A SHORT COURSE IN OBSTETRICAL NURSING

IX.

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Aim:

The primary object of this course is to insure good nursing care for our obstetrical patients, and as a means toward this end the development of the obstetrical nurse.

Time:

24 hours of lecture by obstetrician and 18 hours of class work conducted by the obstetrical supervisor.

General Plan:

The obstetrician, in 12 two hour lectures outlines the principles underlying the care of a normal mother during pregnancy, labor, and the puerperium. Also the care of the newborn placeing special emphasis on clinic and home delivery proceedure. Finally considering some of the most important complications and anomalies, their causes, prevention and treatment.

The supervisor in 12 one and one-half hour periods endeavors to compdement the lectures by teaching the related proceedures as practiced in her own department, having as her aim the better correlation of theory and practice.

Because she has a smaller group and her association with them is less formal, she has a unique opportunity to clear up for them difficult questions concering the previous lecture and to pave the way for the next by stimulating interest in the new subject.

Text:

DeLee, Zabriskie and Van Blarcom.

Methods of teaching based on laws of learning:
The laws of learning as formulated by Dr. Thorndike and elaborated by Bertha Harmer are:

1. The Law of Readiness.

"Mind-set-to-an-end, or purpose. When a bond is ready to act, to act gives satisfaction and not to act gives annoyance; when a bond is not ready to act, to be forced to act gives annoyance. This set acts as a controlling interest and purpose that takes possession of the mind at the time and which makes more ready all one's inner resources (response bonds) that by previous inner connection seems pertinent to the activity at hand."

Fortunately student nurses are studying nursing because they wish to, and have to an unusual degree, interest in, and this eagerness to learn must be constantly stimulated and suitably fed if it is to be maintained at a high level and the second law of learning utilized.

2. The Law of Effect.

"The law of satisfaction (or success) and annoyance (or failure): A modifiable bond is strengthened or weakened according as satisfaction or annoyance attends its exercise."

"This means that the satisfaction which comes to students from seeing, hearing, reading, or doing something which fits in with or helps them in what they have planned and purpose doing, and the satisfaction arising from the success likely to follow whole hearted interest and effort, not only stimulate the learning process but are necessary to it."

The student may come to class full of interest and questions: Through discussions and demonstration this interest may be stimulated and all her questions answered to her entire satisfaction, but if opportunity to apply the principles she has learned a chance to "learn by doing" is not soon made possible for her, these same principles will fade and the learning will not be permanent. Here is where the third law of learning comes in.

3. Law of Exercise.

"(Repetition) or use and disuse states that within limits the more often a response is made to a situation the closer becomes the bond connecting the two; that is, the more surely and smoothly is the response made when the situation presents itself."

Example:

Importance of removing make up as part of preparation of patients for delivery.

Arouse interest by relating specific incident or by some introductory statement such as "For ten months this patient's body, mind and soul has been undergoing changes in preparation for the great event which is now imminent, namely, labor and the delivery of her child. Her reaction is naturally a womans reaction and as such understood by the nuuse. She has her hair freshly marceled, her nails manicured and makes up her face with great care, wishing to meet this new experience "looking her best." As women we do not want to detract one iota from her self assurance but as nurses we have the responsibility of guarding against complications, some of the signs which are to be observed in altered color and expressions which we cannot afford to have masked with heavy make up. This is the problem. The manner of meeting it will depend upon the individual judgement and tact of the nurse.

Having thus aroused interest and after a clear statement of the problem it may be suggested that the nurse formulate her plan and practice it on the ward, bringing back to class the result of her experience.

Thus have been utilized the three laws of learning: readiness, effect and exercise.

OUTLINE OF LESSONS

I. Introduction

II. Anatomy and Physiology

III. Growth of fetus, placenta, maternal changes during pregnancy.
Signs of Pregnancy
Probable
Presumptive
Positive
Demonstration Blood Pressure

IV. Hygine of pregnancy:
Mode of living for pregnant woman
Prenatal care
Dem. Method urinalysis

V. Labor
Stages
Nursing
Dem. Positions and draping for examination

VI. Dr. Adams (1/2 hour)
Presentation and position
Endocrinology

Dem. 1 hour
Plastic Prep.
Rectal Ether
Pre-Delivery scrub

VII. Delivery
OBT Operations

VII. Baby

IX. Puerperium

X. Complications of pregnancy

XI. Complications of Labor & Puerperium

XII. Examinations

Lesson I

Insturctor

Meet class for First time.

No previous assigment.

Some time was spent calling roll, learning the correct prnounciation of the names and associating them with the individuals. (after this little or no time was spent on the roll.

Statement of general plan of course.

Brief introduction to the personalities of Dr. DeLee, Miss Van Blarcom and Louise Zabriskie along with an appreciation of their work.

The question "What do you understand the term obstetrics to mean?" was asked and a defination for obstetrics formulated from replys made by the class.

By way of introduction to the course a few critical statements from current magazines were read and the suggestion made that we bear them in mind during our weeks of study together and see if they are justified and if so what we can do about it.

Assignment

The anatomy (structure) and the physiology (function) of the female generative organs.

First two chapters in any one or better still in all three of our texts.

Demonstration:

Pelvimeter and its use demonstrated on prepared pelvis.

"The importance of these measurements will be made clear by Dr. Kindshie in tomorrows lecture."

Look up as help in tomorrows lecture the following:

1. Antepartum
2. Prenatal
3. Parturient
4. Puerperium
5. Mons Veneris
6. Douglas-cul-de-sac
7. Cyesis
8. Rami
9. Fossa Navicularis
10. Cornua
11. Hormone
12. Rombord of Michelis

Lecture I
Dr. Kindshie

Previous assignment first 62 pages of De Lee
Introductory statement:

Hazard of child birth
7-1000 mothers lose lives in child birth
2nd. only to T. B.
62-1000 babies die during first year
130,000 die annually in United States

Definition of Obstetrical terms:

1. Antepartum--before delivery
2. Prenatal----before birth
3. Parturient--woman giving birth
4. Puerperium--lying in period
5. Mons veneris-"Mound of beauty" pad of fat covering symphsis pubis.
6. Douglas-cul-de-sac-blind pouch between the posterior fornix and the rectum formed by a fold of peritoneum dropping down (illustrated on wall chart)
7. Cyesis------pregnancy
8. Rami---Pelvic arch
9. Fossa navicularous--boat shaped depression between the hymen and termination of labia majora.
10. Cornua--2 upper angles of the uterus.
11. Hormone-product of a gland of internal secretion.
12. Romboid of Michelis-lozenge shaped space on external lower back, marked by 4 dimples
(upper one from which external conjugate is measured)

Types of Pelves

1. Large
2. Small (generally contracted)
3. Flattened
4. Distorted

(Four types demonstrated with prepared pelves.)
Pevimetry-(system of pelvic measurements)
Pelvimeter-instrument used in making these measurements

Measurements
(Demonstrated with pelvimeter on prepared pelves.)
1. Intraspinous-normally 26 cm.
2. Intercrestal-normally 29 cm.
3. Intertrochanteric-normally 31 cm.
4. Baudeloque-normally 21 cm.
5. Transverse diameter-normally 21 cm. (width of outlet)
6. Anterior diameter- normally 11 cm.
Taken from tip of sacreum to lower part of symphsis and representing length of outlet.

Soft Parts

Relative positions of following shown on large colored wall chart:

1. Uterus,- in direct communication with perineal cavity.
2. Urinary bladder- in front
3. Rectum- behind
4. Fallopian-tubes with frimbriated extremities
5. Ovaries- on either side of abdomen.
6. Ovarian artery- joining with uterine artery
7. Vagina
8. Labia- minora, majora
9. Hymen
10. Fourchette
11. Clitoris with prepuce
12. Urinary meatus
13. Bartholin's glands (just inside labia majora, lower end.

Importance of knowledge of all these small parts two fold:
1. To preserve their integrity
2. To maintain our aseptic tecinque.

Have been studying "Passage."
It's size and shape is important only in it relation to "Passenger" or baby's head.

The following bones, sutures, and measurements were demonstrated on prepared skull:-

a. Bones
   1. Frontal (2)
   2. Parietal (2)
   3. Occipital (I)

b. These bones joined by sutures
   1. Frontal
   2. Coroual
      saggital
   3. Lambdoidal

c. Fontanelles "soft spot"
1. Anterior or large
2. Posterior or small

d. Diameters of head
   1. Bi-parietal-normally 9½ cm.
   2. Occipital frontal 12 cm.
   3. Occipital- mental 13½ cm. (chin)
   4. Sub-occipital or Bregniatie

Next time read to page 132 De Lee
Lecture will cover
Physiology of reporduction
Foetal circulation
Prenatal changes and care

Lesson II

Review of previous lecture outlined in following manner.
(Page 9- "Organs of Generation" to "Placenta" page 13.
Outline book.)

A-External

1. Labia majora (the vulva).
2. Labia minora (lesser lips).
3. Vestibule (space between labia majora and labia minora).
4. Hymen (fibrous covering over vaginal orifice in virgins).
5. Vagina (elastic canal lying wholly within the true pelvis.)
   Length: 5 to 6 inches. Lined with mucus membrane and contains glands of secretion.

