#### MINISTRY OF HEALTH OF UKRAINE ODESSA NATIONAL MEDICAL UNIVERSITY

Faculty of international

Department of Obstetrics and Gynecology

**I APPROVE** 

Vice-rector for scientific and pedagogical work
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## METHODICAL DEVELOPMENT FOR PRACTICAL LESSONS FROM EDUCATIONAL DISCIPLINE

Faculty of international, course IV

Educational discipline "Obstetrics and gynecology"

Practical lesson № 10. Topic : «Family planning»

<b>Approved:</b> Meeting of the Department of Obstetric University	es and Gynecology of (	Odesa National Medical
Protocol №1 dated August 28, 2023.		
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#### Practical lesson №10

#### **Topic: "Family planning"**

**Objective:** To teach to evaluate the patient and medical criteria for the acceptability of the method of contraception. Master the plan of examination of the patient before choosing a method of contraception. Master family planning counseling. To teach the selection of a modern method of contraception for different categories of the population.

**Basic concepts:** Family planning counseling: directions, benefits, counseling process. Overview of contraceptive methods: COCs, vaginal ring, contraceptive patch, PTP, injectables, IUDs, barrier methods and spermicides. Methods of recognizing fertility, voluntary surgical sterilization, emergency contraception. Patient assessment. An examination is required, which is carried out in a planned manner before deciding on the use of a particular method of contraception. Family planning for people living with HIV.

**Equipment:** Professional algorithms, structural-logical schemes, tables, models, video materials, results of laboratory and instrumental researches, situational tasks, patients, case histories.

Study time: 4 hours.

# 1. Organizational activities (greetings, checking the audience, announcing the topic, the purpose of the lesson, motivating students to study the topic).

International and domestic experience shows that family planning (FP) through the use of modern contraceptives, taking into account risk factors, is an inexhaustible reserve in maintaining women's health.

Reproductive health, including the provision of family planning services and related information, is not only considered a key means of preserving the health of women and men, but is also a fundamental human right.

Half a million young women worldwide die each year from factors related to pregnancy or abortion. World experience shows that the use of modern methods of contraception as a means of preventing unplanned pregnancies leads to a decrease in the frequency of artificial and illegal abortions, which reduces maternal mortality by 25 - 50%.

- 2. Control of basic knowledge (written work, written testing, online testing, face-to-face interview, etc.).
- 2.1. Requirements for theoretical readiness of students to perform practical classes.

#### Knowledge requirements:

- communication skills and clinical examination of the patient;
- ability to determine the list of necessary clinical, laboratory and instrumental studies and evaluate their results;
- ability to establish a preliminary and clinical diagnosis of the disease;
- ability to perform medical manipulations;
- ability to provide advice on family planning;
- ability to keep medical records.

#### List of didactic units:

- family planning counseling: directions, benefits, counseling process.
- General overview of contraceptive methods: COCs, vaginal ring, contraceptive patch, PTP, injectables, IUDs, barrier methods and spermicides. Methods of recognizing fertility, voluntary surgical sterilization, emergency contraception.
- assessment of the patient.
- the necessary examination, which is carried out in a planned manner before deciding on the use of a particular method of contraception.
- family planning for people living with HIV.

### 2.2. Questions (test tasks, tasks, clinical situations) to test basic knowledge on the topic of the lesson.

#### **Ouestion:**

- Principles of choosing a method of contraception.
- Classification of contraceptive methods.
- Types, rules of application, advantages and disadvantages of COCs and CRC.
- Rules of application, advantages and disadvantages of vaginal hormonal rings and hormonal patches.
- Types, rules of application, advantages and disadvantages of intrauterine contraception.
  - Rules of application, advantages and disadvantages of MLA.
- Types, rules of application, advantages and disadvantages of barrier methods of contraception and spermicides.
- Types, rules of application, advantages and disadvantages of natural contraception.
- Types, rules of application, advantages and disadvantages of surgical contraception.
- Types, rules of application, advantages and disadvantages of emergency contraception.

