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TRENDS IN AMERICAN OBSTETRICS DURING THE FIRST THIRD OF THIS CENTURY

CHAIRMAN'S ADDRESS

LYLE G. McNEILE, M.D.

LOS ANGELES

Although many notable advances and changes have been made in the practice of general medicine and surgery during the present century, in no specialty have there been more drastic changes than in obstetrics.

In order to obtain a clear conception of the evolutionary changes and tendencies in obstetrics, one must first glance at the conditions that existed at the end of the nineteenth century. It must also be fully realized that much of the progress made in the present century is the direct result of the pioneer work of Cederschjöld, Holmes, Semmelweis, Pasteur, Lister, Smellie, Tarnier and many others. The assembled facts from the many traditions and observations of these pioneers have in many instances been "rediscovered" and "reapplied."

At the beginning of the century, the overwhelming majority of women in the United States and other countries were delivered by midwives, in the home. The rich could command the services of one of the few specialist obstetricians, who gave some antepartum care but usually delivered the patient at home, the labor, nevertheless, being allowed to follow its natural course. For the indigent, there were, in several large cities, lying-in hospitals, usually maintained for the purpose of providing clinical material for a teaching institution. Brodhead [1] records that the pregnant women in the Sloane Maternity Hospital in New York were systematically examined and that pelvimetry was a routine procedure. Vaginal examinations were freely made preceding and during labor. No sterile gowns or gloves were used.

Bill [2] states that in Cleveland twenty-five years ago there was no physician who limited his practice entirely to obstetrics, and there was very little obstetric hospitalization. Most of the deliveries were done by midwives, the physician being called only when the midwife encountered unusual difficulty. This should be compared with records of the same city in 1930, when 55.7 per cent of the babies were born in hospitals and approximately 45 per cent of the deliveries were made by specialists or under their supervision. During the past ten years the number of deliveries done by midwives has been reduced to less than 6 per cent.

Thus, at the beginning of this century every general practitioner had perforce to be an obstetrician; but at this time the new fledged doctor obtained his diploma to practice with little or no actual experience in clinical obstetrics. There were at this time not more than a half dozen medical schools that maintained lying-in hospitals in which medical students could witness deliveries, and the student who had actually delivered one or two women before he was graduated was considered very lucky.

Even with this, thirty-five years ago it was considered that there was but little room for improvement in the art of obstetrics. Versions, forceps operations and maneuvers for the correction of malpositions were well known to and practiced by experienced physicians, but in those days it was more generally recognized than at present that even difficult labors very often ended in spontaneous delivery if the woman was allowed a sufficiently long labor.

THE DAWN OF NEW OBSTETRICS

However, several things were happening that were destined to alter the course of obstetrics. The development of asepsis and the perfection of surgical technic in Germany had, even before 1900, made cesarean section a much more frequent operation than formerly. Norris [3] in 1899 pointed out that the successful obstetrician of that day must be a thorough surgeon and a competent gynecologist, because cesarean section and other obstetric operations were being performed with almost startling frequency. The conception of Krönig in 1894 and of Williams in 1898 that the vagina of every pregnant woman who had not been examined vaginally was sterile was new, as also was the general recognition that so-called puerperal fever was puerperal infection by the streptococcus. There occurred at the beginning of the century another innovation, the introduction of the use of rubber gloves for vaginal examinations and during delivery. A spirit was being aroused to do something actively to relieve the pain and the dangers of childbirth and to safeguard the child, as compared with the old laissez-faire policy of letting nature take its course. This was the fundamental spirit of the new tendency in obstetrics about the beginning of the twentieth century.

CAUSES THAT CONTRIBUTED TO THE CHANGED TENDENCIES IN OBSTETRICS

The principal causes that acted as contributing factors to bring about a change in the practice of obstetrics were: first, the scientific advances in medicine and surgery; second, and very important, the demands of the American woman; third, propaganda by surgeons and by those interested in making obstetrics a specialty, and, fourth, social, economic and biologic factors.

Read before the Section on Obstetrics, Gynecology and Abdominal Surgery at the Eighty-Seventh Annual Session of the American Medical Association, Kansas City, Mo., May 14, 1936.

1. Brodhead, G. L.: Modern Obstetric Technic Compared with the Technic of Twenty Years Ago, Am. J. Obst. **78**: 305, 1918.

