**EVENT REPORT FORM**

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| 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 |

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| Event | Possibilities of radiotherapy in pain treatment |
| Type of event | LLL course |
| Venue | Belgrade |
| Date | October 17, 2019 |
| Organizer | University of Belgrade |
| Reporting date | October 2019 |
| Report author(s) | Kristina Gopcevic |

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

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*This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which ma y be made of the information contained therein.*

# EVENT DESCRIPTION

**with special reference to goals and outcomes**

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| **Number of participants at the event** | 24 |
| **Participants (organisations)** | UB, UK, |
| **Event description: Possibilities of radiotherapy in pain treatment** | |

**Objective of the meeting**

This is the second life-long learning course organized at University of Belgrade the project entitled: Strengthening Capacities for Higher Education of Pain Medicine in Western Balkan Countries (HEPMP).

The main objective of this meeting was to introduce the highest clinical offer regarding radiotherapy that Institute of oncology and radiology has in terms of Pain Therapy. Transcutaneous radiation therapy relieves bone pain in a patient with metastatic disease significantly in 75% -90% of cases, allowing the reduction of pain therapy drugs and their side effects. This significantly improves the quality of life, often dramatically. Because administration of the medication may require at least a few weeks to reach maximum efficacy, meanwhile patients may become addicted to pain medication. Cancer pain therapy uses different radiotherapy regimens (eg. 30Gy in 10 sessions, 20 Gy in 8 sessions, 16Gy in 4 sessions, and 8Gy in 1 session) depending on the patient's status, tumor histopathology and age. There are also urgent conditions in pain therapy such as compression of medulla spinalis, compression of nerve roots, pathological bone fractures in which palliative radiation therapy is urgent. In addition to cancer pain therapy, radiotherapy is also used in the treatment of non-cancer and degenerative pain.

Although non-steroidal anti-inflammatory drugs (NSAIDS) and / or opiates are used further in the course of the disease to control pain, the side effects of these drugs lead to a further decrease in quality of life. Poor assessment of pain levels and pain control options lead to inadequate treatment of pain, which can be a major health problem in our country.

**Description of the meeting**

Globally, during the course, team from Medical Faculty University of Belgrade presented lecturers regarding the clinical activities on pain therapy in Serbia. The lessons concern both pharmacological subjects, invasive and non-invasive procedures addressed to the cancer patient, not oncological inpatients and frail outpatients.

After the Registration, Prof. dr. Vesna Plesinac-Karapandzic, Director of radiation oncology and diagnostic center of the Institute of oncology and radiology of Serbia open the beginning of course announced lectures and explained the role of the HEPMP project.

