

**MINISTRY OF HEALTHCARE OF UKRAINE**  
Danylo Halytsky Lviv National Medical University

APPROVED

by the Vice-Rector for Academic  
Work, Professor I.I. Solonyenko



Department of Family Medicine  
Course: Palliative and hospice  
medicine

Basic (yes, no)

Address: Lviv city, 117 Lychakivska  
Street

**WORKING PROGRAM**  
**of the course ББ 3.2 “Palliative and hospice medicine”**

specialists of the second (master's) level of higher education

22 "Health care"


Specialty 222 «Medicine»

Faculty of Medicine, 6<sup>th</sup> year of study

Discussed and adopted  
at the Department Meeting  
on 02 May 2023

Minutes No. 9 as of 02 May 2023


Department Chair

 prof. O.N. Nadashkevych

Approved by the  
Profile Methodological Commission  
on 04 May 2023

Minutes No. 9 as of 02 May 2023

Chair

 prof. O.M. Radchenko

Lviv – 2023

The current curriculum was developed for medical students by employees of the Department of Family Medicine of Danylo Halytskyi Lviv National Medical University on the basis of the new educational plan in 2022 and meets the criteria of the European Credit Transfer and Accumulation System (ECTS) by professors O.N. Nadashkevich associate professors: Paraschuk BM, Shalko I.V, Stefuk O.Z..

**REVIEWERS:**

Y.Y. Sklyarov - Head of the Department of Therapy №1, Medical Diagnostics and Hematologist and Transfusiology FPDO LNNU named after Danylo Halytsky, MD, Professor

A. Y. Bazylevych - Doctor of Medicine, Professor of the Department of Propaedeutics of Internal Medicine, Danylo Halytskyi National Medical University

## INTRODUCTION

The curriculum is aimed to prepare students of higher medical educational institutions of Ukraine as specialists of second (master's) level of higher education, helps professional growth and is an integral part of the educational process.

**The program is designed in accordance with the normative document:**

- educational and qualification characteristics (EQC) and educational and professional programs (OPP) of training specialists, industry standards of higher education in the field of knowledge 22 Health care, specialty 222 "Medicine"

*The educational process is organized according to the European Credit Transfer and Accumulation System (ECTS).*

### 1. Description of the discipline

Characteristic	Discipline description	
Name of discipline	Palliative and hospice medicine	
Knowledge field	22 "Health care"	
Specialty	222 «Medicine»	
Specialization (if any)		
Educational program	Medicine	
Level of higher education	Master	
Discipline status		
Educational year	6th	
Academic year	2021-2022	
Semester numbers:	Full-time	External form
	11-12	
Total number of ECTS credits / hours	3,0 credits / 90 hours	
Course structure:	Full time education	External form
	40 hrs. 50 hrs.	
Percentage of class load	44 %	
Course language	Ukrainian	
Form of final control	Credit - 11-12 semesters	

## Introduction

Palliative care is a comprehensive approach aimed at ensuring the highest possible quality of life for palliative patients and their families, by preventing and alleviating suffering through early detection and accurate diagnosis of symptoms of pain and disorders, adequate treatment, symptomatic (adjuvant) therapy and care, provision of psychological, social, spiritual and moral support, regardless of illness, age, social status, nationality, religious and political beliefs, place of residence of the patient, etc. Palliative care is based on a comprehensive interdisciplinary assessment of the patient's physical condition, the degree of pain and dysfunction, psycho-emotional, cognitive and cultural characteristics, the maximum possible and comprehensive consideration of the needs and wishes of the patient and his family, prognosis and life expectancy. Palliative care begins at the time of diagnosis of an incurable progressive disease and a limited prognosis and continues until the end of the family's period of grief.

Palliative care is an approach that improves the quality of life of patients with incurable diseases and their families by preventing and alleviating the suffering of terminally ill people (WHO, 2002).

Palliative patients - patients of all ages who suffer from malignant neoplasms in stage III-II disease, HIV / AIDS, congenital malformations, cardiovascular, neurological, respiratory, atrophic-degenerative and other progressive diseases and post-traumatic conditions. can not be cured by modern and affordable methods and means, and are accompanied by severe pain symptoms, severe disorders, require qualified medical care, care, psychological, social, spiritual and moral support in the terminal stage of the disease or with limited life expectancy, questionable prognosis or improvement or full recovery of vital functions.

