# DANYLO HALYTSKY LVIV NATIONAL MEDICAL UNIVERSITY DEPARTMENT OF NEUROLOGY

The first deputy vice-rector
on scientific and pedagogical work
of the Lviv National
Medical University
named after Danylo Halytsky,
Assoc. Prof. I.SOLONYNKO

# EDUCATIONAL WORKING PROGRAM FOR THE FREE ELECTIVE COURSE REFLEXOTHERAPY IN DENTISTRY

ВБ 1.73

5 years of study

training of specialists of the second level of higher education (master of medicine) field of knowledge 22 "Health" specialty 221 "Dentistry"

Discussed and approved at a meeting of the Department of neurology protocol No. 4

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neurology

prof. T. Nehrych

Approved by the profile methodical commission on therapeutic disciplines protocol № 50 × 4

"12" Uefolog 2023 Chairman of the profile methodical commission prof. O.Radchenko

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#### INTRODUCTION

Work program for the subject "«REFLEXOTHERAPY IN DENTISTRY" (optional course) for training of specialists of the second (master's) level of higher education for V year students of medical faculty, branch of knowledge 22 "Health care" specialty 221 " **DENTISTRY** ". Description

of the subject "«**REFLEXOTHERAPY IN DENTISTRY** " (optional course) for students:

The discipline **"Reflexotherapy in Dentistry"** (discipline of choice) is anormative discipline that is taught in the X semester and 5<sup>th</sup>year oftraining in the amount of4.0 credits (according to the European Credit transfer system, ECTS). The curriculum provides 40 hours of classroom classes(40 hours ofpractical) and 120 hours of independent work.

### Description of the curriculum for the discipline «REFLEXOTHERAPY IN DENTISTRY (optional course) for medical students.

Structure of the subject	Nun	ber of hours, of them			Year of education	Type of control
	Total hou credits	/ Classroom		IWS (hours)	-	
		Lectures (hours)	Pract. sessions (hours)			
	120/4,0	0	40	80	5	

The subject of study is the theory of unconventional methods of healing, technology of conducting and the content of lessons on non-traditional methods of healing.

**Interdisciplinary Relations:** Reflexotherapy is based on the study of human anatomy, medical biology, medical chemistry, medical and biological physics, physiology, pathophysiology, hygiene and ecology, pharmacology, propedeutics of internal medicine, neuropsychology and cytology by students and integrates with these disciplines.

**1.1 The goal** is to provide students with a holistic view of basic theoretical and methodological aspects of reflexotherapy, as well as to acquire practical skills in using it in clinical settings.

### **1.2.Task:**

- to teach students the general principles of reflexotherapy in diseases of the internal organs;
- to reveal practical aspects of reflexotherapy, ways and methods of using its achievements in clinical practice.
- **1.3 Competences and learning outcomes** facilitated by discipline (relationship with the normative content of higher education applicants' training, formulated in terms of higher education outcomes).

In accordance with the requirements of the Higher Education Standard, the discipline provides students with competencies:

### • integral:

The ability to solve typical and complex specialized tasks and practical problems in the learning process, which involves research and / or innovation and is characterized by complexity.

Specification of competencies according to the NRC descriptors in the form of the Competence Matrix.

Specification of competencies according to the NRC descriptors in the form of the Competence Matrix.

