

## EVENT REPORT FORM

Project title	Strengthening Capacities for Higher Education of Pain Medicine in Western Balkan countries
Project acronym	HEPMP
Project reference number	585927-EPP-1-2017-1-RS-EPPKA2-CBHE-JP
Coordinator	University of Belgrade
Project start date	October 15, 2017
Project duration	36 months

Event	New Project output: Postoperative Pain Service in University of Ljubljana Course in Banjaluka
Type of event	WP3 (Development of LLL courses and interventional pain medicine courses)
Venue	Faculty of Medicine, University Banjaluka
Date	28.11.2019.
Organizer	Faculty of Medicine at University Banjaluka, University Clinical Center Banjaluka
Reporting date	December, 15, 2019.
Report author(s)	Prof. Dr D. Golić

Project number: 585927-EPP-1-2017-1-RS-EPPKA2-CBHE-JP (2017 – 3109 / 001 – 001)

*This project has been funded with support from the European Commission.  
 This publication [communication] reflects the views only of the author, and the Commission cannot be held  
 responsible for any use which may be made of the information contained therein.*

## EVENT DESCRIPTION

### with special reference to goals and outcomes

<b>Number of participants at the event</b>	51
<b>Participants (organisations)</b>	University Clinical Center Banjaluka General Hospital Gradiska., Gradiska General Hospital Prijedor, Prijedor Rehabilitation Center “Dr M. Zotovic” Banjaluka
<b>Event description:</b>  The main goals of organizing and hosting this course was to provide experts from the University Clinical Center of Ljubljana to share their experience on the organization Acute pain service in hospital. Since the University Clinical Center Banjaluka and other hospitals does not have this service the maintenance of this course has enabled the organisation to be considered in order to improve the treatment of acute postoperative pain, and thus prevent the complication due to possible inadequate analgesia. After the develop the learning materials, selection of trainees, and accreditation of the course by the Ministry of Health of Republic of Serbs, the course was held for the purpose to give detailed information regarding acute postoperative pain management considering that there is no organized Acute pain service in University Clinical Center Banjaluka.	
<b>Objectives of course:</b>  <ul style="list-style-type: none"> <li>- Teach participants to explain difference between acute and chronic pain</li> <li>- Teach participants to explain difference between nociceptive and neuropathic pain</li> <li>- Teach participants about the importance of treating postoperative pain</li> <li>- Point out the importance of the pain as the fifth vital sign and pain intensity estimation</li> <li>- Pain intensity estimation method</li> <li>- Learn how to treat acute postoperative pain using different analgesic method</li> <li>- Learn how to monitor patient</li> </ul>	
<b>Description of activities</b>  After drafting the educational materials, two lectures were selected, who each from the field for whom it was delegated, wrote the material and produces a presentation. The entire educational material has been systematized, prepared in required format and attached on this document. Education event accredited as the first category seminar with 4 points. A flyer was prepared	

outlining the program the event, as well as decision of accreditation. In addition, a flyer was sent to potential participants in the form of the call. The course started from 09:00 with the registration of participants. The attendees were addressed and greeted by the team coordinator of the University of Banjaluka, who introduced the participants to the HEPMP project, its goals and tasks through an introductory lecture. Afterwards, the Head of the Department of Anaesthesiology and Reanimatology of the University Clinical Center Banjaluka, addressed the attendees, Prof dr Darko Golic who presented the needs and opportunities for the organisation of Acute pain service.

