

# THEMATIC PLAN OF LESSONS ON OBSTETRICS AND GYNECOLOGY FOR 5th YEAR STUDENTS OF FACULTY FOR INTERNATIONAL STUDENTS

*Thematic plan was approved at a meeting of the Department of Obstetrics and Gynecology with PD & PC*

## **9 semester**

**Topic 1: Principles of the organization of gynecology care in the Republic of Belarus. Anatomical and physiological features of the reproductive system of women. The main symptoms of gynecological diseases. Methods of examination of gynecological patients.**

1. The main stages of gynecological care. The main activities of the gynecological service. Specialized gynecological care.
2. Organization of the work of the antenatal clinic and the hospital for the provision of gynecological care.
3. Ethics and deontology in gynecology.
4. Anatomy and physiology of female genital organs.
5. Age periods in a woman's life. Anatomical and physiological features of female genitals in different age periods.
6. The main symptoms of gynecological diseases: pain symptom, pathological discharge, itching, menstrual disorders, infertility, dysfunction of neighboring organs.
7. Methods of examination of gynecological patients: clinical examination, general examination and objective examination, examination and palpation of the mammary glands, examination and examination of the external and internal genitals (examination of the external genitals, examination with gynecological mirrors, vaginal examination, two-handed and vaginal-rectal examination).
8. Manipulations in gynecology: D&C, biopsy of the endometrium, biopsy of the cervix, culdocentesis
9. Hormonal tests.
10. Endoscopic techniques (colposcopy, hysteroscopy, laparoscopy).
11. Ultrasound diagnostics.
12. X-ray methods in gynecology.
13. Genetic, cytological, morphological methods in gynecology.

## **Topic 2: Menstrual function and its disorders.**

1. Menstrual cycle. Definition. Characteristics of the normal menstrual cycle. Levels of regulation of the reproductive system: extrahypothalamic structures of the brain (cerebral cortex, neurotransmitter system); hypothalamus: releasing hormones; the anterior pituitary: gonadotropic hormones (LH, FSH, prolactin). Effects of gonadotropins. Ovaries: folliculogenesis, ovulation, hormonal function. The biological effects of estrogen, progesterone, and androgens. Target organs: cyclic changes in them (uterine cycle). Feedback system.
2. Classification of disorders of menstrual function. Etiology and pathogenesis.
3. Amenorrhea. Definition.
  - a) primary amenorrhea.

- b) secondary amenorrhea.
4. Hypomenstrual syndrome.
5. Abnormal uterine bleeding. Definition. Classification. Diagnostics. Treatment.
6. Dysmenorrhea. Clinic. Diagnostics. Treatment.

### **Topic 3: Neuroendocrine syndromes in gynecology.**

1. Premenstrual syndrome (PMS). Etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prophylaxis.
2. Polycystic Ovary Syndrome (PCOS). Etiology, pathogenesis, classification (types of PCOS), clinical manifestations, diagnosis, treatment, prophylaxis.
3. Congenital adrenal hyperplasia. Clinical features. Diagnosis, treatment, prophylaxis.
4. Hyperprolactinemia. Etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prophylaxis.
5. Menopause. Climacteric syndrome. Etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prophylaxis.

### **Topic 4: Benign and premalignant diseases of the cervix. Hyperplastic processes of the endometrium.**

1. Classification of pathological processes of the cervix. Causes and pathogenesis of pathological conditions of the cervix.
2. Benign diseases of the cervix: erosion, eversion, ectropion, polyp;
3. Premalignant diseases of the cervix (CIN, LSIL, HSIL).
4. Etiopathogenesis and classification of endometrial hyperplastic processes.
5. Clinic and diagnosis of endometrial hyperplastic processes.
6. Precancerous processes of endometrium. Etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prophylaxis.
7. Endometrial polyps. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.

### **Topic 5: Endometriosis.**

1. Endometriosis. Definition. Basic characteristics of disease. The theories of endometriosis origin.
2. Pathogenesis of endometriosis. Classification.
3. Clinic and diagnosis of various forms of endometriosis:
  - adenomyosis,
  - pelvic endometriosis,
  - cervical and rectovaginal endometriosis;
  - extragenital endometriosis.
4. Methods of treatment of endometriosis: hormonal therapy, surgical treatment.
5. Prevention of endometriosis.

### **Topic 6: Uterine fibroids.**

1. Uterine fibroids. Etiopathogenesis and classification.
2. Clinical features and methods of diagnosis of uterine fibroids.
3. Conservative therapy of uterine fibroids.

4. Surgical treatment of uterine fibroids. Indications for surgical treatment. Technique of myomectomy, total and subtotal hysterectomy
5. Principles of observation of patients with uterine fibroids.
6. Uterine fibroids and pregnancy.

**Topic 7: Benign tumors of the ovaries. Dishormonal diseases of mammary glands.**

1. The etiology and the classification of ovarian tumors (WHO).
2. Methods of diagnosis of ovarian tumors. Classification O-RADS.
3. Basic principles of treatment and observation of patients with ovarian tumors.
4. Fibrocystic breast disease. Fibroadenoma. Etiopathogenesis. Clinic. Diagnostics. Classification BI-RADS. Treatment. Prevention.