#### **Typical situational tasks:**

1. A 37-year-old woman went to an obstetrician-gynecologist to choose a combined oral contraceptive. A detailed medical history revealed that the woman had been smoking for 10 years. What are the tactics of treatment? Відповідь:

If a woman over the age of 35 smokes, it is advisable to stop smoking or use another method of contraception when using COCs.

A 26-year-old woman, who is breastfeeding and resuming her menstrual period, went to see an obstetrician-gynecologist 6 months after giving birth. Should contraceptive methods be recommended?

Answer: Resumption of menstruation means that reproductive function has been restored and contraceptive methods (barrier methods, IUD, progestogen-only pills, natural pregnancy planning methods) should be started immediately.

#### **Typical test tasks:**

- 1. In what situations the use of MLA is impractical?
- A. No more than 6 months have passed since the birth.
- B. A woman breastfeeds exclusively.
- C. A woman feeds a child on demand.
- D. The woman is breastfeeding irregularly, menstruation has resumed.
- 2. What types of COCs do not exist in terms of hormone composition?
- A. Single-phase.
- B. Two-phase.
- C. Multiphase
- D. Four-phase.

Correct answers: 1 - D; 2 - D.

# 3. Formation of professional skills, abilities (mastering skills, conducting curation, determining the treatment scheme, conducting laboratory research, etc.).

#### 3.1. Content of tasks (tasks, clinical situations, etc.).

#### **Interactive task:**

Students of the group are divided into 3 subgroups of 4-5 people each. We work in women's consultation rooms with gynecological patients, we give tasks:

And the subgroup - to make a preliminary diagnosis.

Subgroup II - to make a plan for the management of a gynecological patient.

Subgroup III - assesses the correctness of the answer of subgroups I and II and makes adjustments.

#### **Atypical situational tasks:**

1. A 37-year-old woman applied for a women's consultation to install an IUD. At detailed inspection the diagnosis was established: cervicitis.

Task:

What are the doctor's tactics?

Reply:

The introduction of the IUD should be delayed until complete healing of the inflammatory process.

A 26-year-old woman applied for a women's consultation to install an IUD. The patient did not give birth, plans to become pregnant in a few years.

#### Task:

1. Is it advisable to use the IUD for contraception in this case?

#### Reply:

Women who have not given birth and are planning to give birth are not recommended to use the IUD. You need to choose other methods of contraception.

#### **Atypical test tasks:**

- 1. A woman went to see a doctor to choose a method of contraception. Postpartum period of 7 months. Breastfeeding. Menstruation is available for 2 months. Which method of contraception CANNOT be used in this case?
- A. Intrauterine spiral.
- B. Progesterone birth control pills.
- C. Progesterone injectable contraceptives.
- D. Condoms.
- E. Method of lactation amenorrhea.
- 2. A woman who had undergone surgery for breast cancer 6 months ago applied to a doctor for a method of contraception. Which method of contraception CANNOT be used in this case?
- A. Combined oral contraceptives.
- B. Copper IUDs.
- C. Surgical sterilization.
- D. Condoms.

Correct answers: 1 - E, 2 - A.

3.2. Recommendations (instructions) for performing tasks (professional algorithms, orientation maps for the formation of practical skills, etc.). An examination is required, which is carried out in a planned manner before

making a decision in favor of a particular method of contraception.

kind	202	CIC	TNK	IUC	Condoms	cervical caps	Contraceptives for the prevention of congestion	female sterilization	Vazectomy
Examination of the mammary glands	С	С	С	С	С	С	С	С	Not done
Examination of the pelvic / genital organs	С	С	С	A	С	A	С	A	A

Screening of cervical pathology	С	С	С	С	С	С	С	С	Not done
Standard laboratory examination	С	С	С	С	С	С	С	С	С
Determination of hemoglobin level in the blood	С	С	С	В	С	С	С	В	С
STD risk assessment: history taking and general examination	С	С	С	A*	C*	C**	C**	C**	С
Screening for STD / HIV: laboratory examination	С	С	С	В*	C*	C**	C**	C**	С
Blood pressure measurement	***	***	***	С	С	С	С	A	C***

**Class "A" -** this examination / analysis is definitely recommended in all cases and is a guarantee of safety and effectiveness of a particular method of contraception.

