

PRENATAL SUPERVISION*

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I present this paper before this Section with the expectation of arousing some discussion. Prenatal Supervision in the rural community is a problem we are all trying to solve. It has already been worked out in part in our larger cities and we are getting excellent results. The eyes of the profession are now turned to the rural districts.

The Children's Bureau of the United States Department of Labor, of which Julia C. Lathrop is chief, is doing wonderful work along this line. Several publications are in circulation dealing with maternity care and welfare of young children both in larger cities and in rural communities. Never before in the history of the world has the vital importance of adequate prenatal care, together with conscientious obstetrics, been so generally realized as at the present time. In New York, Boston, Chicago and St. Louis before the World War some work was being done in the interest of the expectant mother, but since the war these efforts have received a tremendous impetus, for which we all should be thankful.

In 1913 in this country at least 15,000 women (and this is an underestimate) died from childbirth. About 7,000 of them died from puerperal infection, a disease almost entirely preventable, and the remaining 8,000 from conditions common to pregnancy and labor, that are to a great extent preventable. In 1913 childbirth caused more deaths among women fifteen to forty-four years of age than any disease except tuberculosis. Likewise, it is shown that the greatest percentage of babies who die in the first year of life do not live to be one month old. This must mean two things: First, lack of prenatal care, and second, incompetent management of labor and the new born baby.

Nine-tenths of all expectant mothers receive no prenatal care. Over forty per cent. are attended in labor by midwives and physicians who are unqualified and in-

competent to supervise the pregnant woman. Many thousands die of puerperal infection because they do not have proper attention. Others are incapacitated for duty and become more or less complete invalids because of the same lack. Thousands of children are still born, due to failure of diagnosis of the position of the child, or of the size of the mother's pelvis. Often when instruments are applied and the baby is dragged out by mere force its skull is crushed and injuries are caused that impair its mentality and leave it a subject for the public institutions. Thousands of pregnancies come to an untimely end because the expectant mother has not had the necessary and proper guidance. How can this deplorable condition be corrected? First, by education of the laity to demand better care and to demand that their baby shall be born perfect. Second, better education of our young doctors in matters obstetrical.

Several years ago the Women's Municipal League of Boston undertook to circulate propaganda relating to prenatal care, and much good was accomplished both among the laity and the medical profession. Their work was quickly taken up by many other organizations, and the field is now becoming full of prenatal workers, especially in the cities. Some counties in various states have undertaken the work, and it promises to spread to other states. We hope it is only a matter of a short time before every community is provided with prenatal care under municipal or state supervision. Why should not this problem be handled by our government? Our government is made up of the brains of the country, and we must have the best thought and work on these problems. We know in order to get the best results we must begin our care with the unborn baby. When our country needed us for the World War they simply told us to come along and go to war. They took complete control of us and expected the best we had in us. Then, why should not our country supervise our unborn children? It would be fairly easy to place bureaus in each county or district and have available nurses and doctors who would freely advise all pregnant women. As soon as a woman knows she is pregnant she should register with the bureau, or better still, her physician should register for her. It seems to me

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that in this way we could maintain an efficient service for the rural mothers.

Questions then of the most vital interest to the whole nation are these: First, how are the lives of the mothers in this country and in other countries being protected? Second, to what degree are the deaths caused by pregnancy and childbirth preventable? Third, if preventable, are we doing our part? Fourth, has there been the same great decrease in the last few years in sickness due to childbirth as there has been in other preventable diseases, as typhoid, tuberculosis and diphtheria?

MIDWIVES

The cry is often raised to abolish the midwives. Those who raise that cry forget what statistics show in comparing midwives with poorly trained doctors. The Children's Bureau of the United States Department of Labor has just published a report, "Maternity and Infant Care in Two Rural Counties in Wisconsin." One county was selected from the northern part of the state where the population is composed of foreign elements, mostly German and Polish, and the majority of women are delivered by midwives. And one county in the southern part of the state where physicians are in attendance, with practically no midwives.

In the northern county the infant mortality was low compared with the average for the United States birth registration area. The stillbirth rate was somewhat higher than the rate found for six of the eight cities in which infant mortality studies have been made by the bureau. The death rate of mothers from causes connected with childbirth was high. In the southern county the infant mortality rate was higher than in the northern county, but the stillbirth rate was lower. Only one mother died at childbirth. In neither of these counties did any of the patients receive either prenatal or postnatal care. The question then arises, shall we abolish the midwife completely and allow the poorly trained physician to continue his unscrupulous practice when he in reality is no better than the midwife? Do not misunderstand me. I am not making a plea for the midwife, because I personally think there is no place for her in the medical field. Rather, on the other

hand, I wish to awaken the medical profession to the importance of good obstetrical care and thus put an end to the great mortality due to poor obstetrics.