**Topic 8: Inflammatory diseases of the female genital organs of nonspecific etiology.**

1. Factors of protection against pathogenic microflora. Etiology, pathogenesis, classification of inflammatory diseases.
2. Bacterial vaginosis: etiology, pathogenesis, clinical picture, diagnosis, treatment.
3. Inflammatory diseases of nonspecific etiology of the lower genital organs: vulvovaginitis; Bartholinitis; endocervicitis.
4. Inflammatory diseases of nonspecific etiology of the upper genital organs: - endometritis, salpingitis, salpingoophoritis, hydrosalpinx, pyosalpinx, parametritis; pelvioperitonitis.
5. Indications and methods of surgical treatment of inflammatory diseases of nonspecific etiology.
6. Principles of rational antibiotic therapy in patients with pelvic inflammatory diseases.

**10 semester**

**Topic 9: Inflammatory diseases of the female genital organs of specific etiology.**

1. Trichomoniasis. Etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prophylaxis.
2. Gonorrhea. Etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prophylaxis
3. Urogenital chlamydial infection. Etiology, pathogenesis, clinical manifestations, diagnosis, treatment chlamydial infection. Prevention.
4. Ureaplasmosis. Mycoplasmosis. Etiology. Clinic. Diagnostics. Treatment. Prevention.
5. Genital herpes. Etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prophylaxis.
6. Vulvovaginal candidiasis. Etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prophylaxis.
7. Tuberculosis of female genital organs. Etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prophylaxis.
8. Anaerobic infection of the internal genital organs. Clinic. Diagnostics. Treatment. Prevention.

### **Topic 10: Emergency care in gynecology.**

1. Ectopic pregnancy. Classification. Etiology, pathogenesis, clinical manifestations, diagnosis, treatment. Rehabilitation. Prophylaxis.
2. Ovarian apoplexy. Etiology, pathogenesis, clinical manifestations, diagnosis, treatment. Rehabilitation.
3. Torsion of ovarian tumors. Etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prophylaxis.
4. Other conditions in gynecology that require emergency care (incomplete abortion, perforation of the uterine wall during intrauterine manipulations, nascent submucous fibroids). Clinical features. Diagnostics. Treatment.

### **Topic 11: Pelvic organ prolaps.**

5. Topographic anatomy of the female genital organs. Uterine support. Ligaments of the uterus.
6. Normal position of internal genital organs. Causes of incorrect positions.
7. Pelvic organ prolaps (POP). Risk factors, pathogenesis, classification.
8. Clinical features, diagnosis of pelvic organ prolaps.
9. Methods of conservative treatment of pelvic organ prolaps.
10. Typical gynecological operations in pelvic organ prolapse.

### **Topic 12: Congenital malformations. Pediatric gynecology.**

1. Stages of the development of the reproductive system
2. Causes of congenital malformations
3. Abnormalities of the hymen and vagina. Clinic. Diagnostics. Methods of surgical treatment.
4. Abnormalities of the uterus. Classification. Clinic. Diagnostics. Surgical treatment.
5. Abnormalities of the fallopian tubes, ovaries. Clinic. Diagnostics. Treatment.
6. Early pubertal development. Classification, clinical features, diagnosis, treatment.
7. Delayed puberty. Clinical features, diagnosis, treatment.
8. Abnormal uterine bleeding in girls. Etiology. Clinic. Diagnosis. Treatment. Prophylaxis.
9. Inflammatory diseases in girls. Etiology. Clinic. Diagnosis. Treatment.

### **Topic 13: Infertility. Hormonal therapy in gynecology.**

1. Causes of female infertility.
2. Organization of examination of infertile married couple.
3. Methods of conservative treatment of female infertility.
4. Methods of surgical treatment of infertility.
5. Assisted reproductive technology. Insemination, IVF, ICSI. Surrogacy.
6. The main principles of hormone therapy: stimulation of ovulation, hormone replacement therapy.

### **Topic 14: Medical and social aspects of family planning.**

1. Social and medical indications for termination of pregnancy.

2. Methods of termination of pregnancy up to 12 weeks, complications. Methods of termination of pregnancy in the period from 12 to 22 weeks, complications.
3. Medical abortion.
4. Method of contraception. Classification. Indications and contraindications. Complications of contraception.
5. Hormonal contraception: groups of drugs, the mechanism of contraceptive action.
6. Positive non-contraceptive effects of COC. Side effects, contraindications.
7. Intrauterine contraceptives. Classification. Indications. Contraindications.
8. Surgical sterilization, indications, contraindications, techniques, and complications.

**Topic 15: Operative gynecology. Typical gynecological operations, preoperative and postoperative care of gynecological patients.**

1. Planned and emergency gynecological operations.
2. Surgical incisions in gynecology.
3. Typical gynecological operations on the uterus, ovaries, tubes. Surgical treatment of uterine fibroids. Typical gynecological operations in pelvic organ prolapse.
4. Endoscopic methods of treatment in gynecology.
5. Typical manipulations in gynecology: D&C, biopsy of the endometrium, biopsy of the cervix, culdocentesis.
6. Management of the postoperative period.
7. Postoperative complications and their prevention.
8. Rational antibiotic prophylaxis and antibiotic therapy for typical surgical manipulations and operations in gynecology.