

MINISTRY OF HEALTH OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY
Department of Radiation Diagnostics, Therapy, Radiation medicine and
Oncology



«APPROVE»
Vice-rector for scientific and pedagogical work

I.P. Shmakova

« 09 » 20 21 y.

PROGRAM WORK
DISCIPLINE "ONCOLOGY"

“Palliative and hospice care for cancer patients”

Level of higher education: second (master)

Field of knowledge: 22 "Health protection"

Specialty: 222 "Medecine" educational qualification "Master of Medicine",
professional qualification "Doctor"

Education-professional program: "Medecine"

Odessa – 2021

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professional qualification "Doctor"

Education-professional program: "Medicine"

The work program consisted on the basis of the educational-professional program of the second level of higher education for the preparation of masters in the specialty 222 "Medicine" ONMedU, approved by the Academic Council of ONMedU "____" _____ 20____ (protocol № ____).

The work program was created by prof. Bondar O.V, doc. Kuznetsova O.V.

The program was discussed at a meeting of the Department of Radiation Diagnostics, Therapy, Radiation medicine and Oncology "____" _____ 20____ (protocol № ____).

Head of the Department, prof. Sokolov V.M. _____

The program was approved at the meeting of the subject-cycle methodical commission on therapeutically disciplines "____" _____ 20____ (protocol № ____).

Head of the methodical commission, prof. Matsigora N.A.

The program was approved at the meeting of the Central Coordination and Methodological Council of ONMedU on "____" _____ 20____ (protocol № ____).

Secretary _____

1. Discipline description

| | | |
|---|---------------------------|-----------------------|
| Denomination | Characteristic | |
| | Daytime education | |
| Total amount: credits – 2 hours – 90 semantic subsection – | <u>Obligatory</u> | |
| | Year of education: | VI |
| | Semester | XI-XII |
| | Lecture | - |
| | Practice | 40 hours |
| | Independent work | 50 hours |
| | Including individual work | - |
| | Final control form | Final control, offset |

2. The purpose and the tasks of discipline

The purpose is to form a complex of knowledge, skills and abilities in oncology among students and to form more elements of professional competencies in the field of oncology.

The ultimate purposes of discipline:

1. To determine the etiological, pathogenetic factors and clinical manifestations, to diagnose oncological lesions;
2. To determine the etiological, pathogenetic factors of chronic oncological lesions of people, to determine the tactics of managing the victims;

The tasks:

1. To form the responsibility of the student as a future specialist of the level of his training, its improvement during training and professional activity;
2. Make the student a participant in the process of providing medical care to the patient at all stages of the patient's treatment with the acquisition of professional practical skills.
3. To implement the above, it is necessary at the first lesson of the discipline to provide the student with a detailed plan of his work and ensure the organization of its implementation.

Competencies and learning outcomes, the formation of which is facilitated by the discipline (relationship with the normative content of the training of applicants for higher education, formulated in terms of learning outcomes in the standard).

According to the requirements of the standard, the discipline ensures that students acquire the *following competencies*:

- *integral*:
 - the ability to solve typical and complex specialized tasks and practical problems in the learning process, involves research and / or innovation and is characterized by the complexity and uncertainty of conditions and requirements;
- *are common*:
 - the ability to apply knowledge of "Oncology" in practical situations;
 - knowledge and understanding of the subject area of oncology (diagnostic and treatment algorithm for oncological pathology);
 - the ability to choose a communication strategy;
 - ability to work in a team;
 - the ability to interpersonal skills;

- the ability to communicate both in the native language and in the second language orally and in writing;
- the ability for abstract thinking, analysis and synthesis;
- the ability to constantly learn and be modernly trained;
- the ability to assess and ensure the quality of work performed;
- have the skills to use information and communication technologies.
- *special (professional, subject):*
- to know the possibilities of various methods of radiation pathology of various organs and systems;
- be able to choose various methods of oncological pathology of various organs and systems: lungs, mediastinum, heart and blood vessels, gastrointestinal tract, hepatobiliary system, urinary system, reproductive system, bones and joints, central nervous system, thyroid gland;

Program competencies, the formation of which is provided by the discipline :

According to the requirements of the standard, the discipline provides students with the acquisition of competencies:

Integrated and competent spine - pass ness solve challenges and problems in a particular industry or professional activities in the learning process, involving research and / or innovation and implementation is characterized by complexity and uncertainty of conditions and requirements.