* The first lecture on radiotherapy modalities in pain management was delivered by prof dr Kristina Gopcevic, entitled “Overview of the HEPMP project goals and project implementation”. Prof Kristina Gopcevic explained in the introductory Erasmus plus EACEA projects the key activity 2 and the role of these projects.
* The university partners that are members of the project and the project objectives are then listed. This project aims are supporting the development of Pain medicine service provision in the country by providing qualified trained staff, then support will be granted to operationalise the recently established an educational program in the form of pain medicine subspecialisation and the possibility of the development of undergraduate education programs.Furthermore, the objectives of the project was establish an academic network and improve professional cooperation through opportunities provided by new technologies (Internet, telemedicine, etc.). Dr Gopcevic described what was done in the first year of the project. Team of project determine the existing differences in methodological approach, as well as the program itself (Reports of aanalysis of PM study program and LLL courses in PCs, Analysis of PM study program and LLL courses in PgCs, Comparative analysis of education offer of PM in the PCs and PgCs, Analysis of labour market needs relevant for HCW in PCs). Also, the project team finished purchasing and installation of equipment. It has been finished training of existing teaching staff from PCs at PgCs and development of HEPMP contents and teaching material ofjoint curricula for Pain Medicine. Importantly, the team of HEPMP developed of learning material and delivered courses for health care workers in Belgrade, Kragujevac, Tuzla and Banja Luka. It has been created the Pain Medicine Textbook, than monograph and script regarding Pain Medicine.
* The next lecturer was Prof. Dejan Nesić who gave a lecture entitled „Physiology of cancer pain”. Prof. Nešić in his lecture pointed out that specialized receptors belonging to the transient receptor potential (TRP) family of ligand-gated ion channels constitute the critical detectors and transducers of pain-causing stimuli. Nociceptive TRP channels are predominantly expressed by distinct subsets of sensory neurons of the peripheral nervous system. Several of these TRP channels are also expressed in neurons of the central nervous system, and in non-neuronal cells that communicate with sensory nerves. Nociceptive TRPs are activated by specific physico-chemical stimuli to provide the excitatory trigger in neurons. In addition, Prof. Nešić said that decades of research has identified a large number of immune and neuromodulators as mediators of nociceptive TRP channel activation during injury, inflammatory and other pathological conditions.
* The next lecturer was Prof. Vladimir Jurisic who gave a lecture entitled Pathophysiology of cancer pain. Prof Jurišić in his lectured pointed out that cancer pain, especially pain caused by metastasis to bone, is a severe type of pain, and unless the cause and consequences can be resolved, the pain will become chronic. As detection and survival among patients with cancer have improved, pain has become an increasing challenge, because traditional therapies are often only partially effective. Until recently, knowledge of cancer pain mechanisms was poor compared with understanding of neuropathic and inflammatory pain states. We now view cancer-induced bone pain as a complex pain state involving components of both inflammatory and neuropathic pain but also exhibiting elements that seem unique to cancer pain. In addition, the pain state is often unpredictable, and the intensity of the pain is highly variable, making it difficult to manage. Prof Jurišić presented the essential pharmacologic and biologic mechanisms involved in the generation and continuance of cancer-induced bone pain. Prof Jurišić pointed out on changes in peripheral signaling in the area of tumor growth, describe spinal cord mechanisms of sensitization, and finally address central processing. Furthermore, prof. Jurisic described for the sensory characteristics of cancer-induced bone pain as a basis for better understanding and treating this condition.
* The next lecture on “Radiotherapy modalities in pain management” was delivered by Prof. Nebojša Ladjević, entitled “Opioids -opportunities and pitfalls”. In the beginning, prof. Ladjević pointed out that opioids are the oldest and most potent drugs for the treatment of severe cancer pain, but they are burdened by detrimental side effects such as respiratory depression, addiction, sedation, nausea, and constipation. Their clinical application is undisputed in acute (e.g. perioperative) and cancer pain, but their long-term use in chronic pain has met increasing scrutiny and has contributed to the current 'opioid crisis.' Moreover, prof. Ladjević described the range of novel opioids with reduced side effects. In his lecture he explained basic mechanisms underlying pain, opioid analgesia and other opioid actions. To illustrate the clinical situation and medical needs, plasticity of opioid receptors, intracellular signaling pathways, endogenous and exogenous opioid receptor ligands, central and peripheral sites of analgesic and side effects are discussed.