Some states have fairly good laws in supervising the midwives, but rarely do they enforce these laws. They are required to pass the same obstetrical examination as the physician and are then licensed. Other states, without examination, require a small registration fee, and then issue a license to practice midwifery. In many rural districts there are midwives who never register, but go about delivering babies without even a knowledge of reading and writing. Especially is this true of many of our Southern darkies. Before we can decrease the mortality of mothers and babies, this sort of practice must be stopped. The solution is fairly simple in the larger cities. The schools of midwifery in this country are diminishing, and the midwife that now exists will in a few years seek other employment. The out clinics which are now being conducted in the larger cities offer free care to the pregnant woman and in complicated cases free hospital care, which is drawing the clientele from the midwife. In the rural communities, with better education of the laity and with better teaching and training of the young physicians at our medical schools, we hope eventually to decrease this high mortality of mother and baby.

PUERPERAL INFECTION

Dr. Grace Meigs, of the Department of Labor of the United States of America, in a report shows that during the twenty-three years ending in 1913 no definite decrease in the death rate of childbearing can be demonstrated in the death registration area of the United States. It is further shown from a study of the death rates of fifteen foreign countries that only five of them, England and Wales, Ireland, Japan, New Zealand and Switzerland, have effected any diminution in the mortality of childbearing in recent years, and of these England and Wales and Ireland are the only countries which show a falling off in percentage of deaths due to puerperal sepsis. One might think that from the days of Lister's discovery maternal deaths from puerperal infection would be greatly decreased. Statistics show that the same per-

centage of mothers are dying now as then, and that in the rural communities and in cities without maternity hospitals the percentage remain the same. It is true in our well regulated hospitals we do not have the epidemics of puerperal infection that we had in days before surgical asepsis was developed. But outside of well managed lying-in hospitals the mortality and morbidity in connection with childbirth is disgracefully high.

In the year 1860 the death rate from puerperal sepsis was returned at 1.4 per 1,000 births and in 1913 it was 1.3 per 1,000 births. Apparently we have not improved over the pre-Listerian days. What is the reason? Simply that we are not observing asepsis in our technique. In our well regulated lying-in hospitals, where technique is good, we do not any longer see epidemics of puerperal infection. At times a sporadic case is present, which usually can be traced to an outside physician or midwife. The patient entered the hospital already infected. But we must remember that only a very small percentage of women receive hospital attention, and we must deal with the problem in general.

Taking the conduct of labor in general, not much more than an antiseptic solution stands between the practice of today and the practice of pre-Listerian days. This is not what Lister founded, though it has been misconceived by many physicians. When rubber gloves came into popularity the obstetricians thought the matter was solved and resorted to placing his gloves on his hands after using the antiseptic solution and proceeded to make his delivery. This is not the great founder's theory. He laid down principles dealing with asepsis pertaining both to operator and patient. Why do we as obstetricians not follow this teaching? It has been proved that millions of bacteria make their home on the vulva, especially the labia minora and around the margin of the anus. If we do not prepare our field of delivery according to aseptic technique when we attempt to examine the patient we carry infecting organisms into the vaginal tract. We should be able to prevent extrinsic infections by careful preparation of our patient with antiseptics and wearing of rubber gloves. Besides the immediate loss by death of a number of child-bearing women each year

we must consider the number infected who do not die, but are left sterile in one way or another, and thus shut off from the possibility of childbearing. By a comparative estimate I believe that out of every five patients seriously ill of puerperal infections one dies and four get well, but are left afflicted in some way, usually by sterility. This morbidity is very injurious to the nation. Most of these women are unfit for their daily duties; others are sterile or are afraid to bear children, and lastly a good proportion of the children die because they are taken away from the breast.

TOXEMIA

The second most common cause of disaster to pregnant women is toxemia, which is classified as follows: (a) pernicious vomiting, (b) acute yellow atrophy, (c) pre-eclampsia toxemia, (d) nephritic toxemia. This deals directly with the unborn child and is the foundation for prenatal care. Toxemia when properly handled rarely ends with untoward results. Most of these cases we classify as disturbances of metabolism, and treat by diet, attention to elimination, hygiene, etc. In rural communities and incities where midwives are in attendance and the patient has no prenatal supervision, the mortality of both mother and baby are high. In a well regulated clinic, where all patients are under a direct prenatal care, the outcome is usually good.

We must educate our patient to report to her physicians as soon as she knows herself to be pregnant. This is fairly easy in the larger cities, but in the rural communities the physicians seldom sees his patient until she is in labor, when he is called and meets the condition confronting him. This is the problem we must solve. We need a better co-operation of patient and doctor.

