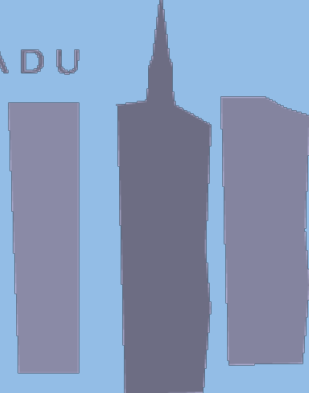


UNIVERZITET U BEOGRADU

MEDICINSKI  
FAKULTET



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# **ANALYSIS OF HIGHER EDUCATION OFFER OF PAIN MEDICINE IN SERBIA**

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# **Pain Medicine - a new subspecialization**

● Pursuant to Article 45 paragraph 1 of the Law on Government ("Official Gazette of the Republic of Serbia", No. 55/05, 71/05 - correction, 101/07 and 65/08),

● The government brings,

**STRATEGY FOR PALLIATIVE BRUSHING**

● **ACTION PLAN FOR THE IMPLEMENTATION OF THE PALLIATIVE BRANDING STRATEGY FOR THE PERIOD 2009 - 2015**



# **Pain Medicine - a new subspecialization - the first steps in Serbia**

- **2009 - 2013**

**Collegium of Deans in the School of Medicine  
University of Belgrade**

- **Ministry of Health, Government of the  
Republic of Serbia**



Government of the Republic of Serbia



# Pain Medicine - a new subspecialization



- **Finally, in February 2013**, the Ministry of Health of the Republic of Serbia published in the Official Gazette no. 10/2013 list of all specializations, among which there was a sub specialization in palliative medicine and pain medicine.
- **However, in September 2013**, The Ministry of Health of the Republic of Serbia proposes that the narrow specialization be divided into two specialized specialties: Pain Medicine and Palliative Medicine. Soon everything is legalized by the publication of the Official Gazette No. 113/2013.

# **RULES ON SPECIALIZATION AND TRAINING OF SPECIALIZATIONS OF HEALTHCARE WORKERS AND HEALTHCARE COOPERATION ("Official Gazette of RS", No. 10/2013, 91/2013, 113/2013 and 109/2014)**

- **Types and duration of sub specialization - 1 year**

## **Article 7**

**48) pain medicine** - if they have specialization in anesthesiology and reanimatology and intensive therapy, internal medicine, pediatrics, neurology, physical medicine and rehabilitation, general medicine, general surgery, abdominal surgery, vascular surgery, chest surgery, orthopedic surgery and traumatology, neurosurgery, plastic, reconstructive and aesthetic surgery, maxillofacial surgery, urology, cardiac surgery, psychiatry, child and adolescent psychiatry, infections, radiology, clinical pharmacology;



# Pain Medicine - a new subspecialization

- The first generation of specialists, ten of them, on the specialization of Medicine Pain were enrolled in the school year 2013/2014.

- 2014

- 10 students

- 2015

- 6 students

- 2016

- 16 students

- 2017

- 16 students



# Pain Medicine - a new subspecialization

Ministry of Health Republic of Serbia made a decision that our **sub specialization - pain medicine** is on the list of the deficit specializations



Министарство здравља  
Републике Србије

# **Pain Medicine - a new subspecialization**

**● OUTCOME:** By following the course of routine specialization in the field of pain, the candidates would be able to:

- It allows the removal of pain and other symptoms
- They combine the psychological and spiritual aspects of patient care
- They offer a support system and help the patient
- To train a team approach in recognizing the needs of patients and their families
- They improve the quality of life, and they also positively affect the course of the disease itself



# **Pain Medicine - new subspecialization**

**Since 2013 she has been working for the multidisciplinary department of postgraduate education from the specialization specialization "Pain Medicine"**

**Chairmen of the postgraduate department of Pain Medicine**

**Prof. dr Predrag Stevanović**

**Deputy of chairmen the postgraduate department of Pain Medicine**

**Prof. dr Nebojša Lađević**

**Secretary of the postgraduate department of Pain Medicine**

**Prof. dr Dejan Nešić**

<b>LECTURE</b>	<b>Teaching hours</b>	<b>LECTURE</b>	<b>Teaching hours</b>
<b>Introduction lecture</b>	<b>2</b>	<b>Nonpharmacological methodes in pain management</b>	<b>6</b>
<b>Anatomy of pain</b>	<b>2</b>	<b>Chronic Cancer pain</b>	<b>20</b>
<b>Epidemiology of pain</b>	<b>8</b>	<b>Chronic noncancer pain</b>	<b>16</b>
<b>Physiology of pain</b>	<b>10</b>	<b>Headaches</b>	<b>12</b>
<b>Pain assesment</b>	<b>4</b>	<b>Neuropathic pain</b>	<b>16</b>
<b>Pain pharmacotherapy</b>	<b>20</b>	<b>Pain and special condition</b>	<b>4</b>
<b>Legal framework of pain therapy</b>	<b>6</b>	<b>TOTAL</b>	<b>126 HOURS</b>

# **Curriculum of Pain medicine - specialization**

## **Anatomical and physiological basis of pain**

**Anatomy of pain**

**Neuro-anatomic substrates of nociception and  
pain transmission**

**Mechanisms of modulation by the central  
nervous system**

**Plasticity and pain: the role of dorsal roots**

**Pain theories**

## **Pain Assessment**

**Assessment of pain**

**Clinical evaluation of pain**

# **Curriculum of Pain medicine specialization**

**Pharmacology and Pain Management:**  
CNS pharmacology and nociceptive transmissions  
Pharmacology of opiates  
Opiates: clinical use  
Pain, opiates, addiction  
Pharmacology of non-drug analgesics  
NSAIDs and COX inhibitors: clinical use  
Pharmacology of antidepressants  
Antidepressants as co-analgesics - clinical use  
Pharmacology of anticonvulsant  
Anticonvulsants as co-analgesics - clinical use  
Kanaboids