According to a consensual opinion, adequate management of pain is a medical obligation. Several factors have been identified as causes of uncontrolled and unnecessary postoperative pain, some of them merit also a bioethical analysis (1). Health care professionals have an ethical obligation to relieve pain. And yet, this obligation has been largely neglected (1). Nurse-based anesthesiologist-supervised acute pain service (APS) proved to be effective and also a reasonably low-cost model (2). The pain management team consists of surgical ward nurses who assess and record pain, give analgesic drugs, monitor vital signs and side effects (3). Surgical ward nurses are trained by pain nurses who daily come to surgical wards and visit patients on PCA pumps for intravenous, epidural or peripheral nerve catheter analgesia. If needed pain nurses contact APS anesthesiologist to adjust analgesic regimen. APS is supervised by the anesthesiologist who communicates with surgeons, physical therapists and also pharmacists. Besides day-to-day responsibility for postoperative pain relief, APS pain nurses assume also training programs of nursing and medical staff and regular auditing. According to the results obtained by monthly and annual analysis of pain scores, side effects and complications, APS anesthesiologist adjusts recommendations for pain treatment protocols. Patient satisfaction with the quality of postoperative pain management is also assessed and analyzed. In 1998 APS was established in the University Medical Center Ljubljana. Several studies showed that implementations of APS was associated with a significant decrease in pain intensity (2) and a lower incidence of postoperative complications. Also, our experience shows that APS in a teaching hospital led to an increase in appropriate use of specialized analgesic techniques. Recorded and evaluated the effectiveness of pain relief and possible side effects enabled improvement of postoperative analgesia. The role of regular teaching program of ward nurses, implementation of standardized protocols, regular audits to improve outcomes cannot be overstated. Program for education of patients are the next step to improve postoperative pain management and patient's satisfaction. Decision making practice informed by a person-centered dimension (patient as a person, patient-physician relationship and communication) that take into account some ethical theories may constitute a constructive approach to an ethics framework also for postoperative pain management.

This was followed by a lecture on the effective removal of pain as a key to a successful surgical outcome. It was pointed out that postoperative pain was not adequately treated and that the control of postoperative pain in Europe and the USA was not optimal. Postoperative written treatment protocol exist in only 60% of hospitals that serve as teaching bases. Inadequately treated postoperative pain increases morbidity, leads to the development of chronic postoperative pain, prolonged use of opioids, impairs mobility and postoperative recovery, decreases quality of life and increases health costs. It was emphasized that for the adequate treatment of postoperative pain, it is crucial to evaluate the pain and the existence of protocols, and to organize an acute pain treatment service. Various methods of treating postoperative pain with an emphasis on multimodal analgesia are presented. Good treatment of postoperative pain implies patient satisfaction, prevention of chronic postoperative pain, and good surgical outcome (early mobilization, good wound healing, shorter hospitalization).

This was followed by a presentation on Acute pain service organization and its implementation in daily practice. Everything that is needed for this organization is presented: written protocols for postoperative analgesia, a new nurse profile (nurse in pain therapy), education (department nurses and patients), regular pain assessment (make pain visible), recording of YOP and consumption analgesics, recording of side effects and complications, analysis, audits (regular meetings and plans for improvement). Nursing duties for pain therapy: daily visits to patients with pca pump (recording you recently, calculating analgesic consumption, adjusting the pca pump program to the needs of the patients, recording side effects), daily visits to patients with catheters (catheters nursing, recording complication, safe removal catheters), department nurse education (regular education

program), statistic analysis, annual reports. Subsequently, the methods of administration of analgesics as well as the different types of pumps for the administration of analgesic compositions are presented. At the end of this lecture, the achievements of the Acute Pain Treatment Service at UCC Ljubljana after 20 years are presented: Pain is routinely evaluated and recorded as the 5th vital sign in all surgical wards, Effective removal of postoperative pain in all SPAN and surgical wards:  $YOU \leq 3$ . There are few side effects, no serious complications: about 5%, Regular nursing education programs: attendance required, positive results, high patient satisfaction with quality of postoperative pain removal: results of regular surveys 4.9 points (out of a possible 5).

The third lecture was about the evaluation of acute pain. The causes of acute postoperative pain and its consequences are presented at the beginning of the lecture. In the evaluation of acute pain, we evaluate the intensity, location and duration of pain, ensure that the patient is well, evaluate the effectiveness of analgesic therapy, reduce fear, prevent complications. Pain is evaluated after surgery in the recovery room, for the time of admission to the ward, regularly 15-30 min after parenteral, 60 min after oral analgesic application, at rest, during the performance of respiratory and locomotor physiotherapy. Pain is assessed by talking to the patient, observing changes in physiological signs, using pain rating scales. Pain is graded according to the steps: A - ask: ask regularly for pain, evaluate pain systematically; B - believe: trust the patient; C - choose: choose the appropriate method of pain relief regarding the particularities of the patient and the circumstances; D - deliver: measures should be timely, logical and coordinated; E - empower: Encourage patient to monitor pain changes on their own. Methods and scales for assessing pain intensity are presented. Recommendations for clinical approach to pain assessment and recognition are given: interdisciplinary approach to pain management, individualized approach for each patient, always examine the patient in the same way, pain systematically, trust the patient and relatives when talking about pain and how the patient alleviates it, choose for the patient, family and environment the most appropriate way to control pain, perform procedures in a timely and coherent manner encourage patients and family and allow them to monitor pain as much as possible (JCAHO, 2001), preoperative education.