B-Internal

1. Uterus
   - (a) Definition: Hollow, pear-shaped musculo-membranous organ.
   - (b) Function: To harbor and expel the products of conception.
   - (c) Composition: Muscular tissue (elastic) and mucus membrane.
   - (d) Situation: In midposition in mid-pelvis.
   - (e) Supports: 2 broad ligaments and 2 round ligaments, abdominal muscles and perineum.
   - (f) Coverings: Inner of mucous membrane. This membrane called endometrium. Outer by peritoneum.
   - (g) Parts: (1) The Fundus: upper, rounded portion
     (2) The body: that portion lying between the fundus and cervix.
     (3) The cervix: the lower, narrow, constricted portion the last inch and a half of which projects into the mouth of a bottle.
   - (h) Openings: (1) For Fallopian tubes: at junction of fundus and body.
     (2) Internal os: at junction of body and cervix.
     (3) External os: at end of cervix.
     (4) Cervical canal: opening that lies between internal and external os.
   - (i) Weight:
     (1) 3 to 5 oz.
     (2)
2. Ovaries
   - (a) Size: About that of an English Walnut.
   - (b) Shape: Almond.
   - (c) Situation: On either side of the abdomen in the posterior folds of the broad ligament.
   - (d) Function: Ovulation.
     Gland of internal secretion.

3. Fallopian Tubes
   (a) Shape: Trumpet.
   (b) Length: 3 to 4 inches
   (c) Extremities: Proximal attached to uterus. Distal in fan-shape formation-knownas fimbriated extremity.
   (d) Attachments: Proximal end to uterus at junction of jundus and body. Distal end almost entirely free except for s slightest attachment to ovary.
   (e) Function: A canal for the migration of the ovum in its effort to become fertilized with the male element.

4. The Mammae (Breasts)
   (a) Location: On anterior wall of the chest between 3 and 7 ribs.
   (b) Function: Lactation (milk secretion).
   (c) Composition: Glandular and fat tissue.
   (d) Arrangement of tissue: 15 to 20 lobes (fat tissue between the lobes) and these lobes are divided into lobules, known as milk ducts. Just before duct enters nipple, it dilates and forms what is known as a reservoir. The duct runs from the periphery of breast to the center.
   (e) Nipple: Papilla in center of breast containing the openings of the mild ducts.
   (f) The Areolar: Dark tissue immediately surrounding nipple. Contains glands of Montgomery.

Anatomy of the Pelvis

A- Composition
   1. 2 innominate bones
   2. 1 sacrum.
   3. 1 coccyx.

Divisions of the Innominate Bone
   1. Pubis and wings.
   2. Ilium and wings.
   3. Ischium and wings and tuberosities.
   N.B.--These are not separate bones in the adult.

B-Parts of Pelvis
   1. Pelvic Inlet:
      (a) Location: at junction of true and false pelvis.
      (b) Shape: eliptical.

   2. Pelvic Outlet:
      (a) Location: at end of true pelvis.
      (b) Shape: flattened heart.

   3. Pelvic Cavity:
      (a) Location: between pelvic inlet and outlet.
      (b) Shape: Eliptical
      (c) Contents: rectum to the left.

C-Divisions of the Pelvis

(a) Upper or false, which is composed of the expanded wings of the ilium.
(b) Lower, or true, which is composed of the innominate bones, sacrum and coccyx.

D-The Perineum or Pelvic Floor

(a) Definition: A musculo-membranous body separating the vagina from the rectum and extending from the bony outlet to the vaginal outlet.
(b) Composition: muscles and ligaments. Most important muscles are the 2 levator ani.
(c) Openings: urethra, vagina, anus.
(d) The fourchette is that portion of the perineum that is composed chiefly of skin and that extend from the vaginal orifice to the anal orifice.

E-Joints of Pelvis

1. Symphysis pubis (1).
2. Sacro-iliac (2).

Pelvic Measurements

Measurements	Diameter	Position
A-Internal		
1. Diagonal or internal conjugate	11.5-13 cms. (made by making certain deductions from the internal conjugate diam.)	Lithotomy
2. Conjugate vera, or true conjugate.		
B-External		
1. Spines of ilium	26 cms.	Dorsal
2. Crests of ilium	28 cms.	Dorsal
3. Intertrochanteric	31 cms.	Dorsal
4. External conjugate, or Baudeloque	18-21 cms.	On side
5. Anterior sagittal	4-6 cms.	Lithotomy
6. Posterior sagittal	8-10 cms.	Lithotomy
7. Antero-posterior sagittal	10-13 cms.	Lithotomy
8. Transverse of outlet or tuberosities of ischium	9-11 cms.	Lithotomy
9. Oblique-right and left		Side

Class which is arranged in semicircle around instructor is asked "What part of study so far have you found most difficult? "Pelvic Measurements", "Relation between corpus Luteum and Menstration" are the answers, (more or less anticipated by the instructor). The ideal methods of demonstrating the relation of measurements to sucessful delivery is on pregnant patients in prenatal clinics but since this is impossible in the class room or on private patients such as we work with, the following method was substituted.

On a volunteered student the four external measurements were demonstrated pointing out the land marks, crests of illium, spines of illium, dimple below last lumbar spine etc. Illustrations in Zabrishie were passed around, students were encouraged to find these points on themselves, read the pelvimeter and compare their findings with the normal.

The four internal measurements were illustrated by diagrams on the backboard particular care being taken to show the relation between shape of pubic arch and depth of perineum. (Anterior-posterior saggital)

Suggested that those working in the maternity, seize every opportunity to observe interne when he makes these measurements, read his findings on charts and compare them with measurements of babies heads taken following delivery etc.

How corprea lutea activated by the piutitary gland becomes a temporary gland of internal secretion pouring into the blood stream first the Hormone estrin which causes the lineing of the uterus to proliferate and then hormone progestion which controls bleeding and in case of fertilization persists through out pregnancy, was briefly pointed out with promise that Dr. Kindshie would further develope theme in next lecture.

Assignment
Bring to class, two diagrams-

1. showing course of fetal circulation thru hypogastricarteries, ductusvenosus, ductusarterious and the foramen ovale.
2. showing circulation of blood after birth, with hupogastricarteries, ductusvenosus, ductusarteriosus and foramen ovale in process of obliteration and pulmonary circulation greatly increased, may be found on pages 86 and 87 Van Blarcon or Kimber's anatomy and physiology.

Also study growth of fetus being able to tell comparative size of each month of pregnancy.

Placenta

1. function
2. size, color, attachment, shape
3. mechanism by which it works
4. formation
5. surfaces
6. membrane
7. umbilical cord

Changes in maternal organism due to pregnancy.
"No part of the woman's body fails to feel the stimulus of the reproductive function" says Dr. De Lee, (page 62)

These changes may be divided into two classes:
1. Local- those found in genitals and breasts.
2. General- those affecting the rest of the body.

Lesson III

I. Brief statement summarizing the work so far and stating clearly today's assignment:-

We have been considering the passage or birth canal, it's bony structure, the organs of reproduction and how they function to start this new little creature which begins with the fusion of two single cells barely decernible to the naked eye yet containing all the inherited traits and characteristics of the child to be.

Today we shall see how this little fetus grows and developes during the 280 days of gestation into the extremely complex and awe inspiring bit of humanity whose future usefulness will undoubtedly be influenced by our care during his first weeks of independent existence.

We shall consider the special organ which acts as lungs, stomach, intestines, kidneys for him during his stay in his mother's body: and finally we shall see how the whole of the mother's body changes month by month to meet his demands.

II. Outline:-
(a) Growth and development of fetus:

During first month embryo increases in size and length; alimentary canal exists; rudiments of thymus, thyroid, lungs, liver, heart, eyes, nose, ears, brain and extremities apparent.

4th Week. Sac about size of pigeon's egg; chorion and amnion exist:; embryo surrounded by amniotic fluid. Length about .4 of an inch.

8th Week. Head grows; bone centers appear; kidneys, suprarenal bodies, extremities formed; sex distinguishable. Length, 1 inch Weight, 1/8 ounce.

12th Week. Ossification occurs; digits separate; umbilical cord develops. Length, 3.6 inches. Weight, 1 ounce.

16th Week. Definite development of body and its surroundings. Length, 6 inches. Weight 4 ounces.

20th Week. Body covered with skin; fat appears; face wrinkled; hair on head; eyelids opening; quickening occurs. Length, 10 inches. Weight, 9 ounces.

24th Week. Skin wrinkled; head large. Length, 11 to 13 inches. Weight, 1 lb. 6 ounces.

28th Week. Thin and scrawney; skin reddish, covered with vernix; intestines contain meconium. Length, 14 inches. Weight, 2 lbs. 10 ounces.

32nd Week. Nails firmer; hair more abundant; lanugo disappearing. Length, 17 inches. Weight, 4 lbs. 4 ounces.

36th Week. Body rounder; aged look gone; chances of life greatly increased. Length, 18 inches. Weight, 5½ lbs.

40th Week. Normal end of pregnancy. Length, 20 inches. Weight, 7¼ lbs.

Fetal circulation made possible by certain temporary structures that change or disappear at birth, such as:
- Foramen ovale.
- Ductus venosus.
- Ductus arteriosus.
- Hypogastric arteries.

Kidneys. Apparently begin to function about 7th week.
Bowels. Normally inactive; intestinal contents chiefly meconium, made up of bile pigment and cast-off hairs from fetus' body; not expelled until after birth.

Head — Composed of separate ununited bones: 2 frontal, 2 parietal, 2 temporal and occipital and sphenoid bones.
Soft membranous spaces between margins of bones are called sutures; the frontal, sagittal, coronal and lambdoidal.
Spaces formed by intersection of sutures are called fontanelles: largest and most important is diamond -shaped anterior; posterior, smaller triangular shaped.