At preliminary examination the patient should have a very careful general examination. Especial attention should be paid to the heart, lungs, kidneys, breasts, blood pressure and pelvis. Determine that the ovum is intra and not extra-uterine. Measure the pelvis very carefully externally and internally. Take a Wassermann of the blood and keep accurate records. Give your patient prenatal advice, or better still, have some pamphlets printed stating facts in detail. Have the patient report to you

monthly and bring a specimen of urine for the first six months. After that time let her either bring or send you specimen of urine every two weeks. During the last four weeks of her pregnancy she should have a very careful examination to determine the presentation and position of the child. Estimate the size of the child and see if the presenting part is in the pelvis. At this time make another very careful measurement of the pelvis and give her instructions to call you at the onset of labor.

At the Washington University Obstetrical Service, which has been run for years, we are doing a great deal of prenatal work. Dr. Henry Schwarz, professor of obstetrics and gynecology, several years ago realized that an obstetrical service cannot be complete without competent prenatal, natal and postnatal care, and in 1914 read a most excellent article on "Prenatal Care" and outlined the working of such a service. Today we feel that we are running one of the best obstetrical clinics in the country. Our results are most satisfactory, and we feel we are going ahead in the development of our nation by giving children prenatal care.

DISCUSSION

Dr. George Clark Mosher, Kansas City, Mo.—The paper of Dr. Newell brings out a great many valuable points regarding this most interesting subject, which now occupies a prominent place in our obstetric forum.

When we consider the report of the Bureau of Child Welfare, at Washington, and realize that in five rural communities in various parts of the country that out of one hundred and sixty-nine births only ninety-seven children survive and then take the statistics of Lea that in England in forty years the morbidity and mortality of women in child birth has only been reduced the fraction of 1 per cent, the crying need of prenatal care becomes insistent.

We must engage in a propaganda to induce municipal supervision of prospective mothers, through child welfare centers, prenatal clinics and parent-teacher associations.

Our doctors can be aroused by an appeal to give their patients advice and care during this critical period.

The Boston Association for Mothers' Welfare has published remarkable results of its work. In Kansas City we have organized under the auspices of the Junior League a prenatal clinic and another will be arranged early in January.

Individuals as well as obstetric societies can help to improve the conditions which have prevailed.

I want again to thank Dr. Newell for his timely paper.

Dr. W. H. Vogt, St. Louis, Mo.—The paper of Dr. Newell brought out some very interesting points in this very important subject, and I feel that prenatal care should receive still more attention than has been given to it in former years. The essayist spoke of the practices of the midwife and what little prenatal care they give their patients. I am sure all of what he says is true, but I do not believe that the average doctor gives his patients much more care. The trouble lies with the education of the medical student. The obstetric course given the students is far from being sufficient. The student, after having seen a few obstetric cases, and having had only a limited number of didactic lectures, is graduated and goes out to practice obstetrics. He does obstetric work not because he likes it or because he knows anything about it, but simply as an introduction to the family, hoping thereby to eventually get the family practice. He makes no effort to improve his knowledge of the subject, but his main object is later to get to treat the baby that he has brought into the world, the mother, the father, in fact to treat any member of the family of whatever ailment may arise.

The average doctor practices more obstetrics and knows less about it than perhaps any other subject in medicine. They wouldn't think of taking care of a serious eye trouble for fear of the patient losing an eye, yet he doesn't hesitate to take chances with the life of a mother and baby.

I am not criticising the doctors, but I think the fault lies with our methods of teaching and not until these are improved and the student impressed with the need of a good obstetric foundation will the women in labor receive the care that she has a right to expect.

Dr. R. E. Wobus, St. Louis, Mo.—As Dr. Vogt has pointed out, the best thing the "prenatal movement" will accomplish is the fact that it will teach women to demand better obstetric service. Dr. Newell speaks of the deplorable condition in the rural community. We may as well admit that, outside of the maternity clinics and hospitals, conditions on the whole are no better right in St. Louis. Some years ago, in looking up this matter, it was found that, while about 60 per cent of the women in St. Louis were delivered by midwives, there was a greater maternal morbidity and mortality in the 40 per cent delivered by doctors. This is explained by the fact that the physician more often comes in contact with contagion and more often employs operative procedures to terminate labor. This ratio has changed somewhat. The midwife is on the wane and, so far as I know, there is at present only one midwife school in the United States, the one connected with Bellevue.

We are getting, in late years, doctors who are better trained in obstetrics, yet I am quite certain that not one-half of the doctors in St. Louis own a pelvimeter and doubt if more than one-half of them examine the urine of their pregnant women. These things will change when the patient herself knows what she has a right to expect.