**Class "B" -** conducting this examination / analysis largely ensures the safety and effectiveness of the use of a particular method of contraception.

**Class "C" -** conducting this examination or analysis does not provide any significant guarantee of the safety and effectiveness of a particular method of contraception.

- \* If a woman is at high risk of contracting a gonorrhea or chlamydial infection, then the introduction of IUDs is not recommended, except in cases where the use of alternative methods of contraception for one reason or another is impossible or unacceptable.
- \*\* Women at high risk of HIV infection should not use spermicides that contain nonoxynol-9.
- \*\*\* It is recommended to measure blood pressure before using COCs, TCPs, ICPs.

#### \*\*\*\* Procedures performed using local anesthesia.

### Family planning for different categories of the population and according to the periods of life (order №59 from 21.02.2014)

		(order 1923) from 21.02.2014)			
Position protocol	Rationale	Necessary actions			
1. Methods of contraception for adolescents and young people.	Adolescent pregnancy is always unplanned. First of all, teenagers have a higher risk of health than the younger ones (it is especially significant for 13-16-year-olds).	Required:  1. Conduct counseling on healthy living, sex education, prevention of unplanned pregnancy and STIs.  2. Start a consultation on contraceptive methods by talking about the most reliable method of avoiding pregnancy - lack of sexual contact.  3. Suggest methods of contraception:  Condom:  - protects against STD / HIV;  - easy to use and without a visit to the doctor;  - has no side effects.  COC:  -for young women who have a regular sex life and a regular sexual partner;  - does not protect against STIs / HIV.  Double method (simultaneous use of COCs with a condom).  IUD:  - not to offer to teenagers and young women who have not given birth and do not have one sexual partner;  - does not protect against STD/ HIV.  Fertility recognition methods:  - can be offered to disciplined girls with a regular menstrual cycle, who are highly motivated to use this method and have one partner;  - does not protect against STD / HIV.			

#### Emergency contraception: - high efficiency; can not be used regular as contraception, only for occasional use with irregular sex; - does not protect against STD / HIV. 2. Methods of of *Required*: The key issues postpartum contraception for 1. To consult on the peculiarities of the contraception are the postpartum period and the use of family women in the beginning of the period planning methods. postpartum of prevention period. 2. Suggest methods of contraception: unplanned pregnancy Method of lactation amenorrhea (MLA): and the impact of - breastfeeding immediately after birth contraception on and up to 6 months exclusively lactation. breastfeeding (at least 8-10 times a day) According to studies, menstruation the absence in resumption (amenorrhea): menstruation up to 6 High efficiency and significant after birth months benefits for both maternal and child occurs in 11.1 - 39.4% health. of cases. and the Progestogen-only contraceptives: contraceptive - women who use MLA, only 6 months effectiveness of MLA after birth: is from 93.5 to 100%. - women who are not breastfeeding can Progestogen-only be used immediately, provided there is contraceptives do not no pregnancy; affect the quality and quantity of breast milk - women who are breastfeeding, but and the health of the alternate with complementary foods - 6 baby. weeks after birth. The use of COCs in the Intrauterine contraceptives: first 6 months after - postplacental or within 48 hours after reduces birth the childbirth or cesarean section autopsy, amount of breast milk which occurred without complications; adversely and may - - in the postpartum period only after 4 affect the normal weeks. if not administered growth of the child and postplacentally. in the first 3 weeks Combined oral contraceptives (COCs): birth after COCs - Not recommended for women who

- fed in the first 6 months after

increase

risk of thrombosis.

IUDs are contraindicated for women with complicated childbirth (bleeding, anemia, infections);

IUD and DHS do not affect the quantity and quality of breast milk (WHO 2012).

childbirth;

are - if a woman is not breastfeeding, for COCs can be used 3 weeks after with delivery.

Voluntary surgical sterilization (DHS):

- immediately after delivery, during caesarean section or within 7 days after delivery;
- - if sterilization is not performed after 7 days, perform only 6 weeks after delivery.

#### Barrier methods:

- from the time of resumption of sexual activity (cervical caps - 6 weeks after birth).

Fertility recognition methods:

- It is not recommended to start using before the resumption of regular menstruation.