**Competence Matrix** 

№	Competence	Knowledge	Skill	Communication	Autonomy and responsibility
	General competence			responsibility	
1.	Ability to apply knowledge of the basics of reflexotherapy in practical situations.	Have specialized conceptual knowledge acquired in the learning process.	Be able to solve complex problems and problems that arise in professional activity.	Clear and unambiguous communication of their own conclusions, knowledge and explanations, which substantiate them to specialists and nonspecialists.	Responsible for decision-making under difficult circumstances.
2.	Ability to choose communication strategy; ability to work in a team; interpersonal skills. behavior.	Know the tactics and strategies of communicati on, the rules and methods of communicati ve behavior.	Be able to choose ways and strategies of communicatio n to ensure effective teamwork. responsible for the choice and tactics of the communicatio n method.	Use communication strategies and interpersonal skills.	Be responsible for the choice and tactics of the communication method.
3.	Skills of using information and communication technologies.	Have profound knowledge in the field of information and communicati on technologies used in professional activities.	Be able to use information and communicatio n technologies in the professional field that needs updating and integration of knowledge.	Use information and communication technologies in professional activities.	Responsible for the development of professional knowledge and skills.
4.	The ability to abstract thinking, analyze and synthesis, ability to learn and be modernly oriented.	Know how to analyze, synthesize and further modern learning.	Be able to analyze information, make informed decisions, be able to acquire modern knowledge.	Establish appropriate relationships to achieve the objectives.	Be liable for timely acquisition of modern knowledge.
5.	Ability to assess and ensure the quality of	Know the methods of	Be able to provide	Establish connections to	Be responsible for the

work performed.	evaluating	qualitative	ensure quality	qualitative
	performance	work.	work.	performance of
	quality.			works.

### Special (Professional, subject) competence

1.	Ability to assess data of functional anatomy and clinical physiology of autonomic human nervous system.	Know the anatomy and the function of the autonomic nervous system.	Be able to conduct research of vegetative tone, vegetative reactivity of the patient.	Use standard approaches to assessing the autonomic nervous system function.	Understanding the importance of careful and proper study of the autonomic nervous system in future professional activities.
2.	Gathering history, medical information about the patient's condition.	To know the algorithm of survey of the patient with neurological pathology and pathology of internal organs.	Be able to conduct inquiring and highlight the main complaints, assess the patient's general condition.	Comply with the requirements of ethics, bioethics and deontology in their professional activities.	Responsible for the qualitative performance of the tasks.
3.	Ability to use unconventional methods of health improvement in neurological diseases and somatic pathology.	Know the basic symtoms and syndromes of diseases of the internal organs and nervous system.	The skills of reflex diagnostics and reflexion-diagnostics.	Folowing ethical and legal norms.	Feeling of responsibility for correctness and timeliness of of reflexotherapy.
4.	Ability to conduct medical and preventive conversations.	Know the principles of conducting scientific and educational work in the conditions of hospital.	Be able to conduct scientific and educational work in the conditions of neurological hospital.	Ability to conduct preventive, educational work in the conditions of neurological hospital.	Carry out responsibility for the effectiveness of educational and preventive activities.
5.	Maintenance of medical records.	Know the rules and standards of medical documentatio n.	Be able to fill and maintain medical documentation of the patient using standard technology based on normative documents.	Establish interpersonal relationships for effective medical records.	Responsible for quality completion and maintenance of medical documentation.

6.	Processing of State,	Know the	Be able to	Use standard	Responsible for
	social and medical	methods of	analyse and	approaches to	the study of state,
	information.	processing	assess state,	information	social, medical
		the state,	social and	assessment, use	information.
		social,	medical	computer	
		medical	information.	information	
		information.		technologies.	

### **Learning outcomes:**

**Students should know:** The basics of reflexotherapy, properties of acupuncture points, basic components of puncture reflexotherapy (reception, place and time of stimulation), key concepts of chiropractics reflexotherapy;

- Demonstrate knowledge about systematization and reflexotherapy;
- Analyze acupuncture areas in the aspect of their reflextherapeutic effects, in particular acupuncture analgesia;
- Use basic rules of selection and puncture and chiropractics reflexotherapy in clinical practice.

### Be able to:

- Analyze clinical manifestations of the disease and form the algorithm of reflexotherapy application (puncture and manual);
- To demonstrate possession of simple methods of reflexotherapy (acupressure and segmental massage, termorefleksotherapy, postisometric relaxation of muscles, etc.);
- Substantiate optimum parameters of electrostimulation for percutaneous electroneurostimulation and Electromyostimulation;
- Determine the peculiarities of the use of reflexotherapy methods in various medical situations (first aid, treatment, rehabilitation, prevention).

**Learning outcomes for Discipline:** isolate and identify leading clinical symptoms; According to standard techniques, using previous data of the patient's history, examination of the patient, knowledge about the person, its organs and systems, to establish a probable cerebral syndromes preliminary clinical diagnosis. To form the algorithm of reflexotherapy application (puncture and manual); Massage, Termorefleksotherapy, postisometric relaxation of muscles, etc.