2. Bill, A. H.: The New Obstetrics, Am. J. Obst. & Gynec. **23**: 155 (Feb.) 1932.

3. Norris, R. C.: Obstetrics, Prog. Med. **3**: 323-422, 1899.

In regard to the first, the great impetus to surgery through the development of asepsis vastly extended its field and was bound to have its reflex in cesarean section and other operative procedures connected with obstetrics. Symphysiotomy, pubiotomy and episiotomy were among such procedures which were early popularized. From the medical field came the development of several important drugs, such as solution of posterior pituitary, which was much more rapid in its action and more reliable in producing good uterine contractions than was the ergot of the day. It was not until hundreds of ruptured uteri had been reported, however, that the danger of pituitary preparations was recognized, and their real value, the control of hemorrhage after delivery, generally accepted. From the medical group also came the rapid development of methods of analgesia and anesthesia, the former to control pain during labor, the latter to render operative procedures painless. Steinbuchel introduced the method of so-called twilight sleep into German obstetric practice in 1902. Although in its original form it was dangerous and did not survive for long, it had a very definite influence on the development of the more acceptable present-day methods.

The second factor, the demands of the American woman, is one that has not been sufficiently stressed by those who criticize modern obstetrics and its results. The American woman was educated by lay propaganda to know that scientific medicine could spare her the pangs of labor without sacrificing her child. Even if physically as well as or better able to bear pregnancy and labor than generations before her, she demanded and has continued to demand and to insist that childbirth be accomplished without pain. She does not want the old method of letting nature take its course. Moreover, if she is told that the newer methods are accompanied by an increased morbidity and mortality both for herself and for her child, she ignores such possibilities and accepts all risks of anesthesia and operative procedures provided she remains in oblivion throughout the ordeal. The old generation of women looked with fear and terror to the time of labor. Today a primipara, secure in the knowledge that she will receive anesthesia and analgesia, merely looks on childbirth as an incident. If this present-day attitude is abnormal, I believe that the fault lies with the obstetric profession, which has allowed lay propaganda to be broadcast for more than twenty years and yet has not, except in one or two instances, attempted to educate the public through its own medium, the lay press.

The third factor—propaganda by surgeons and specialists in obstetrics—was a logical consequence. Women demanded a rapid, painless labor. Anesthesia and analgesia caused uterine inertia, which in turn required some type of operative intervention. To execute these procedures properly, men specially trained in operative obstetrics were necessary and answered the call. These men very naturally raised their voices in favor of their own procedures, and today it is a controversial question as to whether or not they were not, at least to some extent, right. The rational use of anesthesia and instrumentation, entirely apart from the demand for it by prospective mothers, may be the better obstetric procedure. In any case the old-fashioned practitioner who patiently sat by the bedside for long hours was ruthlessly pushed aside and his methods were scouted by the profession and the public alike.

The social, economic and biologic factors tending toward changes in American obstetrics were many. There was the great extension in urban communities of the flat or small apartment, which made hospitalization of the woman at term a necessity. Again, hospital delivery began to be looked on by women as the correct style; there is social etiquette even in obstetrics. Economically, for a large percentage of the people, free dispensaries, even free hospital service, free public health welfare clinics and many other organizations literally pushed the pregnant woman into the newer methods rather than to allow her to remain at home and call the midwife at the onset of labor. Biologic factors, such as voluntary birth control, affected obstetrics only by reducing the birth rate. But a biologic factor such as the tendency toward fewer babies and the limitation of progeny even by abortions, self induced or otherwise, must have a very definite effect on obstetrics. This, however, is an important phase which time will not permit me to enlarge on here. Another biologic obstetric factor in the United States is the mixture of races. It is well known that pelvic measurements vary in different races and that such studies as have been made of fetal head measurements show that they too manifest similar variations. Furthermore, statistics prove that in races having smaller pelves the head measurements too are proportionately smaller. This accounts for the frequency of dystocia due to disproportion in mixed marriages with women having smaller pelves and may be important in explaining the increased incidence of dystocia in America.

De Lee [4] puts the whole matter of the new tendencies in obstetrics very succinctly:

> The woman nowadays demands a safe labor, freedom from unnecessary pain, a reasonable length of labor, and when she arises from confinement a complete *restitutio ad integrum*. She also demands a healthy baby, undamaged by conditions affecting it during pregnancy and free from the effects of traumatism during labor. Modern obstetrics can give the woman nearly all of these things and people are willing to pay for them.

