OBSTETRICAL NURSING

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OBSTETRICAL NURSING

Obstetrics is that part of the science and art of medicine relating to the function of reproduction.[1] It is both an art and a science: An art, because it requires skillfull doing as well as knowing; A science, because it is based upon an ever increasing body of exact knowledge.

Obstetrical nursing is that part of science and art of nursing relating to the care of the mother during pregnancy, through labor, and delivery, and to the care of the mother and child after delivery.

Obstertical nursing dates back to the beginning of time. Even before there were any record kept of the events of people we had groups of women caring for those who were to be confined. That is the natural way of group living: We must care for those who are ill and especially those who are bringing life into the world. In the ancient and primative times it was a great honor for a man to have a wife who was prolific and could bring him a large family. In some tribes the coming of girl babies was heralded as a big event and in other communities the boy babies were the most welcome. This depended a great deal upon the tribe and which sex would bring the greatest economic return--either as warriors and hunters, or as slaves to be sold to wealthy members of neighboring tribes.

The Indians had many superstitions and beliefs about childbirth. These ideas have carried down through the ages and are still told to-day. Many of them believed that parts

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1. Principles and Practice Of Obstetrics By De Lee

of the afterbirth were beneficial as healing powers or as sacrifices to appease the wrath of their different gods. They did not believe a woman was of any use to the tribe if she did not bear children and the men of some tribes would refuse to accept the woman as a wife until they were certain that she was able to bear him children. The larger the family, the greater his prestige would be in his community. These people were ruled by the man of the tribe while the women took care of the living quarters, cooked, sewed, and had children. They had very little say in making the laws of the tribe.

We have many superstitions that have come down from time immemorial about babies, where they came from, and how they got here. Many people believed that by some unhappy event occurring to the pregnant woman, that woman would in some way mark her child by some physical mark or characteristic that would develop as the child grew. This fact, we of today, know to be false, but many people still believe it true. There are superstitions concerning the moon and stars that are still handed down from mother to daughter.

The primative people believed in superstitions because they could not understand just how babies were created. Things that puzzled them were thought to be mysterious and controlled by different gods. Of all the beliefs that are now told the one that seems most terrible is that of a certain group of Hindu people who lived along the Ganges River. They did not care for the female children and so to avoid an over supply, they would cast the infant into the river. If the child came to the surface, it was rescued and allowed to live, if the child did not rise to the surface of the water, it was not

meant to live. This custom has been stopped by civilization but in the ancient times, when civilization was in the making, the male babies were usually more desireable than the female babies. The man of the tribes did the hunting and fighting, so more men were needed to replace those that were killed in battle.

In the ancient Egyptian hiroglyphics we have found records of the story of childbirth. In these picture writings there were many pictures of gods, demons, and evil spirits. these picture writings give us a fairly accurate idea of how the people lived and what their religion was. They worshipped many gods who were interpreted to the people by priests and medicine-men. These men were called to help the pregnant woman through her period of trial. They used all of their influence with the gods, offered up sacrifices, and prayers to help protect her from the evil spirits and demons that would try to molest her. In these ancient times people believed that demons were ready at all times to pounce upon the pregnant woman. In India pregnant women were not allowed to have their hair down for fear an evil spirit might become enmeshed in the strands. Women who were pregnant were warned against yawning because an evil spirit might enter by way of her mouth and cause some malady to overtake that woman. Even today many women still believe in the taboos and superstitions of the primative people, They will not listen to the knowledge of science and learning that is available to the Mediaal profession of our modern times, but still cling to the stories repeated to them by thier mothers and grandmothers. Among some of the superstitions still told to the expectant mother

are warnings not to reach above the head to hang clothes because the cord will wrap itself around the baby's neck and s strangle the child while still in the uterus, To avoid any severe shock or fright that will so upset the mother and cause the baby to be born with a birthmark or be marked in some manner. People in the ancient times had no idea about the growth and development of the fetus. They believed that at rare intervals some god might come down to earth and conceive a child. This child was supposed to be a genius or a leader of his people. They also thought that witches were brought into the world by this manner, and that the father was some evil spirit that had had this person as his tool to work with.. The afterbirth of these children was used for supposed healing powers and as sacrifices to the gods.

These annient people had never had a clear idea as to how man came to be on earth, even today with all of our books, we have no way of explaining man's existance . All we have are theories that men have evolved from scientific observation. Some believed that man sprang from the right shoulder of a bull as a serpent struck the bull dead. Others believed that a devine god was exiled from heaven to wonder the earth alone until a woman was sent down to keep him company; thus man and woman were put on earth. And still we have our own Bible stories of Adam and Eve that have been believed since the Bible has been read. That question does not seem to be one for us to answer, and I believe that we shall never know the exact origin of man. He dates back so far in history that we cannot possibly understand things as they were in the beginning of life.

Modern science is doing much to eradicate these superstitous

ideas people have, but there are so many that have not been reached and who will never understand just what knowledge can do to relieve much suffering. It is a minority of people that have been broadminded and learned enough to ignore these old superstitions and old wives tales.