During the fourth lecture, seminar participants had the opportunity to hear about the surveillance of a patient with epidural analgesia. Thoracic and epidural analgesia were presented at the beginning of the lecture as well as medications used for this purpose. LOCAL ANESTHETICS block: sympathetic nerves (bradycardia, vasodilation and hypotension), sensory nerves (blockage of sensation of touch and temperature), motor nerves (muscular weakness, paresis or paralysis). Opioids bind to opioid receptors: they reduce pain (analgesia) and potentially cause opioid side effects (itching ..... Breathing depression). Supervision of a patient with epidural analgesia includes: Consciousness 1 x 3h, frequency, depth and rhythm of breathing 1 x 3h, blood pressure constantly on the monitor, sensory / motor 1 x per turn, diuresis: usually have SUK, catheter and connection monitoring: injection site, fixation, patches, contact with bacterial filter and pump, control of pump for drug delivery. The complications of epidural analgesia and their treatment are also presented.

In the next lecture, the lecturer presented to the participants the monitoring of a patient with a catheter in the wound. At the beginning of the lecture, the stress response of the organism to surgery as well as the importance and methods of multimodal analgesia are presented. One method of multimodal analgesia is the placement of a catheter in the operating wound. The catheter in the wound provides continuous application of local anesthetic to the area of the surgical wound, is favorable for abdominal, thoracic, orthopedic operations, less invasive procedures: a smaller surgical wound. Features of the catheter in the wound: Length depends on the size of the wound, lateral openings on the part of the catheter that is in the wound, the size of the openings must provide a constant flow LA, marks on the part of the catheter that is outside the wound, and also the epidural catheter. The catheter is placed in the operating room at the end of surgery, under eye control or after suturing the wound with tunneling, injecting fluid through the catheter, ensuring that all holes are in the wound, fixing with sutures and patches. Monitoring of a patient with a catheter in the wound involves: Monitoring in the operating room during catheter delivery, examination of the catheter placement site and surgical wounds with respect to inflammatory processes, catheter patency, catheter discharge, pain relief: YOU, vital signs, monitoring of vital functions for recognition of toxic effects LA: neurotoxicity, cardiotoxicity. Removing the catheter from the wound is a simple and painless procedure. If the catheter is sewn, care must be taken when

removing the seams; being careful not to cut the catheter. If the catheter cannot be removed without the use of force, there is a danger that the catheter is covered by a surgical suture- a surgeon should be called. It is necessary to check that the entire catheter is removed. After removal, bandage the area as you wound it.

The short break allowed the educators and participants to refresh and discuss the presented topics. The sixth lecture was about analgesic mixtures for perioperative analgesia. Analgesic compositions for intravenous postoperative analgesia are prepared in the operating room and in the surgical wards. For continuous intravenous analgesia (perfuser, PCA): pyritramide 45 mg + 0.9% NaCl solution up to 90 ml: 0.5 mg pyritramide / ml. For administration at specified time intervals: at 6h, at 12h, at 18h, at 24h 5-7 mg of pyritramide + 1.24 g of metamizole in 100 ml of 0.9% NaCl: flows for 2 h. Standardized analgesic mixtures for regional analgesia, prepared by the Central Pharmacy UCC Ljubljana, are presented.

