

**H E P M P**

HIGHER EDUCATION PAIN MEDICINE PROJECT

Report on Labour  
Market Needs in  
Bosnia and  
Herzegovina



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## List of Abbreviations

CBHE	Capacity Building in Higher Education
D&E	dissemination and exploitation
EACEA	Education, Audiovisual and Culture Executive Agency
EC	European Commission
EU	European Union
GA	Grant Agreement
HCWs	Health Care Workers
HE	Higher Education
HEI	Higher Education Institution
HEPMP	Higher Education Pain Medicine Project
LLL	Life Long Learning
NEO	National Erasmus+ Office
PA	Project Adviser
PA	Partnership Agreement
PC	Project Coordinator
PCC	Partner Country Coordinator
PCs	Partner Countries
PCT	Partner Country Team
PgCC	Programme Country Coordinator
PgCs	Program Countries
PgCT	Programme Country Team
PM	Pain Medicine
PMB	Project Management Board
QCB	Quality Control Board
TL	Task Leader
TLs	Task Leaders
UB	Faculty of Medicine University of Belgrade, Belgrade, Serbia
UBBL	Faculty of Medicine University of Banja Luka, Bosnia and Herzegovina
UF	Faculty of Medicine University of Florence, Italy
UHDM	University Clinical Hospital Centre "Dr Dragisa Misovic-Dedinje" Belgrade, Serbia
UK	Faculty of Medical Sciences University of Kragujevac, Kragujevac, Serbia
ULj	Faculty of Medicine University of Ljubljana, Slovenia
UP	Faculty of Medicine University of Podgorica, Montenegro
UR	Faculty of Medicine University of Rijeka, Croatia
UT	Faculty of Medicine University of Tuzla, Bosnia and Herzegovina
WP	Workpackage

## I About the HEPMP project

### 1.1 The HEPMP project summary

**Funding:** Erasmus+

**Key Action:** KA2 Capacity Building in Higher Education

**Type of project:** Joint Projects

**Coordinating Institution:** University of Belgrade

The main aim of HEMP project is to increase quality of education in pain medicine in order to contribute to the improvement of public health care services and PCs in line with the Health 2020. In Serbia, Montenegro and Bosnia and Herzegovina there is a significant problem of large percentage of the population who suffers from cancer, rheumatic and neurological diseases, while education in the field of pain medicine is insufficient. In fact, one of the priorities of the strategy Health 2020 improvement of the quality of medical services and continuously adapt to changing patterns of disease. Aim of this project is developing an interdisciplinary program in Pain Medicine at the under / postgraduate studies by applying new methodologies and specific learning outcomes in partner country universities. The introduction of the modernized study program of pain medicine is important for improvement of the quality of higher education that will contribute to improve the health care of the population. Moreover, one of the aims is establishment of 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 development of educational PAIN REGION WB Network which will enhance regional cooperation and education of pain medicine of all partner country universities.

Also, one of the HEPMP aims is delivering of trainings of pain medicine in order to increase skills and competences of health care workers (HCW) in PCs . Training would be for the two target groups: the first type of courses would be for HCWs who work in primary health care centres and daily dealing with the management of pain medicine, and other types of courses would organized in the form of highly specialized training for interventional treatment of pain for doctors who work in tertiary institutions. During the project will form the learning material in the form of brochures for courses and textbooks on pain.

## 1.2 The HEPMP project consortium

No	Institution	City	Country
1	University of Belgrade	Belgrade	Serbia
2	University of Kragujevac	Kragujevac	Serbia
3	University of Tuzla	Tuzla	Bosnia and Herzegovina
4	University of Banja Luka	Banja Luka	Bosnia and Herzegovina
5	University of Montenegro	Podgorica	Montenegro
6	University of Florence	Florence	Italy
7	University of Ljubljana	Ljubljana	Slovenia
8	University of Rijeka	Rijeka	Croatia
9	KBC Dr. Dragisa Misovic-Dedinje	Belgrade	Serbia

## 1.3 The HEPMP Managing Board

No	Name and Last Name	Institution
1	Prof. dr <i>Predrag Stevanović</i> ,	University of Belgrade, <b>Project Coordinator</b>
2	Prof. dr Jasna Jevđić	University of Kragujevac
3	Prof. dr Vladimir Đukić	KBC dr Dragiša Mišović
4	Prof. dr Danko Živković	University of Montenegro
5	Prof. dr Jasmina Smajić	University of Tuzla
6	Prof. dr Darko Golić	University of Banja Luka
7	Prof. dr Anđelo Rafele De Gaudio	University of Florence
8	Prof. dr Maja Šoštarić	University of Ljubljana
9	Prof. dr Željko Župan	University of Rijeka

## II Report on Labour Market Needs in Bosnia and Herzegovina

Republika Srpska is an entity in Bosnia and Herzegovina, which has about 1.2 million inhabitants.