TRENDS OF THE NEW OBSTETRICS

The outstanding trends in American obstetrics since the beginning of the century would doubtless be seen in a different light by each obstetrician who paused to consider them. To me they may be placed under five headings: first, the changing ideals in obstetric education; second, to regard pregnancy and labor as pathologic rather than physiologic processes; third, to make parturition easier for the mother; fourth, to make obstetrics easy for the obstetrician, and, fifth, to eliminate the midwife.

OBSTETRIC EDUCATION

It is impossible to think of the development of the scientific background of obstetrics during the first quarter of the twentieth century without thinking of the late John Whitridge Williams. Professor Williams realized that real knowledge of the physiology and pathology underlying all the phases of reproduction was absolutely essential before obstetrics could ever hope for a place among the recognized specialties. Slemons [5] says: "Research, teaching, and the care of the sick were effectively blended in [his] department

4. De Lee, J. B.: Progress Toward Ideal Obstetrics, Am. J. Obst. **73**: 407 (March) 1916.
5. Slemons, J. M.: The Academic Career of John Whitridge Williams, West. J. Surg. **44**: 47 (Jan.), 100 (Feb.) 1936.

through the chief's inherent talent for organization, and it is not easy to say in which of these fields he was most gifted."

During the same period, Cragin, Barton Cooke Hirst, Edgar and several other outstanding teachers of obstetrics developed the first specially constructed maternity hospitals and clinics in the United States and instituted the form of clinical teaching that is generally used today. There was a definite trend toward adequate obstetric education.

Never in the history of American obstetrics had there ever been a real attempt made to pause and to take stock of the real status of obstetric education until the third White House Conference, called by ex-President Hoover to meet in 1930. While previous White House conferences had been held, they were concerned chiefly with the problems of the dependent child, the social and economic status of the child, supplemented by its health and that of its mother. Under the able leadership of Fred L. Adair, who was assisted by the outstanding leaders in obstetric education and many other subjects which are directly or indirectly related to maternal welfare, the 1930 White House Conference assembled tangible facts which showed the unenviable state of obstetric education, the high maternal mortality in this country, and many other facts which were destined to lower smug satisfaction with the existing conditions. The conclusions of the committee were not destructive, however, for they pointed out causes in many instances and suggested very definite remedies. In obstetric education the necessity of combining the departments of obstetrics and gynecology was stressed, and this is being accomplished in the medical schools. The necessity of providing adequate clinical material in obstetrics for undergraduates and for careful supervision of clinical teaching was shown. The value of additional facilities for furnishing postgraduate obstetric education was emphasized, particularly in its relation to infant and maternal mortality. The development of the motion picture as a means of teaching clinical obstetrics was pointed out as a thoroughly satisfactory method of providing teaching material in those schools which lacked adequate clinical material. The use of films, properly edited and directed, presents such great possibilities that I am inclined to regard their development as a teaching method as a reasonably well established trend.

The report of the subcommittee on Factors and Causes of Fetal, Newly Born, and Maternal Morbidity and Mortality has led to a definite trend which may have the greatest influence in the reduction of morbidity and mortality. I refer to the various investigations of the local problems relating to obstetrics, a consideration of their causes and their treatment, undertaken by many medical societies, health departments and allied agencies. The problem of maternal mortality in the United States had occupied a major position in the program of the Children's Bureau since its organization, and numerous studies had previously been made by interested agencies. No general interest had been shown, however, until the report of the Committee on Maternal Mortality of the New York Academy of Medicine was released to the daily newspapers in abstract form under the title "Why Women Die in Childbirth," Nov. 20, 1933. This report brought forth a storm of protest from the medical profession, but the disinterested observer would be inclined to believe that the protests arose from the manner of its publication rather than from its major conclusions. A very definite trend was created; i. e., the investigation of each obstetric death and the responsibility for its occurrence by local and sectional societies, health departments and others in many large sections of the United States. On the West Coast, the Pacific Coast Society of Obstetrics and Gynecology is investigating every such death occurring in Washington, Oregon and California. The paper of Dr. William Benbow Thompson[6] on "Cesarean Section in Los Angeles County" is a good example of the scope of such a report. It is inconceivable to me that such investigations can fail during the next two decades to exert a favorable influence on both morbidity and mortality.