In the next lecture, the lecturer presented to the participants how to prevent complications in a surgical patient receiving opioid analgesia. Ways to prevent acute postoperative pain, as well as commonly used analgesics, are presented at the beginning of the lecture. Continuation of the lecture presented PCA pumps and its benefits in postoperative analgesia: constant level of analgesics in the blood without oscillations, when pain arises the patient can add a single predetermined dose of the drug to himself, shorten the time from when the patient feels pain to the moment he receives analgesic in the vein, the pain is easier to manage, the use of analgesics is smaller, and the possibility of side effects and complications is less. The most important psychic moment for the patient: the pain relief does not depend on the MS, its work and time, the patient needs to be explained and taught to operate the pump, the patient regulates the pain intensity within tolerable limits through the pump with additional doses, to be able to realistically evaluate the severity of his pain, the pump is pre-programmed, safe, the patient cannot overdose. Then, intravenous opioid analgesia complications and their treatment were presented. The conclusion of the lecture is that effective pain relief is a challenge; good analgesia implies a satisfied patient, better treatment results, faster recovery, shorter hospitalization time; Pain relief involves eliminating pain and improving quality of life, identifying complications in a timely manner, and taking appropriate action.

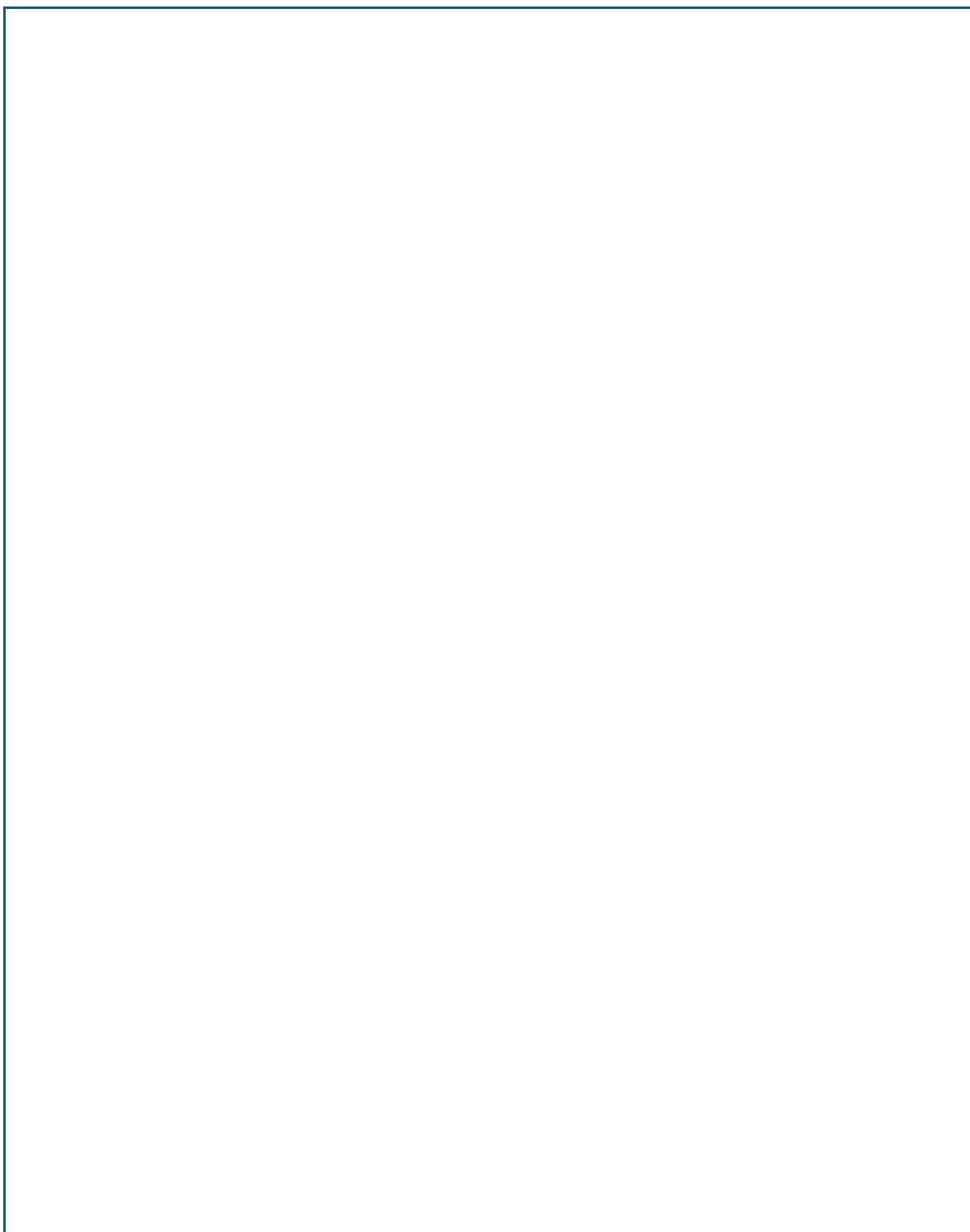
The following presentation was dedicated to the monitoring of patients with peripheral nerve catheters. Performance of peripheral nerve blockade is shown using ultrasound. Peripheral nerve blockages can be performed as: SINGLE SHOT BLOCK - anesthesia for surgery, dose of local anesthetic 20 - 40ml; or as: CONTINUOUS BLOCK - post-operative analgesia per catheter, administration of boluses per catheter only at specified intervals, local anesthetic in continuous infusion, possibility of administration of additional boluses of local anesthetic. Instructions for handling catheters for blockage of peripheral nerves are given, as well as possible complications as well as how to remove the catheter.

