country, the discrepancy is explicable only on the supposition that many died in early youth, or that the respondents overestimated their attainments. Furthermore, it is interesting to inquire where they received their training and who were their teachers. As has already been indicated there are only five lying-in hospitals which keep their assistants for longer than one year; consequently, as it is hardly possible to train a competent professor in a shorter time, it must follow that most of them must have received their training in these schools, which is unlikely.

Again, it may be asked whether all of the seventeen professors giving positive answers are competent to train such men. This also does not appear probable; for, although I have been a close student of medical literature for the past twenty years, I do not recall having seen an article, good, bad or indifferent from five of them; and it is highly improbable that totally unproductive men would be able to stimulate young men to become excellent professors. Moreover, in some instances it would have been impossible for them to have obtained their knowledge from the obstetrical clinics of their own school, as less than 100 patients are delivered per year in four of the hospitals concerned, while one has only twenty-five patients. Furthermore, one is connected with a most notorious non-acceptable school, and several more, to my knowledge, are poorly equipped in buildings, clinical material and facilities for investigation. On the other hand, it is a pleasure to admit that a small number of the schools are doing good work in this direction and have turned out several men of really first-rate professorial caliber.

The replies in general are very discouraging, as they indicate, in the first place, that it is usually impossible for ambitious young men to obtain in the schools from which they graduate anything like sufficient opportunity to equip themselves for a teaching career; and, in the second place, they force us to conclude that many professors take their duties very lightly, and have but little conception of the obligations connected with a properly conducted professorship. If this is the case, is it not absurd to expect such men to inspire students with a proper conception of obstetrics, or to deserve and maintain the respect of members of their own faculty, or of the profession in the neighborhood in which they live?

QUESTION XIX

Do you consider that the ordinary graduate from your school is competent to practice obstetrics?

Eleven teachers, or one-quarter of the entire number, promptly answered "no"; while the remainder replied in the affirmative, although in many instances in a somewhat qualified manner. Thus, one replied: "Well, yes in a way; that is, some of them." It appears to me that the affirmative answers, as a rule, are more positive the

poorer the school and the smaller its clinical material. That this is not an exaggeration is shown by the fact that affirmative replies came from several of the schools without lying-in hospitals, as well as from two others with only twenty-five cases per year available for the instruction of fifty students.

At the same time, most of the teachers qualify their affirmative answers by stating that their graduates are competent to conduct normal cases, while several others designate them as fairly efficient men-midwives. Moreover, most of them admit that their graduates are not competent to conduct operative labors, while several state that they deteriorate rapidly in technic after leaving the medical school.

After eighteen years' experience in teaching what is probably the best body of medical students ever collected in this country—the student body at the Johns Hopkins Medical School for the year 1911-1912, being made up of graduates from one hundred and twenty-eight colleges and universities in this country and Europe—I would unhesitatingly state that my own students are unfit on graduation to practice obstetrics in its broad sense, and are scarcely prepared to handle normal cases.

In general, it may be said that in the medical schools of this country the facilities for teaching obstetrics are greatly inferior to those afforded in medicine and surgery; while the teachers as a rule are not comparable to those in the German universities. No student would think of attempting to practice surgery immediately on leaving the medical school; for he would know that years of apprenticeship are necessary in order to obtain the requisite judgment and manual training; yet young graduates who have seen only five or six normal deliveries, and often less, do not hesitate to practice obstetrics, and when occasion arises to attempt the most serious operations. At the same time, I do not want to imply that the American graduate even with his faulty training is very much worse than in other countries, as I have seen in Europe some of the most horrible obstetric tragedies in the hands of practicing physicians of long standing.

QUESTION XX

What proportion of labor cases in your city are attended by midwives?

The replies indicate great variations in different localities. Midwives are almost unknown in Montreal, and I am informed that only twenty-five practice in Boston. On the other hand, in most of our large cities including New York, Chicago, St. Louis and Atlanta, they conduct from 40 to 60 per cent. of all labor cases.

In regard to their licensure, eight teachers pleaded ignorance of conditions, while twenty-five stated that they were licensed and ten that they were not.

Concerning their necessity, there was still a wider divergence of opinion. Twelve professors replied that they did not possess sufficient data to justify an expression of opinion; while of the thirty-one giving positive answers, fifteen stated that they were necessary and sixteen not.