The state health system of Republic of Serbs consists of: 2 University hospitals, 9 hospitals and 54 health centers. In state hospitals the number of hospital beds is 2 870. In addition to state institutions there are also private health institutions and ambulances.

Currently there are 3700 physicians in the Republic of Serbs, of which 1582 are specialists and 2118 are doctors of family medicine.

The largest healthcare institution in the Republic of Serbs is the University Clinical Center of Republic of Serbs in Banja Luka (UKC RS), which has 2500 employees and 1200 beds. In UKC RS, 620 doctors are employed.

Doctors of family medicine are not educated for the Pain of Medicine. In hospitals: anesthesiologists, neurologists, physiatrists, oncologists and surgeons deal with pain. There are currently 82 anesthesiologists, 324 surgeons, 59 neurologists and 78 physiatrists in the Republic of Serbs . There are no personnel in the hospitals, nor the protocols on pain therapy. There are pain ambulance at the University hospitals in Banja Luka and Foča. Through this ambulance , during 2017 there were treated 1218 patients.



In 2017, a total of 37 267 operative procedures in anesthesia were done in hospitals.

Postoperative pain is treated anesthetist for the first 8 hours postoperatively, and then a surgeon.

The only palliative care is in the Gradiška hospital and has 10 beds.

pain, in the coming period it is necessary to educate doctors of family medicine for the treatment of pain. Provide a minimum of one doctor for pain treatment to 50 000 inhabitants. At the Family Medicine level, introduce standard I protocols for medication therapy.

At the hospital level it is necessary to educate doctors of all specialties for pain therapy. It is necessary to educate and organize medical pain teams (nurses and doctors) in hospitals, which would be exclusively dealing with pain therapy. Diagnosis, pain therapy and diagnostic procedures in hospitals and complications of medication therapy should be made.

Conclusion: In Family Medicine it is necessary to educate one doctor on 50,000 inhabitants, who will deal with Medicine pain. It is necessary to make protocols for the most common painful conditions. In hospitals it is necessary to organize a team (medical technician-doctor) for Pain therapy. A team of 1 would have enough for 500 beds. In hospitals, pain follows as one of the vital signs.

## Tuzla

There is a Centre for palliative care At University clinical centre Tuzla for pain management of oncological patients, where works just one doctor, specialist in anaesthesiology and reanimatology. During 2017, there were 475 patients hospitalized and 58 patients were treated in daily hospital.

Two major hospital in Federation of Bosnia and Herzegovina, University Clinical Centre Sarajevo and University clinical hospital Mostar have Pain management department as a part of a Clinic of anaesthesiology and reanimatology.

Data regarding the medicines use in Bosnia and Herzegovina during 2016. shows that pain killers (non-steroid antireumatics, opiod analgetics and other analgetics) are most prescribed drugs, second to *other antineoplastic* agents, on third level of ATC.

### **Group of medicines      Consumption in Euros in 2016. in B&H**

*Chemotherapeutic* agents ~ 22 million

Nonsteroid antireumatics ~ 11 million

Other analgetics              ~ 9 million

Opiode analgetics            ~1,5 million

### **Pain killers                      Consumption in Euros in 2016. in B&H**

Paracetamol                    ~ 9 million

Aspirin                            ~ 5 million

Diclofenac sodium            ~ 4 million

Ibuprofen                        ~ 2,5 million

Paracetamol, Tramadol ~ 0,5 million

Fentanyl                         ~ 0,45 million

Tramadol                         ~ 0,44 million

Morphin                         ~ 0,055 million

Considering the number of patients who, due to the pain are asking a doctor for help, the number of medications being issued each year for pain treatment, there is a great need to increase the number of doctors dealing with pain medicine, especially those with close involvement.

Strengthening Capacities for Higher Education of Pain Medicine in Western Balkan  
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