This was followed by a lecture on the ethics of treating acute pain. A code of ethics is a set of general rules and principles that guide members of different groups of people in deciding what is right, good and useful. Ethics theories are presented: Deontological Theory (Kant's), Teleological and Utilitarianism, the Virtue Ethic, and the Ethics of Care. Relation to the patient in light of feeling and pain relief can be: verbal (talk, explaining, persuasion, instructions, learning), physical (touch, procedures and interventions), immediate (nurse - patient), indirect (nurse - environment - patient), personal (when based on the personal qualities and value system of the nurse - courtesy, patience, civility, understanding), professional (when they contain all modern professional principles, values and orientations - expertise, dishonesty, charity, correctness), morally ethical (when the emphasis is on prescribed or desirable standards of behavior and action - trust, secrecy, fairness). Pain treatment and research raise many ethical dilemmas. Pain relief (from ancient Greece) must be a must for all healthcare professionals; for both doctors and nurses. Causes of inadequately treated pain are: insufficient recognition of pain as a priority in patient care, inability to establish a proper relationship between patients and physicians, ignorance of prescribing analgesics, fear of addiction or tolerance to analgesics, pain relief as a front line, inability to be fair and responsible. Pain relief is an ethical obligation. Pain education and pain management is the task of all pedagogical organizations that educate healthcare professionals. Legislation preventing access to opioid analgesics for patients in need is unethical. This presentation was followed by a lecture on opiophobia - the dilemmas and thinking of our doctors. The conclusion emphasizes the golden rule



that we treat others the way we would like others to treat us. Translated to the feeling of pain, none of us wants to feel pain, so we must not allow anyone else to suffer pain.

This was followed by workshops in which the course participants were divided into groups in which their educators presented subjective pain assessment and physiological signs of pain, postoperative monitoring of the patient by type of analgesia and handling of PCA pumps. After the workshops, the lecturers presented to the participants some cases with queries for analgesic treatment. After each lecture, participants had questions, mini-discussions were initiated, and participants were encouraged to communicate with HEPMP lecturers in informal settings during the breaks to communicate with Strengthening Capacities for Higher Education of Pain Medicine in the Western Balkan Countries. After the presented topics, a discussion was opened and the lecturers answered the participants with all questions raised regarding acute postoperative pain and its treatment. Participants were also advised to download educational material in pdf format from the HEPMP website. The seminar was completed by completing an evaluation questionnaire and awarding certificates to the participants. An evaluation questionnaire was analyzed and the results are given in the appendix to this document. Interest in the course was extremely high, as was shown by a large number of students - 57. Over 50% of them are highly educated, physicians and nurses graduated by structure. The group of listeners was very heterogeneous and consisted of specialist doctors and specialists, nurses. The participants rated the choice of education topics, the content of the education program, the methods used, the duration and the organization of the education highly rated. 100% of them have estimated that they will use the knowledge acquired during education often or constantly in everyday practice. Participants stated in the evaluation questionnaire that teaching was easy to understand. Each of the lecturers was evaluated individually by the participants, and each received an average grade between 4.89 and 4.93. The participants assessed that the lecturers were prepared for the lectures. Participants rated the overall impression of the seminar as average 4.90 (out of 5).