The report of the subcommittee on Basic Sciences and Their Relation to Maternal and Fetal Problems stated: "The entire fund of present information concerning what is desirable in safeguarding the health of mother and child rests, with a few exceptions, upon definite underlying principles rather than upon empiric procedure." There is definite evidence of a trend in medical schools and among research workers toward research in the problems peculiar to obstetrics. The greatest progress, however, seems to have been made in the study of the endocrines and in the development of certain drugs such as anesthetics, analgesics, oxytocics and antiseptics, because, in these fields, money has often been made available by commercial companies in the understandable expectation of profiting by the research.

IS PREGNANCY A DISEASE OF NINE MONTHS' DURATION?

There are apparently two well developed schools of thought in regard to the question Is pregnancy a disease of nine months' duration? Williams in 1926 stated: "I am inclined to suppose that many practitioners in urban communities have been led astray by the teachings of those who regard labor as a pathologic rather than a physiologic process, with the result that interference upon insufficient indications is frequently undertaken by those who do not fully appreciate the risk involved." De Lee said in 1927: "Can a function so perilous that, in spite of the best care, it kills thousands of women every year, that leaves at least a quarter of the women more or less invalided, and a majority with permanent anatomic changes of structure, that is always attended by severe pain and tearing of tissues, and that kills 3 to 5 per cent of children—can such a function be called normal?" The conservative or old school consider pregnancy and labor as natural and normal and not as a general rule to be interfered with; the new tendency regards pregnancy and labor as subjects for therapeutic measures from onset to termination; any method, surgical or otherwise, that will eliminate the discomfort, pain and/or danger of these processes is justified.

The trend during the past fifteen years has been very definitely toward increased operative intervention. Whether or not this trend will continue is debatable.

TREND TOWARD MAKING OBSTETRICS EASIER FOR PATIENT AND PHYSICIAN

These trends have been characterized by a number of procedures which may be summed up in a few words as shortening the time of labor by instrumental or operative delivery under anesthesia.

6. Thompson, W. B.: Cesarean Section in Los Angeles County, read before the section May 15 and to be published in THE JOURNAL.

Here, of course, I am not speaking of therapeutic abortion but of what is commonly accepted as labor at or near full term. The present operative furor in obstetrics began with the introduction of the obstetric forceps and the substitution of the physician for the midwife in obstetrics. It has gained impetus with every generation. In the first two decades of this century there was a tremendous increase in forceps delivery, delivery by internal podalic version, by abdominal cesarean section, by low so-called prophylactic forceps with episiotomy, by low cervical cesarean section, and more recently the routine induction of labor by artificial rupture of the membranes at estimated full term.

So far back as 1899 Norris [3] wrote: "The radical tendency (to perform cesarean section) which has recently been manifested by articles on this subject by men high in the profession I cannot but regret, and I can see in this a dangerous teaching which will be exceedingly apt to lead to unhappy results." The unhappy results are strikingly shown by Plass,[7] whose figures in 1931 showed an increasing year-by-year incidence of cesarean sections in representative American hospitals and who presented mortality figures for cesarean operations in large sections of the population, which varied from a low of 4.2 per cent to a high of 16.1 per cent.

In 1920, at the meeting of the American Gynecological Society, De Lee [8] described his "prophylactic forceps" operation, in which he recommended, particularly in primiparas, that, when distention of the perineum was evident, episiotomy be performed and the patients delivered with forceps. In spite of very pronounced opposition, his method has had a very strong following.

Available statistics would indicate that the maternal mortality from forceps operations is low.[9] Maternal morbidity, as well as fetal morbidity and mortality after forceps, has been shown rather definitely to be increased.

Internal podalic version received an extraordinary impetus in 1920, when Potter [10] of Buffalo introduced some modifications and expressed the opinion that every obstetric patient should be delivered by this method at the end of the first stage of labor if feasible, so as to avoid the discomfort of the second stage. Williams [11] tritely remarked that possibly Potter was right and the rest of the obstetric world was wrong, and Polak [12] said regarding Potter's report of 1,113 labors with 920 versions and eighty cesarean sections, with a fetal mortality of 6.7 per cent: "His operative incidence is so much greater than has been shown to be necessary, and his fetal mortality so much higher, that I cannot see on what ground he claims endorsement for his procedure." These innovations, however, in spite of the condemnation which they have received, already have had some distinctly beneficial effects. Today forceps are used more frequently than formerly, and yet far more safely. The high forceps operation has been abandoned in favor of version or of low cervical cesarean section. The use of low forceps has become very common, and its advocates have been able to show real benefit when proper conditions are present and good technic is used. Potter's technic has resulted in vastly improved results in the treatment of breech presentations in my clinic, and his advocacy of podalic version has been an important factor in the elimination of the high forceps operation, it having been definitely proved that podalic version is a far safer procedure than high forceps.