After analysis of the replies to this question, it is apparent that midwives attend many cases in most of our large cities, but that their employment is dependent on local conditions rather than general necessity; as is shown by the replies from Boston and Montreal. In most localities some attempt is made to control them in a feeble way, but nowhere effectively, while the teachers of obstetrics throughout the country are about equally divided as to their necessity.

QUESTION XXI

Do you believe that more women die from puerperal infection in the practice of midwives or of general practitioners?

This question, as well as the one immediately following, cannot be answered with accuracy; consequently the replies must be taken as the general impression of the respondents, rather than as precise statements based on exact statistics. In order to draw perfectly correct conclusions, many factors would have to be considered, concerning which accurate information is not at present available.

In the first place, it would be necessary to know what proportion of women in each city are delivered by physicians and midwives, respectively, as well as the incidence of fatal infections in each group. Secondly, the ordinary "vital statistics" would not give the desired information, as it is well known that many deaths from infection are returned under other headings. Thirdly, in many instances there is no means of ascertaining

whether infections followed by death, and reported by practitioners, originated in their practice or were seen only after the patients had become seriously ill under the care of midwives. Furthermore, it is improbable that many of the respondents based their statements on careful study of the case-histories of their own clinics.

Consequently, as the replies represent merely the general impression of the various respondents, they are subject to many fallacies and are thereby greatly reduced in value. Nevertheless they are of great interest and are as follows: Eight teachers replied that they did not possess sufficient data on which to base an opinion; while of the thirty-five who answered, fifteen stated physicians, thirteen midwives and five that the death-rate is almost equal.

Accordingly, it appears that somewhat more than one-half of the teachers replying consider that general practitioners lose proportionately as many women from puerperal infection as do midwives. Even if based on somewhat faulty premises, such a conclusion is appalling, and is a railing indictment of the average practitioner and of our methods of instruction in obstetrics, more particularly as one of the main arguments urged against the midwife is the prevalence of infection in her practice.

QUESTION XXII

Do as many women die as the result of ignorance, or of ill-judged and improperly performed operations, in the hands of general practitioners, as from puerperal infection in the hands of midwives?

The same objection applies to this as to the former question, and consequently the answers must be regarded merely as the general impression of the respondents, some of whom are necessarily biased in their opinions. Eight teachers state that they are not prepared to answer the question; while of the thirty-five who do so, twenty-six answer against the general practitioner, six against the midwife and three hold that the two are equally bad. Moreover, many direct attention to the unnecessary death of large numbers of children, as the result of unnecessary or improper operating, and from the failure to recognize the existence of contracted pelvis.

I must confess that I was somewhat surprised at the unanimity of the replies; but, after making every allow-

ance for personal prejudice and the impossibility of answering the questions accurately, it must be admitted that it is scarcely probable that more than three-fourths of the professors of obstetrics from all parts of the country could arrive at such a conclusion were it not justified by their own personal experience.

If it appears necessary to reform anything, here is the opportunity. Why bother about the relatively innocuous midwife, when the ignorant doctor causes quite as many absolutely unnecessary deaths? From the nature of things, it is impossible to do away with the physician, but he may be educated in time; while the midwife can eventually be abolished, if necessary. Consequently, we should direct our efforts to reforming the existing practitioner, and to changing our methods of training students so as to make the physician of the future reasonably competent.

QUESTION XXIII

How do you consider that the midwife problem can best be solved?

Thirty-four answers to this question gave the following result: Eighteen advocated the regulation and education, and fourteen the abolition of midwives, while one advocated that the question be left *in statu quo*, and another held that the only solution lay in better-trained doctors.

On analyzing the replies several interesting facts were elicited. Thus, a thoroughly competent professor in one of the large western cities, in which more than one-half of all labors are conducted by midwives, states that, although the smaller portion of the obstetrical work in his city is in the hands of physicians, his experience forces him to conclude that the latter nevertheless lose from infection many more women than do the midwives.

Again, one of the respondents from New York City states that owing to the extension of lying-in charities, midwives now attend many less women than formerly, notwithstanding the rapid increase in the population of the city. A similar statement comes from Cincinnati, where, without stringent regulation, the number of women attended by midwives has decreased from 70 per cent. in 1880 to 30 per cent. in 1909, thus tending to indicate that prolonged residence in this country grad-

ually overcomes the prejudices of our foreign-born population against the employment of physicians. Moreover, the replies show that less than twenty-five midwives are registered in the city of Boston and that very few practice in Montreal.