## Attachments

<b>Agenda (pdf)</b>	Leaflet Acute pain service
<b>Attendance sheet (pdf)</b>	Annex 4- HEPMP-Attendance list Banjaluka

Photos (jpg)	
News form (pdf)	Title
Deliverable (pdf)	Leaflet Acute pain service
Presentations (pdf)	<p><b>01. Vintar Effective pain relief is the key to a successful surgical outcome</b></p> <p><b>02. Neli Vintar The organisation APM and implementation in every day clinical practise</b></p> <p><b>03. Maja Šoštarič How to evaluate acute pain</b></p> <p><b>04. Neli Vintar Supervision the patient with epidural analgesia</b></p> <p><b>05. Maja Šoštarič A patients with analgesia via catheter in the wound should be monitored in postoperative period</b></p> <p><b>06. Neli Vintar Analgesic mixture</b></p> <p><b>07. Maja Šoštarič How to prevent complication in the surgical patient receiving opioid analgesia</b></p> <p><b>08. Neli Vintar Monitoring the patient with peripheral nerve catheter.</b></p> <p><b>09. Maja Šoštarič Ethics and treatment of acute pain</b></p> <p>Workshops:</p> <p>1. Subjective assessment of pain and physiological signs of pain (N. Vintar)</p> <p>2. Postoperative supervision of a surgical patient according to the type of analgesia (M. Šoštarič)</p>
Other personal remarks	
<p>The interest in the lecture was very high. The lecturers gave us their brochures, information sheets and instructions for the patient, as well as protocols in pain therapy.</p> <p>The lecturers left us other instructions in the field of pain medicine.</p>	



## Organisation details

<b>Invitation sent to</b>	Doctors and nurses of surgicals departments and Department of Anaesthesiology of University Clinical Center Banjaluka as well as the other hospital (Prijedor, Gradiska)
<b>Date of event material release</b>	November, 08, 2019.
<b>Date of participants list's finalisation</b>	November, 27, 2019.
<b>Date of agenda finalisation</b>	November, 18, 2019.
<b>Number of participants (according to the participants list)</b>	51
<b>Comments</b>	
<p>The interest in the lecture was very high. The lecturers gave us their brochures, information sheets and instructions for the patient, as well as protocols in pain therapy.</p> <p>The lecturers left us other instructions in the field of pain medicine.</p> <p>During the workshop, participants were able to exchange experiences in the field of pain medicine, as well as to learn about the experiences of the Clinical Center Ljubljana.</p>	

## Problems encountered during the event preparation phase

Please add your comments, if any:

## Strengths and limitations of the event (please include comments received)

<b>Strengths of the event and contributions or activities by participants</b>	The participants of the seminar were able to learn from different methods of postoperative analgesia,
---	---

	experiences of the Clinical Center Ljubljana, complications of analgesia, methods of resolving complications and ethical norms in the treatment of acute pain.
<b>Suggestions for the improvement</b>	
<b>Any further comments</b>	

## Evaluation details

### Results of evaluation of the general organisation of the event

Description
Participants are very satisfied with the choice of topics, prepared and presented topics, preparedness of lecturers, as well as interesting lectures.
Table(s)/Figure(s)

Quality of presentation

Category	Value
Poor	0,00
OK	1,54
Good	0,00

Response	Percentage
Excellent	60,00
Very Good	9,23
Good	0,00
OK	0,00
Poor	0,00



### Results of evaluation of general working communication

Description
Participants in the evaluation questionnaire stated that the teaching was easy to understand. Each of the lecturers was individually evaluated by the participants, and each received an average rating of between 4.78 and 4.9. The participants evaluated that the lecturers were prepared for the lectures.
Table(s)/Figure(s)

### Results of evaluation of overall success of the event

Description
The participants rated the overall impression of the held seminar with an average score of 4.94 (out of 5).
Table(s)/Figure(s)
Figures for all question are separated in excell tables.

Please indicate your suggestions for further event's improvement:

---

---

---

---

---

---

Location, date

Banjaluka, 20.12. 2019. \_\_\_\_\_

\_\_\_\_\_

Signature