From the general:

- LC2 Ability to know and understand the subject area and professional activity.
- LC3 Ability to communicate in the state language.
- ZK6 Ability to work in a team.
- LC8 Ability to assess and ensure the quality of work performed.
- LC9 Ability to act on the basis of ethical considerations, socially responsible and conscious.
- LC10 Ability to be aware of equal opportunities and gender issues; appreciate and respect diversity and multiculturalism.

C special (professional, subject):

- SC1 Communication skills and clinical examination of the patient.
- SC2 Ability to determinate the list of required clinical, laboratory and instrumental studies and evaluate their results
- SC3 Ability to establish a preliminary and clinical diagnosis of the disease
- SC5 Ability to diagnose emergencies
- SC12 Ability to determine the tactics of management of persons subject to dispensary supervision
- SC13 Ability to conduct a performance examination
- SC14 Ability to keep medical records
- SC15 Ability to conduct epidemiological and medical-statistical studies of public health; assess the impact of the environment, socio-economic and biological determinants on the health of the individual, family, population

Expected learning outcomes. As a result of studying the discipline the student must:

Know: clinic, diagnosis, treatment of the most common conditions at the end of life of cancer patients, the structure of the cancer service and the place of measures to provide palliative care to cancer patients.

Be able:

- Collect data on complaints, medical history, life history of cancer
- Evaluate information about the diagnosis using a standard procedure, based on the results of laboratory and instrumental studies.
- To determine the list of necessary clinical-laboratory and instrumental researches and to estimate their results at oncological diseases
- Identify the leading clinical symptom or syndrome.

- Establish a preliminary diagnosis, make a differential diagnosis and determine the clinical diagnosis of common cancers.
- To monitor a cancer patient with a common tumor process and in time to recognize the development of complications or deterioration of the patient's condition
- Recognize the need for narcotic analgesics
- Adhere to the requirements of ethics, bioethics and deontology in their field

Master the skills:

- Communication and clinical examination of the patient.
- Perform medical manipulations in cancer patients (thoracentesis, laparocentesis, catheterization of the bladder).
- Maintain medical records (emergency notification of the first detected cancer, control card of dispensary observation, fill in the discharge from the hospital about a patient with a malignant neoplasm)

3. The content of the discipline

The purpose of palliative care is to maintain the highest possible level of quality of life for the patient and his family members. It does not prolong or shorten the patient's life, helps to perceive death as a natural way out of life, relieves him of pain and suffering, provides an acceptable quality of life and a decent way out of it.

The program is structured and contains 15 topics for classroom and independent study.

Topic 1. Basic principles and methods of palliative and symptomatic care in oncological practice.

The concept and main differences of palliative care, palliative medicine, the main sections of palliative medicine. The procedure for the provision of palliative and hospice care, the task of the palliative and hospice care service, the organization of primary and general palliative and hospice care in outpatient and inpatient conditions, a specialized health care institution of a special type - "hospice"; the main tasks of the hospice. Basic principles and methods of palliative and symptomatic care in oncological practice. Rationale for the transition from radical to palliative treatment. The concept of "incurable disease". Organizational foundations of palliative care in oncological practice, in hospice and outpatient settings.

Topic 2 Ethical, psychosocial, religious and cultural issues in palliative and hospice medicine.

Methods for assessing the quality of life of patients and determining the main factors affecting it, the quality of life. Ethical, psychosocial, religious and cultural issues in palliative and hospice medicine. Methods for providing palliative patients and their families with psychological, social, spiritual, moral support. Training and education of medical personnel. Methods for the development and support of the volunteer movement in the field of hospice care.

Topic 3. Fighting pain.

Diagnostics and classification of pain, diagnostics of various types of pain, psychological factors affecting the perception of pain, pharmacological methods and means of pain relief. Organization of anesthesia on an outpatient basis. Medical and labor expertise and rehabilitation of oncological patients.

Topic 4. Chronic fatigue syndrome. Anorexia / cachexia syndrome. Depression and mental disorders in cancer patients.