In the time of the Roman empire we find many women who were interested in humanity and who cared for the sick. This included mothers as well as other people. The people who cared for the sick were devided into three types: Female healers; Wise women; and mid-wives. One of the outstanding characters of the Roman era was Phoebe, a wealthy Roman lady who went about caring for the sick. It was her influence that interested people in the unfortunate, and aroused the spirit of humanity. She started a place for the sick and cared for them with the help of others as sympathetic. Later the Sisters, Nuns, and Monastaries of the Church carried on this work of humanity. The art of nursing would have fared very poorly had it not been for the work of the Church. They kept nursing alive until it was revived in the later centuries by the more scientific world. The work carried on through the long centuries made a great foundation for modern nursing. The nursing profession was not justly represented by those women like Sairy Camp, but by the women who tried to keep the ideal of the nurse upon a higher Plane. Sairy Camp was only a representative of a type of attendant who was allowed to practice at the lowest period of nursing. She is a good illustration of how poorly equipped and incapable the untrained lay woman was in carrying on the nursing profession It was just about the time that Florence Nightingale became so well known that Hospital reforms were being put into effect. This reform was in Liverpool, Glasgow, and London. One of Miss

Nightingale's fellow workers in the field of reform was Mr. Rathbone as well as many other co-workers. Due to the influence of Miss Nightingale we find a better type of women becoming interested in nursing. These women were hard workers, intelligent, and could be depended upon to carry on their work in the best way. They were taught by Florence Nightingale and went out to take charge of other schools and hospitals to help elevate the standards of the Hospitals and the Nurses. Florence Nightingale marks the end of the Middle Ages of nursing and the beginning of Modern Nursing as we now have it today.

We find a beginning in modern Surgery and trends of improvement in nursing as early as the middle of the sixteenth century when Ambroise Pare, A French Physician and Surgeon made a name for himself. He was an assistant at the Hoter D Dieu and later was a military surgeon during the war. He made several important advancements in surgery, one the use of ligatures to tie off bleeding arteries instead of the use of cauterization with burning oil, he invented the truss to be used for hernias. In Obstetrics his most important contribution was the revival of podalic version in 1550. This procedure had been one known to the Greeks but had been lost during the Middle Ages. He wrote his books in his native tongue instead of Latin. He believed that Latin was harder for the more modern scholars to read, and that his books would be more widely read if written in the French. Under the influence of Ambroise Pare the Hotel Dieu was brought up to date and watched more carefully but In the sixteenth and seventeenth centuries the hospitals were a good place to contract infections. For this reason expectant mothers dreaded hospitals because of the high

death rate.

Midwifery was started long before the science and art of obstetrics was known. In the early periods we have had women who practiced the art of delivering babies. Ever since the time of the cave man someone has helped the laying in woman. Small wonder that mid-wifery is still very popular today, especially in Europe more than in America. In some places a doctor is unavailable and someone must be there to recieve the new-comer because he will not wait when started on his way to the outside world. We have several men who did a great deal to educate the midwife in her duties. Henry Van Deventer of Holland has been called the father of modern midwifery. He wrote a book titled "A New Light For Midwives" and in this book he described the pelvis and its deformities and some of the anatomy and physiology associated with childbirth. In Europe there are schools that have been established to teach women the art of midwifery, at the end of this period of school, these women are given licences that permit them to go out in the community and practice. These trained women help keep up the vital statistics of the nation.

In Sweden there is a very highly trained group of women who by their knowledge and care have lowered the infant and maternal mortality rate to the lowest in the world. While in the United States we have a high infant and maternal rate due to the poor conditions for the care of the mother and child in the Southern States. Our ranking is sixteenth up the list of which we should be ashamed. Any country as well educated and progressive as the United States should have a ranking much lower than it is. There are only two or three

schools in the whole country to teach midwifery. One is located in Phiadelphia and is excellent. The Public Health Nurse has done much work in the South in teaching the old Negro mammys the meaning of asepsis and cleanliness. These old Negro ladies go about the country on their mules or on foot and cover the Negro population. Medical work in this district is very unprofitable and entails much hard work and difficult hours. By teaching the midwives some of the dangers and complications of childbirth, there is a chance of saving many lives that might be lost. They are taught what to do in case of normal deliveries and to send for a Doctor in case of any abnormal condition or complications, The Medical profession in the United States is very anxious to lower the Death Rate and is working out a way to accomplish this end. Things like that must be given time to be worked out. They are against the practice of midwifery and have fought all efforts made to establish schools for the teaching of midwifery. It seems as though a good foundation school under the management of competent physicians could do a great amount of good in caring for the poor and isolated people.

Education is playing its part in our country to help in the saving of life. Yet we have a large population to reach and some of it as yet is unable to understand the simple booklets published for education purposes.

The State Bureau of Public Health sends out literature to every expectant mother that comes to the office. Usually the County Nurse, County or private physician send in the name of the family or some friend interesred in that family. Monthly letters are sent to the expectant mother that give her information and help guide her that particular month of her

pregnancy. At the end of each letter the most important parts of the letter are summarized to emphasize that letter. Some of the most important facts of the whole group of letters are:

1. To engage your physician early.
2. Follow the advice of your physician not of friends.
3. The baby can not be marked.
4. Keep busy, happy, and free from worry.
5. Check fluid intake and output for at least three pints daily.
6. Visit the physician regularly.
7. Be informed.
8. Good elimination daily.
9. Watch diet to meet the requirements of the body.
10. Exercise and rest regularly.
11. Plan for the baby's supplies early.
12. Cleanliness in pesonal hygiene.
13. Keep close check on urine examination.
14. Be informed and prepared for the coming baby.

These items are among the most important and are of value to all families. The literature is sent out to be read and studied and advice in these letters is of great value to those people who are in the more sparcely settled areas. Along with these letters are sent pamphlets and booklets that advise the family as to the necessities for the new-comer. Here in Portland the Visiting Nurses Association can be referred to and any questions that are disturbing can be asked with freedom. It is the work of this organization to help those who are in need of aid. They issue booklets that deal with the prenatal care and the postpartum care of the mother and with care of the infant. These booklets that are sent out have valuable information that is important to all families who expect to have a family.