Those who advocate regulation and education vary greatly in their ideas, some advocating mere general regulation, while others demand extensive education in properly equipped hospitals, as in Germany and Italy, with constant supervision by the board of health, which should have power to revoke licenses whenever necessary.

Equally divergent arguments are advanced by those favoring the abolition of midwives. One group regards as hopeless any attempt to train them efficiently, while another holds that they may be entirely done away with by educating the laity, by extending lying-in charities, and by supplying better doctors and cheaper nurses; while my own views will be expressed in the second part of the paper.

QUESTION XXIV

Can you suggest any practicable method of improving the general standard of practical obstetrics outside of hospitals?

The mere fact that all but two of those answering my questionnaire make definite suggestions in this regard, offers further proof of the deplorable condition of obstetrical education and practice, and indicates the urgent need for reform.

It would lead too far to consider all of the suggestions in detail, and I shall content myself by enumerating the main ones, which are so arranged as to indicate the order of frequency in which they were made:

1. Better teaching and more abundant lying-in hospital accommodations.

2. Instruction of the profession and laity that obstetrics is surgery, and that its major operations are as serious as laparotomies.

3. Education of the laity concerning existing conditions and insistence that the proper place for major obstetrics is a well-conducted hospital.

4. Regulation of obstetric practice by the state boards of health, which should grant a provisional license to practitioners, revocable on demonstration of incompetency or neglect.

5. Better education of practitioners. A number of respondents do not believe that the present generation can be materially improved.

6. Teaching both doctors and the laity that the ordinary practitioner should attend only normal cases, and should refer the abnormal ones to specially trained men connected with well-equipped hospitals.

7. Better pay for practitioners doing general obstetric work, as it is held that it is useless to expect expert care for compensation which is generally regarded as adequate.

8. The collection and general dissemination of accurate statistics concerning the mortality of childbirth, as well as the injuries and illness which result from improper care.

9. Elevation of the importance of obstetrics in the eyes of practitioners, medical students and the laity.

10. Marked extension of obstetric charities and well organized lying-in hospitals.

11. Greater development of visiting nurses for those of moderate means, and the education of trained helpers to carry out their directions.

12. Differentiation of students into classes, one of which should be educated as man-midwives, and the other as broadly-trained obstetricians.

I am convinced that no fair-minded person who is interested in the welfare of the women and children of our country, or in the problems of medical education, can read the foregoing analysis without feelings of profound depression, or without admitting that we are facing a condition urgently in need of reform.

The replies clearly demonstrate that most of the medical schools included in this report are inadequately equipped for their work, and are each year turning loose on the community hundreds of young men whom they have failed to prepare properly for the practice of obstetrics, and whose lack of training is responsible for unnecessary deaths of many women and infants, not to speak of a much larger number, more or less permanently injured by improper treatment, or lack of treatment. Moreover, the spontaneous admission by most of the respondents that poor training of medical men is responsible for many unnecessary deaths in childbirth, forces us to acknowledge that improvement in the status of the midwife alone will not materially aid in solving the problem.

A priori, the replies seem to indicate that women in labor are as safe in the hands of admittedly ignorant midwives as in those of poorly educated medical men. Such a conclusion, however, is contrary to reason, as it

would postulate the restriction of obstetrical practice to the former, and the abolition of medical practitioners, which would be a manifest absurdity.

The discrepancy is in part explicable by the fact that, with few exceptions, midwives recognize their inability to cope with obstetric emergencies and therefore limit their activities to the care of apparently normal cases of labor, with the result that their patients die only from infection or from conditions following procrastination or neglect in soliciting medical aid. On the other hand, the imperfectly educated practitioner does not recognize his own limitations, but in his ignorance feels that he is as competent to cope with abnormal conditions as his efficiently trained confrère, whose aid he solicits only after futile attempts at delivery have demonstrated his inability to complete the task. Consequently, the specialist, as a rule, does not see the patient until her condition has become deplorable.

This is not the place to enlarge on the tragedies, or "near-tragedies," of consulting obstetric practice, and the matter is mentioned merely in explanation of the apparent discrepancy between the results obtained by midwives and medical men. Moreover, I do not wish to convey the impression that all practitioners are included in this condemnation, as I am glad to say that I know many, and there are thousands of others in the country, who, from natural ability or from extensive experience and study, are thoroughly accomplished in the management of all but the most complicated cases. Furthermore, I desire to go on record as stating that the average practitioner is not entirely to blame for his ignorance in obstetric matters, as he is usually as benevolent, as intelligent, and as anxious to do good work as any one else. The fault lies primarily in poor medical schools, in the low ideals maintained by inadequately trained professors, and in the ignorance of the long-suffering general public.

