

**FEDERAL AGENCY FOR PUBLIC HEALTH
AND SOCIAL DEVELOPMENT**

**VOLGOGRAD STATE MEDICAL UNIVERSITY
OBSTETRICS & GYNECOLOGY DEPARTMENT**



MANUAL IN OBSTETRICS

for students' practical training

for fourth year students of general medicine department
in the English- speaking medium

Volgograd 2019

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Summer practical training plays an important part in teaching obstetrics. The medical students have practical training upon completion of practical classes in obstetrics.

During summer practical training the students should use and enrich their theoretical knowledge and practical skills of obstetrics they gained in the course of their studies.

The main objectives of summer practical training are the following:

- Familiarizing themselves with the work of the obstetrical in-patient department.
- Drawing up medical records.
- Familiarizing themselves with the main stages of diagnostics and management of parturient women.
- Mastering practical skills.
- Formation of a clinical way of thinking.
- Sanitary education about delivery among pregnant and parturient women.

The order of practical training

1. At an organization meeting the students will be instructed in the arrangement of their practical training in maternity hospitals.

2. The head of Gynecology and Obstetrics department appoints three persons responsible for practical training.

3. The students who have practical training outside Volgograd should be registered. They get their appointment at practical training department.

4. The instructor in charge of practical classes in obstetrics will make a list of students on duty.

5. The students will work under the guidance of doctor on night duty (from 19 p.m. till 8 a.m.) or at day-time on holidays or weekends. Thus, the students' working time amounts to 14 or 24 hours, respectively.

6. The total time of practical training for students of General Medicine Department is 96 hours.

7. The student works in the capacity of a doctor under the supervision of a doctor on duty, the leading doctor of the ward, and the head of the department. These practical training supervisors coordinate, direct, and monitor the student's work.

8. All necessary medical manipulations are to be conducted by the student independently under the supervision of a doctor on duty.

9. The student is required to maintain a written journal of his or her work (Appendix 1). For each day on duty, the student must obtain the signature of a doctor on duty.

10. After the journal is complete, it has to be submitted for review to the course instructor. The student, then, is given a written report of his or her performance signed by the instructor.

11. Upon the completion of the practical training and submission of the journal, the student provides a report regarding his or her work and receives a grade, which is recorded in the roster, the student's practical training journal, and the student's record book. The schedule for the academic training exam is developed by the Department of Obstetrics and Gynecology, and is authorized by the office of the Academic Training Dean's Office of the VolSMU.

Diary template

I. Title-page

II. Maternity clinic. Departments of maternity home

III. Obstetric statistics in maternity home

IV. Theoretical part

- clinical examination of pelvis, average dimensions of the normal pelvis
- abdominal palpation - Leopold's maneuvers
- diagnosis of pregnancy in the 1-st half and 2-nd half
- vaginal examination, assessment of cervix
- mechanism of normal labor with vertex presentation
- preprocessing of the newborn
- assessment of newborn by Apgar score
- amniotomy, indication and technique
- episiotomy, indication and technique
- caesarean section
- manual removal of the placenta
- delivery with forceps
- blood grouping and Rhesus factor

V. Description of night watching or day care with doctor's signature

VI. Forms of recording labor and delivery (Appendices 2, 3, and 4). Students in the Faculty of General Medicine are required to make a record of 8 deliveries, one of which is a surgical delivery. The student has to write a pre-surgery report (Appendix 5) for pregnant women who delivered or are scheduled to deliver by surgery, which includes the diagnosis, reasons for surgery, anesthesia, nature of the surgical intervention, forecasted complications, life prognosis, expected operation of the future menstrual function and childbearing capabilities, and the woman's expected future ability to work. In addition, the student is required to maintain a detailed record of the surgical operation procedure (Appendix 6), as well as the period of post-surgical recovery (no less than 3 journals).