Primary palliative care is palliative care provided to palliative patients at the primary level of outpatient care or at home by general practitioners, family physicians, district physicians and polyclinic specialists.

General palliative care is palliative care provided to palliative patients by specialists in accordance with their specialization on an outpatient basis and in inpatient health care facilities of the second and third levels.

Specialized palliative care is a comprehensive multidisciplinary medical, social and psychological care provided to palliative patients in special health care facilities "Hospice", in departments and wards of palliative care of inpatient treatment and prevention facilities by doctors and junior medical specialists. training in palliative and hospice care, and at home by specialists of specialized multidisciplinary mobile palliative care teams with the involvement of medical psychologists, social workers and other professionals, if necessary, as well as volunteers, close relatives or guardians of the patient.

Limited life prognosis is a scientifically based assumption that the patient's life expectancy in the typical course of the disease is limited to 12 months.

Hospice is a special type of health care institution, whose specialists have received special training and provide palliative care to patients and their families, provide organizational, methodological and advisory care and coordination of primary, general and specialized palliative care in the designated area (Ukrainian, regional , city, district / inter-district), as well as other functions and tasks defined by the "Regulations on a specialized health care institution of a special type" Hospice ".

Hospice care is a component of palliative care provided to palliative patients, primarily in the terminal stages of the disease and members of their families by specialists who have received special training in the provision of palliative and hospice care.

Hospice medicine is a component of palliative medicine, the main task of which is to ensure the highest possible quality of life of palliative patients in the terminal period of disease progression, through timely diagnosis of pain and disorders, prevention and alleviation of suffering by adjuvant therapy, qualified medical care. received special training in palliative and hospice care

The principles of organization and philosophy of modern hospices were introduced in the second half of the twentieth century. In the UK, a prominent figure - nurse, doctor and writer Cecilia Saunders.

#### 1. Purpose, tasks and planned learning outcomes

The main purpose of palliative care is to maintain the quality of life in its final stage, maximize the physical and moral suffering of the patient and his loved ones, as well as preserving the human dignity of the patient at the end of earthly life. The study of palliative and hospice medicine is established on the basis of OPP training of a doctor in the specialty in accordance with its block and is the basis for building the content of the discipline.

Palliative medicine, as a branch of clinical medicine and health care and an academic discipline, is an integral part of clinical medicine, so the study of the basic principles of this branch of science is an important point in training a doctor of any specialty.

Objectives of study: acquisition by the student of competences, knowledge, abilities and skills for implementation of professional activity on a specialty:

1) to consider palliative care as a medical and social direction of the state and society, the main purpose of which is to maintain the quality of human life in its final period of life, maximum relief of physical and moral suffering of the patient and his relatives, preservation of human dignity on the brink of inevitable biological death man;

2) take into account the peculiarities of patients in need of palliative care, who are people with chronic incurable diseases (cancer, cardiovascular and neurovascular, neurodegenerative brain lesions, patients in the terminal stages of tuberculosis, HIV / AIDS, etc.);

3) provide professional psychological care, which also applies to family members of the patient, including in the immediate period after the death of the latter;

4) use a holistic interdisciplinary (holistic) approach, which is achieved through coordination by doctors, nurses and other medical and non-medical professionals in all aspects of patient care.

5) relief of pain and other symptoms of incurable progressive disease, ensuring the maximum possible consideration of the needs and wishes of patients with incurable diseases

6) spiritual support of palliative patients taking into account their religious beliefs and needs; providing support and rehabilitation measures that help to lead the most active social life; ensuring the maximum possible quality of life and dignity of palliative patients

Prerequisites for studying the discipline (interdisciplinary links). Palliative and hospice medicine as a discipline:

a) is based on the study of students - human anatomy; histology, biochemistry, physiology, pathomorphology; pathophysiology; surgery, internal medicine, pediatrics, pharmacology and integrates with these disciplines;

b) is an integral part of all clinical disciplines and includes their most important sections, including internal medicine, pediatrics, surgery, traumatology and orthopedics, neurosurgery, urology, obstetrics and gynecology and other disciplines, involving the integration of teaching with these disciplines and ability to apply knowledge in the process of further education and professional activity;

c) provides an opportunity to gain practical skills and develop professional skills for the diagnosis and provision of palliative care in certain pathological conditions and during the care of patients;

d) forms the methodological foundations of clinical thinking.