The obstetric operative incidence in hospital practice in the United States is said to vary from 10 to 30 per cent of all deliveries as compared with 4 per cent in European and other countries in which midwife delivery is the common practice. Epstein and Fleischer [13] found that the morbidity risk in operative obstetrics, as compared with nonoperative, was in the ratio of 5:1 and that the maternal mortality risk was 30:1. For the year 1929 Holmes [14] found that 445 hospitals with 221,859 deliveries reported 46,946 operative terminations of pregnancy or labor.

It has been noted that the present trend toward operative intervention in obstetrics began with the introduction of the obstetric forceps and the elimination of the midwife and has gained impetus with each succeeding generation.

I shall quote the opinion written by Francis H. Ramsbotham of the Royal College of Physicians, London, England, in 1841 and compare it with the opinion of E. D. Plass, written in 1931, regarding this operative furor.

Ramsbotham said:

> Although in skilful, and especially discriminating hands, obstetric instruments must be regarded as great blessings to the suffering sex, yet it is a question with some practical men, whether by their unnecessary use they have not produced on the whole more injury than good. During the long reign of barbarous surgery, there is ample evidence to prove that operative interference was often most unjustifiedly had recourse to, and there is good reason to fear that many women have dragged out a wretched existence to the end of their days, the miserable victims of impatience, ignorance, or violence. In no few instances, the child's, if not the mother's life has been sacrificed, when patience, perseverance, and a proper reliance on the natural powers, were the only obstetric auxiliaries required.
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> I would not have it thought, by these observations, that I am unable to appreciate the advantages sometimes resulting from instrumental aid, or that I would draw an argument against a valuable measure from the possibility of its abuse. I know too well that nature sometimes fails, and occasionally both the mother and her offspring would be overwhelmed in one common fate unless art stepped in. But I would endeavor to impress deeply upon the mind of the young practitioner, that urgent necessity alone will warrant him in taking an obstetric instrument in hand, and that, when a choice is allowed him, he should leave nature to accomplish her own purpose, provided, indeed, that he can with safety trust her.
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> In his practice he will find it much more difficult to determine the time when instrumental aid may have become necessary, than to administer that aid, and unfortunately he will find the most deadly means most easy of application. Many times, also, he may almost be persuaded, against his own opinion, to the adoption of these means, by the urgent and unceasing solicitations of the patient. I would entreat him neither to allow these considerations to weigh with his judg-

7. Plass, E. D.: The Relation of Forceps and Cesarean Section to Maternal and Infant Morbidity and Mortality, Am. J. Obst. & Gynec. **22**: 176 (Aug.) 1931.
8. De Lee, J. B.: The Prophylactic Forceps Operation, Tr. Am. Gynec. Soc. **45**: 66, 1920.
9. Plass.[7] Maternal Mortality in Fifteen States, Children's Bureau publication 223, 1934, p. 64.
10. Potter, I. W.: Version, Am. J. Obst. & Gynec. **1**: 560 (March) 1921.
11. Williams, J. W.: A Criticism of Certain Tendencies in American Obstetrics, New York State J. Med. **22**: 493 (Nov.) 1922.
12. Polak, J. O.: Forced Labor; Its Status in Obstetrical Teaching, Am. J. Obst. **2**: 237 (Sept.) 1921.
13. Epstein, H. J., and Fleischer, A. J.: "Sane" Obstetrics, J. A. M. A. **97**: 219 (July 25) 1931.
14. Holmes, R. W.: Institutional Obstetrics in the United States in 1929, Tr. Am. Gynec. Soc. **59**: 321, 1934.

ment, nor to let that less worthy motive, a wish to take advantage of the éclat likely to result from a successful operation, tempt him to act contrary to his own feelings of propriety.