Fetal head measurements of obstetrical importance are: occipito-frontal; bi-parietal; bi-temporal; occipito-mental and sub-occipito-bregmatic.

(b) Placenta:-

1. Synonym: "After birth."
2. Function: clearing house for fetal and maternal metabolic products.
3. Mechanism by which placenta works: there is no exchange of blood between mother and child. Only an exchange of metabolic products one from the other by the process of osmosis or filtration.
4. Attachment: to uterine walls.
5. Size: about one pound
6. Color: purplish red, except in syphilis, when it is grayish white and greasy in appearance.
7. Formation: begins to form at second month, and is completely formed at end of third month.
8. Surfaces:
   (a) Maternal or nutritive: composed of net work of villi (finger-like progections) which are held to gether by connective tissue. Each villus contains an artery and a vein. The formation resembles that of a mattress, and each compartment is called a "cotyledon."

(b) Fetal or protective: is covered with a glistening membrane and contains the umbilical cord, large fetal vellels and membranes (amniotic sac).

9. The Membrane:
   (a) Composition: amnion and chorion.
   (b) Function: protect child during intrauterine life ---aids in dilating os during labor.
   (c) Contents: amniotic fluid, child, and cord.
   (d) Attachment: over fetal surface and to circumference of placenta.

10. Shape: irregular; round; bilobate; accessory (odd lobe).

11. Umbilical Cord:
   (a) Composition: 2 arteries, 1 vein, Whartonian jelly.
   (b) Length; any.
   (c) Shape: tortuous.
   (d) Function: convey blood brom placenta to child and from child to placenta.
   (e) Attachments: to placenta (fetal side) and to child in the navel.
   (f) Pulsates at rate of 132 to 140 per minute.

12. Methods of Presentation: Schultze: fetal surface presents; Duncan; maternal surface presents.

(C) Maternal changes due to Pregnancy
   (a) -- General or Constitutional

1. Blood
   (a) Leucocytosis.
   (b) Increase in amount.
   (c) Increase in viscosity.
   (d) Less alkaline.
   (e) Distended veins.
   (f) Blood pressure slightly increase.

2. Lungs: Pushed upwards and backwards.
3. Thyroid Gland: Slightly enlarged.
4. Digestive Tract:
   (a) Ptyalism-increased flow of saliva.
   (b) Morning sickness. Varies in amount and occurence. Vomitus usually consists of saliva and mucus or food that has just been taken. Usually begins in 2 month and lasts about six weeks.

   (c) Fickle appetite.
   (d) Voracious appetite.
   (e) Morbid cravings of appetite.
   (f) Teeth decay.
   (g) Gaseous eructations.
   (h) Constipation
   (i) Hemorrhoids.

5. Nervous System:
   (a) Fainting.
   (b) Headache.
   (c) Irritable.
   (d) Melancholia.

6. Urinary Tract:
   (a) Increase in amount of urine.
   (b) Increase urination.
   (c) Low specific gravity.
   (d) Trace of albumen in 85 per cent of cases.

(b) Local

1. The Abdomen:
   (a) Enlarges: Symmetrical in nulliparae; pendulous in multiparae.
   (b) Linea Striae: Pinkish in nulliparae; silvery white in multiparae.
   (c) Pigmentation of linea alba.

2. The Skin:
   (a) Increase activity of the sweat glands.
   (b) Pigmentation of linea alba, face, areolar of breasts.

3. The Breasts:
   (a) Slightly enlarged.
   (b) Tender and sensitive.
   (c) Pigmentation of areolar tissue.
   (d) Burning, prickling sensation.
   (e) Nipples become more prominent.
   (f) Glands of Montgomery more prominent.
   (g) Colostrum forms:
      (1) Occurrence: about 12 weeks of pregnancy.
      (2) Function: act as laxative and mild nourishment to child immediately after birth.
      (3) Composition: small amount of albumin, water, red and white blood cells, bacteria.

4. The Vagina and Vestibule:
   (a) Increased activity of vaginal glands.
   (b) Bluish discoloration of vaginal mucous membrane. This is known as Chadwick's sign.
   (c) Amenorrhea.

Assignment for next time.
Look up as help in Dr. Kindshie's lecture tomorrow the following terms:-

1. Gravid
2. Funis
3. Lanugo
4. Meconium
5. Ectoderm
6. Entoderm
7. Mesoderm
8. Nidation
9. Chloasma
10. Braxton Hick's contraction
11. Striae gravidarum
12. Colostrum
13. Diastasis
14. Vermix casevia

Read chapters V and VI in De Lee
Hygiene of pregnancy and prenatal care.
Write and bring to class a letter written to a married friend or sister who is the wife of a foreman on ranch at foot of Steens Mts. in Eastern Oregon. She has written to you for advice . She thinks she may be pregnant because she has missed two periods.
Cover the following points.
1. Importance of prenatal care--supervision.

2. Relief of morning sickness
3. Diet
4. Exercise
5. Rest and sleep
6. Bathing
7. Management of bowels
8. Dress
9. Breasts
10. Marital relations
11. Symptons and signs to report.

Make letter personal and practical remembering her environment and mode of living, the handicap of distance etc.

(The state board of health has for the asking prenatal letters which you will find contain many helpful suggestions and which you may use as a guide if you wish.)
(Room 816 Oregon Bldg. 3rd. and Oak Sts.)

Lecture III
Dr. Kindshie

Preserved specimens illustrating the growth and development of the fetus at various stages were passed around for inspection by the class. (very helpful)

4th week or 1 month
2 1/2 m.m. long, no cord, heart pulsating in bulgy tube.

8th week or 2 months
1 1/4 inches or 3 m.m. long, eyes, nose, and liver may be seen.

12th week or 3 months
3 1/2 inches or 9 m.m. long, head as large as rest of body, cord development, sex determinable, few teeth found, toe, and fingers determinable.

4th month
Skin red and transparent showing net work of blood vessels through 6 to 7 inches long. Weight 120 grains. Lonugo and meconium present, fetal heart tones and movements may be determined.

3rd to 5th month
More than doubles in size.

5th month
Weight 250 grains, 25 c.m. long. Still very little fat underskin, nails and hair indicated.

6th month.
1 1/4 lbs. vernix casiosa forms.

7th month
2 1/2 lbs. Eyes open, testicles down, looks like a wrinkled little old man.

8th month
3 to 4 lbs. Fatter, better rounded, chances of life greatly increased.

9th month or 40th week.
Ripe ready for independent life. Weight 7 to 7 1/2 lbs. Circumference of head and shoulder nearly equal, head a trifle larger if anything.

Uses of Aminotic Sac and fluid.
1. Protect fetus from injury.
2. Provide equable pressure and temperature.
3. Prevents adhesions between skin of fetus and aminotic membrane.
4. At time of labor acts as dilating wedge.

I. Physiology of fetus
1. Lung collapsed
2. Skin not functioning
3. Kidneys) only in passive manner
Bowels)
5. By means of wall chart fetal circulation was traced and major changes after birth indicated.

II. Physiology of Pregnancy
Adjustments of maternal organism to meet demands of body developing and growing within her.
1. Local changes
(a) Uterus- grows from 2 oz. to 2 lbs.
Cavity increased 500 times
Fetus grows larger and longer

(b) Abdominal wall- becomes distended, hernia may develope called diastasis recti.
(c
(c) Striae gravidarium
(d) Pigmentation
1. abdomen - striae
2. breasts - areola
3. face - chloasma
4. genitals
(e) Increased glandular activity.
1. vagina
2. sweat glands
3. milk glands - (tubercles of Montgomery

2. General changes
(a) cardio-vascular
1. head grows
2. more blood
3. increased blood pressure
4. relative anemia

(b) respiratory
1. lungs may become crowded.
(c) digestive system
1. nausea
2. constipation
3. heart burn
4. capricious appetite
5. increased secretion of salivary glands or ptyalism.
(d)urinary
1. frequency
2. cystitis and pyolytis (85%- get dilatation of right rueter, resulting in hydronephrosis causing susceptibility to infection.
(e) Sacro-illiac - strain and pain due to decalcification of this joint.
(f) Center of gravity changed and therefore tendency to falling and tripping increased

(g) Changes in glands of internal secretion
    1. Posterior pituitary body increases
    2. Adrenal glands hyperactive
(h) Emotional changes
    1. Irritability
    2. Cries easily, etc.
    3. May become temporarily insane
    4. May be unnaturally good natured (occurs less frequent)

Next time - Prenatal care and presentation and positions.

In speaking of the importance of prenatal care for the pregnant woman Dr. Edward Lyman Cornell says,"How did it come about that women have been brought to such a high degree of athletic proficiency that they are able to compete with men in many of the major sports? Even a school boy knows the answer. It is training. The boy or girl who is ambitious to be on a team in school knows that training is necessary. Babe Ruth, Helen Wills Moody and Virginia Van Vie reached their heights by training, not for a day, a week or a month, but for years.

If, then, training has enabled women to achieve an athletic development which, a few years ago, would have been the greatest feat possible to womanhood, child-bearing, can be accomplished with less difficulty than at present? There is only one reason why this cannot happen soon; that reason is the refusal of the majority of women to go into training.