In the practice of obstetrics, infection is one of the most important complications. There can be and infection arising from any part of the period of pregnancy; prenatal, Labor, and post-partum. With all of these chances of infection it is little wonder that we warn people to be very clean and sanitary in their personal hygiene. Infection causes more

deaths than any other complication of pregnancy. The dreadful part of this is we can avoid the high death rate caused by infection by practicing cleanliness and antisepsis. It is not hard to keep things clean or to learn just what to use and how to use it, to obtain the most effective results. There are trained people who are willing to help people learn how to care for themselves. In a country like the United States where we have so many wonderful inventions and modern conveniences, there should be less infection among the pregnant women. She must be on guard at all times against infection. The up-to-date mother knows that she must not take tub baths the last two months of pregnancy because of the danger of infection entering the reproductive tract by that way. An infection that might start before delivery may cause the death of the mother or the unborn child or the death of both mother and child. We must not take such risks. Sexual relations must be avoided during the latter part of pregnancy, but are not so dangerous the first three months of pregnancy. These relations may cause an abortion of the fetus or may cause an infection that would endanger the life of mother and child. Fathers as well as mothers should be educated upon the hygiene and prenatal care. It is a cooperative business and both people should endeavor to give the child a healthy, well body to start out this life on earth.

Infection during delivery under ~~the~~ some conditions can be excused if the delivery was performed under the strictest aseptic conditions. Some times when a delivery is long and difficult an infective process may start in the traumatized tissues. There are bacteria in the reproductive tract at all times and these organisms may start the infection.

During a hard delivery much manipulation and straining is necessary to deliver the infant. This may cause trauma to the tissues and result in sloughing of the tissues. This sloughing tissue is an excellent media for the growth of bacteria and may cause a septic condition to arise. Twins or multiple births always tend to subject the mother to infection, Contamination of surgical wounds must be avoided. In the delivery of the majority of babies there is a perineal tear or and episiotomy that must be repaired. These surgical procedures must be treated as surgical wounds and given aseptic care.

After delivery we must watch for retained tissue which may set up an infective process. During the puerperum period care must be taken to carry out strict aseptic technique to protect the surgical wounds and also to eliminate the danger of cross infection. Greater care must be taken in the hospital than in the home because in the home the mother is used to her own organisms and is less likely to become infected from them.

Child-bed fever in the seventeenth century was a great scourge. In 1660 at the Hotel Dieu two thirds of the women died of sepsis, and in Great Britain severe epidemics were very common. At the end of the eighteenth century, White of Manchester and Gordon of Aberdeen began to use isolation and disinfection. This was ridiculed by the Medical profession but it seemed to eliminate many of the deaths that would have occurred. In America Oliver Wendell Holmes in 1843 read a paper before the Boston Medical Society on the contagiousness of puerperal fever. He also was not given much credit until later years when his work was proven to be correct. Ignatz Semmelweis discovered the true nature of puerperal sepsis.

He declared that puerperal fever originated from the carrying ofer of decomposed organic matter to the woman in labor by those in attendance in the hospitals. He met with bitter opposition and died of a blood stream infection of the same type of organism. His work was carried on by Pasteur and Koch. who isolated the streptococcus organism in many cases of puerperal fever.(1)

The work of Lister on antiseptic and asptic principles and the use of bacteriology by Pasteur and Koch brought on a new era in Surgery and made child bitth much safer.

Modern cesarian section dates back to 1882 when Max Sanger devised a method of sewing up the uterine inscision. Today the cesarian section is performed with very little risk.

Of just as great importance to sepsis and asepsis is the infections of the new born. There are many things that can happen to the new-born infant, but among the most important are; impetigo, ophthalmia neonatorum, jaundice or icterus neonatorum, and syphylis.

Impetigo is a dangerous infection of the skin caused by the staphylococcus organism. It usually starts around the buttocks due to excoriations of the anal region. It also may start from any open lesion on the baby's skin. Damp diapers and chaffing will cause the skin to break down and allow the organism to make its enterance under the skin. In December 1936 Dr. Howard Smith published and article giving data on a newer or more successful method of caring for the skin of the new born infant.(2) His work was carried out in the ob-

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1. Modern Motherhood by Dr. Caude Edward Heaton

2. American Journal of Nursing December 1936
The Prevention of Impetigo
The study of Non-bathing of the Newborn.
By Geneva T. Beane R. N.

stetrical department of the University of Oregon Medical School at the Multnomah County Hospital. His work was done upon non-bathing of the new-bonn infant. He had controle of the experiments that were run along with the work. He tried both methods: removing the vernix caseosa and bathing the infants,,and non-bathing of the infants. He believed that the vernix would furnish a protective coat on the skin and protect it from infection and skin irritation. The latter method was much more successfull. Out of 820 babies born in one yeaf, there were 7 cases of possible impetigo. One was diagnosed as skin irritation leaving 6 possible cases. These babies were isolated from the group that were cleaned with sterile copper oleate at birth and given daily baths.a All were healed and out of isolation in thirty-six hours. Of this group of 820, 362 babies were not cleaned at birth. There were no lesions in this group. One baby had a slight skin irritation that cleared up before discharge from the hospital. The simple procedure of leaving the layer of vernix caseosa on the skin of the newborn seems to be effective in the prevention of impetigo and in the conservation of time in a crowded nursery.