Expected learning outcomes. As a result of studying the discipline students

must have knowledge of:

- features of the organization of palliative care with seriously ill and incurable persons;
- essence and principles of palliative care with seriously ill and incurable persons;
- content of methods and forms of palliative care with seriously ill and incurable persons;
- roles and functions of various medical institutions and qualification characteristics of a medical worker who implements tasks in the field of palliative care;
- skills and abilities of independent work in the field of palliative care;
- selection and application of adequate and effective methods and forms in work with seriously ill and incurable persons;
- establishing interaction and partnership with organizations engaged in social work in the field of palliative care;
- analysis of the actions of professionals involved in palliative care.

According to the requirements of the educational and professional program, students must:

KNOW

- age anatomical and physiological changes that take place in the organs and systems in old age and old age;
- definition, etiology, classification of diseases of organs and systems in the elderly and senile age;
- features of clinical manifestations of diseases and acute conditions in the elderly and senile age;
- rules of collecting anamnesis and examination of elderly and senile patients;
- definition: “palliative medicine”, “palliative care”, “hospice”;
- philosophy of palliative medicine;
- principles of hospice operation;
- psychological aspects of palliative care;
- social aspects of palliative care;

- spiritual aspects of palliative care;
- ethical and deontological features of communication with hopelessly ill patients and their relatives;
- legislative and normative documents of the Ministry of Health of Ukraine on the organization and provision of geriatric, palliative and hospice care to the population.

**BE ABLE:**

- to provide medical and protective, sanitary and anti-epidemic regime in the structural subdivisions of medical and preventive and social institutions for the provision of adequate medical care to the elderly and senile;
  - follow the rules of safety, labor protection in the field and occupational safety;
  - identify real and concomitant problems of the patient;
  - anticipate potential problems of the patient from long-term use of drugs;
  - establish clinical diagnoses for diseases in the elderly and senile;
  - make a plan of medical interventions in case of geriatric problems;
  - perform medical manipulations;
  - to observe, monitor the condition of patients' organs and systems;
  - keep medical records;
  - provide emergency care in acute conditions;
  - carry out the medical process of providing palliative care with chronic pain syndrome and incurable cancer patients;
  - provide medical care for palliative care to patients with immunodeficiency virus and tuberculosis;
  - assess the quality of medical care and develop management decisions aimed at improving and optimizing palliative care;
- to carry out sanitary and educational work among the population on issues of preventive medicine, promotion of a healthy lifestyle aimed at prolonging life and preventing the development of diseases;

**BE COMPETENT OF:**

- structure of diseases of the population of Ukraine in the elderly and senile age;
- modern theories of aging, features of the course of "diseases in old age", theories of longevity, the role of health professionals in their implementation;
- achievements in the field of palliative and hospice medicine, embodied in health care practice;
- new methods, tools and methods of organizing patient care in the field of palliative and hospice medicine.

The developed program corresponds to the educational-professional program (OPP) and is focused on the formation of competencies: general (LC) - LCI-LCP OPP:

ZK1. Ability to abstract thinking, analysis and synthesis, the ability to learn and master modern knowledge.

ZK2. Ability to apply knowledge in practical situations.

ZKZ. Knowledge and understanding of the subject area and understanding of professional activity.

*professional (FC) - FC1 - 6; FC10; FC16; FK18 OPP:*

FC1. Patient interviewing skills.

FC2. Ability to determine the required list of laboratory and instrumental studies and evaluate their results.

FC3. Ability to establish a preliminary and clinical diagnosis of the disease.

FC4. Ability to determine the required mode of work and rest in the treatment of diseases.

FC5. Ability to determine the nature of nutrition in the treatment of diseases.

FC6. Ability to determine the principles and nature of disease treatment.

FC10. Ability to carry out medical and evacuation measures.

FC16. Ability to determine the tactics of management of persons subject to dispensary supervision.

FC18. Ability to keep medical records.

*program learning outcomes (PRN) -PRN11, PRN13-18, PRN22, PRN25, PRN28, PRN30, PRN32, PRN33, PRN35, PRN41 OPP:*

PRN11. Collect data on patient complaints, medical history, life history (including occupational history), in a health care facility, its unit or at the patient's home, using the results of the interview with the patient, according to the standard scheme of the patient's survey. Under any circumstances (in the health care facility, its unit, at the patient's home, etc.), using knowledge about the person, his organs and systems.