After all, childbirth requires more nerve, stamina and courage than any baseball, tennis or golf game. True it is that some women can bear children easily; but are not the natural athletes also few and far between? There are few women like Mildred Didrikson. Even she must have training to compete sucessfully against a large field. Without training, few champions are born. Prenatal care is the training period for the pregnant women." (*)

The letters of advice to the married sister were read and some lively discussions followed.

1. Should a pregnant woman try to satisfy peculiar dietary cravings, and is it necessary for her to eat enough for two?

2. Should she refrain from doing anything that requires stretching her arms high above her head?

3. Is it true that she should plan to do heavy work during the last week of pregnancy?

4. Is an 8th month baby less likely to survive than a 7th month one?

5. Possibility of marking the baby or influenceing it's future taste for music, etc.

6. Social problems involved in regulating martial relations at this time.

7. Is it better to massage nipples or to leave them strictly alone.

As a matter of interest some of the customs of the Tillamook and Coos Indian women were mentioned.

"A Tillamook woman is encouraged to eat as little and work as hard as possible all through her prengancy so that

the baby would not become too large."

"The Coos Indians were able to predict time of delivery and knew quite a bit about conception."

Demonstrations.

(a) Simple method of testing urine without labratory equipment.
(b) Tecnique of taking blood pressure. (*) (*)

Next Time:

Labor, What is it?, What are the stages?, What happens during each stage and how long does it last?.

Specific nursing duties during each stage.
Which stage do you consider most dangerous?, Why?

References:

(*) Page 982 - Hygeia November 1934.
(*) American Journal of Nursing. November 1934.

Lecture IV
Dr. Kinshie
Jan. 16, 1935.

Prenatal care, clean deliveries and intelligent motherhood will reduce obstetrical risks.

Described work of Prenatal Clinic in connection with Oregon Medical School.

Nursing work covered by five nurses:
1. Supervisor
2. Assistant
3. Three students

Patient has a complete physical examination during the first trimester. After that the blood pressure and urine is checked monthly until the 9th month, when the patient is seen every two weeks and during the last month weekly.

Four deaths in 3000, mortality.

Nurses
1. Teach health habits
2. Report to doctor
3. Aids doctor in maintaining asepis and antisepsis during examinations and deliveries.
4. Very patticular about personal cleanliness in all her ministrations.

Dystocia is some obstruction to normal delivery.
Breasts-modified skin cells of compound racemose type. Each breast made up of lobes: these divided into lobules, and each lobule into acini. Tubes connect lobules to main canal which enlarges into sinus lactiferons just before opening into nipple.

Darkened area around nipple is called areola and contains small nodules, called tubercles of Montgomery. (illustrated on wall chart).

Expected date of delivery may be estimated by:-
1. Adding 7 days to first day of last menstral period and subtracting 3 months.
2. Counting back 85 days from 1st day of last menstruation.
3. From quickening in multiparae counting forward 22 weeks.
4. From quickening in multiparae counting forward 24 weeks.
5. From last day of menstruation count forward 280 days.
6. Measuring height of fundus uteri
   (a) At umbilicus at 6 months
   (b) 3 finger breadths below umbilicus at 7 months
   (c) 4 finger breadths below Xhyphoid bone 8 months
   (d) At Xhpoid bone at 9 months

(3) 4 fingers breadths below Xyphoid at 10 months
Length of pregnancy 280 days, 10 lunar months or 40 weeks.

Next time:

Signs and symptons of prgenancy and presentation and postions.

Dr. Kinshie called away, lecture cut short.

Lesson V.

The Clinical Course of Labor

Labor is that function of the female organism by which the products of conception are expelled from the uterus, through the vagina, into the outside world.

Labor is accomplished by the alternate and rhythmic retraction and contraction of the lower and upper uterine segments of the uterus. As the lower uterine segment contracts the upper segment relaxes, and vice versa. Then when the cervix has been completely dilated and expulsion of the child is in process, the uterine efforts are augmented or assisted by abdominal muscles.

Stages of Labor

(a) First Stage: Comprises the period from the onset of pains until the cervix is completely dilated and when the birth canal is in one, straight canal. Frequently spoken of as the "canalization."

(b) Second Stage: Comprises the period from canalization until expulsion of the child has been accomplished.

(c) Third Stage: Comprises the period from the delivery of the child until the delivery of the placenta has been accomplished. This stage is spoken of as the "placental stage."

Description of First Stage Pains.

Pains begin in the back and radiate to the lower abdomen, occurring at 20 to 30 minute intervals, and lasting from 30 to 45 seconds, increasing in frequency and duration until they occur at 3 minute intervals, lasting from 60 to 90 seconds.

Description of Second Stage Pains.

Pains occur at 5 minute intervals, lasting from 60 to 90 seconds, and become "bearing down" and expulsive" in character.

Description of Third Stage Pains.

After completion of the second stage, pains cease for an interval of from 15 to 30 minutes, then they recur, simulating second stage pains, only less severe in character.

Description of a Typical Labor Pain.

a. Involuntary
b. Intermittent.

c. Regular.
d. Painful
e. Stages: (1) Acrement.
(2) Acme.
(3) Decrement.
f. After Pains: More or less severe pains after the expulsion of placenta which result from the contractile efforts of the uterus to return to its normal condition.
N.B. - After pains are seldom seen in other than multiparous women.

Premonitory Symptoms of Labor

a. Lightening or settling.
(1) Engagement of child into pelvis with relief of pressure in the upper abdomen.
(2) Usually occurs 3 to 6 weeks before confinement.
(3) May not occure at all in nulliparae or multiparae.

b. False Pains: These are bona fide uterine contractions, usually stimulated by constipation and gas accumulation.
c. The "Show"
(1) Occurrence: 12 to 24 hours before onset of pains.
(2) Mucus tinged or mixed with blood.
(3) Not present in all cases.
(4) Source: from cervix during dilatation or from separation of membranes from cervical attachment.
d. Rupture of membranes: escape of amniotic fluid due to a premature rupture of the sac.

The Asepsis of Labor

Definition: That which is done by Nature in behalf of the women.

A.- Thick plug of mucus is placed in cervix at the beginning of pregnancy. Seals off the uterine cavity.

B.- Membranes rupture and the sterile amniotic fluid acts as a douche to the parturient canal, douching from within out.

C.- The child then swabs out the canal as it is being delivered.
D.- More amniotic fluid escapes after delivery of the child, thus acting as a douche to the canal.

E.- Placenta swabs out the canal as it is being delivered.

F.- Passage of blood following delivery of the placenta acting as a douche to the canal from within out.

G.- Lochia is established acting as a douche to the canal.

The Antisepsis of Labor

Definition: That which is done by any attendant in behalf of

the woman.

A- Duties of the nurse in the First Stage of Labor

1. Notify physician that you think labor has begun.
2. Preparation of the room:
   (a) Light, airy, sunshiny room.
   (b) Proper ventilation-avoid drafts.
   (c) Convenient to bath.
   (d) Place for doctor and nurse to scrub.
   (e) Place for baby.
   (f) Place for supplies, solutions, instruments, etc.
   (g) Protect floor.
   (h) Remove all unnecessary furniture.
   (i) Remove all busy bodies.

3. Preparations of the bed:
   (a) Secure highest bed possible.
   (b) Secure firm mattress. If necessary use boards between mattress and springs.
   (c) Protect mattress with oil cloth.

4. Preparation of supplies:
   (a) Gloves.
   (b) Gowns.
   (c) Towels.
   (d) Sponges.
   (e) Plain sheets.
   (f) Perineal sheet.
   (g) Leggins.
   (h) Uterine Pack.

5. Preparation of drugs:
   (a) Pituitrin.
   (b) Ergotole or ergot.
   (c) Morphine sulphate.
   (d) Strychnine
   (e) Ethier-chloroform.
   (f) Silver solution for baby's eyes. 1% Silver nit.

6. Preparation of Solutions:
   (Alcohol.
   (b) Lysol 1/2 % solution.
   (c) Normal saline heated to 116 degrees.

7. Preparation of instruments:

   (a) 1 pr. obstetrical forceps.
   (b) 2 prs. scissors, 1 curved pair with blunt point.
   1 straight pair with blunt point.
   (c) 2 pr. tenaculae or volsellum forceps. (Jacobson).
   (d) 1 anterior vaginal retractor.
   (e) 1 posterior vaginal retractor.
   (f) 1 pr. uterine packing forceps.
   (g) Hypodermic syringe and needle That Work.

(h) Douche can and nozzle That Work.
(i) Curved artery forceps-several pair.
(j) Cord tie.
(k) Rubber catheter.
(l) Snare for rupturing membranes.
(m) Repair outfit:
    (1) Needle Holder
    (2) Tissue forceps.
    (3) Needles: Cervical and perineal.

8. Preparation of patient:
(a) Sponge or shower bath-Never a tub bath.
(b) S.S. enema, if not in the second stage of Labor.
(c) Shave vulva and perineum.
(d) Cleanse field of operation as follows:
    (1) Copious bath with warm water and green soap. Include from umbilicus to anus and on inner surfaces of thighs to knees.
    (2) Remove excess green soap with sterile water.

(e) Clean stockings and gown.
(f) Irrigate after each defecation and urination.
(g) Do not permit patient to handle herself.
(h) Never give a douche unless ordered by doctor.

9. Keep Maternal Chart:
(a)(T.P.R. every 3 hours.
(b) Defecations and urinations.
(c) Frequency and duration of pains.
(d) Apparent rupture of membranes.
(e) Character of vaginal discharges.
(f) Condition and rate of fetal heart.
(g) Diet taken by patient.
(h) Untoward symptoms, e.g. : headache, nausea, vomiting.
(i) Report Temp. of 100.4 and pulse of 120 or over.