SUGGESTED REMEDIES

What is the remedy for these conditions? I shall enumerate some of them, but their mere number indicates how serious the problem is, and how impossible it will be to consider them all adequately at the present time.

Some of the necessary reforms are:

I. Better and properly equipped medical schools.
II. Higher requirements for the admission of students.
III. Scientifically trained professors of obstetrics with high ideals.
IV. General elevation of the standards of obstetrics.
V. Education of medical practitioners.
VI. Insistence by state examining boards on better training before admitting applicants to practice.
VII. Education of the general public.
VIII. Development of lying-in charities.
IX. Cheaper nurses.
X. Possibly the training of midwives.

I. MEDICAL SCHOOLS

Mr. Abraham Flexner's able report on the medical schools of this country, prepared under the auspices of the Carnegie Foundation for the Advancement of Teaching, has clearly shown how poor most of our schools are and what drastic methods must be applied in order to reform them. I thoroughly agree with the gist of his report, and consider that our ultimate aim should be the gradual closing of most of the existing schools and their replacement by not more than thirty excellent schools scattered throughout the country. These should form component parts of strong universities already in existence, and be administered as such. This will require a great increase in endowment to make possible the employment of professors with high ideals concerning the training of students and the advancement of medical research, not to mention the cost of maintaining thoroughly well-equipped clinical institutes and laboratories.

As far as obstetrics is concerned, it is apparent that the needs are manifold. In the first place, well-equipped lying-in hospitals with sufficient clinical material are urgently demanded. I feel that students cannot be properly trained for the mere management of normal cases without having witnessed at least twenty normal deliveries, being thoroughly trained in the methods of diagnosis, and having fair opportunity for bed-side

instruction in the more usual complications. This is not possible for a class of fifty students, unless the department has under its control at least 500 indoor and an equal number of outdoor patients.

It is highly desirable that the lying-in hospital be owned by the university, or if not, that it should be in the closest possible affiliation with it, with the power of appointment vested in the proper university authorities. At the present time I know of only one medical school in the country which is in any way ideally provided with the clinical material necessary for proper teaching. Within a year another very satisfactory institution will be opened, which I regret to say is not at the Johns Hopkins, where the conditions are highly unsatisfactory; the department being housed in quarters which were not primarily intended for the purpose, which only afford makeshift accommodations for about one-half of the number of patients necessary for the proper instruction of our students.

The lying-in hospital should be regarded not merely as a place where poor women are properly cared for during and after labor, and properly utilized for the instruction of students; it has an equally important function in the training of assistants, from whom the specialists and the professors of the future should be recruited. In order to make this effective, long-term services are absolutely essential, during which the assistants should not only be trained to be competent practical obstetricians, but should aim to become broadly educated men, who regard obstetrics as an engrossing scientific study. In order to accomplish this, the head of the department must be a man of high scientific ideals, who is able to see that his men acquire proper training in the underlying sciences and have abundant laboratory facilities.

As indicated in the first part of the paper, practical obstetrics must be regarded as a branch of surgery, and the only feasible method by which the assistants can obtain the necessary facility in surgical methods and technic is by the closest cooperation with the gynecologic department, or preferably by the union of the two departments.

II. ENTRANCE REQUIREMENTS

Before any thorough-going reform can be instituted in medical practice, it is essential that the general standard of the men pursuing it be elevated. The last few years have seen a marked improvement in this respect, and thanks to the efforts of the Council on Medical Education of the American Medical Association, and other agencies, the time is fast approaching when all of the better-class medical schools will require that applicants for admission be fairly well-educated men, with a satisfactory training in the sciences on which medicine is based. Then it will be possible for idealistic teachers to convince such students that medicine is not a mere money-making pursuit, but that its real reward comes from the consciousness of having fulfilled one's various obligations in the best possible manner.

III. PROFESSORS

Radical reform in the type of professors is quite as important as the erection and proper equipment of commodious lying-in clinics.

With very few exceptions, most professors feel that they satisfactorily fulfil their professorial obligations by a few hours' teaching each week and by very general supervision over the hospitals under their charge, the balance of their time being engrossed by the cares of large private practices. Indeed, I think it no exaggeration to state that such posts are usually desired for the opportunity they afford to build up a lucrative practice, rather than for the opportunity of training young men or advancing knowledge.