Fatigue is defined as a disorder characterized by a state of general weakness and an inability to mobilize enough energy to carry out daily activities. Fatigue is the most common symptom experienced by almost every cancer patient. Fatigue associated with swelling differs in that it is difficult to relieve and does not disappear after sleep and rest.

Topic 5. Bacterial infections in cancer patients.

Fungal viral infections as a complication of anticancer therapy. Neutropenia, neutropenic fever, and sepsis. Chronic anemia and thrombocytopenia. Prevention and treatment of bleeding caused by a widespread tumor process and other diseases that require palliative and symptomatic treatment.

Topic 6. Pulmonary complications and breathing disorders that require palliative and symptomatic treatment.

Medical methods for correcting breathing disorders: cough, shortness of breath, hydrothorax. Syndrome of compression of the superior vena cava. Surgical treatment of respiratory complications. Surgical treatment of hydrothorax, pneumothorax, hydropericardium, bronchial fistulas.

Topic 7. Cardiac complications of cancer therapy. Cardiotoxicity of anticancer therapy. Cancer and thrombosis.

The concept of cardiotoxicity. Cancer therapy can cause a wide range of short- and long-term cardiotoxic effects. Classification of anticancer drugs with a potentially high risk of developing cardiotoxicity. Decreased left ventricular ejection fraction, cardiovascular failure. Prevention of myocardial damage during anticancer therapy

Topic 8. Disorders of the digestive system, and complications of anticancer treatment requiring palliative and symptomatic treatment. Toxic medicinal hepatitis.

Surgical treatment of complications of tumors of the digestive tract and other diseases that require palliative and symptomatic treatment. Surgical methods for the treatment of obstruction of the digestive tract. Methods for the treatment of perforated complications. Surgical methods of artificial nutrition. Methods for stenting the esophagus. Obstructive jaundice treatment. Caring for patients with stomas. Medicinal methods for correcting disorders of the digestive system. The main clinical manifestations of disorders of the digestive system caused by a tumor, its complications and treatment methods that require drug treatment: nausea, vomiting, diarrhea, constipation, lack of appetite, weight loss. Artificial nutrition, appetite stimulation, diet therapy.

Topic 9. Skin lesions during anticancer therapy. Medical and surgical methods of prevention and treatment.

The most common skin complications of anticancer therapy. Side effects of total body irradiation. Alopecia, causes, methods of prevention. Treating skin complications of antineoplastic therapy. Hand-foot syndrome: concept, often chemotherapy factors, reducing the risk of development, treatment.

Topic 10. Bone damage in cancer patients (bone metastases, osteoporosis during hormone therapy, hypercalcemia).

Clinical picture and diagnosis of bone lesions. Bone modeling therapy for cancer complications (bisphosphonates). Prevention of osteoporosis during adjuvant hormone therapy in breast cancer patients.

Topic 11. Disorders of the genitourinary system require palliative and surgical intervention (catheterization or stenting).

Palliative surgical and combined treatment of tumors of the genitourinary system. Medical and surgical treatment of obstructive complications of the urinary system. Techniques of nephrostomy, cystostomy, bladder catheterization.

Topic 12. Medical and surgical methods of treatment of complications of cancer therapy (extravasation of cytostatics, mucositis, osteonecrosis caused by the administration of bisphosphonates).

The concept of extravasation. Classification of anticancer drugs with a potentially high risk of extravasation. Methods for the prevention and treatment of extravasation. Bone modeling therapy for cancer complications (bisphosphonates). Clinical picture, diagnosis of mandibular necrosis. Clinic, diagnosis, treatment of mucositis during anticancer therapy.

Topic 13. Medical and surgical methods of prevention and treatment of Lymphodema, bedsores, wounds. Hand-foot syndrome.

Damage to the skin, hair, nails and mucous membranes is a common and common side effect of many cancer treatments. Complications during chemotherapy, targeted therapy, immunotherapy and radiation therapy, differences. General recommendations for the prevention of skin complications during drug therapy for cancer.

Topic 14. Sexual dysfunction in cancer patients. Fertility and pregnancy (all pros and cons) in cancer patients.

