ONMedU, Department of Obstetrics and Gynecology .Practical class #4. Contraception for women of different age categories

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

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Vice-rector for scientific and pedagogical work

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Eduard BURIACHKIVSKYI

Faculty international

Department of Obstetrics and Gynecology

# METHODOLOGICAL RECOMMENDATIONS FOR THE PRACTICAL LESSON EDUCATIONAL DISCIPLINE

Faculty international, course IV

Elective discipline "Family planning. Contraception"

Practical class #4. Topic: "Contraception for women of different age categories"

Methodical recommendations of a practical class, EPP "Medicine", 4th course, Faculty of Medicine. Elective discipline: "Family planning. Contraception"

#### Approved:

Meeting of the Department of Obstetrics and Gynecology of Odesa National Medical University

Protocol No. 1 dated August 29, 2024

(Ihor GLADCHUK)

Head of the department

#### **Developers:**

PhD, Associate Professor of the Department of Obstetrics and Gynecology \_\_\_\_\_\_\_\_\_ Lavrynenko G.L. PhD, Assistant of the Department of Obstetrics and Gynecology \_\_\_\_\_\_\_ MHH Shevchenko O.I.

# Practical class #4

#### Topic: "Contraception for women of different age categories"

Aim:Master the features of counseling and learn how to choose a modern method of contraception for women of different age categories.

**Basic concepts:** Peculiarities of counseling sexually active persons under 18 years. Methods of contraception for teenagers. Peculiarities of counseling women in the perimenopausal period. Peculiarities of a woman's "transitional" period. Methods of contraception for women approaching menopause.

**Equipment:** Professional algorithms, structural and logical schemes, tables, models, video materials, results of laboratory and instrumental studies, situational problems, patients, medical cards.

# 1. Organizational measures (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).

Adolescents and women approaching menopause have different life circumstances, reproductive problems and goals, and accordingly require special family planning (FP) services. Professionals who provide FP services must know and recommend the methods that are most suitable for a woman depending on the period of her life and be aware of the relationship between method choice, failure to use it, unplanned or high-risk pregnancy and abortion.

# 2. Control of the reference level of knowledge (written work, written test, online test, face-to-face survey, etc.).

Knowledge requirements:

- communication and clinical patient examination skills;
- the ability to determine the list of necessary clinical and laboratory and instrumental studies and evaluate their results;
- the ability to conduct family planning counseling;

List of didactic units:

- counseling of sexually active persons under the age of 18;
- methods of contraception for teenagers;
- counseling of women in the perimenopausal period;
- peculiarities of a woman's "transitional" period;
- contraceptive methods for women approaching menopause.

# **3.** Questions (test tasks, tasks, clinical situations) to check basic knowledge on the topic of the seminar.

#### Typical situational tasks:

1. Patient K., 15 years old, turned to a doctor in connection with the fact that she had started dating a young man. She already had sex with him. Wants to know how she can prevent unwanted pregnancy and STDs.

Answer: Using a condom.

2. Patient R., 18 years old, turned to the hospital about choosing a reliable method of contraception. She studies at a technical school and lives in a dormitory. She does not have regular sexual relations. The day before the consultation, she had unprotected sex. What are the doctor's actions?

Answer: Recommend to use emergency contraception, counseling on a permanent method of contraception and STD prevention.

3. A 47-year-old woman applied to the medical institution. She is engaged in business, often goes on business trips. It is known from the anamnesis that she has two adult children, is currently unmarried, but has a boyfriend who is younger. Can she use postinor as a method of permanent contraception?

Answer: No, she can not use it.

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

1. What are the requirements for contraceptive methods in adolescence?

A. Reliable protection against STDs

B. Reliable protection against unwanted pregnancy

C. The method should be reversed

D. All of the above

2. Is it possible to use the method of voluntary surgical sterilization in adolescence?

A.Optional

B. Sometimes

C. No

D. Always

3. What are the restrictions for the use of COCs by women of older age groups?

A. Smoking and age.

B. Age characteristics.

C. Anatomical features.

D. Safety for health.

4. Is the fertility control method a reliable method of contraception for women of older age groups?

A. Yes.

D. No.

C. Yes, if it is combined with the barrier method.

D. Sometimes, in some cases.

Correct answers: 1 - D; 2 - C; 3 - A; 4 - B.