It is impossible to study our native obstetric literature without feelings of profound depression, and without recognizing that scarcely an important contribution has been made by American authors. Moreover, the vast majority of our journal articles are palpably written for advertising purposes, or are simply ephemeral technical or casuistical contributions or rehashings of fundamental work done abroad. If this is the condition of affairs, is there any wonder that most of our professors, even with the best will in the world, fail to imbue their students with enthusiasm, or their colleagues with proper respect for the subject?

I do not, however, wish to be understood as laying the entire blame on the teachers, as they are only partly responsible for the present conditions. The chief fault lies in our system of medical education, and the deplorable lack of idealism in most branches of clinical teaching. The past twenty years have witnessed a revolution in the teaching of the underlying medical sciences, so that at present in all respectable schools, instead of practitioners giving up a fraction of their time to teach physiology, anatomy, etc., we have well-trained specialists who devote their entire energies to the obligations of their professorship, but who, as a rule, are miserably paid and more or less looked down on by their prosperous clinical colleagues.

Leaven of this kind has as yet worked but slightly on the clinical teachers, and consequently most professorships in the so-called practical branches are held by men who gauge success by financial standards, and desire to be regarded as successful practitioners or consultants, rather than as true professors of medicine.

What is needed for the proper teaching and advancement of obstetrics is broadly trained, scientific men, who are not only thoroughly versed in its technical side, but also well trained in the sciences underlying it, and competent to conduct and direct research work and to stimulate their students. Such men should be paid salaries sufficient to permit them to give their entire time, or at least a specified major portion of it, to their professorial duties, and should regard the care of their hospital patients, teaching and investigation as their life-work, and be willing to forego some of the luxuries which might come from a lucrative practice.

Men of this type would not be content to be mere men-midwives, but would demand that their sphere of activity should include everything connected with the normal functions and pathologic aberrations of the female generative tract. In other words, obstetrics and gynecology should be combined into a single, well-equipped department, somewhat as in the women's clinics connected with the German universities. Such institutions should be equipped with suitable laboratories and every reasonable facility for investigative work, so that the problems afflicting womankind could be studied with some hope of success.

Moreover, effective work can be carried on only by the aid of properly trained assistants, who should not be short-term interns, but earnest men who expect to devote years to preparing themselves in all phases of their specialty, and who, on completion of their terms of service, look forward to professorial careers and the management of well-organized clinics. Naturally, only a small number of assistants could expect to reach the goal, as the majority would go into practice after a few years' experience, but those who persisted would be able to hold the torch aloft, and to stimulate on-coming students and assistants to higher ideals and better work.

As institutions and professors of this character are very expensive, they can scarcely be expected in proprietary or pseudo-university schools, but they should represent the ideal toward which all university schools should strive. If the great universities expect to engage in medical education — and only in this way can progress be made — they must realize that adequate clinical instruction is the most expensive form of education, and make preparations to raise the money to pay for it. I estimate that in a properly conducted woman's clinic, $20,000 would be the minimum annual outlay for the salaries of the professor and necessary assistants and for laboratory and teaching expenses, not to mention the cost of maintaining the requisite number of patients.

IV. ELEVATION OF OBSTETRICS

At the present time, woman's clinics and idealistic clinical professors, such as I have sketched, do not exist in this country. The former can be erected and equipped whenever funds become available, and the latter will begin to develop as soon as the universities want them. At this moment I know several well-equipped men who would be delighted to make the financial sacrifice incidental to accepting such posts were they assured of the support of their university.

A few professors of this type would do more toward elevating the standards of obstetrics than volumes of writing. They would teach students that the ideal obstetrician is not a man-midwife, but a broad-minded, scientific man, with a surgical training, who is prepared to cope with the most serious clinical responsibilities, and at the same time is interested in extending our field of knowledge. No longer would we hear physicians

say that they cannot understand how an intelligent man can take up obstetrics, which they scarcely regard as a serious occupation.

The present degraded position of this branch of medicine is due to several facts: first, that most medical faculties take a somewhat similar view, and regard it as an unfitting occupation for an energetic man; secondly, that an extensive private obstetric practice is so arduous and time-consuming as to be incompatible with serious professorial and research work; and, thirdly, that most ambitious men who take it up regard it merely as a stepping-stone to the less arduous and much more profitable gynecology.