Nearly 100 years later, Plass [7] said:

> The marked increase in forceps deliveries in this country is accounted for largely by the performance of "convenience" operations. Although they have been dignified by the name of "prophylactic forceps," there is no good evidence that they prevent anything but loss of time on the part of the operator. The increased use of cesarean section is merely part of the modern operative furor, but from the standpoint of maternal mortality probably the most important, since by conservative estimate the death rate is between 5 and 10 per cent.

Thus two men, both well qualified to speak on the subject but living in widely separated countries and writing a hundred years apart, give the same advice. But in spite of the unanimity of opinion on the part of those who are best qualified to express the facts, and in spite of the commonly accepted obstetric axiom that any intervention with normal labor carries a definite risk, neither the operative incidence nor obstetric mortality is being lowered.

In spite of this gloomy picture of radical obstetrics during the first third of the century, several trends in favor of conservative obstetrics are apparent. The very great extension of the antepartum care of the pregnant woman has been outstanding. This has been in great part due to the efforts of the Children's Bureau. Such antepartum care not only has resulted in stricter supervision of the hygiene of pregnancy but also has stimulated the early recognition of toxemias of pregnancy, deformed pelves, and many medical complications of pregnancy which were formerly unrecognized. In eclampsia, particularly, a very definite trend away from radical measures, such as routine cesarean section in favor of conservative measures, is very apparent. The discovery of insulin has completely changed the prognosis for the diabetic patient who becomes pregnant, the management of cardiac patients during pregnancy has undergone great changes, and the introduction of blood transfusions in the treatment of the obstetric hemorrhages has been of incalculable benefit.

Efforts to treat obstetric complications as such, rather than to terminate the pregnancy, are continually increasing.

THE ELIMINATION OF THE MIDWIFE

The fourth trend in American obstetrics during this century has been to eliminate the midwife as a factor in obstetrics. De Lee,[15] whose great influence on American obstetrics is acknowledged by all, has been consistently opposed to her.

In 1902 Hirst [16] recommended "that the average obstetrical case be entrusted to a highly trained, well informed, skilful, and experienced nurse, the physician being called to repair the injuries of childbirth, to deal with any complications or abnormalities that might arise, to make perhaps routine visits, and above all to make the final examination at the end of puerperal convalescence." Hirst probably was thinking of the maternal mortality in Holland and the Scandinavian countries, where the maternal death rate is the lowest in the world. In these countries 85 per cent of the deliveries are done by midwives who do not use forceps or other instruments and who are instructed and supervised by physicians. He was also thinking of home deliveries and did not, of course, visualize the vast increase in the number of hospital deliveries.

Figures can be given [17] that show the relatively high and the relatively low maternal mortality in cases attended by midwives, but such figures are not at all conclusive. The Medical Advisory Committee of the Children's Bureau in commenting on maternal mortality in fifteen states says: "Figures given in the report would indicate that, although the midwives played a part in the mortality, they could not have been responsible for any large proportion of the deaths because they attended a relatively small proportion of the cases."

Regardless of arguments for or against the midwives, they are being eliminated in by far the greater portion of this country. It seems probable to me that the real reason for this lies in the general recognition of their lack of training, as well as to the already mentioned demand of the American woman for a short and painless labor.

APPARENT TRENDS CHARACTERIZING OBSTETRICS IN PRESENT CENTURY

Can any lesson be drawn from a consideration of the apparent trends which have characterized obstetrics in the United States during the present century? Bill [2] says:

> It would seem that the most marked feature of present-day obstetrics is the fact that there is a distinct spirit of activity, of being ever alert to do something to relieve the patient and to safeguard her and her baby from the dangers which are ever associated with labor, as against the older policy so often expressed of letting nature take its course. . . .
>
> The new school of obstetrics . . . is without doubt here to stay. There seems to be a feeling of skepticism on the part of many obstetricians, who, while admitting the advantages to the patient of such methods when properly carried out, doubt the wisdom of approving them because such procedures are not within the capabilities of the profession as a whole.

Of the rather definite trends that I have discussed, the trend toward increased operative intervention, with its resultant effect on maternal and infant mortality, alone seems to demand concerted effort in an attempt to change or modify its undesirable features. I can find no record in the literature in which any trend which has existed for more than a hundred years and which shows a constantly increasing acceleration has been checked by the warnings of medical leaders or by similar propaganda. It seems inconceivable to me that any good can come of the present propaganda that is appearing in one of the women's magazines and in certain newspapers, and it appears possible that such articles can actually produce harm. If this is true there can be but one possible solution; i. e., radical changes in obstetric education. The chief adverse criticism of the new obstetrics is on the ground that the profession in general cannot carry out such methods. This is obviously true; for physicians untrained in obstetrics have no place in the new school, just as the physician untrained in surgery should not attempt to do major surgery.