Impetigo is a much dreaded disease because it is highly contagious. Strict isolation must be practiced in treating such cases and thorough sterilization and cleaning of the unit when the case is cleared up.

Ophthalmia neonatorum is not so prevalent now as it was a few years past. It is the cause of blindness in one fourth of all cases of this affliction and can be avoided by the instillation of silver nitrate drops in the eyes of each newborn infant. The cause of the disease is varied but can be isolated to a few organisms: Gonococcus, Pneumococcus,

staphylicoccus, or other organisms that live in the reproductive tract..Stict isolation is necessary in caring for these cases. Usually cold compresses are applied continually to reduce supperation, Sterile irrigations of large quantities of solution, and the instillation of eye drops such as argyrol, protargol, or silver nitrate. Nearly all states in the United States require Silver Nitrate Drops to be instilled in the eyes of all new-born as a preventative measure.

Syphilis in one of the most serious infections of the new-born and is in nearly all cases contracted enutero. The disease is transmitted by means of the blood stream from mother to babe. That is the chief reason why all expectant mothers should have a complete blood analysis with the first physical examination. They should have this examination before the fifth month of pregnancy, and if a posotive wasserman is found then treatments should begin at once. This will insure the baby of a chance for a clean healthy body. If the mother is taking treatments of arsnic or mercurial preperations faithfully she will give birth toa perfectly normal baby. How can we make mothers realize the necessity of consulting a physician as early as possible? Only by continuous lecturing and education will we get the public to realize the dangers of this terrible infection, that can attact any organ or part of the body. We want well, happy babies that are not held back and thwarted by some disease that can be avoided.

Jaundice neonatorum is first recognized by the yellow color of the babies skin. Then the whites of the eyes turn yellow and the baby begins to show symptoms of being ill. Jaundice hase several causes such as obliteration of the

bile duct, syphlis of the liver, septic condition, and icterus neonatorum. The latter is the most common and is present in fully twenty five per cent of new born babies. It usually appears about the third to sixth day and affects the whole body. There are several theories as to the cause of icterus neonatorum such as disorganization of the blood, the inefficienty of the liver which causes an accumulation of bile in the blood, sepsis, and still other less common infections. Usually when the baby begins to get mothers milk and to gain in weight the condition becomes much improved and soon disappears. In the more serious cases blood may be given subcutaneously. Nourishment is of the greatest importance and fluids and food must be given the infant. Icterus tends to increase the bleeding time due to the inability of the blood to coagulate, so any surgical operations must necessarily be delayed until the jaundiced condition is improved.

In all cases of infections whether of the mother or of the infant we meust be very careful with our technique in caring for them; Thus avoiding any chance of carrying the infection from one patient to another. Isolation technique must be strictly observed.

Every mother fears the pain of childbirth and dreads that part of having a baby. It is the aim of the physician to make that time of pregnancy as comfortable as possible and to allay the pain. The type of analgesia and anesthesia, of course, depends upon the patient. It was not until the seventeenth and eighteenth centuries that any anesthesia was perscribed. Then chloroform was discovered to be effective. This was dangerous to the infant and has been discontinued. Later with the progress of science other anesthetics were

found that were just as effective but less dangerous. Today ether is the most favored of anesthetics. It is easy to carry, and can be administered by any untrained assistant if necessary. It is given at the end of the second or expulsive stage of labor to relieve the severe pains of delivery. If given too early it retards labor by inhibiting the pains. Temporary unconsciousness is desired and either gives relief at the time most needed.

Chloroform is rarely used in America because its margin of safety is not so wide and must be administered by a trained ahesthetist.

Ether may be administeredby the cone of by the closed method in combination with oxygen.

Ethylene is a new anesthitics that is very good if given by an expert. It is very satisfactory and leaves no after effects. It is rather expensive to use and is dangerous because of it being highly inflammable. It is used with oxygen to produce a general anesthesia.

Niterous oxide is another popular anesthesia. It is administered in the hospital by a trained anesthetist. It has no tendency to slow labor but takes the edge off pains. Nitrous Oxide may be administered intermittenly for a long period of time and cause no unpleasant after effects to the mother or child. Gas is given in a mixture with oxygen at the beginning of the second stage of labor or the period of expulsion. It is given with the pains and causes a temporary unconsciousness that disappears as soon as the mask is lifted from the face. The only drawback to gas and oxygen is the same as with ethylene; it is expensive to use and

needs the attention of another skilled doctor of.anesthetist.

Morphine is used a great deal in labor as the child nears delivery. It enables the patient to rest between contractions and when given in small doses causes no ill effects upon the mother or child.

A very popular method of inducing obstetrical analgesia throughout active labor is the Gwathmey method. This method consists of three hypodermic injections, the first containing morphine and a 25% magnesium Sulphate solution, the second and third of magnesium sulphate solution alone chich increases the effectiveness of the morphine. As labor progresses an oil retention enema is given of oil and ether. This method of anesthesia is easy to administer and inexpensive, it may by carried out in the home and in the hospital. It can be given by an inexperienced person.

Among the newer methods of easing labor are the use of the barbiturates. Of these Sodium Amytal and Pentobarbital are the most common. They are administered orally and are hypnotic in action. These drugs are very effective and if no are usually combined with morphine.to insure more rest and relief. Avertin is a new anesthetic used by the more modern obstetricians. It is instilled rectally and is hypnotic in effect.