10. In Prolonged Labors:
(a) Give S. S. enema every 12 hours.
(b) See that urinary bladder is emptied every 4 hours.
(c) Use catheter as last resort.
(d) Force liquids.

11. Put patient to bed emmediately upon rupture of membranes, and inspect for prolapsed cord. Observe fetal heart every 5 minutes for 15 minutes, and there after as often as necessary.

B.- Duties of the Nurse in the Second Stage of Labor.
(a) Never give an enema.
(b) Keep chart as in first stage.
(c) Perineal palpation, to determine advance of presenting part.
(d) Assist doctor as directed.

5. Give anesthetic.
6. Be prepared to take the child.
7. In an operation, scrub and assist as directed.

C.- Duties of the Nurse in the Third Stage of Labor

1. Never give ergot or ergotale before expulsion of placenta.
2. Grasp fundus as soon as the child is delivered and massage to keep it well contracted.
3. Hold suitable vessel for the placenta.
4. Adminster medicines as directed.
5. If lacerations to repair, assist as directed.
6. Cleanse patient after physician has completed work.
7. Do not permit patient to move unassisted.
8. If physician fails to attend to baby's eyes and dress cord, the nurse must do so.

D.- Important points to be considered immediately Postpartum

1. Make sure that the placenta has been delivered intact.
2. Make sure that the uterus remains stony hard.
3. Make sure there is no evidence of hemorrhage.
4. Make sure there is no evidence of toxemia-e.g.: headache, nausea and vomiting, visual disturbances, etc.
5. Make sure that the baby breathes all right and that there is no hemorrhage from the cord.

Next time:

Meet in demonstration room where 1 hour will be devoted to special demonstrations.

Assigned to particular students:

1. Positions and methods of drapeing for pre-delivery examinations.
2. Plastic preparation of perineum:
   (directions and equipment secured from maternity ward.
3. Method of checking fetal heart tones what they show, etc. (De Lee stethoscope).
4. Quatamey analgesia
   Reference: May 1933 Journal of Nursing.
   Equipment and directions for giving to be secured from maternity department.
5. Pre-delivery scrub and drape.
6. Delivery bed and methods of improvising stirrups in the home. (See Zabriskie).
7. Equipment and method of giving crede treatment to baby's eyes (1% Silver Nitrate in wax ampule).
8. Instruments, needles and etc. necessary for delivery.

Dr. Adams will talk one-half hour on presentations and positions.

Lecture V
Dr. Lindshie

Presentations and Positions
Terms defined
Demonstrated on manikin method of determining positions and different presentations.

The mechanism of labor shown:-

Twins (Identical
(Similar

Short written review

1. Name three functions of bag of waters.
2. What is the name of the chief muscle of the perineal floor? Describe it.
3. What is the heighth of the fundus at four, six, eight, and ten months?
4. How early can a positive diagnosis of pregnancy be made?
5. What is the name of the bone on which we sit?

Next time:
Demonstration of home delivery
"Miss Eggers puts on a good show."

Lesson VI

Primipara in beginning labor was admitted to hospital prepared for and conducted through first two stages of labor. Each proceedure being demonstrated by student (previously assigned) as we came to it.

See outlines of proceedures used in Obstetrics.

Next Time:

Will continue in same manner through delivery and in addition study obstetrical operations, Major and Minor.

Lecture VI
Dr. Kindshie

Home delivery demonstrated by Dr. Kindshie assisted by Miss Eggers.

Miss Eggers, described prenatal visits to expectant mother, method of approach, how to determine suitablity of patient and house for home delivery. Things to have mother get ready for delivery. Instructions as to periodical visits to clinic etc.

With all equipment following was demonstrated.

1. Delivery bed
   (a) Elevated on blocks
   (b) Protection (rubber sheet
   (newspaper
   (pads
   (sheet for drapeing

2. Discard
   (a) Wash tub
   (b) Newspaper trays

3. Supplies (mother to have ready)
   (a) 1 lb. absorbent cotton
   (b) plenty of clean newspapers
   (c) lysol
   (d) sterile water (hot and cold)
   (e) kotex in sealed package
   (f) 3 basins
      1. Preparation of patient
      2. Placenta
      3. Hand basin
   (g) Tray for baby's toilet as pictured on page 213, Zabriskie.
   (h) Tray for breast care, page 310, Zabriskie.
   (i) baby's bed
      1. clothes
      2. receiving blanket
      3, pillow, on which to oil baby.
   (j) bedpan (between folds of newspaper).
   (k) protect tables, dressers, floor etc. with newspapers.

Delivery Proceedure

Doctor and nurse arrives with obstetrical bag.
Greets patient.
All wash hands.

Nurse prepares:-
1. Hand scrub
2. Rectal examination table
3. Patient
   (a) Shaves perineum
   (b) Scrubs perineum with soap and lysol.

4. Assists doctor with examinations, helping him to maintain aseptic tecnique.
5. Sterile pack
   (a) sheet
   (b) leggings
   (c) towels
   (d) sponges
   (e) cord dressings and tie
   (f) wasserman tube

6. Instruments
   (a) 2 clamps
   (b) scissors

7. Drugs
   (a) ether
   (b) ergot
   (c) pituitrin
   (d) Silver nitrate

Help doctor with delivery and treatment of baby's eyes and cord.

Make mother comfortable

Oil and dress baby. (Zabriskie)

Next time

1st hour - Nursing care during the puerperium.
2nd hour - Accidents during pregnancy.
Toxemias during pregnancy.

Lesson VII

The class was small enough so that the following demonstrations could be carried on in the delivery room, though in our case the patient was not available.

I. Delivery set-up in the modern hospital:-
1. Adjustable delivery bed
2. Electrically heated crib for infant
3. Gas machine and anesthetic table
4. Table with:-
(a) emergency hypodermic set with long and short needles
(b) Pituitrin, 1/2 cc
(c) Ergot, 1/2 cc
(d) Alpha Lobelin, 3/20 grs.
(e) Caffeine Sod. Benzoate grs. 7½
(f) Adrenalin 1-1000
(g) Silver nitrate 1% sol. in wax ampule
(h) Iodine 3%
(i) Mercurochrome 4%
(j) Alcohol
(k) Jar of applicators

5. Table with:-
(a) Handeling forceps in 4% lysol sol.
(b) Canister of sterile cotton balls
(c) " of sterile sponges
(d) " of sterile tape sponges
(e) " of sterile towels
(f) " of alcohol sponges
(g) jars of suturing material
(h) sterile rubber gloves in envelope wrappers

6. Basin stands with:-
(a) basin for 1/2% lysol sol.
(b) " " plain sterile water.

7. Table for scrub nurse on which is sterile labor set containing:-
(a) Drapes for delivery bed
(b) Leggings and drapes for patient
(c) Gowns for doctors and nurse
(d) Cord ties, dressings, binder and receiving blanket for infant.
(e) Sponges and small towels for use during delivery.
(f) Placenta basin
(g) Graduate for urine specimens
(h) Abdominal binder, T and perineal pads for mother.

8. Instrument cupboard
(a) Shelf with tray of instruments for delivery
scissors, 3 pr.
1. episiotomy
2. cord
3. suture
4. tissue forceps, 2 pr. (with teeth
(without teeth

5. Allis forceps f
6. Straight artery forceps, 4
7. Curved artery forceps, 4
8. Needle holders, 2
9. Sponge sticks, 4
10. Long uterine packing forceps
11. Vaginal retractors (Beardsly)
(2 ribbon)
(2 small rt. angle)
12. Needles, 7 curved (2 small trocar point)
(cervix)
(2 medium round muscle)
(2 fine cutting (skin)
(1 large cutting (SW gut)
13. Tube for blood for cord wasserman
14. 2 rubber catheters
15. Bulb for aspirating mucus from throat of infant.

(b) Shelf with delivery forceps- (Simpson (regular) (long) (Tucker-Mc Lean) (Axis-traction) (Cranioclast)

(c) Shelf with equipment for baby's identification
1. Wrist bands
2. foot prints

(d) Shelf with emergency equipment
1. Head stethoscope
2. Tracheal catheter
3. Vaginal packing
4. Intravenous outfit
5. 50cc syringe
6. skin clips
7. Coleurynters

9. Warming oven containing:-
(a) Blankets
(b) Leggings
(c) Jackets
(d) Stretcher pads.

10. Floor lamp, stools and discard pans.

II. Pre-delivery scrub demonstrated on imaginary pts. (see proceedures)

III. Sterile pack opened and method of draping demonstrated.

I. Obstetrical Operations-
In what respects are the obstetrical and the surgical operations alike?
1. Major (Forceps, high, medium, low
(Breech extraction- complete, frank, footing.
(Version

(Caesarean section- Porro, classical, low-
cervical, and vaginal.
(Duehrssen's Incisions
(Symphsiotomy
(Pubiotomy
(Destructive, Craniotomy, and Decapitation

2. Minor- (Preparation for obstetrical examination
(Perineorrhopy
(Removal of sutures
(Uterine tamponade
(Douche, vaginal, uterine
(Curetage
(Administration of saline
(Blood transfusion
(Venesection
((Induction of premature labor
1. Bagging
2. Stripping membranes
3. Rupture of membranes

Preparations for the above operations were stressed knowing that Dr. Kindshie would go into the method.