Undergraduate obstetric education is receiving increased attention from the administrative officers of all schools that maintain medical departments, as well as from all of the three leading national societies.

15. De Lee, J. B.: Several Everyday Obstetrical Problems, Am. J. Obst. **76**: 15 (July) 1917.
16. Hirst, B. C.: The Future of Obstetrics as a Specialty in America, Am. Med. **3**: 815, 1902.
17. McCord, James, cited by Skemp, A. A.: General Practitioner's Response to Challenge of Obstetrics, Wisconsin M. J. **31**: 527 (Aug.) 1932.

The helpful efforts of the Council on Medical Education and Hospitals have been outstanding. Adair,[18] in discussing this subject before the thirty-second Annual Congress on Medical Education in February 1936 summed it up perfectly when he stated: "Obstetric teaching of undergraduates requires adequate proportionate time, ample facilities and capable instructors. It is important to carry out this program in all schools as quickly as possible, because even after they are accomplished it will still be ten or fifteen years before the results are generally realized by the public."

Postgraduate obstetric education is, and will continue to be during the next twenty or twenty-five years, the most important factor in molding the new obstetrics. In many hospitals which provide rotating services for interns, a service in obstetrics is not provided for all interns, in spite of the fact that it has been shown that 35 per cent of the average physician's practice during the two years following graduation is in obstetrics. The number of institutions providing adequate residencies in obstetrics is increasing, but the facilities are still too limited. To provide adequate training, I believe in the home delivery service, because it is impossible for the young practitioner to apply what he has learned of the management of labor under the favorable conditions in the hospital to the much less favorable conditions of the patient's own home, unless he has had definite and specific instructions in a specialized technic for the conduct of labor under such conditions and has applied these instructions in a practical way. The training must include a service of not less than six months in obstetric and gynecologic pathology, because without such experience the young obstetrician can never expect to understand the basic processes underlying the conditions which he is attempting to treat. His hospital service can be adequate only if the staff is properly trained and is genuinely interested in teaching.

The recently formed American Board of Obstetrics and Gynecology, whose function it is to supervise, but not to control, obstetric practice, to encourage the study of obstetrics and to grant certificates of special knowledge in obstetrics to those who are properly qualified, has already had a pronounced influence in checking radical tendencies, in stabilizing the practice of obstetrics and in setting definite standards which should be met before the practitioner would be justified in claiming that he or she was a "specialist."

The most important phase of postgraduate obstetric education now, and for the next twenty-five years, is the education of the great bulk of practitioners whose undergraduate education may or may not have been inadequate, whose hospital training was often sketchy and who, because of the exigencies of their practice or because of their locations away from medical centers or for other reasons, have not been able to keep up with the changes that have occurred during their professional lifetime. There is a very definite duty on the part of all governmental agencies, medical schools, societies and allied agencies interested in maternal welfare to provide systematic instruction for, until recently, the forgotten man, who is, in fact, delivering most of the babies in the United States.

The Children's Bureau, under the Social Security Act, title V, part 1, acting with the state health agency, and always in cooperation with state and local medical groups and organizations, has approved and is fostering extension courses in obstetrics for groups of local practitioners. It is hoped that this phase of each state plan will be as enthusiastically received by the local profession as have similar plans under the auspices of state universities and/or state health departments, in cooperation with the state and local medical societies in California, Florida, Georgia, Iowa, Kansas, Kentucky, Maryland, New York, Oklahoma and Wisconsin.

18. Adair, F. L.: Undergraduate Obstetric Education, J. A. M. A. **106**: 1441-1442 (April 25) 1936.

CONCLUSION

It is a well known fact that the better trained in obstetrics a physician is, the fewer major operative procedures he finds it necessary to perform. While rather drastic changes in the practice of obstetrics have occurred during the present century, I cannot help feeling that obstetrics today is in a transitional stage and that, as obstetric practice gradually comes into the hands of those who have received adequate training, many of the present-day trends may be modified and then utilized to make pregnancy safer and easier for the American woman.

523 West Sixth Street.