The main causes of impaired fertility in male cancer patients are: tumor, surgical and medical castration, and cytostatic chemotherapy. Antineoplastic cytostatics have a different effect on sperm function, azoospermia. Female fertility in cancer patients. Methods for maintaining female fertility during anticancer therapy. Pregnancy and cancer. Pregnancy while undergoing cancer therapy

Topic 15. Management of cancer patients during the COVID-19 pandemic. Recommendations for treatment and features of immunization of cancer patients.

According to official statistics, cancer patients have a higher risk of COVID-19 and a higher rate of severe complications who needed hospitalization in an intensive care unit and mechanical ventilation. General provisions on the extension of anticancer therapy during the COVID-19 pandemic in cancer patients. Vaccination of cancer patients: PROS and CONS.

4. The structure of the education discipline.

| N | Topic | Practice | ISW |
|----------|--|-----------------|------------|
| 1 | Basic principles and methods of palliative and symptomatic care in oncological practice. Preparation of a review of scientific literature, work with medical records, duty at the clinic, assistance at operations, participation in rounds. | 4 | |
| 2 | Ethical, psychosocial, religious and cultural issues of palliative care. | | 6 |
| 3 | Combating pain. | 4 | 4 |
| 4 | Chronic fatigue syndrome. Anorexia / cachexia syndrome. | 4 | |
| 5 | Bacterial infections in cancer patients. Fungal viral infections as a complication of anticancer therapy. Neutropenia, neutropenic fever, and sepsis. Chronic anemia and thrombocytopenia. Preparation of a review of scientific literature, work with medical records, duty at the clinic, assistance at operations, participation in rounds. | 4 | |
| 6 | Pulmonary complications and respiratory disorders that require palliative and symptomatic treatment. | 6 | 4 |
| 7 | Cardiac complications of cancer therapy. Cardiotoxicity of anticancer therapy. Cancer and thrombosis. | 6 | |
| 8 | Disorders of the digestive system, and complications of anticancer treatment requiring palliative and symptomatic treatment. Toxic medicinal hepatitis. | 6 | 4 |
| 9 | Damage to the skin during anticancer therapy. Medical and surgical methods of prevention and treatment | 6 | |
| 10 | Damage to bones in cancer patients (bone metastases, osteoporosis during hormone therapy, hypercalcemia) . | | 6 |

| | | | |
|----|--|-----------|-----------|
| 11 | Disorders of the genitourinary system require palliative and surgical intervention (catheterization or stenting). | | 6 |
| 12 | Drug and surgical methods of treatment of complications of cancer therapy (extravasation of cytostatics, mucositis, osteonecrosis caused by the administration of bisphosphonates) | | 4 |
| 13 | Medical and surgical methods of prevention and treatment of Lymphodema, bedsores, wounds. Hand-foot syndrome | | 4 |
| 14 | Sexual dysfunction in cancer patients. Fertility and pregnancy (all pros and cons) in cancer patients. | | 6 |
| 15 | Management of cancer patients during the COVID-19 pandemic. Recommendations for treatment and features of immunization of cancer patients. | | 6 |
| | Differential scoring. | | |
| | Total hours: 90 | 40 | 50 |

5. Practices.

| № | Topic | Hours |
|----|--|-----------|
| 1. | Basic principles and methods of palliative and symptomatic care in oncological practice. End of life therapy | 4 |
| 2. | Chronic fatigue syndrome. Anorexia / cachexia syndrome. Depression and mental disorders in cancer patients | 4 |
| 3. | Chronic pain syndrome. Fighting pain. | 4 |
| 4. | Bacterial infections in cancer patients. Fungal viral infections as a complication of anticancer therapy. Neutropenia, neutropenic fever, and sepsis. Chronic anemia and thrombocytopenia. | 4 |
| 5. | pulmonary complications and respiratory disorders that require palliative and symptomatic treatment. | 6 |
| 6. | Cardiac complications of cancer therapy. Cardiotoxicity of anticancer therapy. Cancer and thrombosis. | 6 |
| 7. | Disorders of the digestive system, and complications of anticancer treatment requiring palliative and symptomatic treatment. Toxic medicinal hepatitis. | 6 |
| 8. | Skin lesions during anticancer therapy. Medical and surgical methods of prevention and treatment of Lymphodema, bedsores, wounds | 6 |
| | Differential scoring | |
| | Total | 40 |