Next Time:

Read care during the puerperium
List points to be observed in mother's, immediate care postparteum, ~~care~~ and subsequent daily care.

Chaps. XIV Van Blarcom
" XIV Zabrishie
" II Part II DeLee

Lecture VII
Dr. Kinshie

Instead of roll call the class was asked to spend 20 minutes writing answers to the following questions:-

What are the functions of the bag of waters?
Ans:-

1. To protect the child:
   (bland fluid
   (even pressure
   (even temperature

2. To act as hydrostatic dilator during labor .
3. To wash and swab out birth canal during labor.

Nursing care during puerperium is much the same as that of a surgical case.

I. Watch for:-
   1. Hemorrhage
   2. Infection, may occur in perineum, birth canal or breasts.

II. Obstetrical nurse must be:-
   1. Clean
   2. Adaptable
   3. Sympathetic
   4. Watchful

III. Details of care:-
   1. Patient should remain on delivery table 1 hour foloowing delivery, during which time jundus should be constantly observed for signs of relaxing.
   2. First 3 hours following delivery patient should remain flat on back.
   3. She should have sedatives if necessary to insure rest.
   4. Babe not to go to breast for 8-12 hours following delivery.
   5. Perineum should be treated as an open wound.
   6. Urinary bladder should be emptied in 8 hours, usually best to catheterize after first voiding for residual urine.
   7. Bowels should be kept active
      (a) Enemal 2nd day post-parteum
      (b) Mineral Oil B.I.D.
      (c) Diet, containing plenty of fresh fruits, vegetales and fluids.
   8. Fluids should be forced, 2000 to 3000 cc daily.
   9. Care of breasts include
      (a) Establishment of mild supply
         (favors involution
         (reduces infant mortality
      (b) Improving shape of nipples
      (c) Preventing cracks
      (d) Preventing breast abscesses
   10. Temperature, pulse and respiration should be taken every four to six hours.

Temperature of 100 to 100.4/10 or over is considered morbid and should be reported.

11. Care of afterpains
    (a) Sedatives
    (b) Ergot
    (c) Ice cap over fundus.

IV. Contra-indications to breast feeding:
    1. In mother
        (a) General
            (T.B.
            (Cancer
            (Anemia
            (Acute infectious diseases.
        (b) Local
            (Malformations of nipples

    2. In Baby
        (a) Deformities
            (hair lip
            (cleft palate

V. General care
    1. Daily bath
    2. Daily alcohol rub
    3. Exercises
        (a) 2nd and 3rd day chin to chest exercise
            Arm and breathing exercise
        (b) 5th day (leg exercise
        (c) 10 th day (knee chest position
                      (breathing exercises
        (d) 15th day (monkey walk
                      (Mule kick

    4. Getting up
        (a) 5th day backrest
        (b) 9th day chair
        (c) 10th day walking

    5. Involution
        (a) fundus should not be palpable on 14th day.

Next time:-
Accidents during pregnancy
Toxemias during pregnancy

Lesson VIII

I. Derivation:-
Puerperium, (pu-er-pi're-um)
From puer, child and parere, to bring forth.

Related words:-
Puerpera , (pu-er' per-ah)

Puerperal, (pu-er' per-al)
Do not confuse with, (purpura, (pur-pu' rah), meaning disease in which there are purple patches on skin and mucus membrane due to hemorrhage under skin.

II. Definition:-
Puerperium or "lying-in state" is "the period during which the genital organs and tract return to their normal sizes and condition after pregnancy and labor."

III. Duration
1. One day to three months, average six to eight weeks.(*)

IV. Reaction of Maternal Organism in Puerperium:-
1. Temperature: average rise of one and one-half degrees.
2. Pulse: average 80 to 90
3. Respiration: normal
4. Bowels: constipated
5. Bladder: as a rule, spontaneous evacuative.
6. Appetite: good
7. Nervous system: sensitive to light and noise.
8. Patient usually normal.

V. General Principles underlying nursing during the Puerperium.
1. Cleanliness of all genital wounds.
2. Cleanliness of breasts.
3. Careful observation of all normalities and complications.
4. Proper supportive measures for the mother.
5. Time of getting up
6. Final examinations
7. Proper care of the infant

VI. Immediate attention in first three hours of Puerperium:
1. Patient to remain on back for three hours.
2. Pituitrin 1cc hupo. if necessary and ergotole 1 dram by mouth to contraol bleeding.
3. Hold fundus for one hour after delivery and longer if there is a tendency to relaxation.
4. Codeine sulphate grs. 1/2, and aspirin grs. X by mouth is oftern ordered by our doctors to releive after pains.
5. A chill occuring immediately after delivery is not uncommon, due to exhaustion, nervous reaction and change in utra-abdominal pressure-therefore, warm linen is put on patient and she is removed to warmed bed.
6. She is made as comfortable as possible, reasured concerning condition of baby and encouraged to sleep.
7. Relatives are tactfully excluded from the room.
8. As soon as fluids are tolerated, one to two hours, sooner if little or no anesthesia has been used, give hot drink, tea or lemonade.

9. As soon as mother has rested and baby has been given first care bring him in for her to see.

VII. Management of the Puerperium.

L. Attitude of nurse during this pe iod most important At all times she should be:-

1. Understanding, making a special effort to adapt herself to the personality of her patient.

2. Enthusiastic, in her support of physician and hospital routine.

3. Conscientous in carring out every detail of aseptic tenhique.

4. Watchful, quick to see and divert any tendency toward the abnormal.

5. Unselfish, willing to share her knowledge and skills with her patient.

II. Bowels:-

1. Enema; morning of second day.
2. Mild laxatives, as indicated, i.e.: Milk of Mag-
3. nesia, mineral Oil, Petrologar compound licouie powder, phenlax etc.
3. Movement is not essential each day unless patient is ill or uncomfortable.

III. Breasts:-

1. Daily A.M. Care
2. Cleanse before each nursing with sterile water, use applicators for this and not hands.
3. At beginning of engorgement apply support.
4. Report any tenderness, redness or cracks at onee.
5. Never pump or massage without orders

IV. Genitals:

1. Special perineal tecnique will be demonstrated later.
2. If sutures are present report:-
   a. redness
   b. swelling
   c. pus formation
   d. breakdown of repair

) Signs of Infection.
3. Do not make traction or suture.
4. Remove secretions from perineal folds with sterile oil on applicator.
5. No douches until ordered by doctor.
6.

V. Diet:

1. General diet with plenty of protiens carbohydrates and fluids for milk supply.
2. Pleanty of roughage and fluids for bowels.
3. Extra amount of calcium needed all during nursing period.
4. Vitamine B is not stored in body so daily supply must be given mother so that babe will get it from her milk.
5. Gas produceing foods should be restricted.

VI. Rest:-
1. Eight hours of sleep at night.
2. Mid-day rest period.
3. Do all in your power to keep mother free from worry.

VII. Urinary bladder:-
1. Make sure it is emptied eight hours after delivery.
2. Resort to catheterization only after every other means has failed.
3. Use extreme care in the use of the catheter during the puerperium.
4. Be careful retention is not present despite the fact that urination is performed.

VIII. Visitors:-
1. Danger of transmitting infectious diseases.
2. Induce nervousness
3. Cause fatigue

IX Preservations of figure:-
1. Attention to bowels antepartium and postpartium.
2. Avoids strains during pregnancy.
3. Proper care upon getting up.
4. Proper abdominal support
5. Proper exercises during puerperium.

X. Getting up after labor:-
1. Usually remain in bed for 10 days.
2. Avoid fatigue and shock when first getting up.
3. Observe for hemorrhage
4. Vaginal examination should be made by doctor before allowing patient out of bed.

XI. Final instructions upon discharge
1. Avoid, mental, physical and nervous strains.
2. Do not use stair steps until end of first month.
3. No tub baths until end of 1st month
4. Observe for breast abscess all during nursing period.
5. First menstration following delivery is usually profuse.

Demonstrations:
1. Breast Care,
(Tray for daily A. M. Cleaning
(Areators
(Lead and glass shields
(Breast pumps
(Various methods of breast support
2. Perineal care:
(Irrigation carriage
(Tray for perineal compresses

Next time:
Care of baby, 1st. care, face, cord, eyes, and identification.

Initial bath

References: page 38

* Page 98 Zabrishie, Page 289 Handbood of Obstetrics.

1. Accidents during Pregnancy
   1. Premature terminations
      (a) Abortions, before 16th week (Criminal
                                      (Spontaneous
      (b) Miscarriage, before 28th week.
      (c) Premature labors, after 8th week.

   2. Abortions (spontaneous
      a. Types (theraputic
               (criminal

      b. Causes (Abnormalties in fetus
                ("   in uterus
                (Physical shock
                (too frequent pregnancies
                (mental or emotional stress (questionable)

      c. Kind (threatened
              (complete
              (incomplete (retained placenta)
              (missed-when fetus has been dead 6 weeks or
               more.)
      d. Treatment (preventive
                   (indications for therapentic abortion.)
                              (T. B.
                              (Carcinoma
                              (heart disease
                              (mental disease

   3. Premature labors.
            After 7th month
            Fetus, (weighs 1500 to 2500 gms.
                   (length 26 to 34 cc

      a. Causes, (toxemias
                 (syphlic
                 (chromic ephrites
                 (poly hydraumon
                 (monstrasities
                 (placenta previa
                 (abrupto placentae
         Labor may be induced for any of the above causes.