PRN13. In a health care facility, its unit and among the attached population: be able to identify and record the leading clinical symptom or syndrome by making an informed decision, using preliminary history of the patient, physical examination of the patient, knowledge of the person, his organs and systems, following relevant ethical and legal norms. Be able to establish the most probable or syndromic diagnosis of the disease by making an informed decision, for the patient and the patient's examination, based on the leading clinical symptom or syndrome, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms.

PRN14. In a health care facility, its unit: to appoint a laboratory and / or instrumental examination of the patient by making an informed decision, based on the most probable or syndromic diagnosis, according to standard schemes, using knowledge about the person, his organs and systems, adhering to appropriate ethical and Carry out differential diagnosis of diseases by making an informed decision, according to a certain algorithm, using the most probable or syndromic diagnosis, data of laboratory and instrumental examination of the patient, knowledge about the person, his organs and systems, adhering to the relevant ethical and

legal norms. Establish a preliminary clinical diagnosis by making an informed decision and logical analysis, using the most probable or syndromic diagnosis, laboratory and instrumental examination of the patient, the conclusions of differential diagnosis, knowledge of man, his organs and systems, adhering to ethical and legal norms.

PRN15. Determine the necessary mode of work and rest in the treatment of the disease, in a health care facility, at home of the patient and at the stages of medical evacuation, including in the field, on the basis of a preliminary clinical diagnosis, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

PRN16. Determine the necessary medical nutrition in the treatment of the disease, in a health care facility, at home at the patient and at the stages of medical evacuation, including in the field on the basis of a preliminary clinical diagnosis, using knowledge about the person, his organs and systems , adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

PRN17. Determine the nature of treatment (conservative, operative) disease, in a health care facility, at home at the patient and at the stages of medical evacuation, including in the field on the basis of a preliminary clinical diagnosis, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes. Determine the principles of treatment of the disease, in a health care facility, at the patient's home and at the stages of medical evacuation, including field conditions, based on a previous clinical diagnosis, using knowledge about the person, his organs and systems, adhering to ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

PRN18. Establish a diagnosis by making an informed decision and assessing the human condition, under any circumstances (at home, on the street, health care facility, its units), including in an emergency, in the field, in lack of information and limited time, using standard methods of physical examination and possible history, knowledge of the person, his organs and systems, adhering to the relevant ethical and legal norms.



PRN22. Perform medical manipulations in a medical institution, at home or at work on the basis of previous clinical diagnosis and / or indicators of the patient's condition, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms, by making informed decisions and using standard methods

PRN25. To form, in the conditions of a health care institution, its division on production, using the generalized procedure of an estimation of a state of human health, knowledge of the person, its bodies and systems, adhering to the corresponding ethical and legal norms, by acceptance of the reasonable decision, among the fixed contingent of the population. :

dispensary groups of patients; groups of healthy people subject to dispensary supervision (newborns, children, adolescents, pregnant women, representatives of professions that must undergo a mandatory dispensary examination).

PRN28. Organize secondary and tertiary prevention measures among the assigned population, using a generalized procedure for assessing human health (screening, preventive medical examination, medical treatment), knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision, in the conditions of the health care institution, in particular: to form groups of dispensary supervision, to organize medical and health-improving measures differentiated from the group of medical examination.

PRN30. Carry out in the conditions of a health care institution, its subdivision: detection and early diagnosis of infectious diseases; primary anti-epidemic measures in the center of an infectious disease.

PRN32. In a health care facility, or at the patient's home on the basis of the obtained data on the patient's health, using standard schemes, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms, by making an informed decision: tactics of examination and secondary prevention of patients subject to dispensary supervision; to determine the tactics of examination and primary prevention of healthy persons subject to dispensary supervision; calculate and prescribe the necessary food for children in the first year of life.

PRN33. Determine the presence and degree of restrictions on life, type, degree and duration of disability with the issuance of relevant documents, in a health care facility on the basis of data on the disease and its course, features of professional activity.

PRN35. On the territory of service according to standard methods of descriptive, analytical epidemiological and medical-statistical researches: to carry out screening concerning detection of the most important non-communicable diseases; evaluate morbidity, including chronic non-communicable diseases, disability, mortality, and integrated health indicators in the dynamics and when compared with average static data; identify risk factors for the occurrence and course of diseases; to form risk groups of the population.