# **Curriculum of Pain medicine specialization**

## **Ethical, legal and deontological aspects**

**Principles of medical ethics**

**Maintenance and withdrawal from treatment**

**Information, truth and hope**

**Free will and written consent (choice)**

**Legal-legal aspects**

**Pain in the intensive care unit**

**Caring for a dying patient in an intensive care unit**

**Ethics in the case of a critically ill**

**Communication with the relatives of a dying patient  
in an intensive care unit**

# Curriculum of Pain medicine specialization

## **Postoperative acute pain:**

Causes of pain

Assessment of the severity of the pain

Pharmacological therapy

Invasive procedures

Regional analgesia in postoperative pain therapy

Patient-controlled analgesia

## **Cancer pain:**

Cancer pain: causes and consequences

Epidemiology of cancer pain

Evaluation of cancer pain

Medical treatment of cancer pain

Intervention Procedures in Cancer Pain Treatment

Specific painful symptoms, pain breakthrough, bone metastases

Pain as an emergency

Pain control in the care of a dying patient

Rotation of opioids

# **Curriculum of Pain medicine specialization**

## **Chronic disorder pain**

### **Chronic postoperative pain**

**Osteoarthritis and rheumatoid arthritis**

**Myofascial Pain and Fibromyalgic Syndrome**

**Back pain**

**Pain in the neck**

**Visceral pain**

**Pain in neurology**

**Headache**

**Neuropathic pain**

**Peripheral neuropathies**

**Diabetic neuropathy**

**Complex regional pain syndrome**

**Central pain, phantom pain**

**Trigeminal neuralgia**

**Pain in the elderly**

**Pain syndromes**

# **Curriculum of Pain medicine specialization**

## **Application of invasive and noninvasive procedures in pain therapy**

**Application of ultrasound in performing invasive  
procedures**

**Central nerve blocks**

**Nerve Plexus Blocks**

**Peripheral nerve blocks**

**Blocks of nerve ganglion**

**Central neuro-stimulation**

**Transcutaneous electro neuro-stimulation**

**Possibilities of physical medicine in the treatment of  
pain - neopharmacological therapy**

**Radio therapy in the treatment of pain**

**Placebo analgesia**

**Neurosurgical procedures in the treatment of pain**



# **Curriculum of Pain medicine specialization**

**Pain in pediatric; Overview of current  
problems and their history;**

**Pain in children**

**Development of painful pathways and pain  
mechanisms**

**Assessment of pain**

**Pediatric and neonatal scales**

**Clinical implications of analgesic  
pharmacokinetics in children**

**Pharmacological treatment of pain**

**Regional analgesia**

**Non-pharmacological techniques of analgesia**

**Chronic pain in children**

# **New curricula to other universities of Serbia**

**The important impact is also introduction of new curricula to other universities of Serbia (improve existing curricula in School of Medicine University of Belgrade), Montenegro and Bosnia and Herzegovina. In the development of these programs will participate academic staff of the universities involved in the project**

# **Courses through the Center for Continuing Medical Education (CME)**

**At the all Universitys we decide to make all courses through the Center for Continuing Medical Education (CME) of health workers and associates. We want to offer specific educational activities and multidisciplinary scientific approach. In the courses we involve different specialityes (academic staff) for lecturers.**

**All courses will be accredited by National Health council of the Republic of Serbia and the lectures and participants will receive a certain number of CME credits with coordination The European Accreditation Council for CME**



# Master Academic Studies in School of Medicine University of Belgrade

Master Academic Studies Physical Activity, Health and Therapy  
Practice

Master academic studies in neuroethics

Master academic studies in public health

Master academic studies in management in the health care system

Master Academic Studies in Pharmaceutical Medicine

Specialist academic studies - medical sciences

Specialist vocational studies for nurses and physiotherapists

Master academic studies for nurses

**New Module Master Academic Studies in Pain medicine**





# New module PhD studies



# Pain medicine

# Promotion Higher Education Pain Medicine Project (HEPMP)

We will use web page of School of Medicine, at all Universities to HEPMP and disseminate all informations. Also, we perform a few television emissions about courses and HEPMP and importance of that activities.

Under the official web site of School of Medicine at all Universities, we will develop web page about HEPMP and clearly emphasize HEPMP on the main School web page. On the HEPMP web page we continuously upload all informations about HEPMP



# **Educational PAIN REGION WB Network**

We will organize permanent exchange of knowledge of Pain medicine which will be continuous updating of recommendations of standards and procedures regarding PM by establish the academic network that would allow the exchange of knowledge of HCWs in Serbia, Montenegro and Bosnia and Herzegovina. The main tool of this network would be developed educational PAIN REGION WB Network which will enhance regional cooperation and education of pain medicine of all partner country universities. This Web platform for education and communication will enable trough case study selection and analysis between the participating countries will provide permanent exchange of knowledge regarding PM.

# General practitioner and pain medicine



We want to write and published brochures, leaflets newsletter and publications which will help a general practitioner (family doctor) to treat patients with pain problems much better and more adequately and to implementation all the latest recommendations.

The World Organization of Family Doctors (WONCA) is a global not-for-profit professional organization representing family physicians and general practitioners from all regions of the world.

**International symposium in 2018**

**in Serbian Academy of Arts and Science**

**Pain, the terrifying lord of life  
- international monograph -**





**Organization highly specialized  
Master Classes and Workshops and  
Webinars / courses of Pain medicine  
and pain management in partner  
countries**