In our hospital there is a varried number of anesthetics used, the most popular of which are Pentobartal, Gwathmey, ether, and nitrous oxide. These anesthetics, however, depend upon the physician in charge of the casedand the condition of the patient.

The use of instruments was not known until the latter part of the eighteenth century. William Chamberlen in 1569 had invented a forceps that was very effective. The secret of these forceps was kept within the Chamberlen family for rearly two hundred years or until 1773 when Sir Hugh Chamberlen sold the secret to the Dutch. They secured a monoply in Amsterdam that lasted for sixty years but the news leaked out and forceps gradually became known. Scince that time instruments have been used. There are different types of forceps used now, but all have the same principle. Other surgical procedures such as perineal repair from lacerations and epesiotomy have the need of surgical instruments. Usually a delivery table set up consists of knife, forceps, hemostats or clamps, two pair of scissors, one for cord and one for the epesiotomy, kellye forceps, retractors, needle holders, and a basin for the placenta..

Instruments are necessary for obstetrical work if the pelvis is small, the baby large, pelvic deformity, or a very rigid pelvic floor. In case of cesarian section abdominal surgery is performed. In some cases a cervical desarian is done. The cervix is cut to the internal os. Such procedures are contemplated ahead of time and the instruments prepared for the operation. These major surgical operations are only resorted to in case of necessity of saving the life of the mother or child. There are very few cases today where distructive section of the infant is performed. The physician can usually forsee any complications and avoid taking the life of the child.

For the family that is financially able to have a baby, we need have no great fears. Their main problem is first,

to choose a competent physician to care for the mother and then for the baby after the delivery. This physician needs to be up-to-date and well versed upon his work. He must have had adequate training in obstertrics, both theoretically and practical, in his medical school work, and he should have had his internship from a good hospital that has been approved by the National Hospital Association. His knowledge of medicine and surgery should be adequate.to enable him to take care of any complications that may arise. Of course this type of doctor is not available to all mothers but we want them to get the best that they can. It is the hope of the medical profession that as time goes on we will have every practicing physician trained enough to care for any obstetrical case and to recognize complications in advance. The standard for the medical profession has been raised so high that a person must be above average intelligence to pass all the tests and work of becoming a doctor. The physician must be chosen and seen during the early months of pregnancy for an early check on the condition of the patient.

The next problem of the family is the choice of a hospital to take care of the mother during her labor period and the puerperum period. The most important factors in choosing a hospital : That the obstetrical department be segregated from the rest of the hospital; Available facilities for isolation if necessary; The personal should be properly trained for their work; The labratory and special treatment facilities be available; A staff doctor who is a specialist and who can be consulted in case of emergency; Good aseptic technique in the care of the patients both mother and child;

Reservations should be made in advance so that the hospital will expect the mother around the approximate time of confinement.

For the financially unprepared family there has been much work done to care for those expectant mothers. Clinics have been established in the larger cities to care for such emergencies. These clinics have been devided into different sections; pre-natal, delivery,and puerperum, and infant well fare.

The prenatal clinic here in Portland is located at the University of Oregon Medical School in the out patient department. The expectant mother is referred to the clinic and if they cannot afford the care given, a thorough investigation is made of the financial status of the family. When it is ascertained that care is needed, the patient is sent to the prenatal clinic. Here she is interviewed by the attending physician and a senior medical student assigned to that service. Her history is taken and an examination is made, both physically and of the pelvis. Measurements are taken and recorded. She has a chart made out for her upon which the whole record of her pregnancy is kept on file. She is given instructions for her personal care and how to be clean about her body. There are pamphlets published to give the needed information to the mother. The material in the booklets covers diet for the pregnant woman, rest, exercise, personal hygiene, preparation for the infant, infant care, and general information concerning pregnancy. The name and address is sent to the department of the State Bureau of Public Health. From this office the family receives letters and books with infor-

ation about the changes of the body, the adjustments that have to be made to the coming event. They help the young inexperienced woman to know just what is happening and what to do. She is given a simple but complete knowledge of her condition, and the changes that will take place in her body to accommodate the growing fetus. A routine urinalysis is brought by the patient with each visit to the clinic. Sometime during the first three or four months a routine blood count is taken and also blood for a Wasserman test. If there is no posotive reaction in the Wasserman, the patient need not worry about the health of the baby as far as Lues is concerned However, if there is a posotive reaction, treatment should be started for syphlis. The main drugs used in this treatment are marcurial preparations and arsenic preparations. These are usually given by mouth, vein, or in case of mercury it may be applied to the skin. This treatment is not a curative one but simply a preventative for the infant to contract the infection. Parents should be told of the dangers of bringing a child into the world with an iffection that would lessen its chances of an even break in this world. The physician caring for the mother is always willing to clear up any troubles that may be bothering the patient and she should not feel reluctant in asking his advice. At the clinic the best physicians in the city are available. The pregnant woman is ask to reprt to the clinic every month for the first six months of pregnancy and oftener if any complications arise. She comes with her specimen and is examined at each visit. The nurse in the obstertical department that takes care of the pre-natal work tries to visit the patient in her homer frequent-

ly to see what the home conditions are, to help the mother plan her routine and time. In case a home delivery is contemplated the nurse gives instructions about bed boards, linen, baby clothes and bed, avaialable hot water and convenience that the living quarters affords. The mother should have a separate room and must have a bed alone. All these things are cared for the physician by the nurse. In case of complications the patient is brought to the hospital for care, and a hospital delivery is arranged. Only those women who are in excellent health, who have had previous babies, and who have easy deliveries are allowed to have home deliveries. Primipara patients are always an obstetrical risk because they constitute the unknown. During the seventh and eighth months visits are made to the clinic more frequently, two to three weeks apart, As the fetus drops down into the pelvis a closer check is kept upon the patient, and the last two or three weeks weekly visits are made to the doctor.. At any time the patient may go into labor and the condition of the patient needs to be watched carefully.