In the cities, at present, the well-to-do and the very poor receive the best obstetric care, both classes being taken care of in hospitals and maternity clinics. The wife of the man who is too

poor to go to a pay hospital and too proud to take advantage of a charity clinic receives, on the whole, the poorest obstetrical service. One of the greatest handicaps has been the lack of nurses to take care of this class of patients. They can not afford the services of a trained nurse or two, and many of the so-called "practical nurses" are not only incompetent but positively dangerous. Fortunately, the St. Louis Maternity has already taken steps to alleviate this deficiency by establishing a one-year course of training for obstetric attendants who, while not at par with the trained nurse, will be vastly superior to the untrained and unpractical nurse.

Dr. C. R. Hannah, Dallas, Tex.—The subject matter of this sort is extremely important and very appropriate in opening the first Section on Obstetrics by the Southern Medical Association. I certainly commend the theme of Dr. Newell and heartily agree that improvement in obstetrics can be brought about largely by intensive teaching in the medical schools and carrying a knowledge of obstetrics and its danger to the public.

Personally, I think that every woman ought to be under the supervision of an obstetrician from the time that she realizes that she is pregnant until she is delivered and prepared to be returned to the gynecologist, if necessary.

I believe that when she has engaged her obstetrician he should make her a pupil and teach her the important points that might lead to complications. There is no reason why our patient should not have a knowledge of the pre-eclamptic symptoms. Information on this subject will certainly act as a prophylactic. There is no reason why she should not have a knowledge of infection, for she readily then will co-operate. There is no reason why she should not have a knowledge of the growth of the fetus, for a knowledge on this subject will certainly teach her to exercise greater care in health in preparation for delivery. I am confident that eclampsia can be prevented and the biggest asset in the prevention is for the patient to have a knowledge of eclampsia and of the pre-eclamptic symptoms upon which she may act and exercise her judgment in co-operation with the obstetrician. If the obstetrician is negligent or careless, she and the public pay the price. Teach our patients that complications in obstetrics become a liability to the family rather than an asset.

Let us again commend Dr. Newell for bringing this subject to our attention and let each of us take an invoice of ourselves and find just in what particular we are delinquent.

Dr. M. Pierce Rucker, Richmond, Va.—I am very glad of an opportunity of hearing Dr. Newell, as I have been reading the theses from Dr. Schwartz's clinic with a great deal of pleasure. The problem, as Dr. Newell rightly states, is the same as other problems in preventive medicine, i. e., education (1) of the medical student, (2) of the public. That we are not properly edu-

cating the medical student is shown by such statistics as those published by Levy, of Newark, N. J., several years ago, in which he showed that the mortality in cases handled by midwives and those handled by physicians is practically the same. Of course he was careful to charge back to the midwives those cases that began under their care.

When we look at the question from a different angle, what more can we expect when we turn out practitioners of obstetrics with so little practical experience? In Richmond, for instance, we require the student to attend twenty cases. Most of these, of course, are normal cases, and many of them have already delivered themselves when the student arrives. With this experience he goes up into the mountain or out into the country and is confronted with the most terrible emergencies that can confront a practitioner in any branch of medicine. In medicine or surgery he has time to get assistance or to get his patient to a medical center, but in obstetrics this is impossible, and he has to solve his difficulties unaided. How to get the medical schools to give a better course in obstetrics is, I confess, a hopeless problem.

The second kind of education, that of educating the public, is much easier. With a well organized prenatal clinic and a corps of tactful, enthusiastic nurses, it is easy to get in touch with the public. The nurses get the patients to come and keep them coming and the patients absorb unconsciously a great deal about what good obstetrics means. It is quite possible that some time in the future they will insist upon better medical education in this line.

In regard to infection, I think in stressing proper preparation of the hands and the external genitalia, we are apt to overlook the patient's resistance. It matters not how clean and thorough we may be, we can not render the upper genital tract sterile. Dr. Reed, of Chicago, in his work on induction of labor at term, made cultures in all of his cases and found all manner of pathogenic germs, streptococci, staphylococci and gonococci on the cervix. Now, if we permit the patient to have a long exhausting labor and thus lower her resistance to infection, we are apt to get a case of sepsis in spite of the most rigid technic.

Dr. Newell (closing).—I am very well pleased to hear such an interesting discussion on this important subject. It is very convincing to me, after seeing such great enthusiasm, that we are awakening to the fact that good obstetrics is being demanded by the public and that it is not far distant before we will accomplish more in the development of the human race. Prenatal supervision is absolutely essential and the discussion before this meeting has demonstrated that it is already beginning to reach into the rural communities and that it is only a matter of time until it will become universal.