VII. Comprehensive table of practical skills (Appendix 7)

VIII. Student reference (Appendix 8)



Volgograd State Medical University
Obstetrics & Gynecology department

DIARY OF PRACTICAL STUDY IN OBSTETRICS

of fourth year student of general medicine department
in the English- speaking medium _____ group

Period of practicals _____

Teaching hospital: *Maternal clinic* _____

Volgograd 2019



Obstetric sheets and examination

1. Personal History

Name _____ Age _____

Marital status: *married* since _____, *divorced, single* _____

Occupation _____ *or house wife*

Address (no details) _____

Husband data (name, age, occupation) _____

2. Family History (e.g.: hypertension, diabetes, tuberculosis, hepatitis, consanguinity, hereditary disease, twins) _____

3. Life History

Blood group _____ Rh-factor _____ Hb _____ gr/l

Gynecological diseases _____

Surgery in past history _____

Antibiotic therapy, allergic reactions to any antibiotics _____

Allergic reactions to any drugs _____

Hormone therapy in past history; indications for it _____

Transfusion of blood or blood substitutes; reaction to transfusion _____

Patient's harmful habits (smoking, alcohol or drug abuse) _____

Spouse's (partner's) harmful habits _____

4. Menstrual History:

Age of menarche _____ Cycle: *regular or not* _____

Rhythm: every _____ days Duration: for _____ days

Amount: *average, scanty or excessive* Intermenstrual discharge _____

1st day of last menstrual period (LMP) _____

5. Number of pregnancies (number of deliveries regardless of outcome: whether living or dead, full term or preterm, vaginal or operative, single or twins, weight, neonatal jaundice, anomalies, postpartum period, lactation, ectopic pregnancy, abortion - spontaneous or induced, gestational age, complications) _____

N.B. History of previous pregnancies in chronological order, their outcomes!

Number of living children now _____

6. Present History (Detailed analysis of the complaint – its onset, course, duration, medical consultation, investigations and their results, treatment administered): _____

N.B. Present history should begin at the time when the patient started complaining!

7. History of current pregnancy:

Extragenital diseases during pregnancy: _____

Dynamics of changes of body weight, BP, laboratory test _____

Fetal condition _____

Quickening _____

Warning symptoms: vaginal bleeding, vaginal discharge, severe headache

8. General examination of the patient

Height _____ Body weight _____ Body build and gait _____

Blood pressure ____ Pulse ____ beats/min. Temperature ____ Respiratory rate ____ per/min.

Pigmentation _____

Blurring of vision _____

Chest or heart symptoms _____

Edema of _____

Varicosities or deformities _____

Back: _____

Vomiting, epigastric pain _____

Presence of enlarged lymph nodes: _____

9. Pelvimetry:

Distantia spinarum – the interspinous diameter __cm

Distantia cristarum - the intercrystal diameter __cm

Distantia trochanterica - __cm

Conjugata externa – the external conjugate __cm

Conjugata vera – the true conjugate __cm

10. Measuring the abdomen:

Measurement of the circumference of abdomen __cm

Measurement of the height of the uterus __cm

Soloviov’s index __cm

Doctor’s signature _____



Management of labor and delivery

Date of attendance: _____ Admission time: _____

The patient was **referred to maternity hospital from antenatal clinic or brought to maternity hospital in an ambulance or came to maternity hospital herself**

Complaint (in the patient's own words) _____

Obstetric status:

Uterus is **in normal tone or uterus is irritable**

Contractions of uterus every _____ min, duration _____ sec. or absent.

Labor pains: **present** _____ or absent.

Fetal membranes is **present or absent from** _____ hrs _____ min| _____

Palpation of the lower segment: **painless or painful or difficult** _____

Fetal lie: **transverse or longitudinal or oblique or unstable**

Fetal presentation: **cephalic or breech** _____

slightly pressed to the pelvic inlet or above the pelvic inlet

Fetal heart sounds: **clear, rhythmic, unclear** FHR _____ beats/min

Fetal movement: _____

Vaginal discharge: _____

Estimated gestational age according to:

- last menstrual period _____ weeks
- fetal movement first felt (quickening) _____ weeks
- first visit to antenatal clinic _____ weeks
- ultrasound scan _____ weeks
- maternity leave _____ weeks

Estimated fetal weight: _____ gram Permitted blood loss: _____ ml

Vaginal examination: External female genital organs are **properly developed or** _____

Vagina is **wide or narrow**, mucous membrane is _____

Cervix of the uterus is **effaced or length of cervix** _____ cm.

Cervical dilatation _____ cm. Edges of cervix **thin or thickened or pliable**.