PRN41. In the conditions of a health care institution or its subdivision according to standard methods: to select and use unified clinical protocols for the provision of medical care, developed on the basis of evidence-based medicine; take part in the development of local protocols for medical care; to control the quality of medical care on the basis of statistical data, expert evaluation and sociological research data using indicators of structure, process and results of activities; identify factors that hinder the improvement of the quality and safety of medical care.

### 3. The program of the discipline

#### Structure of the educational discipline

Topics	Total o hours	Lect.	Pract.	Self pr.
1				
Topic 1. Principles of organization and provision of palliative and hospice care in Ukraine. Modern international approaches, standards and principles of organization of palliative and hospice care. Regulatory framework governing the provision of palliative and hospice care in Ukraine. Inpatient palliative and hospice care facilities. Providing palliative care.	10	-	5	5
Topic 2. Palliative care in the practice of a family doctor. . Criteria for granting the patient the status of a palliative patient. Definition of "primary palliative care"; components. The terminal state of the patient. Agony. Rules of care for a dying patient.	10	-	5	5
Topic 3. Patterns of development and course of chronic incurable diseases, the concept of quality of life. Disease, basic patterns and periods of development, options for completion. Quality of life and causes of its violation in patients with chronic incurable diseases. Clinical approaches and methods for assessing the quality of life of palliative patients.. Typical clinical symptoms in palliative and hospice medicine. The presence of typical clinical symptoms in palliative patients. Pain syndrome in palliative patients: clinic, pathophysiology of pain. General principles of pain control in palliative care	16	-	6	10
Topic 4. Allergodermatoses. Dermatitis. Toxicoderma. Eczema. Neurodermatitis. Features of the clinical course of allergodermatoses in palliative patients. Methods of treatment.	9	-	4	5
Topic 5. Fungal diseases of the skin and mucous membranes. Keratomycosis and mycosis of the feet. Trichomycosis. Pyoderma (staphylococcal and streptoderma). Features of the clinical course of palliative patients., Methods of diagnosis, treatment and prevention.	9	-	4	5
Topic 6. Bedsores of soft tissues in the practice of a family doctor. Causes. Principles of prevention. Orthopedic preventive measures. Typical and atypical localization options. Clinical classifications of decubitus ulcers. Strategies for comprehensive treatment of chronic purulent wounds TIME, DOMINATE and others. Outpatient treatment and in the palliative and hospice department. Complication. Indications for hospitalization. Indications for necro-, sequestration necroctomy, renecrectomy and other interventions. Staged interventions.	18	-	8	10
Topic 7. Purulent-necrotic pathology of the hand and foot in palliative patients. Causes and ways of spread of purulent-necrotic process on the hand and foot. Surgical complications of mycosis. Incarnations of nails. Diabetic foot syndrome.	18	-	8	10

Patterns of origin and clinical course. Features of complex treatment in the outpatient clinic and in the palliative and hospice department. Limb contractures. Purulent-necrotic complications of hand and foot deformities. Peripheral circulatory disorders and gangrene in palliative patients. Features of planning and implementation of surgical interventions from the standpoint of clinical prognosis and quality of life.				
TOTAL	90	0	40	50

### 3. The content of the discipline

3.1. Lectures are not scheduled.

3.2. Plan of practical classes

№ 3.И.	Topics	Hours
1.	Fundamentals of gerontology. The main tasks of geriatric care in Ukraine. Palliative and hospice medicine. Principles of organization and provision of palliative and hospice care in Ukraine. Modern international approaches, standards and principles of organization of palliative and hospice care. Regulatory framework governing the provision of palliative and hospice care in Ukraine. Inpatient palliative and hospice care facilities. Providing palliative care at home.	5
2.	Palliative care in the practice of a family doctor. . Criteria for granting the patient the status of a palliative patient. Definition of "primary palliative care"; components. The terminal state of the patient. Agony. Rules of care for a dying patient.	5
3.	Patterns of development and course of chronic incurable diseases, the concept of quality of life. Disease, basic patterns and periods of development, options for completion. Quality of life and causes of its violation in patients with chronic incurable diseases. Clinical approaches and methods for assessing the quality of life of palliative patients.. Typical clinical symptoms in palliative and hospice medicine. The presence of typical clinical symptoms in palliative patients. Pain syndrome in palliative patients: clinic, pathophysiology of pain. General principles of pain control in palliative medicine. Pharmacological control of pain syndrome in palliative medicine.	6
4.	Allergodermatoses. Dermatitis. Toxicoderma. Eczema. Neurodermatitis. Features of the clinical course of allergodermatoses in palliative patients. Methods of treatment.	4
5.	Fungal diseases of the skin and mucous membranes. Keratomycosis and mycosis of the feet. Trichomycosis. Pyoderma (staphylococcal and streptoderma). Features of the clinical course of palliative patients., Methods of diagnosis, treatment and prevention.	4
6.	Bedsore of soft tissues in the practice of a family doctor. Causes. Principles of prevention. Orthopedic preventive measures. Typical and atypical localization options. Clinical classifications of decubitus ulcers. Strategies for comprehensive treatment of chronic purulent wounds TIME, DOMINATE and others. Outpatient treatment and in the palliative and hospice department. Complication. Indications for hospitalization. Indications for necro-, sequestration necroctomy, renecrectomy and other	8