#### 4. Discussion of theoretical issues. Question:

- Mechanisms of action of various contraceptives.
- Contraceptive / non-contraceptive advantages of different methods of contraception.
- Disadvantages of various methods of contraception.
- Peculiarities of counseling teenagers.
- Contraceptive methods which are acceptable for teenagers.
- What is the "double dutch" method of contraception?
- Peculiarities of counseling women in the perimenopausal period.
- Peculiarities of the course of the "transitional" period in women.
- Methods of contraception for women approaching menopause.

# Interactive task:

The 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:

Subgroup I - evaluation of the patient condition.

Subgroup II – counseling of the patient on family planning, selection of a contraceptive method.

Subgroup III – evaluates the correctness of the answer of subgroups I and II and makes its corrections.

# Unusual situational tasks:

**1.**A 17-year-old girl sought counseling regarding pregnancy prevention and STDs. Menstruation from the age of 11, there are often delays from several days to a month. Over the past year, she has noticed a significant increase in body weight, which is very upsetting to her. She needs reliable contraception and, preferably, to regulate the menstrual cycle.

# Task:

**1.** What are the doctor's actions?

# Answer:

- Make an examination plan.
- Conduct STD risk counseling.
- To inform about acceptable methods of contraception.
- Offer her a double method of contraception with the simultaneous use of condoms and COCs.
- To inform about methods of emergency contraception.
- Schedule the next visit.

**2.** Girl M., 15 years old, studies at school. She turned to the clinic because of the fear of pregnancy after several unprotected sexual acts with a new partner. **Task:** 

#### 1. Determine the doctor's action algorithm.

#### Answer:

- To examine the patient in order to exclude pregnancy.
- Conduct an STD examination.
- Conduct counseling on changing sexual behavior and a healthy lifestyle.
- Provide counseling on acceptable methods of contraception.
- Schedule a repeat consultation.

**3.** Lyudmila is 45 years old, has two adult children, turned to the women's consultation about choosing a method of contraception acceptable to her. Previously, she had irregular sexual relations and used condoms. Smokes up to 20 cigarettes a day. She denies somatic diseases. For the past 4 months, she has had a permanent partner with whom she plans to marry. The partner is 55 years old and has no plans to have a child together.

#### Task:

1. In what period of life is a woman?

2. What method can be offered to a woman?

#### Answer:

- The period of a woman's life is the end of the desired fertility.
- The choice of contraceptive method is made taking into account the state of health of the woman after a medical examination. A woman can be offered: IUD, injectable contraceptives, methods of voluntary surgical sterilization. Non-typical test tasks:

# **1.**Which of the listed methods of contraception are not recommended for teenagers?

A. Emergency contraception

B.Voluntary surgical sterilization

C. Fertility recognition methods

D. COC

E. IUD

**2.**The double dutch method is:

A.Use of IUDs and condoms.

B.Insertion of IUD and taking COC.

C.Taking COCs and using a condom.

D. Use of a condom with spermicides.

E. All answers are correct.

**3.**Maria, 42 years old, married, mother of one child, suffers from type I diabetes since childhood. She complains of pain in her legs, periodic swellings, uses long-acting insulin, 6 days have passed since the start of menstruation. Maria asked for advice about PS. What method of contraception is most acceptable for a woman?

A. Depo-Provera.

B. IUD "Mirena".

C. Voluntary surgical sterilization

D. Natural family planning methods.

E. All of the above, except natural family planning.

Correct answers: 1 - B, 2 - C, 3 - E.

### Unusual situational tasks:

**1.** A 15-year-old girl had her first unprotected sexual intercourse. She sought medical help.

#### Task:

- What should be the doctor's algorithm of actions in this case?
- What examination should be carried out?

# Answer:

- Algorithm of the doctor's actions:
  - Examine the girl and determine the state of the genitals;
  - Learn about the period of the menstrual cycle at the time of the incident, and then make a decision about the possibility of pregnancy or prevention;
  - Counsel on safe sexual behavior and acceptable methods of contraception.
- Get tested for sexually transmitted infections.

2. Woman A, 42 years old, unmarried, often goes on long business trips. At home, he has a permanent sexual partner, although she occasionally has relationships with other men. During the examination, she was diagnosed with adenomyosis, and there are complaints about the presence of PMS.

Task:

- Determine which method of contraception is most appropriate in this case?
- What examination should be performed on a woman?

# Answer:

- IUD with levonorgestrel and, if necessary, a condom.
- Conduct an STD examination.