   4. Ante-partum hemorrhage
      a. Placenta previa, more common in multipara
         Kinds (total
               (marginal
)lateral
         Signs (Painless bleeding
               (placental suffel heard low
               (can be felt by examinating finger
      b. Premature separation of placenta
               (shock
               (sudden enlargement of uterus
               (pain
      c. Tence hard abdomen in case of rupture of uterus
         not flabby in case of placenta previa.

II. Toxemias of Pregnancy

1. Early toxemias

(a) Hyperemesis Gravidarium (Toxic, Neurotic, reflex)

(b) Pernicious vomiting

(c) Low reserve kidney (increase B.P., swelling hands and feet, small out put of urine)

2. Middle (2nd Trimester)

(a) Nephritis termination indicated (damaged kidney, B.P. high, casts, albumen, blood cells) in urine

3. Later pregnancy

(a), Pre-eclampsia (liver Origin)

- headaches
- swelling
- drowsiness (or reverse)
- loss of appetite
- pallid
- eye symptoms
- pain in epigastrium
- twitching of muscles
- rising blood pressure
- concentrated and scanty
- output of urine
- albumen and casts in urine
- excessive gain in weight
  - (should not exceed 7 lbs. in last four weeks.)

Treatment:

- rest in bed
- measure intake and out put
- blood pressure taken often and recorded
- Sedatives
- fluids may be forced or limited
- glucose given intravenously

(b) Eclampsia (1-300 pregnancies
2/3 of these in primiparas)

Definition:-

An acute toxemia, occuring before, during or after labor and characterized by convulsions and coma.

Treatment:

Conservative

- mouth gag
- prevent injury
- sedatives
- quiet, darken room
- foot of bed elevated
- intravenous glucose
- colonic flushing

Radical
- forceful delivery
- cesarean section
- instrumental

(c) Acute yellow altrophy
- acute abdominal pain
- vomiting and diorrhea
- delerium, coma and death

Next time:
Complications during labor and puerperium.

The New Born-

This lesson was perhaps the most successful.

The demonstration lecture centered around a beautiful 8 day old boy, who yawned, stretched and looked around during his bath & dressing and then fell promptly a sleep when laid in his freshly made crib.

The room used for circumcisions was fitted up as an impromptu nursery with exhibits of equipment and instructions for special treatments such as gavage, flushing, loosening the frenum etc. displayed. Posters such as the two attached samples were placed conspicuously.

Dr. De Lee's opening paragraph on "Care of the Child" was used as introduction substituting "All this baby asks" for the more general statement "All the baby asks."

The demonstration included:-

1. Proper method of holding and carrying the baby.
2. Oiling.
3. Care of eyes, naval, mouth and genitals.
4. General inspection of condition of skin, musculature, eyes, mouth, naval etc.
5. Special inspection for rash, phimosis, hang nails, thrust, etc.
6. Weighing daily a.c. and p.c.
7. Rectal temperature.
8. Stools, number and charcter.
9. Clothing, essentials, band and diaper adjustments.
10. making of crib.
    No pillow
    firm mattress
    light covers
11.

After the baby had been removed to his nursery the students (who were gowned and masked to prevent infection of baby) were encouraged to inspect exhibit and ask questions.

Disorders of the newborn were not taken up as Dr. Kindshie planned to go into them in his lecture next.

Next Time.

Complications of pregnancy, minor, grave.

ESSENTIAL FEATURES OF BABY'S CARE ARE:

1. PROPER FEEDING -
2. SUNSHINE AND FRESH AIR -
3. REGULARITY IN THE DAILY ROUTINE -
4. CLEANLINESS OF FOOD, CLOTHING & SURROUNDINGS -
5. MAINTAINANCE OF AN EQUAL BODY TEMPERATURE -
6. CONSERVATION OF HIS FORCES -

NURSES ON GUARD!

THE THREE CHIEF "PORTS OF ENTRY" FOR INFECTION INTO THE NEWBORN'S BODY ARE:

1. EYES
2. MOUTH
3. UMBILICUS

Development of the average newborn.

Baby begins life as separate entity with frail body: anatomy and functions in many respects imperfectly developed.

Body:
Well rounded, flesh firm, skin deep pink. Head and abdomen relatively large, chest narrow, legs short. Bones of skull separate, fontanelles open.

Weight:
Boy's 71/4 to 7 1/2 pounds: girls slightly less.

Length:
About 20 inches.

Teeth:
First ones appear about 6th or 7th month: has 6 or 8 by end of first year. Well baby not greatly upset by teething.

Stools:
First 2 or 3 days, dar, tarry material, "meconium": gradually become normal bright yellow.

Urine:
Bladder usually contains urine at birth. May void immediately, or not for several hours.

Cord:
Gradually shrivels, turns black and drops off about 8th or 10th day.

Skin:
Lanugo disappears 1st week: scaling of superficial layers lasts 2 or 3 weeks: becomes delicate pink gradually; perspiration begins about end of 1st month.

Tears:
Scanty if any before 3rd or 4th month.

General behavior:
Sleeps 19 to 21 hours daily at first, gradually increasing waking hours. Well, properly fed baby usually contended, good-natured and happy, crying very little.

I. Early Disorders of the Baby.
1. Hemorrhagic disease.
(a) symptoms- bleeding
(b) treatment-blood transfusions
(c) prognosis-fatal if unchecked

2. Opthalmia Neonatorum, prevention stressed.

3. Syphilis

(a) congenital, "snuffles" most familiar symptom.
(b) acquired (by being kissed by syphiletic person)

4. Thrush (mornlia albicaus causative agent).

5. Vaginitis (may be of G. C. origin)

6. Icterus neouatoruim (physiological in most cases.)

7. Engorged breasts.
   (a) Protect from injury and leave alone.
8. Impetigo
   (a) Isolation tecnique imperative.

9. Sarcomphalus
   (a) Granulations of cord stump.

10. Caput succedaneum swelling on baby's head due to pressure at birth. Disappears in a few days, no treatment indicated.

11. Cephalhematoma:
Same as caput except contains blood and may not be o absorbed for two or three months.

II. Anomalies:
1. Hair lip.
   (a) May be single or double
   (b) Treatment surgical

2. Cleft palate:
   (a) Fissure of soft and sometimes bon
   (b) Feeding problem grave.
   (c) Treatment surgical.

3. Hernia:
   (a) Unbilical (most common)
   (b)
   (c) Treatment is to reduce by pressure

4. Club Foot:
   (a) Occurence, 1-1000
   (b) Treatment, corrective massage and casts.

III. Nutritional Disturbance:
1. Richets
2. Scurvy
3. Malnutrition
4. Marasmus
5. Inanition
6. Diarrheal diseases
7. Acidosis
8. Colic
9. Constipation
10. Vomiting

Corrected by proper feeding.

IV. Premature Baby
    1. Special problems
        (a) Presure heat
        (b) Provide suitable food
        (c) Conserve strength
        (d) Prevent infection

Next Time:

Complications during labor and puerperium.

Lesson X

As Dr. Kindshie has pointed out the pregnant woman may be suffering from a chromic condition merely coincident with pregnancy, such as:

1. Heart disease
2. Tuberculosis
3. Pyelitis
4. Syphilis
5. Diabetes
6. Gonorrhea

As well as others directly due to her pregnancy, such as:

1. Premature terminations of pregnancy.
2. Extra-uterine pregnancies
3. Antepartum hemorrhage
4. Toxemias

The care of these conditions, medical or surgical will of course be outlined by attending physician.

However, there are many minor complications and discomforts attending this period about which the nurse will be consulted and should be able to give helpful advise.

I. Nausea and vomiting:

1. Occurrence; about 1/3 of pregnant women have this symptom.
2. Duration; usually begins about 6th week and ends by 12th week.
3. Treatment;
   (a) Avoid fatigue and nervous strains
   (b) Eat small amounts frequently
   (c) Diet rich in simple sugars and starches low in protein and fat.
   (d) counter irritation over stomach
   (e) Knee chest position
   (f) Mild laxatives

II. Varicose Veines:

1. occurrence: Fairly common in multiparae in advanced pregnancy.
2. Parts affected:
   (a) legs
   (b) vulva
3. Treatment:
   (a) no circular constrictions at any part of the body
   (b) frequent rest periods with feet and legs elevated
   (c) rubber stocking, bandage or adhesive strips for support may be ardered by physician
   (d) Patient to be instructed in case of hemorrhage to apply pressure to bleeding point and notify the physician without delay.

III. Leukorrhea:

1. Occurrence-Increase in vaginal discharge
2. Treatment- none necessary unless very profuse, then the physician should be notified.

IV. Pruritus Vulvae
1. Definition- Itching of pudeuda.
2. Cause-
(a) Irritating vaginal discharge
(b) nervousness
(c) Thrush
3. Treatment:
(a) Bathing with soda solution
(b) Local application of calomine lotion
(c) If of nervous or infective origin treatment will be outlined by physician.

V. Pendulous Abdomen:
1. Cause, may be due to diastasis of recti abdominis or merely weakness in these muscles.
2. Treatment:
(a) Proper abdominal support.
(b) Knee chest position may help some.

VI. Pains in the Abdomen:
1. Occurrence: anytime during pregnancy but more common near term.
2. Causes
(a) impaction of feas
(b) tight waist bands on corsets
(c) appendicitis
(d) intestinal colic
3. Treatment:
"With the cause the nurse will find the remedey."