	interventions. Staged interventions.	
7.	Purulent-necrotic pathology of the hand and foot in palliative patients. Causes and ways of spread of purulent-necrotic process on the hand and foot. Surgical complications of mycosis. Incarnations of nails. Diabetic foot syndrome. Patterns of origin and clinical course. Features of complex treatment in the outpatient clinic and in the palliative and hospice department. Limb contractures. Purulent-necrotic complications of hand and foot deformities. Peripheral circulatory disorders and gangrene in palliative patients. Features of planning and implementation of surgical interventions from the standpoint of clinical prognosis and quality of life.	8
	Total	40

### 3.1. Tasks for independent work

For independent work of students the tasks of theoretical character which are insufficiently thoroughly considered within lectures and practical employments are taken out. The student must study literary sources and be ready to answer questions during practical classes. Tasks and tasks are of a practical nature.

№	Topics	Hours
3.П.		
1.	Legislative and normative documents of the Ministry of Health of Ukraine on the organization and provision of geriatric, palliative and hospice care to the population.	5
2.	Palliative care for diseases of the circulatory system, respiratory digestion, psychoneurological diseases in the elderly and senile age.	5
3.	Palliative care for diseases of the endocrine, urogenital, hematopoietic system in the elderly and senile age. Palliative care for diseases of the musculoskeletal system in the elderly and senile age	5
4	Palliative care for diseases of the musculoskeletal system in the elderly and senile age	5
5.	Palliative care for skin diseases in the elderly and senile age	5
6	Features of the course of viral dermatoses in old age	5
7	Soft tissue abscesses and phlegmons in old age	10
8	Features of the course of purulent-necrotic processes in old age	10
	Total	50

## Individual tasks

Selection and review of scientific literature on the subject of the program of the student's choice with the writing of an abstract and its public defense.

Selection and review of scientific literature on the subject of research work of the department with the preparation of a scientific report at a meeting of the SNT or at student conferences.

Scientific research on the topic of research work of the department with the publication of results in scientific journals.

Participation in the work of the student scientific circle and speeches at scientific forums.  
Participation in the student Olympiad in the discipline.

Curation of patients, work in the geriatric ward, hospice.

Typical tests to check the mastered material in practical classes (examples)

1. With the aging of the body there are the following changes in the hematopoietic system:

- A. Lymph nodes shrink
- B. Tonsils increase
- C. The spleen increases
- D. Increases bone marrow mass
- E. The liver decreases

2. In the treatment of iron deficiency anemia in geriatric patients prefer:

- A. Parenteral administration of iron supplements
- B. Oral administration of iron supplements
- C. Diet therapy
- D. Phytotherapy
- E. Eating raw liver

3. For the course of chronic myelogenous leukemia in geriatric patients is characterized by:

- A. enlargement of the liver, spleen
- B. enlarged liver
- C. enlargement of all groups of lymph nodes
- D. reduction of the liver
- E. reduction of the spleen

### 3.1. Ensuring the educational process

1. Multimedia projectors, computers, screens for multimedia presentations, lecture presentations.
2. Diagrams, tables, tests, video.
3. Technical teaching aids: simulation manipulation class.
4. Differential credit tasks.