# Test tasks STEP-2:

1. (2019)A 32-year-old woman turned to a gynecologist with complaints of chronic pelvic pain that worsens during menstruation, dyspareunia, bleeding before and after menstruation. Last period 3 weeks later. When examined in mirrors: on the cervix, there are 2 cysts with a diameter of 3 and 5 mm, blue-purple in color, from which a dark brown liquid is released. During bimanual examination: the body of the uterus is spherical in shape, enlarged up to 6 weeks of pregnancy, painful during 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 is the most appropriate treatment strategy for this patient?

- A. Controlled ovarian hyperstimulation
- B. Prescribing combined oral contraceptives\*
- S. Prescribing androgens

D. Surgical intervention

E. Prescribing gonadotropin-releasing hormone antagonists

2. (2008) A 26-year-old woman who gave birth 7 months ago has been troubled by nausea, vomiting in the morning, and drowsiness for the past two weeks. She is breastfeeding, there was no menstruation. She was not warned against pregnancy. Which of the methods should be used to clarify the diagnosis?

A. Ultrasound examination\*

- IN.Ro-graphy of the pelvic organs
- C. Palpation of the mammary glands and milk ejection
- D. Two-handed vaginal examination
- E. Speculum examination

# 5. Topics of reports / essays.

- Peculiarities of counseling teenagers
- Methods of contraception which are acceptable for teenagers.
- Peculiarities of counseling women in the perimenopausal period.
- Peculiarities of the course of the "transitional" period in women.
- -Contraceptive methods for women approaching menopause.
- Contraceptive / non-contraceptive advantages of different methods of contraception.
- Disadvantages of various methods of contraception.

# Family planning for different categories of the population and according to periods of life (Order No. 59 dated 21.02.2014)

Position protocol	Justification	Necessary actions
1. Methods of contraception for teenagers and young people.	First of all, teenage	<ol> <li>Conduct counseling on healthy lifestyle, sex education, prevention of unplanned pregnancy and STDs.</li> <li>Start counseling about contraceptive methods with a conversation about the</li> </ol>

		1
		- has no side effects. COOK:
		- for young women who have a regular
		sex life and a permanent sexual partner;
		- does not protect against STD/HIV.
		<i>Double method</i> (simultaneous use of COCs with a condom).
		IUD:
		- do not 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;
		- cannot be used as regular
		contraception, only for episodic use
		with irregular sexual life;
		- does not protect against STD/HIV.
2. Methods of	e	Mandatory:
contraception for	statistics of Western	
women	European countries,	
approaching	50% of women aged 44	
menopause.	and 30% of 45-50-year-	taking into account the state of health of
	olds are sexually active, have a preserved	a woman after a medical examination
	menstrual cycle, are	3. Counseling on ending the use of
	able to conceive and	contraceptives (if a woman has had no
	need contraception	mensuluar bleeding for 12 consecutive
	(WHO, 2009).	montilis).
	Abortions in these	
	women are	
	characterized by a 3-	

fold increase in the	COCs of the latest generation.
	Contraceptives of the progestogen
complications	
	for women for whom the use of
	contraceptives containing estrogens is
frequent exacerbation	contraindicated;
of gynecological and	- do not offer DMP (depo-
extragenital pathology.	medroxyprogesterone) to women who
Therefore, the purpose	are at risk of osteoporosis or have its
of contraception in	
1	Barrier methods and spermicides:
	- effective methods of contraception
unplanned pregnancy,	for older women.
but also to preserve	
	- prefer the hormonal IUD, which
	has a protective and therapeutic effect.
contrast to reproductive	
age, smoking is an	
absolute	
contraindication to the	
use of COCs. The use	
of COCs, combined	
patches and vaginal	
rings is contraindicated	
in women over 35 years	
of age with migraine	
pain (regardless of	
whether such pain is	
accompanied by	
migraine aura).	
inigranic aura).	

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

**Current control:**oral survey, testing, assessment of communication skills during role play, solving situational clinical tasks, assessment of activity in class, etc.

#### Final control: balance

#### **Evaluation of the current educational activity at the seminar session**:

1. Evaluation of theoretical knowledge on the subject of the lesson:

- methods: survey, solving a situational clinical problem;
- the maximum score is 5, the minimum score is 3, the unsatisfactory score is 2.
- 2. Evaluation of work with a patient on the subject of the lesson:
- methods: assessment of: a) communication skills of communicating with the patient, b) the correctness of prescribing and evaluating laboratory and instrumental studies, c) compliance with the differential diagnosis algorithm, d) substantiation of the clinical diagnosis, e) drawing up a treatment plan;
- the maximum score is 5, the minimum score is 3, the unsatisfactory score is 2.