Membranes: **intact or ruptured..** Liquor: **clear or turbid or meconium-stained (slightly, green) or blood-stained or** _____

Fetal presentation _____ Position _____ Station _____

Fontanelle _____ Exostosis: **present or absent** _____

Promontory: **accessible or inaccessible.** Diagonal conjugate _____ cm.

Diagnosis: _____

Plan: Delivery is planned to be: vaginal or operative, if operative, **planned or urgent**

- with prevention of anomalies of uterine contraction
- with prevention of intrauterine fetal hypoxia
- with prevention of postpartum hemorrhage of risk degree _____



LABOR PROGRESS NOTES

The 1st stage of labor

Onset of labor. Dynamics of labor. Rupture of membranes (amount and color of the fluid). Analgesia in labor. Fetal condition. Complications of the 1st stage of labor, their management and treatment.

The 2nd stage of labor – delivery of the baby

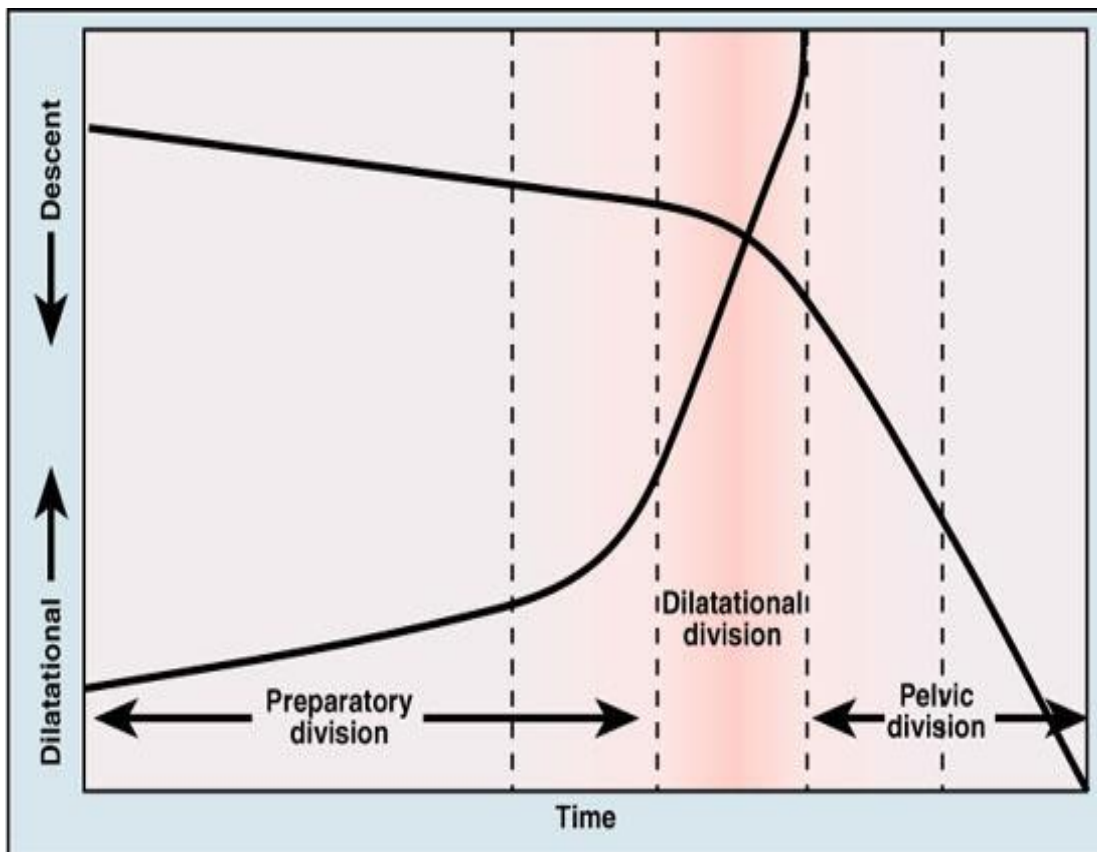
Onset of pushing efforts. Biomechanism of labor. Fetal condition. Complications of the 2nd stage of labor, their management.