List of questions to prepare for practical classes

1. Gerontology as a science, basic concepts.
2. Biology of aging: theories, patterns, mechanisms, types (natural, physiological); delayed (retarded); pathological (accelerated); premature (progeria) in children and adults.
3. Calendar and biological age of man, their indicators for determining the rate of aging.
4. Meteopathic reactions in the elderly and senile age.
5. Organization of preventive and curative care for geriatric patients, responsibilities of the nurse for their implementation. Geriatric treatment and prevention facilities.
6. Geriatrics. Features of the disease in old age.
7. Drug metabolism and features of pharmacotherapy in the aging body.
8. Psychological features of the relationship between the nurse and elderly and senile patients.
9. Methods of nursing examination of a geriatric patient.
10. Features of the organization of geriatric care for elderly and senile patients, the principles of their rehabilitation.
11. Age-related changes in the cardiovascular system and the formation of diseases on the background of involutive changes.
12. Hypertension in the elderly and senile age. Definition, etiology, classification.
13. Special forms of arterial hypertension: isolated systolic, sclerotic. Pseudohypertension. The value of daily blood pressure monitoring.
14. Symptomatic hypertension. Drug therapy.
15. Atherosclerosis, coronary heart disease in the elderly and senile age. Features of clinical manifestations of angina (clinical equivalents of the attack), myocardial infarction in concomitant pathology in the elderly and senile age (hypertension, diabetes, etc.).
16. Chronic circulatory failure in elderly and senile patients. Treatment. Prevention.

17. Arrhythmias in the elderly and senile age (atrial fibrillation, extrasystole, blockade, etc.). Definition, etiology, classification. Emergency care at the pre-hospital stage.
18. Potential problems of patients with pathology of the cardiovascular system associated with long-term use of drugs (cardiac glycosides, ACE inhibitors, diuretics, vasodilators, calcium antagonists, etc.) and comorbidities.
19. Age-related changes in the respiratory system and the formation of diseases against the background of involutinal changes.
20. Pneumonia, bronchitis, bronchiolitis, COPD, lung cancer. Definition, etiology, classification. Advantages of treatment at home (home hospital), indications for hospitalization.
21. Pulmonary emphysema in the elderly and senile age.
22. Potential problems of patients with respiratory pathology associated with long-term medication (antibiotics, sulfonamides, etc.) and comorbidities.
23. Age-related changes in the digestive system and the formation of diseases against the background of involutive changes.
24. Gastritis (acute and chronic type A, B), gastric cancer. Features of clinical manifestations, course in the elderly and senile age. Prevention of dehydration.
25. Peptic ulcer disease (late, old, senile). Features of clinical manifestations, course in old age and senile age; refluxgastroesophageal reflex. Prevention.
26. Gallstone disease, toxic (drug) hepatitis, cirrhosis. Features of clinical manifestations, course.
27. Diverticular intestinal disease in the elderly and senile age
28. 28Constipation in old age and old age. Definition, etiology, classification, clinical manifestations.
29. 2. Potential problems of patients associated with long-term medication (enveloping, laxatives, etc.) and comorbidities.
30. 3. Age features of the kidneys and urinary tract and the formation of diseases on the background of involutive changes.
31. 4. Features of senile chronic pyelonephritis. Features of acute pyelonephritis. The value of reflux nephropathy.
32. 5. Glomeronephritis in the elderly and senile age, diabetic nephropathy.
33. 6. Senile renal amyloidosis, nephrotic syndrome. Definition, etiology, classification. Modern approaches to treatment and prevention.
34. 7. Urinary tract infection. Definition, etiology, classification. Phytotherapy as a means of long-term treatment.