If the mother is taken to the hospital for delivery, she spends nine to ten days in bed after delivery. Here in the hospital any surgical repair work that is necessary after delivery can be done with no danger to the wellfare of the patient. She will have the best of care, and her baby will be put on regular schedule and the diet is watched by the gain made by the infant. If the formula or mother 's milk is not agreeable, a formula is tried until one is found that will agree with the infant. Any skin irritations are checked closely to avoid an infection. During the pueperum period the mother has a full diet, she is urged to take fluids

and to eat hartily. Usually after delivery the appetite of the new mother is very good and no trouble as far as eating bothers the patient. She is given a nourishing diet that meets the requirements of her own body and the needs of the infant.

For the home delivery the staff doctor and the senior medical student on Obstetrical call go out to the home to deliver the patient. They are accompanied by a nurse from the nursing department who has attended to the necessary preliminaries. She has instructed the family just what is necessary, and what to have ready for the doctor when he arrives. Home cases have less danger of infection than hospital cases because the risk of the patient is less, the patient is used to her own organisms and has an immune resistance built up. These patients are given bed rest for the ten days post-partum and then are warned against doing too much for a while until they have their strength back. The person who cares for the patient is given instructions for her pereneal care and usually the Visiting Nurses call daily to bath the patient and the baby. That is in Portland.

For the next two years the life of the baby is of vital importance to the Infant Welfare Department. Before the Baby's arrival calls had been made upon the mother. After the birth of the baby the Infant Welfare Nurse calls upon the mother after her discharge from the hospital. In this way the case is followed and a close check u on the progress of the new arrival is made. It is the work of the Visiting Infant Welfare Nurse to interest the mother in the health of the baby and to instruct her about the Well Baby Clinics that

are held in the districts of the City.

Infant Welfare work was first started in France in 1890 The people and the government of that country were becoming alarmed at the high rate of infant deaths. A milk station was started where only pasteurized milk was given out. The experiment was very successful and a number of such stations were established. The infant mortality rate dropped and the general health of the infants improved.

The example set by France was followed by a man named Nathan Straus. He started up a milk station in New York City. This was the geginning of the Infant Welfare Work in America. With the success of the first station, other stations were established in the large cities. In 1910 there were 42 Infant Welfare organizations in the United States. These were located in the larger cities of the country. The death rate was beginning to go down as a result and other cities followed the examples set by New York. In 1914 a Save The Babies Campaign was held here in Portland. The leading Baby Specialists of the city were backing this campaign. It was held at the Jewish Neighborhood House in South Portland and lasted two weeks. Here pastuerized milk was used and people were instructed to use only pastuerized milk for their babies. With this work came the need of nurses to carry on the work started, with the result of our Infant welfare nurses. The results of this compaign justified the necessity of having clinics in Portland for baby care.

The interest aroused by milk stations increased the necessity of all milk to be pastuerized that was fed to the children. Nurses were needed to instruct mothers about the

care of the infants, the use of complimentary and supplementary feedings, regularity of habits and a routine schedule to be followed in the care of the baby.

In 1920 the Infant Welfare department became a part of the Visiting Nurses Association. Since then very good results have shown the effectiveness of this plan of a combination of Visiting nursing and infant welfare work combined. In Portland the infant death rate for 1000 live births has been on a rapid decline. Also the interest evidenced by the City of Portland has stimulated other smaller communities to carry on the same work done by the infant welfare workers and to decrease infant and maternal death. In Portland the drop has been big

1920	60	deaths	per	1000	l.b.
1928	43	"	"	"	"
1929	41	"	"	"	"
1930	40.3	"	"	"	"
1931	35.1	"	"	"	"
1932	33.	"	"	"	"

The actual work of the clinic consists of varied duties. The infant welfare nurses call upon all new mothers that are referred to the clinic. The success of the nurse in this work depends upon her ability and personality to inspire confidence, to get the full cooperation of the family, and her dependability. People like to be remembered and they will do many things for the nurse if approached by the right manner. The most important work of the infant welfare nurse is to get the mothers to attend the well baby clinics that are held in the cities, and to get them to follow the advice of the physician. These clinics are quite centrally located in eight districs of the city

South Portland------Jewish Neighborhood House

Arletta	Arletta Public Library
Albina	North Branch Library
East Portland	East Portland Library
ST. Johns	St John Public Library
Sellwood	Sellwood Community House
Rose City	Rose City Public Library
Wood Lawn	North Branch Public Library

The aim of the clinics is to reduce infant mortality. The well babies attend these clinics and those who are ill are referred to the family physician and to the physician in charge of the family.. The Visiting Nurse for the Infant Welfare work supervises the clinics with the assistance of some of the leading baby doctors of the city who donate their time to this work. The rest of the work of the clinic is carried on by volunteer help and the Public Health Student Nurses. There is a registration fee of one dollar charged to those who can afford to pay. Those who cannot pay are admitted to the clinic and are ask to pay if and when they fee they are able. For two years the progress of the baby is watched. Each district has a file and each baby registered has a card with all of its history since birth. The diet of the baby is of vital importance. It must have the right foods in the proper quantity, and must be fed regularly. Vitaminssare not forgotten and various preparations of Cod-liver Oil and other Vitamin Dproducts are ordered for the child with increasing dosage ah the infant grows. This is a profilaxix for rickets. Clothing is of importance. The fewer the clothes, the healthier the skin. After the first six months a new diet is perscribed and an increase in bulky foods gradually added. With each visit to the clinic a complete physical examination in made of the baby and the teeth noted, bony formations, and general condition

of the child.