* The next lecture on “Radiotherapy modalities in pain management” was delivered by dr. Marijana Milović-Kovačević( and dr Gopcevic), entitled “Non-opioid pharmacological management of cancer pain”. Dr. Milović-Kovačević explained in her lecture that aspirin, acetaminophen and the nonsteroidal anti-inflammatory drugs (NSAIDs); given as single analgesic treatment, constitute the first step of the analgesic ladder proposed by the WHO for cancer pain therapy. Furthermore, she said that they are commonly defined as 'peripheral' analgesics, although there is increasing evidence that they have a central or not exclusively prostaglandin-mediated action. Dr Milovic pointed out that NSAIDs can only be used, however, for a limited time because of an increasing incidence of side effects and because their analgesia is characterized by a ceiling dose, beyond which additional increments fail to give greater pain relief. The ceiling dose limits the utility of the NSAIDs used alone for mild to moderate pain, but provide additive analgesia when combined with "weak' and strong opioids in the treatment of more severe pain.
* The next lecture on “Radiotherapy modalities in pain management” was delivered by Ass Aleksandar Tomasevic, entitled “Effects and side–effects of radiation therapy in cancer treatment. Dr Tomasevic pointed out that for patients with painful bone metastases radiotherapy is an effective treatment, with a pain response rate of more than 60%. The golden standard is to treat these patients with a single fraction of 8 Gray (Gy), aiming at pain relief with minimal toxicity. Also, dr Tomasevic said that side effects from this treatment are mild and depend on factors like dose, field size, and the anatomic area being irradiated. In several studies in patients treated with radiotherapy for painful bone metastases, toxicity rates between 35 and 46% are reported, consisting mainly of nausea and/or vomiting. Furthermore, dr Tomasevic showed in his lecture recent study of investigated patients treated for painful bone metastases and described that over 50% of patients had complaints of nausea and/or vomiting, despite receiving prophylactic anti-emetic treatment.
* The next lecture on “Radiotherapy modalities in pain management” was delivered by Prof Vesna Plešinac Karapandzic, entitled “Radiotherapy for painful bone metastases”. Prof. Plesinac pointed out bone metastases are the most common cause of cancer-related pain. Radiotherapy is a safe and effective therapy and is well established for such a situation. A fractionation regimen with a short overall treatment time would be preferred if it was as effective as longer courses. Prof Plesinac described that randomized clinical trials and meta-analyses showed that single-fraction radiotherapy with 1 x 8 Gy is as effective for pain relief as multi-fraction regimens. Particularly, it has been shown that multi-fraction radiotherapy results in significantly better remineralization of the osteolytic bone than single-fraction radiotherapy.
* The next lecture on “Radiotherapy modalities in pain management” was delivered by Ass Prof Suzana Stojanovic-Rundic, entitled “Orthovoltage therapy in pain treatment”.Given the diversity of benign diseases that are successfully treated with radiotherapy, it is likely that the therapeutic effect is the result of the interaction of several of these mechanisms of radiation effect on different types of target cells. Ass Prof Stojanovic pointed out that for various benign diseases radiation dose can vary significantly. Different countries use different guidelines regarding RT of benign disease. In order to achieve the optimal therapeutic effect, it is necessary to apply the prescribed radiation dose to the target volume over an appropriate period of time. Ass prof Stojanovic concluded in her lecture that when radiotherapy is successfully applied and the symptoms of the disease are significantly milder or completely gone, the quality of life outweighs the minimal potential risk associated with the use of ionizing radiation.
* The next lecture on “Radiotherapy modalities in pain management” was delivered by prof dr Kristina Gopcevic, entitled “Difficulties with service development in Western Balkan countries-how can they be overcome?” Dr Kristina Gopcevic described situations in Serbia regarding cancer pain control, indications on the use of opiates and the use of various devices to control oncologic pain. Dr. Gopcevic presented the organizational difficulties (number of patients assisted), the detail of palliative care requests within the Institute of oncology and radiology of Serbia and the lack of a specialized training course in pain therapy and palliative care. She described a model of Hubs and spoke of palliative care that is implemented in Italy. Finally, we discussed the university courses in the organization of the masters and lessons on pain therapy in the schools of specialization in anesthesia.