35. 8. Benign hyperplasia, prostate cancer in old age. Manifestations.
36. 9. Incontinence and urinary retention. Causes, clinical manifestations. Modern approaches to treatment. The value of care.
37. 10. Potential problems of patients with diseases of the urinary and genital systems associated with long-term use of drugs (antibiotics with cytostatic
38. action, sulfonamides, etc.) and comorbidities.
39. 11. Age-related changes in the hematopoietic system, the emergence of diseases on the background of involutional changes.
40. 12. Etiology, clinical manifestations, diagnosis of anemia in the elderly (iron deficiency, anemia in chronic diseases, hypo- and aplastic anemia).
41. 13. Hemoblastosis in the elderly and senile age.
42. 14. Hemorrhagic syndrome in the elderly and senile age, the connection with long-term medication.
43. 15. Age-related changes in the endocrine system and the formation of diseases on the background of involutive changes.
44. 16. Type 2 diabetes in the elderly and senile. Definition, etiology, classification, risk factors.
45. 17. Instrumental research, care for diabetic micro- and macroangiopathies. Principles of treatment. Phytotherapy as a means of long-term treatment.
46. 18. Complications of type 2 diabetes mellitus: development, course, features of care for hyperglycemic, hypoglycemic insects.
47. 19. The concept of hyperosmolar, hyperlacidemic coma in the elderly and senile age.
48. 20. Diseases of the thyroid gland in the elderly and senile age.
49. 21. Age-related changes in the psychoneurological sphere and the formation of diseases against the background of involutive changes.
50. 22. Dementias of late age: Alzheimer's disease, Parkinson's disease. Definition, etiology, classification.
51. 23. Confusion (delirium). Definition, etiology, classification.
52. 24. Age-related changes in the musculoskeletal system and the formation of diseases on the background of involutive changes.
53. 25. Potential problems of patients with musculoskeletal pathology associated with long-term medication and comorbidities.
54. 26. Sleep disorders. Depression in the elderly and senile age. Reasons.
55. 27. Age-related changes in the hearing organ and the formation of diseases against the



background of involutive changes.

56. 28. Benign (papilloma, senile keratoma, skin horn, hemangioma) and malignant (basal cell carcinoma, melanoma, etc.) skin tumors in the elderly and

57. senile vi

58. 29. Age-related changes in the skin and the formation of diseases on the background of involutive changes.

59. 30. The course, prognosis in senile osteoporosis, deformed osteoarthritis.

60. 31. Clinical manifestations, course, prognosis of senile cataract, glaucoma, retinopathy. Approaches to treatment. Prevention.

61. 32. Age-related changes in the organ of vision and the emergence of diseases against the background of involutive changes. Prevention.

62. 33. Occupational safety, anti-epidemic regime, occupational safety in somatic diseases in elderly and senile patients.

#### Evaluation criteria and tools for diagnosing learning outcomes

Forms of control and assessment system are carried out in accordance with the requirements of the discipline program and the Instruction on the system of assessment of students' educational activities in the credit-module system of organization of the educational process, approved by the Ministry of Health of Ukraine.

The grade for the discipline is defined as the sum of grades of current educational activity (in points), which is set when assessing theoretical knowledge and practical skills in accordance with the lists defined by the program of the discipline.

The maximum number of points assigned to students when mastering each module (credit) - 200.

Current control is carried out at each practical lesson in accordance with the specific objectives of each topic. When evaluating students' learning activities, it is necessary to give preference to standardized methods of control: testing, structured written work, structured according to the procedure of control of practical skills in conditions close to real ones.

Evaluation of current educational activities:

The weight of each topic within one module should be the same, but may be different for different modules of the same discipline and is determined by the number of topics in the module. Assessment of current educational activities of students is described in the working curriculum of the discipline

When mastering each topic of the module for the current educational activity of the student grades are set on a 4-point traditional scale, which are then converted into points depending on the number of topics in the module. The program used such a system for converting the traditional scoring system:

The maximum number that a student can score for the current academic activity in the study of the discipline is 200 points.

The minimum number of points that a student can score for the current educational activity in the study of the discipline is 120 points.

Semester control is carried out in the form of a semester test in the discipline in the amount of educational material defined by the work program and within the time limits set by the working curriculum.

Semester test is a form of final control, which consists in assessing the student's mastery of educational material in a particular discipline solely on the basis of the results of all types of

educational work provided by the working curriculum. The semester credit is set based on the results of the current control.

Assessment of independent work:

Assessment of students' independent work, which is provided in the topic along with classroom work, is carried out during the current control of the topic in the relevant classroom.

## 6. Recommended sources of information

1. FAMILY MEDICINE: in 3 books / Edited by O.M. Hyrina, L.M. Pasiyeshvili. – Kyiv: AUS Medicine Publishing, 2016.
2. TEXTBOOK OF GENERAL PRACTICE: Third edition / Edited by Anne Stephenson. – London: CRC press, 2013.
3. TEXTBOOK OF FAMILY MEDICINE: Third edition / Edited by I.R. McWhinney, T. Freeman. – New York, USA: Oxford University Press, 2013.
4. THE MERCK MANUAL of DIAGNOSIS and THERAPY: Nineteenth edition / Edited by K.A.G. Lane. – West Point, NJ, USA: Merck, Sharpe and Dohme, 2011.