If reform is to be effected — and I consider that I have clearly demonstrated its necessity — it is essential that radical changes be made, which I believe should be along the lines I have indicated. Medical faculties must be brought to realize that obstetrics is one of the fundamental branches of medical training and can be efficiently taught only by men of first-class ability. That education in this direction is necessary is shown by the fact that even in such an institution as the Johns Hopkins University, several members of the medical faculty still believe that the obstetrician need only be a man-midwife, who should be content with what others do not want.

V. EDUCATION OF GENERAL PRACTITIONERS

That the general practitioner is in need of obstetric education has been clearly shown in the preceding pages. How it can be effected in the older generation, I am not prepared to answer. On the other hand, the oncoming generation of physicians can be educated to regard obstetrics as a serious occupation involving great responsibility, and be taught to recognize the fact that they are scarcely prepared to conduct uncomplicated cases, and that abnormal cases require the services of specially trained men. They should be taught to realize that the more difficult operations are quite as serious as most operations in abdominal surgery, and often require the greatest skill and experience. They should learn to refer such patients to well-equipped lying-in hospitals, and to regard the repeated sacrifice of fetal life as criminal.

VI. HIGHER REQUIREMENTS BY STATE EXAMINING BOARDS

The reforms which I have indicated are revolutionary in character, and I thoroughly realize will require years for fulfilment after their necessity has become recognized by university medical schools. On the other hand, immediate improvement would follow if the medical examining boards of the country should insist on the presentation by applicants for licensure of evidence that they had received a reasonable amount of training in clinical obstetrics. As already indicated, I regard an experience of twenty deliveries under suitable clinical auspices as the minimum preparation for the conduct of normal labor, but far from sufficient to equip one for the care of complicated cases. That this is not an exorbitant demand is shown by the fact that in Great Britain attendance on the same number of cases is a necessary prerequisite for licensure.

Accordingly, if the licensing boards would require each applicant to present evidence that he had seen at least ten women delivered, and had examined them personally during the process, a great step forward would be made, not only in the education of students, but also in aiding to suppress some of the least desirable medical schools, which would be unable to fulfil such conditions. I understand that Dr. Barton Cooke Hirst of Philadelphia has started a propaganda along these lines, and I bespeak for him every assistance from those who are interested in the problem.

Naturally, the mere witnessing of ten or any number of deliveries will be almost without educational value, unless the student is carefully supervised and instructed. Consequently, under such a scheme only such deliveries should be credited as have occurred in a suitable lying-in ward or in a well-organized out-patient department, in which assistants are available for the demonstration of each case.

VII. EDUCATION OF THE LAITY

The public should be taught that only the well-to-do, who can afford to employ competent obstetricians, and the very poor, who are treated free in well-equipped lying-in hospitals or out-patient departments, receive first-rate attention during childbirth; while the great middle class, and particularly those at its lower end, is

obliged to rely on the services of poorly trained practitioners. It should be taught that while pregnancy and labor is normally a physiologic process, it is not always so, but is liable to so many aberrations and abnormalities that the pregnant woman should early place herself under the care of an intelligent physician, who may detect and cure in their early stages many complications, which if neglected might place her life and that of her child in serious jeopardy.

The laity should also learn that most of the ills of women, with the exception of those due to tumors and gonorrhea, are the result of bad obstetrics, and could have been prevented, or at least materially mitigated, had they received proper attention at the time of labor or during the weeks immediately following it. Stress should also be laid on the fact that obstetric operations are not trifling, but are fraught with grave danger to mother and child, and that the more serious ones should be performed only by experts, preferably in well-conducted hospitals.

Every effort should be made to emphasize the great responsibility which the obstetrician must bear in the management of abnormal cases. The public must be taught that the conduct of labor complicated by a moderate degree of pelvic contraction is quite as serious as a case of appendicitis, and that its proper management requires the highest degree of judgment and skill, while eclampsia or placenta prævia are even more serious. At present, however, the average practitioner does not recognize the existence of the former until irreparable damage has been done, and usually considers himself quite competent to treat the latter, instead of immediately placing his patient under expert care, as he would were she suffering from even a minor surgical ailment.

The public should also learn that the repeated birth of dead children indicates ignorance or neglect, and can in great part be prevented under proper care; and furthermore that the development of ophthalmia in the children indicates neglect of the most rudimentary precautions. By way of parenthesis, I may add, that I have never seen a general practitioner, and only an occasional obstetric specialist, make routine use of Credé's prophylactic methods in private practice; yet some of us advocate that its employment by midwives should be required by law.