6. Lectures – not provided by the program work

7. Independent student work.

| № | Topic | Hours |
|----|--|-------|
| 1. | Ethical, psychosocial, religious and cultural issues of palliative care. support. Ensuring the quality of life of patients | 6 |
| 2. | Damage to bones in cancer patients (bone metastases, osteoporosis during hormone therapy, hypercalcemia). | 6 |
| 3. | Fighting pain in cancer patients. Spinal cord compression. Neuropathy | 4 |
| 4. | Disorders of the digestive system requiring palliative surgery. Therapy of edematous-ascites syndrome, indications for abdominal drainage . | 4 |
| 5. | Disorders of the respiratory system requiring palliative surgery. Malignant pleural effusion | 4 |
| 6. | Disorders of the genitourinary system, require palliative and surgical intervention (catheterization or stenting). | 6 |
| 7. | medical and surgical methods of treatment of complications of cancer therapy (extravasation of cytostatics, mucositis, osteonecrosis caused by the | 4 |

| | | |
|-----|--|-----------|
| | administration of bisphosphonates). | |
| 8. | drug and surgical methods of prevention and treatment of lymphodema, bedsores, wounds. Hand-foot syndrome. | 4 |
| 9. | Sexual dysfunction in cancer patients. Fertility and pregnancy (all pros and cons) in cancer patients. | 6 |
| 10. | Management of cancer patients during the COVID-19 pandemic. Recommendations for treatment and features of immunization of cancer patients. | 6 |
| | Total: | 50 |

8. Individual work

writing of abstracts, preparation of presentations (tables, posters, diagrams, algorithms).

9. Methods of education

Practices: conversation, solving clinical situational problems, practicing patient examination skills, demonstration and practice of manipulation skills, description of diagnostic radiation images according to schemes, training exercises on differential diagnosis of the most common cancers.

Independent work: independent work with the textbook, independent work with the bank of test tasks Step-2, independent solution of clinical problems.

10. Discipline Assessment

The grade for the discipline is determined on the basis of the sum of the grades of the current educational activity (the arithmetic mean of the current performance) in the seminars and practical classes.

The assessment of current learning activities should be standardized. The student's current educational activity is assessed on a 4-point (traditional) scale. In accordance with the "Regulations on the organization of the educational process in ONMedU during practical classes, most of the time (at least 60%) should be allocated to the main stage of the lesson: independent work of students under the guidance of a teacher on professionally oriented tasks (real objects of future professional activity - patients, results laboratory studies, radiographs or their models). The rest of the time is for analysis and joint discussion of the results of students' independent work with error correction. The types of student's educational activities, which are subject to assessment in practical and seminar classes, are determined by the department, taking into account the specifics of the discipline and the goals of studying a particular topic and are recorded in the minutes of the department meeting before the start of the academic year. Evaluation of the educational activities of all students is not obligatory at every practical and seminar lesson. However, at a practical lesson at least 50% of students should be interviewed, and at a seminar - at least 30%. At the end of the study of the discipline, the current performance is calculated as the average current score, that is, the arithmetic average of all current grades on the traditional scale, rounded to two decimal places, for example, 4.75.

At the last practical lesson, the teacher is obliged to announce to students the results of their current academic performance, academic debt (if any), and also fill out the student's record when completing the curriculum.

Only those students who do not have academic debt and their average score for the current educational activity in the discipline are at least 3.00 are allowed to the final certification. If a student has received a minimum grade point average of 3.00 on current success, even in the case of unworked unsatisfactory grades for current success, he receives credit.

Retaking unsatisfactory grades. The student has the right to retake current unsatisfactory grades during the semester only in order to achieve an average grade of 3.00. Retaking grades "C", "4", "5" to increase the average score of the student's current performance is prohibited

Assessment of individual student assignments

Grades for individual assignments are awarded to a student only if they are successfully completed and protected. The grade is added to current grades.

Assessment of students' independent work

Independent work of students, which is provided by the topic of the lesson along with classroom work, is assessed during the current control of the topic in the corresponding lesson. The assimilation of topics that are taken out only for independent work is checked during the exam or differential credit.

Offset

Upon completion of the study of the discipline, a test is carried out. Only those students who do not have academic debt and have an average score for current educational activities of at least 3.00 are allowed to the final certification.