The 3rd stage of labor – delivery of the placenta

Signs of delivery of the placenta. Examination of the placenta, membranes and umbilical cord. Postpartum hemorrhage (should be recorded in ml). The course of early postpartum period. Examination of the cervix, vagina, perineum.

Clinical manifestations of postpartum period

Partogram





Preoperative report

Patient _____ was prepared for *urgent or planned* surgery.

Diagnosis: _____

Operation _____

Indications for operative delivery: _____

Extragenital diseases _____

History of allergy: *absent or present* (indicate) _____

History of hemotransfusion _____

Anesthesia _____ agreed with anesthetist.

Blood group _____ Rh-factor _____ Hematocrit _____ Hb _____ of “_____” _____ 200_____ .

Prognosis for mother and child is expected to be *favorable or unfavorable*.

Patient’s consent for surgery was obtained in written form.

Surgeon _____

Assistant _____

Anesthetist _____



OPERATIVE NOTES

(underline if necessary)

Date _____ Time _____

Name of patient _____ Age _____

Operation _____

Indications _____

Anaesthesia _____

Technique of caesarean section: _____ *Lower Segment Caesarean Section*

*The peritoneal cavity is opened by **Pfannenstiel or vertical subumbilical** incision. The peritoneum (plica vesicouterina) over the lower segment is incised transversely for about 10 cm. A wide Doyen's retractor is inserted into the lower end of the wound and the bladder is pushed gently down off the lower segment. The lower part of the lower segment is incised transversely in the middle about 2 cm long and deepened until the membranes bulge. The two index fingers are slipped into the incision and extended to about 10 cm in length. The membranes are ruptured. **The head or breech** is delivered by slipping a **hand** below it and applying moderate pressure on the fundus **or applying blade of forceps** through the uterine incision. In shoulder presentation, the hand is introduced through the uterine incision to grasp a foot and the fetus is extracted gently as a breech. The umbilical cord is cut between 2 Kochers. Delivery of fetus on _____ min. The infant is handed over to the midwife and the mouth and pharynx are cleared of fluid with a soft catheter attached to suction apparatus. Sol. Oxytocini 1 ml is given intravenously or _____. The placenta is allowed to separate **spontaneously or manually removed**. Location of placenta _____. The placenta and membranes are removed through the wound. The uterine incision is sutured in two layers with **catgut or any absorbable suture**. Peritonization with the uterovesical pouch (the 3rd layer). Haemostasis secured. The peritoneal cavity is cleared of blood clots and liquor amnii. The abdominal incision is closed in layers. Skin sutured subcuticularly (cosmetically) and dressed with aseptic gauze.*

Estimated blood loss : _____ ml.

Postoperative catheterization of bladder done _____ ml, **clear or blood-stained**

Surgeon _____

Assistant _____

Anesthetist _____

Scrub nurse _____



Comprehensive table of practical skills

		Approximate amount	Done independently
1.	Measurement of Soloviov's index, circumference of abdomen, height of the uterus, lumbosacral Michaelis rhomboid	10-15	
2.	Estimation of fetal weight	8-10	
3.	Estimated date of delivery (EDD)	10-12	
4.	Leopold maneuvers	10-15	
5.	Pelvimetry	10-15	
6.	Diagnosis of the onset of labor. Assessment of contraction of uterus	10-15	
7.	Assessment of cervix (length, extent of opening in cm, edges of the cervix, its position) by score of "maturity" of the cervix	2-3	
8.	Management of labor and delivery	6-8	
9.	Primary toileting of the newborn	3-5	
10.	Examination of the placenta, membranes, umbilical cord and estimating the blood loss	5-8	
11.	Caesarean section. Observation.	2-3	
12.	Repair of laceration of perineum and vagina. Assistance	3-4	
13.	Manual removal of placenta	2	
14.	Assessment of newborn by Apgar score	10-11	
15.			
16.			