The grade for one seminar session is the arithmetic average of all components and can only have a whole value (5, 4, 3, 2), which is rounded according to the statistical method.

#### **Current assessment criteria for practical lessons:**

"5"	The student has a fluent command of the material, takes an active part in discussing and solving a situational clinical problem, confidently demonstrates practical skills during the examination of a patient and the interpretation of clinical, laboratory and instrumental research data, expresses his opinion on the subject of the lesson, demonstrates clinical thinking.
"4"	The student has a good command of the material, participates in the discussion and solution of the situational clinical problem, demonstrates practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data with some errors, expresses his opinion on the topic of the lesson, demonstrates clinical thinking.
"3"	The student does not have sufficient knowledge of the material, is unsure of participating in the discussion and solution of the situational clinical problem, demonstrates practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data with significant errors.
"2"	The student does not master the material, does not take part 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 research data.

#### 5. List of recommended literature. Main:

- 1. Family Planning: A Universal Guide for Family Planning Providers. Updated 3rd edition 2018. Copenhagen: WHO Regional Office for Europe; 2021
- Obstetrics and gynecology: in 2 books. Book 2. Gynecology: a textbook (III-IV university) / edited by V.I. Hryshchenko, M.O. Shcherbyny, B.M. Ventskivskyi - 3rd ed., edition, 2020. – 376 p.
- 3. Clinical Obstetrics and Gynecology: 4th Edition / Brian A. Magowan, Philip Owen, Andrew Thomson. 2021. 454 p.
- 4. Medical acceptance criteria for the use of contraceptive methods: 5th edition. Guidelines. -Geneva: World Health Organization; 2015
- Family planning and contraception: study guide / V.I. Boyko, N.V. Kalashnyk, A.V. Boyko and others; in general ed. Dr. Med. Sciences, Prof. V.I. A fight – Sumy: Sumy State University, 2018. – 223 p.
- 6. Oats, Jeremy Fundamentals of Obstetrics and Gynecology [Text]: Liewellyn-Jones Fundamentals of Obstetrics and Gynecology / J. Oats, S. Abraham. - 10th ed. – Edinburgh [etc.]: Elsevier, 2017. – VII, 375 p.
- Dutta, Durlav Chandra. DC Dutta's Textbook of Gynecology including Contraception / DC Dutta; ed/ Hiralal Konar. - 7th. ed. - New Delhi: Jaypee Brothers Medical Publishers, 2016. - XX, 574 p.

#### Additional:

- 1. Lopez LM, Grimes DA, Schulz KF. Steroidal contraceptives: effect on carbohydrate metabolism in women without diabetes mellitus. Cochrane Database Syst Rev. 2019 Nov 12; 2019(11).
- Plu-Bureau G, Sabbagh E, Hugon-Rodin J. Hormonal contraception and vascular risk: CNGOF Contraception Guidelines. Gynecol Obstet Fertil Senol. 2018 Dec;46(12):823-833.
- Diagnostics of obstetric and gynecological endocrine pathology: [educational manual for intern doctors and trainee doctors of institutions (fac.) post-diploma. of Education of the Ministry of Health of Ukraine] / edited by V.K. Likhachev; V.K. Likhachev, L.M. Dobrovolska, O.O. Taranovska and others; UMSA (Poltava). – Vinnytsia: E.V. Maksimenko Publisher, 2019. – 174 p.
- Infertility and benign diseases of the mammary gland / National Academy of Sciences of Ukraine, Ministry of Health of Ukraine, Institute of Pediatrics, Obstetrics and Gynecology, UMSA; under the editorship A.G. Kornatska, T.F. Tatarchuk, O.D. Dubenko. – K.; Poltava, 2017. – 271 p.
- 5. Current "Clinical protocols", approved by order of the Ministry of Health of Ukraine for Obstetrics and Gynecology.

#### Internet sources for preparation:

1.<u>https://www.cochrane.org/</u>

2.<u>https://www.ebcog.org/</u> 3.<u>https://www.acog.org/</u> 4.<u>https://www.uptodate.com</u> 5.<u>https://online.lexi.com/</u> 6.<u>https://www.ncbi.nlm.nih.gov/</u>

7.<u>https://pubmed.ncbi.nlm.nih.gov/</u>

8.<u>https://www.thelancet.com/</u>

9.<u>https://www.rcog.org.uk/</u>

10.<u>https://www.npwh.org/</u>