### 1. Information volume of academic discipline

➤ Organization of educational process is carried out on credit transfer system. According to the curriculum of training of specialists, to study the discipline "Basics of Reflexotherapy" 2.0 credits (60 hours), 20 hours from which the classroom training (in the form of practical classes-20 hours) and 40 hours-independent work. The volume of the training load of students is described in the ECTS-credits, which are admitted to the students when they successfully assimilate their respective test credits. The discipline is structured into 2 sections:

Section 1. Basic Reflexotherapy. Section 2: Special reflexotherapy.

### ➤ Topics::

- Theme 1. Definition of reflexotherapy, its role and place in modern medicine
- Theme 2. The main components of puncture reflexotherapy: Place of action, reception and Moment of action
- Theme 3. Acupressure. Local Barotherapy Theme 4. Surface Multineedle Acupuncture Theme 5. termorefleksotherapy
- Theme 6. Electroreflexotherapy: percutaneous electroneurostimulation (PENES), electromyostimulation, laser
- Theme 7. Reflex diagnostics. Microacupuncture systems. The combination of acupuncture

zones.

Theme 8. General rules of manual reflexotherapy. Optimization of static-dynamic loads on the vertebral column and joints.

Theme 9. Myofascial pain syndrome. Manual methods of muscular correction. Principles of Reflex Anesthesia

Theme 10. Peculiarities of reflexotherapy in medical practice.

### 3. PROGRAM CONTENT

### Unit 1: "General reflexotherapy"

<u>Specific goals:</u> To assimilate the definition of reflexotherapy, properties of acupuncture points, the main components of puncture reflexotherapy (reception, place and time of stimulation), key concepts of chiropractics reflexotheraphy

- Demonstrate knowledge on systematization and reflex diagnostics.
- Analyze acupuncture zones in terms of their reflextherapeutic effects, in particular acupuncture analgesia.
- To use basic rules of selection and puncture and manual reflexotherapy in clinical practice.

**Theme 1. Definition of reflexotherapy**, its role and place in modern medicine. Sanogenic processes, their constituent parts (restitution, regeneration, compensation, activity of the immune system, microcirculation). The concept of methods of complementary (Amplireinforcing, supplementing) medicine. Specificity of puncture reflexotherapy (PRT), Determination of acupuncture points (AP), scheme of reactions to acupuncture. Basic mechanisms of influence of acupuncture therapy. Key indications for the use of PRT.

Theme 2. The main components of puncture reflexotherapy are: the place of action, reception and moment of action. Three main components of PRT: Place of action, Reception of Action (quantitative and qualitative signs), moment of action (time parameters and consideration of activity of organs and systems). Properties AP. Acupuncture layers. Ways to search AP. Using the meridian system. AP general action and their functional significance. General principles of dosing of irritation in the PRT. General contraindications for the PRT are segmental AP (therapeutic AP, Shupoints) and their functional significance.

Theme 3. Definition of reflex diagnostics and its systematization (local, segmental, meridian, microacupuncture). Organization of the autonomic nervous system. Clinical assessment of vegetative manifestations orientation. Study of vegetative tone, vegetative reactivity and vegetative support. Visceral-sensory phenomenon (Zakhar'in-ged zone).

Theme 4. Modern ideas about Microacupuncture systems (MAS) and their properties. Auricular MAS, systematics of its acupuncture zones. Principles of choice and combining AP in PRT. Corporate points of general action, segmental and local, possibilities of their combination with microacupuncture points. Formation of optimal compositions AP depending on the functional disorders of patients of different profiles.

**Theme 5. Principles of reflex anesthesia.** The incept of a nociceptive and antinociceptive system. Endogenic Opioid (localization, functions, peculiarities of action). Reflexotherapy as a means of first medical aid. Reflexotherapy in complex measures in case of pain syndromes. Anti pain parameters of acupuncture zones stimulation. Method of Acupuncture analgesia.