VII. Heartburn:
1. Causes- an indigestion due to gas produaiy food encroachment of enlarging uterus on stomach.
2. Treatment:
(a) Anti-acids, such as, soda, soda-mints, milk of magnesia
(b) Plain diet taken in small amounts.

VIII. Decaying teeth:
1. Causes
(a) neglect of cavities
(b) bad oral hygiene
(c) insufficient calcium in diet.
2. Treatment:
(a) Cavities should be filled, bad teeth pulled but gold fillings and tiring bridge work should be postponed.
(b) Milk of Magnesia held in mouth t.i.d. 3 minutes.
(c) Increase milk, eggs, cereals and green vegitables eaten.

IX. Frequent urination:
1. Occurrence:
(a) During 1st and 3rd trimester.
(b)
2. Causes:
(a) Malposition of uterus
(b) Pressure of head in pelvis
(c) Cystitis

3. Treatment:
   (a) No treatment in 1st trimester unless it is so aggravated as to interfere with patients rest, then physician should be consulted.
   (b) Knee chest position will help if there is no pathological basis for the condition.

X. Fainting:
   1. Causes
      (a) not heart disease
      (b) cause not apparent
   2. Occurrence:
      (a) may be present from 4th month
   3. Treatment;
      (a) explain that the condition is harmless.
      (b) advise to avoid crowds, over-eating, irrational dress and etc.
      (c) Smelling salts may be used when one feels the condition approaching.

XI. Bachache:
   1. Causes;
      (a) Softening of pelvic joints and oacro-illiac strain
      (b) High heeled shoes
      (c) Pendulous abdomen
      (d) pyelitis
   2. Treatment:
      (a) tight pelvic girdle
      (b) Proper shoes
      (c) Abdomeninal support
      (d) Medical treatment

Next Time:
Complications during labor and the puerpening
Page 368 - 442 - De Lee

Complications during labor

I. Prolapse of part of baby:
   1. hand
   2. foot

II. Prolapse of cord

III. Hemorrhage:
   1. Placenta previa
   2. Premature separation of placenta

IV. Tears :
   1. Vagina
   2. Perineum
   3. Cervix

V. Hematoma:

VI. Infection

Complications of Puerperium

I. Hemorrhage (1st degree-500 to 750 mil
(2nd degree-750 to 1000 mil
(3rd. degree-1000 mils or more

   1. Prevention:
      (a) Pt. should stay on delivery room table 1 hr.
      (b) Condition of fundus should be noted and charted every 15 minutes 2nd hour.
   2. Causes:
      (a) retained parrs
      (b) tears

II. Puerperal sepsis:
   1. Septicemia
   2. Sapremia

III, Infection
   1. sutures
   2. breast
   3. any acute infectous disease

IV. Phlegmasia alba doleus (milk leg)

V. Cystitis (treated by posture
VI. Pyelitis (alkalines
(force fluids

VII. Thrombophlebitis

VIII. Mastitis

IX. Subinvolution

Sources of Infection

1. Doctor

2. Nurse
3. Patient
4. Other patients
5. Visitors

X. Diseases of the breasts
1. Simple engorgement (suport , ice caps.
2. Mastitis
3. Fissures of nipples
4. Supernumerary nipples or breasts

Next Time:

Review and some unusual conditions that nurse may meet in her practice.

Lesson XI

Obstetrical Complications and Emergencies

I. Toxemia:
1. Keep patient as quiet as possible
2. Temperature, resperation and pulse every four hours.
3. Have mouth gag fastened to head of bed in readiness for use in case of convulsion.
4. Measure intake and output.
5. Fluid may be forced or limited (as ordered)
6. Secure specimen of urine (catheterized if ordered) and send to laboratory for examination for albumen, acetone and diacetic acid.
7. Be prepared to give colonic flush if ordered
8. Be prepared for administration of glucose solution intravenously.
9. Blood pressure taken frequently (as often as necessary)
10. Fetal heart tones checked frequently.
11. Speciat diet, fruit juices or milk as ordered
12. See that patient is hept warm.

II. Convulsions:
1. Protect patient from self injury but do not restrain her too forcebly.
2. Place padded mouth gag between teeth
3. Loosen clothing
4. Keep warm
5. Provide plenty of fresh air
6. Guard against all forms of stimulations such as:
   (a) unnecessary noise and handling
   (b) jarring
   (c) bright lights etc.
7. Notify physician
8. Be prepared to give Morphine Sulphate Grains 1/4 hypedermically.
9

III. Prolapse of cord
1. A loop of the cord slips down in advance of the presenting part.
2. Danger:
   (a) Compression of cord between presenting part and walls of birth canal.
   (b) Fetus dies in 5 to 8 minutes after interruption of fetal circulation.
   (c) Mortality 50%

3. Occurrence:
   (a) Early rupture of membranes (
   (b) Breech presentation (Polyhydramnios
   (c) Long cord (Placenta praevia

4. Evidence:
   (a) Change in fetal heart rate, rhythm, and volume.
   (b) Appearance of cord at the vulva.

5. Procedure: After rupture of membranes:
   (a) Notify the phusician immediately;
   (b) Take the fetal heart every 15 minutes or as indicated (change in rate, rhythm, and volume.)

(c) Place the patient in the elevated Sims' position (with 1 or 2 pillows under the hips) and have someone notify the house obstetrician if the cord appears or if any change in the fetal heart.
(d) If the cord appears at the vulva:
1. Open a package of sterile gloves!
2. Don the sterile gloves without taking time to scrub the hands:
3. Cleanse the cord with cresol compound solution 1/2 % and wrap it in a sterile towel wrung out very dry from the warm cresol compound solution 1/2 %.
4. Be ready for immediate bagging or delivery.

IVI Precipitate Delivery
1. Rapid, unexpected delivery without the presence of the physician
2. Seldom entirely alone
3. Stay with patient call for (antiseptic solution
(sterile dressings
(Gloves
(have scissors and tie for cord boiled
(
4. Have mother on side to retard delivery and facilitate handling.
5. Instruct her to pant and not bear down
6. Do what you can to protect her clothing and bed
7. Do not allow sudden expulsion
8. Deliver head between pains
9. Free infants face from discharges
10. No hurry now, delivery shoulders anterior one first if possible.
11. See that child is breathing
12. No hurry about severing cord
13. Observe fundus and watch for secondary hemorrhage.
14. No hurry delivery of placenta
15. See that mother and baby are covered and warm
16. When cord ceases to pulsate clamp, tie, and sever leaving the cord stump 2 to 3 inches long.
17. Make only gentle pressure from above downward on uterus so placenta is expelled.
18. Save placenta for doctor's inspection
19. Continue to guard fundus and care for as any other case.

V. Postpartum hemorrhage:
1. Do not leave patient alone but grasp jundus and call for help to notify physician.
2. Have foot of bed elevated
3. Have pituitrin 1/2 cc and ergot 1 cc given hypodermically.
4. Keep patient warm and give plenty of fresh air.

VI. After pains:
1. Make sure uterus is well contracted
2. Hot drink
3. Be prepared to give codiene grains one by mouth every four hours.

VI. Complete or 3rd. degree tears:
1. Keep wound clean and dry as possible with frequent dressing.
2. Give no residue food befoe 4th day but plenty of water.
3. Give no cathartics before 4th day.
4. On 4th evening give, warm olive oil retention enema
5. On 5th day morning give hot S.S. enema.

VII. Childless mothers:
1. Apply tight breast binder at once.
2. Use ice bags for comfort whenever there is tenderness and pain.
3. Limit all fluids except water

VIII. Contra-indications to nursing.
1. Hemoglobin 60% or less
2. Inverted nipples
3. Scar tissue from previous breast abscesses
4. cracked and bleeding nipples
5. Premature baby

IX. Sapremia
1. Semi fowlers positions to insure good drainage
2. Fluid Extract of Ergot ounces one every four hours for 8 to 10 doses
3. Force fluids

Case studies read

Next time:
Examination

Lecture XI.
Dr. Kindshie

Some Unusual conditions which may be met with.

I. Hydatid mole:
  1. Def. cystic degeneration of chorian three to four months duration.
  2. Symptoms;
    (a) Disporportionate enlargment of abd.
    (b) Bleeding
    (c) Cramps
    (d) No fetal heart tones
    (e) No small parts seen by X-ray
    (f) Ashknin-zondek test positive (strongly)
    (g) Patient passes small grape like bodies.
  3. Treatment:
    (a) Uterus must be emptied- D. & C.
    (b) A.Z. test made ff two weeks, and if it remains positive must resort to hypterectomy.

II. Chorion Epithelioma, malignant follows hydatid mole and retained placental tissue.
  1. Treatment is removal of uterus.

III. Succenturiata:

IV. Retained placenta:
  1. Cause:
    (a) fibrous maternal portion
  2. Treatment:
    (a) manual removement

V. Cord: (funic)
  1. 55 c.m. average length (6 to 109 reported.
  2. knots
  3. convelutions
  4. rupture of cord during delivery.
    (a) causes asphyxia of baby.
  5. torsion

VI. Poly-hydramnion--(about 1000 cc normal)
  1. may go to 15,000 cc
  2. Types
    (a) acute toxemias, sudden increase, abortion gradual

VII. Oligohy-hydramnin (too little fluid)

VIII. Infarcts
  1. Fibosis

IX Ectopic

X. Lythopedian, fetus which has dropped thru tube into pelvic cabity, without fata hemorrhage and become calcified.

Bottled specimens were passed around class.
Dr. Kindshie briefly reviewed course.

Next time: Examinations.