3. Methods of contraception for women after abortion.

Post-abortion family planning services:

- advising on the need for contraception and all available methods of contraception, their characteristics, effectiveness and side effects;
- providing an opportunity to make an informed choice of contraceptive methods;
- providing information on the need for protection against STIs.

The provision of family planning services for women after abortion should

#### *Required:*

1. Advise on the specifics of the postabortion period and the use of family planning methods.

Uncomplicated abortion:

- after abortion up to 12 weeks should not delay the use of contraceptive methods.
- After an abortion after 12 weeks, barrier methods (cervical caps), surgical sterilization and introduction of IUDs can be recommended in 4-6 weeks.

#### **Uncomplicated abortion:**

Hormonal drugs:

- the first tablet of COC or TKP is given immediately on the day of surgery;
- hormonal patch, vaginal ring can be used immediately after surgery.

#### Injectable drugs:

#### begin

immediately, because ovulation can occur on the 11th day after abortion and usually occurs before the first menstruation.

The ability to conceive restored is quickly - within weeks after an abortion or miscarriage that occurred in the 1st trimester of pregnancy, and within 4 weeks after an abortion or miscarriage that occurred in the second trimester of pregnancy. uncomplicated After abortion in the first trimester, all methods of contraception are suitable.

- can be administered immediately after abortion or within 7 days after surgery.
- IUD (containing copper) or IUD (with levonorgestrel):
- immediately after abortion or within 7 days (for IUDs with levonorgestrel) and 12 days (for IUDs containing copper) provided there are no symptoms of infection.

### Barrier methods (condoms, spermicides):

- since the resumption of sexual activity. *Fertility recognition methods:*
- -only after the resumption of the regular menstrual cycle.

#### **Complicated abortion:**

- -you can use hormonal oral contraceptives, injection methods, condoms;
- Postpone IUD and sterilization until complications are eliminated.

#### - Medical abortion:

- you can start using hormonal contraception after taking the first pill under the scheme of medical abortion;
- complete abortion should be confirmed before intrauterine contraception or sterilization.

### Algorithm for performing practical skills. Bimanual (vaginal) examination:

- 1) greet the patient;
- 2) identify the patient (name, age);
- 3) to inform the patient about the need for research;
- 4) explain to the patient how the study is conducted;
- 5) obtain permission to conduct research;
- 6) wash your hands;

- 1) wear inspection gloves;
- 2) with the first and second fingers of the left (right) hand to spread the labia majora, the middle finger of the "dominant" hand to place at the level of the posterior adhesion, gently press on it to open the entrance to the vagina;
- 3) carefully and slowly insert the middle finger, then the index finger into the vagina along the posterior wall to the vault and cervix, bring the fourth and fifth fingers to the palm, the thumb to the top;
- 4) determine the length of the vaginal part of the cervix in centimeters;
- 5) determine the consistency of the cervix (dense, soft);
- 6) determine the patency of the outer eye of the cervical canal (closed, passes the fingertip);
- 7) assess the pain of the cervical tour;
- 8) carefully place the second palm on the abdomen (above the symphysis) and press moderately to determine the bottom of the uterine body;
  - 9) bring the body of the uterus between two hands and determine:
    - position of the uterus relative to the cervix (anteflexio, retroflexio);
    - body size of the uterus (normal, reduced, enlarged);
    - consistency of the uterine body (dense-elastic, soft, compacted);
    - motility of the uterine body (relatively mobile, limited mobility);
    - sensitivity to palpation (painful, painless);
- 10) place the fingers in the bottom of the right lateral arch and using both hands to palpate the right vaginal arch and the right appendages of the uterus, determine their size, mobility and pain;
- 11) place the fingers in the bottom of the left lateral arch and using both hands to palpate the left vaginal arch and the left appendages of the uterus, determine their size, mobility and pain;
- 12) determine the capacity of the vaginal vaults;
- 13) inform the patient about the results of the study;
- 14) thank the patient;
- 15) remove inspection gloves;
- 16) wash your hands.