## Unit 2: "Special reflexotherapy" Specific goals:

• Analyze clinical manifestations of the disease and form the algorithm of reflexotherapy application (puncture and manual).

- Demonstrate the possession of methods of reflexotherapy (acupressure and segmental massage, termorefleksoterapia, pososometric relaxation of muscles, etc.).
- To substantiate the optimum parameters of electrostimulation for percutaneous electroneurostimulation and Electromyostimulation.
- To determine the peculiarities of the use of reflexotherapy methods in various medical situations (first aid, treatment, rehabilitation, prevention).

Theme 6. General rules of Chiropractics. Acupressure. Local barotherapy. Manual therapy and scope of its application, types of biomechanical disorders. Therapeutic effects of chiropractics. Features manual diagnostics, the concept of anatomical and functional barriers. The most important methods of manual therapy. Determination of acupressure and its types. Mechanisms of therapeutic action of acupressure. Advantages and limitations of acupressure. Acupressure methods. A simple finger rubbing. PA that most commonly used for acupressure. Local barotherapy, its therapeutic effects and methods of application.

### Theme 7. Surface Multi-needle acupuncture.

**Termoreflexotherapy.** Surface Multi-needle Acupuncture (SMA), types, mechanisms of therapeutic action, indications and contraindications. Methods of conducting SMA. Dosing of irritation at SMA. Stimulation zone in the SMA. Thermal therapeutic factors in reflexotherapy. Temperature sensitivity, heat and cold termoreactions, therapeutic effects of termorefleksotherapy. Methods of thermopuncture. General indications for its application. Local cryotherapy.

# Theme8. Electroreflexotherapy: percutaneous electroneurostimulation (PENS). Electrical myostimulation. Laser therapy.

Electrotherapeutic factors in Reflexotherapy. The mechanism of Pain relief Action of PENS: scheme of the gate Pain control, classification of nerve fibers. Methodology for conducting the PENS. Electromyostimulation, its therapeutic effects and methods of application. Laser therapy and Laserpuncture: Mechanisms of therapeutic action, methodology of conducting, indications for use.

### Theme 9. Myofascial pain syndrome. Manual methods of muscular correction.

Manual study of the muscles condition. Myofascial trigger points and methods of their inactivation. Postisometric relaxation of muscles. Prevention of biomechanical disorders of spine and joints. Algorithm of application of manual therapy. Structural and functional features of the joints, spinal column and their consideration in manual therapy. Radiodiagnostic signs of osteochondrosis of the spinal column.

### 4. THEMATIC PLAN OF PRACTICAL CLASSES

		Кількість			
№	Тема	годин			
1.	Definition of reflexotherapy, its role and place in modern medicine.	4			
2.	The main components of puncture reflexotherapy are: the place of action, reception and moment of action.	4			
3.	Reflexotherapy. Organization of the autonomic nervous system.	4			
4.	Microacupuncture systems. Of acupuncture zones.	4			
5.	Principles of reflex anesthesia.	4			
6.	General rules of chiropractics. Acupressure. Local barotherapy.	4			
7.	Surface multineedle acupuncture. Termorefleksotherapy.	4			
8.	Electroreflexotherapy: percutaneous electroneurostimulation (CENS). Electrical myostimulation. Laser therapy.	4			
9.	Myofascial pain syndrome. Manual methods of muscular correction.	4			
10.	Final lesson.	4			
	Total: 40				

№	Theme	Number of hours	Type of control
1	Definition of reflexotherapy, its role and place in modern medicine	4	Поточний контроль під час практичних занять
2	Acupressure. Local Barotherapy	4 4	·,· ,· -
3	Electroreflexotherapy: percutaneous electroneurostimulation (CENS), electromyostimulation, laser	4 4	;; ;; _
4	Reflexotherapy. Microacupuncture systems. Acupuncture zones connections.	4 4	·,· ·,· -
5	General rules of Chiropractics. Algorithm of application of manual therapy.	4 4	·,· ·,· -
6	Thermal therapeutic factors in reflexotherapy.	4	·, ·, –
7	Principles of reflex anesthesia.	4 4	·, ·, -
8	Myofascial pain syndrome.	4 4	·, ·, -
9	Optimization of statico-dynamic loads on the vertebral column and joints.	4 4	·, ·, -
10	Preparation for practical training- theoretical preparation and mastering of practical skills.	4 4	- "
11	Individual IWS. Independent study of topics that are not part of the audit plan: Reflexotherapy in Pediatrics. Vegetative dysfunction.	4	·, ·, ·, · · · ·
12	Preparation for the final lesson.	4	Final control
	Total:	80	

### 6. Individual tasks.

Individual tasks are performed by students independently under the guidance of teachers.