The Visiting Nurses Association is financially supported by the Community Chest, the City of Portland, The Metropolitan Life Insurance Company, Donations, and Registration fees paid by the mothers in the clinic.

The United States has a high infant mortality rate. It is sixteenth on the list and has not decreased to a great extent inthe past ten years. Only by time, money and a strong educational program can this rate be lowered to compete with the countries of Europe such as Sweeden, France, England, and Holland and other countries low in the death rating.

In Oregon the infant death rate has been on a steady decrease. Since the infant welfare work became so strong, there has been a marked decrease. The maternal death rate has been harder to lower thatn the infant mortality, and in the past two years it has gone up a little.

Portland has much to be thankful for. The death rate in the city has made a marked decline and is still going down. Great strides are being made in the dare of our young but important population.

The new Social Security Act that was put through by Congress has enabled each state in the United States to employ more Public Health nurses. The whole country is anxious to lower the death rate and to combat infection. If as much progress is made in the next five years as has been made in the past five years we have a bright outlook ahead. We hope for the best. It is the desire of every public spirited person to decrease death. We want to be

proud of our country and not embarassed by the high ratin in comparison with other nations.

The main causes of maternal death rate are puerperal infections, eclampsia, and other infections contracted du during pregnancy. These all tend to lower the resistance and strength of the body. The infections so weaken the m nother and cause death. The highest death rate is from s sepsis and is the easiest prevented. Good prenatal hygiene is the most essential factor in avoiding infections.

The infant mortality is due to various causes:

Still births which may be causes by a long hard labor, suffocation enutero, placenta previag and syphilis of the mother who has not received treatment during pregnancy.

Some babies do not nurse and are allergic to most prepared foods. Malnutrition and marasmus may cause death.

Prematurity causes many deaths. Until the past few years very little was known about the premature infant. Now with the help of specially trained physicians and nurses and the modern conveniences of he up-to-date ho hospital many premature infants are saved that of former years. The incubator or specially heated cribs must be available to furnish heat to the infant. They are unable to regulate thier own body heat and must be aided in this by artificial means. The premature infant is fed by gavage for a few weeks until it has enough strengh and is gaining weight to enable it to nurse the breast of the nipple. Economy

of energy is essential to the life of the premature child

Obstetrical nursing opens side fields to the nurse who is interested in the care of the mother and child. The actual care of the obstetrical patient, the Public Health Nursing in connection with obstetrics, and the Infant Welfare work are all interesting and relative new fields for the ambitious nurse study and work on. I believe that Infant Welfare Work is one of the most important fields for the Obstetrical nurse and the next few years will mark a great change and dissemination of health education. Nursing in any field is becoming more important and essential. The country is beginning to be more health minded and is ansious to become educated to better health measures. With the cooperation of the physicians, the nurses, and the general educated public much progress should be mad in Public Health and Vital Statistics.