#### Clinical examination of the mammary glands:

- 1) greet the patient;
- 2) identify the patient (name, age);
- 3) to inform the patient about the need for research;
- 4) explain to the patient how the study is conducted;
- 5) obtain permission to conduct research;
- 6) wash your hands;
- 7) wear inspection gloves;
- 8) examine the mammary glands, assess their shape, skin color, nipples, areas around the nipple (asymmetry, retraction, etc.);

- 1) examine the tissue of the mammary glands clockwise or in quadrants and determine its density, homogeneity, sensitivity, presence / absence of bulky tumors:
- 2) at detection of a new growth to define its form, the sizes, a consistence, borders of formation, mobility, a parity with fabric of a mammary gland, morbidity;
- 3) palpation of lymph nodes in the supraclavicular, subclavian and axillary areas;
- 4) determine the presence of pathological secretions from the mammary glands;
- 5) inform the patient about the results of the study;
- 6) thank the patient;
- 7) remove inspection gloves;
- 8) wash your hands.

#### 3.3. Requirements for the results of work, including before registration.

- Advise women on contraception.
- Evaluate the patient.
- Choose a method of contraception for adolescents, women of childbearing age, in the postpartum period.
- Oral report on the thematic patient.
- Analysis and discussion of the results of the patient's examination.
- Multimedia presentation on the topic of the lesson (review of literature using modern sources; videos, etc.).

### 3.4. Control materials for the final stage of the lesson: tasks, tasks, tests, etc.

Atypical situational tasks:

1. A 25-year-old woman who has been using COCs for contraception for the last 3 months has applied for a women's consultation. The woman's main complaint is that she often forgets about taking pills every day. What is the doctor's advice in this case?

Answer: The patient should be prescribed other hormonal contraceptives, such as a vaginal ring or hormonal patch, or barrier contraception should be recommended.

A 25-year-old woman applied to a women's clinic to choose a method of contraception. The patient complains of oily skin, acne and excessive hair growth on the face and inner thighs. What are the doctor's tactics in this case?

Answer: Prescribing COCs with antiandrogenic action after appropriate examination and hormonal screening (for example, Diane-35, Yarina, Zhanin).

#### **Test tasks STEP-2:**

1. (2019) A 32-year-old woman consulted a female doctor with complaints of chronic pelvic pain, which is exacerbated during menstruation, dyspareunia, blood smear before and after menstruation. The last menstruation is 3 weeks later. When examined in mirrors: on the cervix 2 cysts with a diameter of 3 and 5 mm blue-purple color, from which a dark brown liquid.

On bimanual examination: the body of the uterus is spherical, enlarged to 6 weeks of pregnancy, painful on palpation. Appendages on both sides without features. The doctor was informed that the birth of a child is not planned in the near future. What are the most appropriate treatment tactics for this patient?

- A. Controlled ovarian hyperstimulation
- B. Prescribing combined oral contraceptives \*
- C. Purpose of androgens
- D. Surgical intervention
- E. Appointment of gonadotropin-releasing hormone antagonists
- 2. (2008) A 26-year-old woman who gave birth 7 months ago has been worried about nausea, vomiting in the morning, and drowsiness for the last two weeks. Breastfeeding, no menstruation. She was not warned about pregnancy. Which of the methods should be used to clarify the diagnosis?
- A. Ultrasound examination \*
- B. Ro-graphy of the pelvic organs
- C. Palpation of the mammary glands and squeezing milk
- D. Two-handed vaginal examination
- E. Research with the help of mirrors

#### 4. Summing up (criteria for evaluating learning outcomes).

Current control: oral examination, testing, assessment of practical skills, solving situational clinical problems, assessment of activity in the classroom, etc.

- The structure of the current assessment in the practical lesson:
- 1. Assessment of theoretical knowledge on the topic of the lesson:
- methods: survey, solution of situational clinical problem;
- - maximum grade 5, minimum grade 3, unsatisfactory grade 2.
- 2. Assessment of practical skills and manipulations on the topic of the lesson:
- methods: assessment of the correctness of practical skills;
- - maximum grade 5, minimum grade 3, unsatisfactory grade 2
- 1. Evaluation of work with the patient on the topic of the lesson:
  - methods: assessment of: a) communication skills of communication with the patient, b) the correctness of the appointment and evaluation of laboratory and instrumental studies, c) compliance with the algorithm for differential diagnosis d) justification of clinical diagnosis, e) treatment plan;
    - maximum grade 5, minimum grade 3, unsatisfactory grade 2.