The purpose of individual educational-research task-an independent study of the program material, systematization, deepening, generalization and practical application of the student's knowledge of the training course, the development of independent work skills. The individual task has a title page, the content of individual task, theoretical and practical components, conclusion, the list of used literature. Disclosing an individual task should have practical direction, a connection with a specific object of activity in the field of medicine or pharmacy.

### 7. Teaching methods.

The types of training activities of students according to the educational plan are: a)

practical classes, B) independent work of students (IWS). Practical classes provide for: 1) study by students of somatic and neurological status of healthy person; 2) Study status students in various diseases of the nervous system; Detection of symptoms and syndromes; 3) Resolution of clinical diagnosis; Reflexotherapy; 4) Solving situational tasks, tasks on the type of the license exam

#### 8. Methods of Control.

**Current control** is carried out at each practical lesson according to the specific objectives of the topic, during the individual work of the teacher with the student for those topics that the student processes independently and they are not included in the structure of the practical lesson.

It is recommended to use the following tools to evaluate student preparation: computer tests; solving situational tasks - typical and atypical; structured writing; the procedure for the control of practical skills and competences (assessment of knowledge and ability to analyze

and interpret macro- and microscopic changes of cells, tissues, organs and systems in certain pathological processes).

**Evaluation of current educational activity:** When mastering each topic of the module for the current educational activity of the student grades are given on 4-point traditional scale.

**Evaluation of independent work:** evaluation of independent work of students, which is provided in the subject along with the classroom work, is carried out during the current control of the topic in the appropriate classroom.

# Final control form According to curriculum (credit) Criteria for evaluating the student's current educational activity:

**Excellent ("5")** - The student correctly, clearly, logically and completely answers all standardized questions of the current topic, including the questions of the lecture course and independent work. Closely binds theory to practice and correctly demonstrates the implementation (knowledge) of practical skills. Freely reads results of analysis, solves situational tasks of increased complexity, is able to generalize material, know methods of patients examination to the extent necessary for the doctor's activity. Completed the scheduled individual work.

<u>Good ("4")</u> - The student correctly and essentially answers the standardized questions of the current topic, including the questions of the lecture course and independent work. Demonstrates the implementation (knowledge) of practical skills. Correctly uses theoretical knowledge to solve practical tasks. Able to solve light and medium complexity situational tasks. Possesses the necessary practical skills and techniques of their execution in the amount exceeding the required minimum.

<u>Satisfactory ("3")</u> - Student incompletely, with the help of additional questions, answers standardized questions of the current topic, lecture course and independent work. Can not independently build a clear, logical answer. The student makes mistakes while answering and demonstrating practical skills. The student solves only the easiest tasks, knows only the required minimum of methods of study.

<u>Unsatisfactory ("2")</u> - The student does not know the material of the current topic, can not construct a logical answer, does not answer additional questions, does not understand the content of the material. The student makes significant, gross mistakes when answering and demonstrating practical skills.

Evaluation of independent work: Evaluation of independent work of students, which is provided in the subject along with the classroom work, is carried out during the current control of the topic at the appropriate classroom lesson. Evaluation of topics that are presented only for independent work and are not included in the topics of classroom lessons, is held at the final session.

**11. Final control:** Final control is carried out upon completion of the study of all topics in the subject.

**Semester credit** -a form of final control, is to assess the student's learning material from discipline solely on the basis of the results of all types of educational work provided by the working curriculum. Semester passed billed according to the results of the current control.