If the discipline ends with a credit, only the average grade of the current academic performance is calculated, that is, the arithmetic average of all the marks received according to the traditional scale, rounded to two decimal places, which is converted according to the 200-point system. At the same time, the average current score is recorded in the corresponding documentation, which is converted on a 200-point scale and a score is given on a 2-point scale ("passed" or "not credited").

The final control in the form of tests is evaluated on a two-point scale:

- grade "credited" is given to a student who has completed the curriculum of the discipline, has no academic debt; level of competence - high (creative);

- the grade "not credited" is given to a student who has not fulfilled the curriculum of the discipline, has an academic debt (average score below 3.0 and / or absences); level of competence - low (receptive-productive).

The multi-point scale characterizes the actual success of each student in mastering the discipline. Conversion of the traditional grade from the discipline to 200-point is performed by the information and computer center of the university program "Contingent" according to the formula:

average grade point average (current / discipline) x 40

| National note | score |
|---------------|---------|
| «5» | 185-200 |
| «4» | 151-184 |
| «3» | 120-150 |

The ECTS rating scale evaluates the achievements of students in the discipline who study in one course of one specialty, in accordance with the points obtained by them, by ranking, namely:

| ECTS note | Statistical indice |
|-----------|-------------------------|
| «A» | best 10 % students |
| «B» | following 25 % students |
| «C» | following 30 % students |
| «D» | following 25 % students |
| «E» | following 10 % students |

11. Conversion of traditional assessment in a discipline on a multi-point scale.

Of particular methodological importance is the question of converting the result of a student's study of a discipline on a 200-point scale and then ranking according to the ECT rating scale. This is necessary for the implementation of academic mobility of students, providing the student with the opportunity to continue their studies in this discipline in another university or in another country.

The resulting average score for the discipline allows for conversion on a 200-point scale.

Example :

| Average current grades | Sum of points for discipline |
|--|------------------------------|
| 5.00 | 200 |
| 3.82 | x |
| $\Rightarrow x = (3.82 \times 200) / 5 = 153$ points | |

12. **Distribution of points received by applicants for higher education**

Assimilation of the topic (current control) is controlled in practical and seminar classes in accordance with a specific goal. Methods for assessing the level of training of students include: solving situational problems, analysis and evaluation of the results of physical, laboratory and instrumental methods of the study of the patient's condition, the ability to communicate with the patient, the determination of tactics for examination and treatment of patients with suspected cancer and cancer, the skills of maintaining medical records of oncological patients, control of practical skills (digital examination of the rectum, examination of the mammary and thyroid glands, peripheral lymph nodes and skin tumors, etc.). Assessment is one of the final stages of a student's educational activity and determining the success of study. The assessment is conducted on the basis of "Instructions for assessing the educational activities of students at the Odessa National Medical University». The procedure and methodology of evaluation significantly affect the final results, the possibility of analysis and the statistical reliability of assessments. Therefore, during the assessment it is necessary to give preference to standardized methods: testing, structured written work, structured according to the procedure of control of practical skills in conditions close to real ones. According to the content it is necessary to assess the student's achievement of certain learning outcomes, in particular the level of knowledge, skills, abilities and competencies defined in the Educational Qualifications and reflected in the curriculum of the discipline. The grade for the discipline is determined on the basis of the sum of grades of current educational activity (arithmetic mean of current performance), which is set when assessing theoretical knowledge and practical skills in accordance with the lists defined by the program of the discipline

Distance learning.

In the event of the introduction / extension of the COVID-19 quarantine, the department switches to distance learning and carries out the educational process in on-line mode. For this, on-line platforms are used - Moodle, Google, Classroom, Zoom, which allow lectures and practical classes, as well as testing students in accordance with work programs and class schedules; and also to carry out differentiated control. Employees of the Department of the ONCOLOGY cycle use multimedia presentations (pdf format), video files for mastering practical skills, video recordings of surgical interventions with the participation of department employees and leading oncological surgeons, methodological developments for practical exercises, test tasks.

Ongoing control is carried out through daily checking of homework (tasks and questions), testing, video conferences and briefings using the messenger - Viber, WhatsApp, Telegram.