#### Criteria for current assessment in the practical lesson:

«5» The student is fluent in the material, takes an active part in the discussion and solution of the situational clinical problem, confidently demonstrates practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental studies,

	expresses his opinion on the topic of the lesson, demonstrates clinical thinking.
«4»	The student is well versed in the material, participates in the discussion and solution of situational clinical problems, demonstrates practical skills during the examination of the patient and interpretation of clinical, laboratory and instrumental studies with some errors, expresses his opinion on the topic, demonstrates clinical thinking.
«3»	The student does not have enough material, insecurely participates in the discussion and solution of the situational clinical problem, demonstrates practical skills during the examination of the patient and interpretation of clinical, laboratory and instrumental studies with significant errors.
«2»	The student does not have the material, does not participate in the discussion and solution of the situational clinical problem, does not demonstrate practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental studies.

## LIST OF RECOMMENDED TRAINING AND METHODOLOGICAL LITERATURE IN OBSTETRICS AND GYNECOLOGY

#### 1. Basic

- 1.Gynecology: a textbook (edited by BM Ventskivsky, GK Stepankovskaya, ME Yarotsky) .- K .: VSV Medicine, 2012.- 352 p.
- 2. Zaporozhan VM, Chaika VK, Markin LB Obstetrics and Gynecology (in 4 volumes): national textbook: 2013
- 3. Gynecology: a textbook in English (edit by I.B. Ventskivska) .- K .: Medicine, 2010.-160 p.
- 4.Zaporozhan VM Operative gynecology: a textbook. Odessa: Odessa Medical University, 2006. 292 p.
- 5.Methods of contraception according to periods of life: a textbook.- K., 2013.- 255 p.
- 6.SM Pashchenko, GI Reznichenko, MA Voloshin Diagnosis and treatment of patients with dyshormonal breast diseases: Zaporizhzhya: Prosvita, 2011.-152 p.
- 7. Modern aspects of family planning: a textbook.- K., 2012.-307p.
- 8.Dubossarskaya ZM, Dubossarskaya Yu.A. Reproductive endocrinology: a training manual .- D.: Lyra LTD, 2008.-416 p.

- 9.Pregnancy, Childbirth, Postpartum and Newborn Care: A Guide to Essential Practice. WHO, Geneva, 2006.
- 10.Existing "Clinical Protocols" approved by the order of the Ministry of Health of Ukraine on obstetrics and gynecology

#### 2. Methodical

- 1. Family Planning. Tutorial // Kyiv, 2016. 444p.
- 2. Miller VE Methodical bases of preparation and carrying out of employment in higher medical educational establishments / VE Mileryan. K., 2007. 120p.

#### 3. Scientific

- 1. Dutta, Durlav Chandra. D. C. Dutta's Textbook of Gynecology including Contraception / D.C. Dutta; ed/ Hiralal Konar. 7<sup>th</sup>.ed. New Delhi: Jaypee Brothers Medical Publishers, 2016. XX, 574 p.
- 2. Khvorostukhina SA Sexual infections in women. 2008. 126 p.

#### **Online sources for training:**

- 1. https://www.cochrane.org/
- 2. <a href="https://www.ebcog.org/">https://www.ebcog.org/</a>
- 3. <a href="https://www.acog.org/">https://www.acog.org/</a>
- 4. <a href="https://www.uptodate.com">https://www.uptodate.com</a>
- 5. <a href="https://online.lexi.com/">https://online.lexi.com/</a>
- 6. <a href="https://www.ncbi.nlm.nih.gov/">https://www.ncbi.nlm.nih.gov/</a>
- 7. <a href="https://pubmed.ncbi.nlm.nih.gov/">https://pubmed.ncbi.nlm.nih.gov/</a>
- 8. <a href="https://www.thelancet.com/">https://www.thelancet.com/</a>
- 9. <a href="https://www.rcog.org.uk/">https://www.rcog.org.uk/</a>
- 10. <a href="https://www.npwh.org/">https://www.npwh.org/</a>

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