### 10. Scheme of calculation and distribution of points that students will receive:

For discipline - "REFLEXOTHERAPY IN DENTISTRY" (optional course)-the form of final control is credit: The maximum number of points that a student can dial for the current academic activity while studying the subject is 200 points. The resulting value is converted into points by for multimark scale as follows:

$$\frac{CA \times 200}{x = 5}$$

For convenience, a conversion table is provided on a 200-point scale: Recalculation of the average grade for current activity into a multimark scale for disciplines that finish with the credit.

	200
4-points	point
scale	S
4.97	200
4.97	199
4.95	198
4.92	197
4.9	196
4.87	195
4.85	194
4.82	193
74.8 <sub>11</sub>	192
4.75 4.72 4.72	191
4.75	190
4.72	189
47	188
4.67	187
4.65	186
4.62	185
4.6	184
4.57	183
4.52	181
4.5	180
4.47	179

4-points scale	200
	points
	scale
4.45	178
4.42	177
4.4	176
4.37	175
4.35	174
4.32	173
4.3	172
4.27	171
4.24	170
4.22	169
4.19	168
4.17	167
4.14	166
4.12	165
4.09	164
4.07	163
4.04	162
4.02	161
3.99	160
3.97	159
3.94	158

4-points scale	200
	points
Searc	scale
392	157
389	156
3.87	155
3.84	154
3.82	153
3.79	152
3.77	151
3.74	150
372	149
37	148
367	147
365	146
3.62	145
3.57	143
3.55	142
352	141
35	140
347	139
3.45	138
3.42	137
3.4	136

4-points	200
scale	points
Scarc	scale
3.37	135
3.35	134
3.32	133
3.3	132
3.27	131
3.25	130
3.22	129
3.2	128
3.17	127
3.15	126
3.12	125
3.1	124
3.07	123
3.02	121
3	120
Less	No
than 3	enoug
L	l

Points for subject for students who have successfully completed the program are converted to a traditional 4 point score scale according to the absolute criteria that are listed below in the table:

Points for subject	Score for 4-point scale
From 170 to 200 points	5
From 140 to 169 points	4
From 139 points to the minimum number of points a student must achive	3
Нижче мінімальної кількості балів, яку повинен набрати студент Lower than minimum number of points a student must achive	

Scores of students who study in one specialty, taking into account the number of points scored from the discipline are ranked on the scale of the ECTS as follows:

Table 3

ECTS Score	Statistical indicator
	T 100/ 6 / 1 /
A	Top 10% of students
В	The next 25% of students
	The next 25 /6 of students
С	The next 30% of students
D	The next 25% of students
$\mathbf{E}$	The last 10% of students

### 11. Methodological support

The department created the conditions for the study of subject "reflexotherapy" (Optional course): Typographic way issued textbooks, methodical recommendations for practical classes and self-work, curation of patients is carried out, performance of practical skills, study of extracurricular topics. Methodological support and literature are sufficient.

### Main (basic)literature:

- 1. Neurology with neurostomatology: training. manual / by ed.L.I. Sokolova. K.: VSV "Medicine',2018.- 126 p.
- 2. Reflexotherapy: textbook / [Sviridova N.K., Morozova O.G., Chupryna G.M., etc.]; per ed..
- 3. N.K. Sviridova, O.G. Morozova.- K.: LLC SIKGROUP Ukraine, 2017. T. 1.- 427 p.

- 4. Reflexotherapy: textbook / [Sviridova N.K., Morozova O.G., Chupryna G.M., etc.]; per ed.. N.K. Sviridova, O.G. Morozova.- K.: LLC SIKGROUP Ukraine, 2017. T. 2.- 205 p.
- 5. Reflexotherapy: textbook / [Sviridova N.K., Morozova O.G., Chupryna G.M., etc.]; per ed.. N.K. Sviridova, O.G. Morozova.- K.: LLC SIKGROUP Ukraine, 2017. T. 3.- 476 p.
- 6. Morozova O.G., Zdybsky V.I., ShcherbakovS.S.Worthy diagnostics in reflexotherapy, Kharkov,

2016...-408 ths.