QUESTIONS

I. Methods of examination in obstetrics

1. Anatomy of the fetal skull
 2. Estimate of fetus' weight
 3. Anatomy of the newborn
 4. Methods of fetus condition during pregnancy and during labor
 5. Anatomy of external female genitals
 6. Anatomy of internal female genitals
 7. Blood supply and innervations of female genitals.
 8. The pelvic floor.
 9. Abdominal obstetrical examination
 10. Leopold maneuvers.
 11. Michaelis rhomboid.
 12. Anatomy of the normal female pelvis
 13. Pelvimetry of mayor pelvis
 14. Pelvimetry of minor pelvis.
 15. Vaginal obstetrical examination
 16. Diagnosis of early pregnancy
 17. Diagnosis of late pregnancy
 18. Estimation of the expected date of delivery
 19. Assessment of cervix by score of "maturity" of cervix.
 20. Assessment of uterus contraction. Fetoscope
 21. Cardiotocography during pregnancy and labor.
 22. Department of labor and delivery.
 23. The second department of maternity clinic.
 24. Postpartum department.
 25. Department of pathology of pregnancy. Prenatal diagnosis.
 26. Antenatal clinic.
 27. Blood grouping and Rhesus-factor pregnant women.
 28. Blood grouping and Rhesus-factor newborn.
 29. Obstetric statistics. rhesus-factor The neonatal mortality rate. The maternal mortality rate.
- Methods to establish gestational age.
30. Diagnosis of fetus condition during pregnancy and during labor.

II. Physiological obstetrics

31. The causes of the onset of labor.
32. Differentiating contractions of true and false labor
33. The first stage of labor. Management and prevention of complication.
34. The second stage or labor. Management and prevention of complication
35. Mechanism of labor with anterior vertex presentation.
36. Mechanism of labor with posterior vertex presentation.
37. The third stages of labor. .Management.
38. Signs of placental separation.
39. Obstetric hemorrhage. Prevention.
40. Prenatal diagnosis.
41. Management of the 2nd stage. Care of the perineum. Signs of threat of perineum laceration.
42. Breech presentation. Diagnosis.
43. Assessment of cervix by score of "maturity" of the cervix.
44. Mechanism of labor with breech presentation.
45. Breech presentation. Management and prevention of complication.
46. Multiple pregnancy. Diagnosis. Intrapartum management.
47. Face presentation.

48. Brow presentation.
49. Breech presentation. Management. Birth of the after coming head.
50. Preprocessing of the newborn.
51. Apgar score.
52. Routine care of the newborn.
53. Postpartum period. Clinic. Management and prevention of complication.
54. Health care for women.
55. The third stages of labor. Signs of placental separation.
56. Amniotomy. Indication and technique.
57. Multiple pregnancy. Diagnosis. Management.
58. Anesthesia during labor. Analgesia in labor and delivery. Analgesic and anesthetic agents.
59. Advice to the patient during pregnancy
60. Breast - feeding.

III. Pathological obstetrics

61. Diagnosis of late gestosis.
62. Management of the labor with gestosis.
63. Eclampsia. Clinic, diagnosis. Condition of fetus.
64. Placenta praevia. Clinic, diagnosis
65. Antepartum hemorrhage. Abruption placenta. Clinic, diagnosis.
66. Abruption placenta during labor.
67. Prolonged labor.
68. Anomaly of the labor. Discoordinated labor.
69. Fetal malposition and malpresentation.
70. Hypoxia of the fetus. Diagnosis, treatment.
71. Contracted pelvis.
72. Contracted pelvis. Management of the labor.
73. Clinical small pelvis.
74. Hypoxia of the fetus during 1st stage of labor. Management of the labor.
75. Hypoxia of the fetus during 2nd stage of labor. Management of the labor.
76. Asphyxia of the newborn
77. Postpartum endometritis.
78. Hemorrhage in the first stage of labor.
79. Hemorrhage in the third stage of labor.
80. Postpartum hemorrhage. Uterine atony.
81. Laceration of the perineum. Diagnosis of danger of rupture of perineum.
82. Perineotomy. Episiotomy. Indications. Technique. Complications.
83. Repair of laceration of the perineum degree I - II.
84. Repair of laceration of the cervix degree I - II.
85. Caesarean section. Care of sutures after caesarean section.
86. Manual removal of the placenta. Indications. Anesthesia. Technique.
87. Outlet forceps. Indications, conditions, anesthesia necessary for the application of forceps. Technique. Complications.
88. Management of preterm labor.
89. The very small infant. Principles of special care.
90. Asepsis and antisepsis in obstetrics. Prevention of HIV – infection.

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