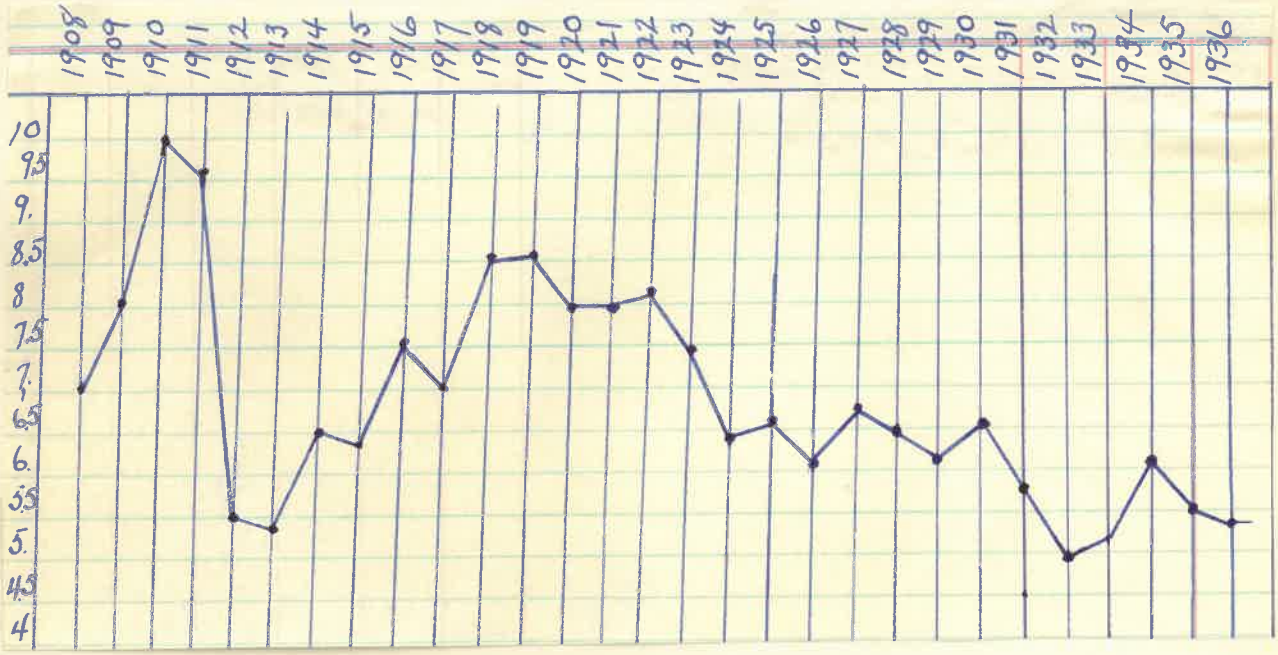
INFANT AND MATERNAL DEATH RATES TO 1000 LIVE BIRTHS IN OREGON

Year	Infant	Maternal
1808	81.2	7.0
1909	80.7	8.0
1910	79.9	9.9
1911	78.7	9.5
1912	58.6	5.6
1913	61.9	5.4
1914	49.6	6.2
1915	47.6	6.0
1916	55.9	6.9
1917	63.6	6.6
1918	68.2	7.9
1919	61.9	7.9
1920	61.9	7.9
1921	50.6	7.5
1922	58.7	7.6
1923	56.9	6.9
1924	52.7	5.9
1925	50.5	6.1
1926	51.5	5.7
1927	47.3	6.2
1928	46.0	6.1
1929	47.7	5.7
1930	49.8	6.0
1931	43.6	4.5
1932	41.3	4.9
1933	40.5	5.2
1934	39.7	6.0
1935	40.8	5.5
1936	44.7	5.4

Maternal Death Rate For 1000 Live Births

1908 - 1936

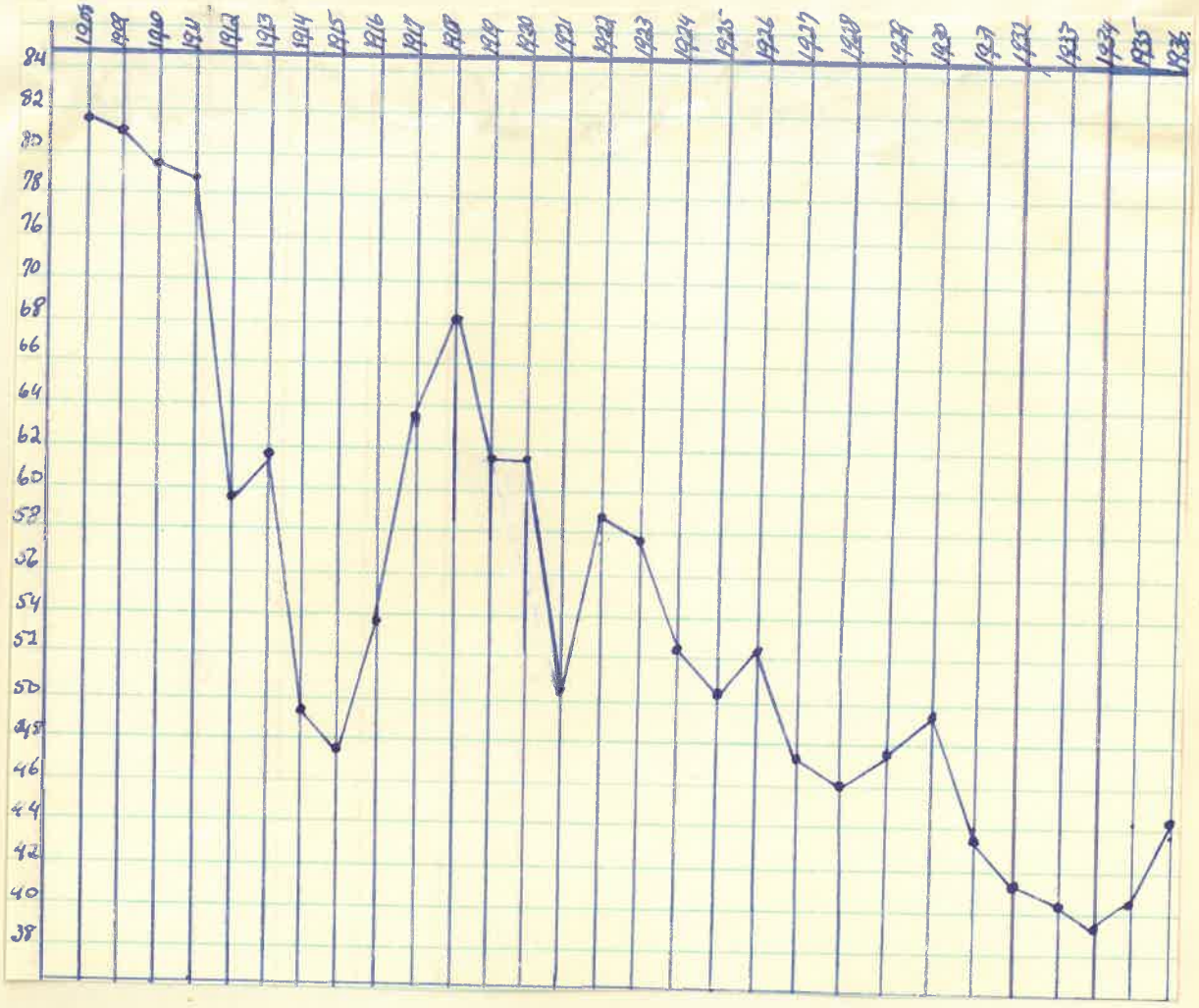
Oregon



Infant Death Rate for 1000 Live Births

1908 through 1936

Oregon



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