- 7. Reflexotherapy: national textbook / [Murashko N.K., Morozova O.G., Chupryna G.M., etc.]; Ed. N.K. Murashko, O.G. Morozova. K.: SIKGROUP Ukraine LLC, 2013. T. 1. 480 p.
- 8. Reflexotherapy: national textbook / [Murashko N.K., Morozova O.G., Chupryna G.M.
- tetc.]; per ed. N.K. Murashko, O.G. Morozova. K.: SIKGROUP Ukraine LLC, 2013. T. 2. 421 p.
- 9. Lysenyuk V.P. Fundamentals of reflexotherapy, herbal medicine and homeopathy: textbook .-K.:VSV "Medicine",

2010.- 424s.

10. Samosyuk I.Z., Lysenyuk V.P. Acupuncture. Medicine's ancyclopedia. - M.: ACT-PRESS BOOK, 2004. - 528 p.

### Additional literature:

- 1. Holubev V.L. Vegetative rasterism / V.L. Golubev, A.M. Wayne, T.G. Voznesensk, Sparrow O.V. MYA, 2010.- 640s.
- 2. TRowell J.G., Simone D.G. Myofascial pains and dysfunctions. Handiwork on trigger points: Per. c. Eng. M.: Medicine, 2005. T.1. 656 s; T.2.- 1192 s.
- 3. Lecture of the cycle of specialization in reflexotherapy "Application of YIN and YANG theory in traditional Chinese
- medytsyni" / Chuprina G.M., Trufanov E.O., SviridovaN.K.[, etc.]. -Eastern European Neurological journal. 2018, No4(22).- p.26-31.
  - 4. Lecture of the cycle of specialization in reflexotherapy "The use of reflexotherapy as part of complex
    - therapeutic measures in cosmetology" / Sviridova N.K., Chuprin G.M., Parnikoza T.P., Cherednichenko T.V. East European neurologist. zhurn. –2017.- No2 (14.- p. 4-10.
  - 5. Lecture of the cycle of specialization with RT "Practical application of the theory of U-Xin in traditional Chinese
    - medicine" / Chuprina G.M., Sviridova N.K., Parnikoza T.P. [etc.]. East-Europe Neurological Journal. 2018, No2(20).- P.19-23.
  - 6. Lecture of the specialization cycle with RT "Theoretical and methodological bases of reflexotherapy" / Chuprin G.M., Sviridova N.K., Parnicosa T.P. [etc.]. East-Europe Neurological Journal. 2018, No2(20).- P.19-23.
  - 7. Lecture of the cycle of specialization with RT "Cephalygia: clinic, diagnosis and treatment" / Chuprin G.M., Sviridova
    - N.K., Parnikoza T.P. [etc.]. East-Europe Journal. 2018, No2(20).- P.12-18.
  - 8. Lecture of the cycle of specialization in reflexotherapy "Theory of YIN-YANG, as a basis for the diagnosis and lycation of diseases" / Chuprin G.M., Sviridova N.K., Parnikoza T.P. Eastern European Neurological Journal. 2017, No4(16.- p.30-35.
  - 9. Clinical protocol of medical care in the specialty "Reflexotherapy" for patients with facial nerve neuropathy and secondary contracture of facial muscles (facial hemispasm) / Maceret
    - E.L., Kovalenko O.E., Chupryna G.M. [etc.]. Ministry of Health of Ukraine, 2010.- 10 p.
  - 10. Acupuncture for spasticity after stroke: a systematic review and meta-analysis of randomized controlled trials [Electronic Resource] / S.M. Lim, J. Yoo, E. Lee [et al] // Hindawi publish. corpor. evidence-based complement. and alternat. med. Vol. 2015. R. 1 12. Zhurn access mode: https://www.hindawi.com/ journals/ecam/2015/870398/.
  - 11. Acupuncture-induced analgesia: the role of microglial inhibition / L. Lin, N. Skakavac, X. Lin [et al.]

Cell Transplantation. – 2016. – Vol. 25, P. 621–628.

### **Information resource**

1. http://www.sport-med.com.ua
2.http:// www.medicalacupuncture.org
3.http:// www.acucouncil.org

4. http:// www.acudetox.com