The laity should also be taught that a well-conducted hospital is the ideal place for delivery, especially in the case of those with limited incomes. Moreover, they should learn that the average compensation for obstetric cases is usually quite inadequate; and should realize, although I regret to confess it, that doctors who are obliged to live on what they earn from their practice cannot reasonably be expected to give much better service than they are paid for. I think I may safely state that obstetric fees are generally as much too low as those for many gynecologic and surgical operations are absurdly high. I am loath to mention so sordid a matter, and I do so at the risk of being misunderstood, but I know from my own experience that many well-to-do patients object to paying as much for the conduct of a complicated labor case, as for the simplest surgical operation which involves no responsibility.

Finally, the laity should be impressed with the fact that the remedy lies in their hands, and that they will continue to receive poor treatment as long as they do not demand better. Moreover, as long as they choose their medical attendant by the way he curls his moustache, or on the recommendation of some foolish or ignorant woman, they will get what they deserve. If they desire competent attention, they should go for advice to conscientious medical men.

VIII. DEVELOPMENT OF LYING-IN CHARITIES

Even the most bigoted advocates of the education and regulation of midwives must admit that the very poor will receive the best care in well-regulated lying-in hospitals and out-patient services. Consequently, those of us who are interested in the problem should advocate their extension and greater utilization; especially, as by so doing the condition of the poor will not only be alleviated, but at the same time greater facilities will be afforded for the training of medical students and nurses. Likewise, proper hospital accommodations should be provided for such well-to-do patients as may desire to utilize them. These two aspects of the question are in a fair way of solution, and I imagine that in time the demand will be met.

On the other hand, we are confronted with the more serious problem of properly caring for the women of the lower middle class — with incomes of $700 to $1,200

a year. Such women are unable to pay for adequate attention in their own homes, nor can they afford the current rates for board and medical care in the private wards of hospitals, while at the same time they are too proud to enter the public wards as free or part-pay patients. This is a most serious problem, and concerns not only obstetrics, but all the other branches of medical practice. How it will eventually be solved I am unable to predict.

The situation may be met partially by the endowment of low-priced private rooms, which is still charity, and partially by teaching that it is only false pride which prevents the utilization of existing charities; but neither of these alternatives will solve the difficulty for more than a fraction of those concerned. As the members of this class form in great part the hope of the commonwealth, it is essential that they ultimately receive better care in all branches of medicine. At present they do more for the state than they receive in return, and it is probable that the question will remain unsolved, until we are prepared to face some form of modified socialism.

IX. CHEAPER NURSES

The trained nurse has been of invaluable aid in the development of modern methods of caring for the sick. Unfortunately, the compensation which she demands and deserves puts her beyond the means of those in very moderate circumstances, and there is no likelihood that conditions can be materially altered. Consequently, even when patients of this class can secure competent medical aid, they are forced to be content with very inferior nursing; and one of the arguments in favor of elevating the status of midwives is that they will serve as both doctor and nurse. As it is difficult to secure either a good doctor or a good nurse, it is extremely improbable that women of the class from which midwives must necessarily be recruited will be able to unite in one person the good qualities of both professions.

I feel that in large cities the problem may be partially solved by developing a class of visiting nurses, who would be willing to stay with the patient during the day of labor, make daily visits for a number of days thereafter, and supervise the activities of a partially trained helper, who would not only give the patient and her infant routine care, but in addition look after certain

important household duties. If some such arrangement were possible, it would enable those of limited means to obtain fairly efficient nursing care at a fraction of the present prohibitive cost, and at the same time result in much better treatment on the part of careless physicians.

X. TRAINING OF MIDWIVES

In 1850, Dr. James P. White of Buffalo introduced into this country clinical methods of instruction in obstetrics. Yet the first part of this report clearly shows, notwithstanding relatively great development along these lines during the following sixty-two years, that our medical schools have not succeeded in training their graduates to be safe practitioners of obstetrics. If this has been the case with the relatively intelligent medical student, I must confess to great skepticism concerning the possibility of doing better, or even as well, with the class of women who are likely to become midwives, even if abundant facilities for their training were at our disposal.

Moreover, the fact that their employment is very restricted in both Boston and Montreal indicates that they are not absolutely necessary, even in cities with a large foreign-born population, and lends additional strength to the argument of those who believe in their ultimate suppression. Consequently, in large cities, at least, I am prepared to advocate their gradual abolition and their replacement by a marked extension of lying-in charities.