With the introduction of quarantine, materials for differential credit, namely a list of questions, for 5th year students were prepared and posted on the university website. The assessment is carried out by the teachers of the department. After the assessment, the student has the opportunity to see the results and comments on their grades. If the student does not agree with the

assessment results, the cycle leader or professor asks several additional questions that must be answered during the conversation using video conferencing (Viber, Microsoft Teams, Skype, Zoom). If, when answering, there are suspicions that the answer is not self-sufficient, the score is automatically reduced without the possibility of repeating an additional survey.

If during the videoconference there are technical problems that make it impossible to communicate adequately, or if the connection is broken, the student is asked another question when the connection is restored. If the teacher has a suspicion of a deliberate disruption of communication, the grade is automatically reduced without the possibility of repeating an additional survey.

13. An indicative list of knowledge and practical skills that a student must master.

To know:

1. The procedure for the provision and tasks of the palliative and hospice care service.
2. Organization of primary and general palliative and hospice care in outpatient and inpatient settings.
3. Hospice, the main tasks of the hospice.
4. The main goals, principles and methods of palliative care in oncological practice.
5. Obruntuvannya transition from radical to palliative treatment.
6. Concept and main differences of palliative care.
7. Ponyattya "incurable disease".
8. Organizational foundations of palliative care in oncological practice in hospice and outpatient settings.
9. Ethical, psychosocial, religious and cultural problems of palliative care.
10. Principles of the doctor's relationship with the patient and his relatives, methods of providing palliative patients with psychological, social, spiritual and moral support.
11. Ensuring the quality of life of patients.
12. Diagnosis and classification of pain.
13. Pain management, diagnosis of various types of pain, psychological factors affecting the perception of pain,
14. Pharmacological agents and methods of anesthesia.
15. anesthesia on an outpatient and inpatient basis.
16. Disorders of the digestive system that require palliative and symptomatic treatment.
17. The main clinical manifestations of disorders of the digestive system caused by a tumor, its complications and treatment methods that require drug treatment
18. Methods for the treatment of nausea and vomiting.
19. Methods for the treatment of diarrhea.
20. Methods for the treatment of lack of appetite, weight loss, artificial nutrition.
21. Disorders of the digestive system that require palliative and symptomatic surgical treatment.
22. Surgical treatment of esophageal obstruction.
23. Surgical methods for the treatment of gastric obstruction.
24. Surgical methods for the treatment of colon obstruction.
25. Methods for the treatment of perforated complications of the digestive tract.
26. Surgical methods for the treatment of obstruction of the digestive tract.
27. Methods of stenting of the esophagus.
28. Treatment of obstructive jaundice.
29. Care of patients with stomas.
30. Methods of artificial nutrition.
31. medicinal methods for correcting breathing disorders, coughing, shortness of breath.
32. Surgical treatment of hydrothorax, pneumothorax.
33. Surgical treatment of hydropericardium.
34. Prevention and treatment of bleeding.
35. drug treatments for bleeding.
36. Treatment of anemia and leukopenia.

37. Surgical treatments for bleeding.
38. Medication and surgical treatment of obstructive complications of the urinary system.
39. Techniques of nephrotomy, cystostomy, bladder catheterization.
40. Methods of bladder catheterization.
41. Methods of prevention and treatment of Lymphodema.
42. Methods for the prevention and treatment of pressure ulcers.
43. Methods of prevention and treatment of wounds.
44. Tactics of management of patients in a terminal state.
45. Ethical, psychosocial, religious and cultural issues in palliative care.
46. Principles of the doctor's relationship with the patient and his relatives.
47. Training and education of medical personnel.
48. Methods for the development and support of the volunteer movement in the field of palliative and hospice care;
49. Methods for assessing the quality of life of patients and determining the main factors affecting.
50. Ensuring the quality of life of patients.
51. Methods for preserving the fertility of oncological ailments.
52. Methods for the prevention of hepatotoxicity during the implementation of new methods of anti-swelling treatment.
53. The introduction of oncological ailments before the hour of the COVID-19 pandemic.

Be able to do:

- Diagnosis of pain in an oncological patient in the terminal stage.
- Organization of sickness in outpatient and stationary minds.
- Treatment of nausea, vomiting and diarrhea.
- Treatment of lack of appetite, weight loss, artificial nutrition.
- Treatment of anemia, neutropenia.
- Catheterization of the bladder.
- Prevention and treatment of lymphedema, bedsores.
- Tactics of managing patients in the terminal state.