Furthermore, as the majority of respondents to my questionnaire appear to believe that midwives at present do less harm than the irresponsible practitioner, they could be left alone with comparative safety, while those of us who are interested in the problem devote our energies to insisting on radical reforms in our medical schools, and to the education of the laity in the hope of developing better-trained medical men. I feel sure that this can be accomplished in time, but I am very dubious concerning the possibility of developing satisfactory midwives by any method of instruction.

On the other hand, I am quite prepared to admit that the question is more difficult in rural districts, where lying-in charities cannot be developed, and where the people are so poor and the distances so great that

medical aid will be difficult to procure, and will become increasingly so as medical practitioners are better educated.

I know that in taking this stand I shall be in opposition to many earnest workers who think otherwise; but I hope that the deplorable condition of obstetric instruction for medical students as revealed by this report may cause them to hesitate before definitely committing themselves to a propaganda advocating extensive training of midwives. If, however, it is decided to take any steps in the matter, I hope that they will be drastic, and that no one will imagine that much can be accomplished by mere legislation, with pseudo-education and pseudo-regulation as in most states.

If anything is to be done, I feel very strongly that it can be accomplished only after a long campaign of education — not of the midwives — but of the public and its legislators, who must be taught that effective training will be very expensive, as it will require the establishment of special institutions, where long periods of practical instruction can be given, as well as the development of an efficient system of supervision with power of punishment, which will be quite contrary to our usual lawless customs. In other words, we should approach the subject as Germany and Italy have done, but at the same time be prepared for disillusionment; for, if the results are not vastly superior to those obtained in those countries, we shall have to admit failure.

CONCLUSIONS

A questionnaire containing some fifty questions concerning obstetric education and the midwife problem was sent to the professors of obstetrics throughout the country. Forty-three replies were received, representing one-half of the acceptable and one-fifth of the nonacceptable medical schools, which indicate a most deplorable condition of affairs, briefly as follows:

1. Generally speaking the medical schools are inadequately equipped for teaching obstetrics properly, only one having an ideal clinic.

2. Many of the professors are poorly prepared for their duties and have little conception of the obligations of a professorship. Some admit that they are not competent to perform the major obstetric operations, and

consequently can be expected to do little more than train men-midwives.

3. Many of them admit that their students are not prepared to practice obstetrics on graduation, nor do they learn to do so later.

4. One-half of the answers state that ordinary practitioners lose proportionately as many women from puerperal infection as do midwives, and over three-quarters that more deaths occur each year from operations improperly performed by practitioners than from infection in the hands of midwives.

5. Reform is urgently needed, and can be accomplished more speedily by radical improvement in medical education than by attempting the almost impossible task of improving midwives.

6. In my opinion the following reforms are most important:

A. Reduction in the number of medical schools, with adequate facilities for those surviving, and higher requirements for admission of students.

B. Insistence in university medical schools that the head of the department be a real professor, whose prime object is the care of hospital patients, the proper training of assistants and students and the advancement of knowledge, rather than to be a prosperous practitioner.

C. Recognition by medical faculties and hospitals that obstetrics is one of the fundamental branches of medicine, and that the obstetrician should not be merely a man-midwife, but a scientifically trained man with a broad grasp of the subject.

D. Education of the general practitioner to realize that he is competent only to conduct normal cases of labor, and that major obstetrics is major surgery, and should be undertaken only by specially trained men in control of abundant hospital facilities.

E. The requirement by state examining boards that every applicant for license to practice shall submit a statement certifying that he has seen delivered and has personally examined, under appropriate clinical conditions, at least ten women.

F. Education of the laity that poorly trained doctors are dangerous, that most of the ills of women result from poor obstetrics, and that poor women in fairly well-

conducted free hospitals usually receive better care than well-to-do women in their own homes; that the remedy lies in their hands and that competent obstetricians will be forthcoming as soon as they are demanded.

G. Extension of obstetric charities — free hospitals and out-patient services for the poor, and proper semi-charity hospital accommodations for those in moderate circumstances.

8. Greater development of visiting obstetric nurses and of helpers trained to work under them.

9. Gradual abolition of midwives in large cities and their replacement by obstetric charities. If midwives are to be educated, it should be done in a broad sense, and not in a makeshift way. Even then disappointment will probably follow.

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