14. List of control questions for the current control

1. The procedure for the provision and tasks of the palliative and hospice care service.
2. Organization of primary and general palliative and hospice care in outpatient and inpatient settings.
3. Hospice, the main objectives of the hospice.
4. The main goals, principles and methods of palliative care in oncological practice.
5. Justification of the transition from radical to palliative treatment.
6. Concept and main differences of palliative care.
7. The concept of "incurable disease".
8. Organizational foundations of palliative care in oncological practice in hospice and outpatient settings.
9. Ethical, psychosocial, religious and cultural issues of palliative care.
10. Principles of the doctor's relationship with the patient and his relatives, methods of providing palliative patients with psychological, social, spiritual and moral support.
11. Ensuring the quality of life of patients.
12. Diagnosis and classification of pain.
13. Pain management, diagnosis of various types of pain, psychological factors affecting the perception of pain,
14. Pharmacological agents and methods of anesthesia.
15. Anesthesia on an outpatient and inpatient basis.
16. Disorders of the digestive system that require palliative and symptomatic treatment.
17. The main clinical manifestations of disorders of the digestive system caused by a tumor, its complications and treatment methods that require drug treatment

18. Methods for the treatment of nausea and vomiting.
19. Methods for the treatment of diarrhea.
20. Methods for the treatment of lack of appetite, weight loss, artificial nutrition.
21. Disorders of the digestive system that require palliative and symptomatic surgical treatment.
22. Surgical treatment of esophageal obstruction.
23. Surgical methods for the treatment of gastric obstruction.
24. Surgical methods for the treatment of colon obstruction.
25. Methods for the treatment of perforated complications of the digestive tract.
26. Surgical methods for the treatment of obstruction of the digestive tract.
27. Methods of stenting of the esophagus.
28. Treatment of obstructive jaundice.
29. Care of patients with stomas.
30. Methods of artificial nutrition.
31. Medical methods for correcting breathing disorders, coughing, shortness of breath.
32. Surgical treatment of hydrothorax, pneumothorax.
33. Surgical treatment of hydropericardium.
34. Prevention and treatment of bleeding.
35. Drug treatments for bleeding.
36. Treatment of anemia and leukopenia.
37. Surgical treatments for bleeding.
38. Medical and surgical treatment of obstructive complications of the urinary system.
39. Techniques of nephrotomy, cystostomy, bladder catheterization.
40. Methods of bladder catheterization.
41. Methods of prevention and treatment of Lymphodema.
42. Methods for the prevention and treatment of pressure ulcers.
43. Methods of prevention and treatment of wounds.
44. Tactics of management of patients in a terminal state.
45. Ethical, psychosocial, religious and cultural issues in palliative care.
46. Principles of the doctor's relationship with the patient and his relatives.
47. Training and education of medical personnel.
48. Methods for the development and support of the volunteer movement in the field of palliative and hospice care;
49. Methods for assessing the quality of life of patients and determining the main factors affecting it.
50. Ensuring the quality of life of patients.

15. Recommended literature.

Main literature:

1. Practical Medical Oncology Textbook by Russo, A., Peeters, M., Incorvaia, L., Rolfo, C. Published: July 27, 2021
2. Oxford Textbook of Oncology by David J. Kerr, Daniel G. Haller, Cornelis J. H. van de Velde, and Michael Baumann. Published: 21 October 2018
3. Clinical oncology by John E. Niederhuber & James O. Armitage & James H Doroshow & Michael B. Kastan & Joel E. Tepper. Published: 26 March 2019.

Additional literature:

1. Textbook of gynecological oncology – ESMO 2021
2. Surgical oncology. Theory and multidisciplinary practice / 2nd edition / G. Poston, L. Wyld, R. A Audicio – 2019

16. Information resources

1. NCCN and clinical guidelines <https://www.nccn.org>
2. UpToDate – <http://www.uptodate.com/home>

3. Access Medicine - <http://accessmedicine.mhmedical.com>
4. PubMed - <https://www.ncbi.nlm.nih.gov/pmc/>
5. CancerMedicine www.ncbi.nlm.nih.gov