Other specific topics have been discussed in details during the meeting organized in Florence. Several problems have been taken into considerations, from the recognition of the frailty patients requiring chronic pain management to the patients’ follow-up. A particular attention has been paid to the multidisciplinary approach for the evaluation and care of these patients and to the importance of a basic academic teaching to make all the different healthcare professionals involved in these pathways aware about problems and possible solutions. The advantages and the drawbacks of this model have been analyzed. In particular, a rapid and multidisciplinary approach has been recognized as the main advantage of this integrated model. On the other hand, the limited compliance and/ or resources of general practitioners are recognized as critical points of this process. The integration from continuity of care, palliative care and pain chronic management of these frail patients has been recognized as a main factor for the good outcome. A tight connection between this program and the previous Erasmus plus project TEMPUS has been recognized.

The next lecture on “Radiotherapy modalities in pain management” was delivered by dr sc med Jelena Santric, entitled “Legal implication of pain”. Dr Santric described situations in Serbia regarding legal implication cancer pain. Accurate and sensitive communication of health care information is essential to effective patient management in the pain clinic, operating room, and other health care settings. However, information relating to the health care status of a patient is sensitive and may be embarrassing or damaging if it falls into the wrong hands. Ethical cannons of medicine and statutory provisions have emphasized the obligation of the physician to safeguard patient confidences. However, threats to the confidentiality of medical information abound and are even more significant in our age of instantaneous communication characterized by the growing use of email, facsimile, and the Internet. Dr Santric outlined legal issues relating to communication in three key areas of health care law: confidentiality/breach of privacy, informed consent, and defamation. The major principles of the law in cancer pain area are discussed and case studies are used to illustrate key points and give simple preventive strategies to help steer the delicate balance between sharing important healthcare information and protecting sensitive patient information.

The meeting was closed with the final discussions and planning of the future activities. Prof. Dr. Predrag Stevanovic and Prof Kristina Gopcevic thanked everyone for participating and helping this kick-off meeting to be successfully achieving all the listed objectives

# Attachments

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| --- | --- |
| **Agenda (pdf)** | Annex A, IORS meeting agenda |
| **Attendance sheet (pdf)** | Annex B, IORS meeting attendance sheets |
| **Photos (jpg)** | Annex C, photos |
| **Deliverable (pdf)** | Annex D, event evaluation calculator  Annex E IORS meeting evaluation summary |
| **Presentations (pdf)** | Presentations |
| **Other personal remarks** | |

**Organisation details**

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| --- | --- |
| **Invitation sent to** | Al Coordinators |
| **Date of event material release** | 17.10.2019 |
| **Date of participants list's finalisation** | 17.10.2019 |
| **Date of agenda finalization** | 17.10.2019 |
| **Number of participants (according to the participants list)** |  |
| **Comments** | |
| Results for organization details of this meeting have been concluded from data reported on the “Quantitative / Qualitative Monitoring Questionnaire“. The meeting was attended by 65 participants (doctors, nurses and technicians) engaged in the treatment of patients with a cancer pain. During the meeting they exchanged knowledge and experiences gained during the treatment of patients with a cancer pain or problems they have in everyday practice.  Most of attendees were mostly satisfied with the coordination of the project and with the overall animation of the partnership. All the attendees were satisfied with the communication of the information between the partners.  Up to 55 of the attendees confirmed that the project allowed the partner to share and enrich their experiences. Furthermore, the exchange of knowledge and new information convinced the partnership to create opportunities for new collaborations in future. | |

## Problems encountered during the event preparation phase

Please add your comments, if any:

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

|  |  |
| --- | --- |
| **Strengths of the event and contributions**  **or activities by participants** |  |
| **Suggestions for the improvement** |  |
| **Any further comments** |  |

# Evaluation details

## Results of evaluation of the general organization of the event

**Description**

During the course “Radiotherapy modalities in pain management” the ''Event Evaluation List'' was delivered to all the attendees. Among all the forms delivered, 65 returned back. These were collected, scanned to make them available on the website, and the original forms stored at the Medical Faculty in University of Belgrade.

The evaluations reported in these forms have been analyzed, in order to quantify the Attendees' perspective on the general organization of this specific event.

Among attendees, two attendees (2, 3, and 07%) have described an acceptable quality (Good) in at least one item of the form referring to the general organization. Most of the attendees (63, 96.92%) have described a high level of quality (very good-excellent) in all the items of the form referring to the general organization of the “Radiotherapy modalities in pain management” meeting.

Frequencies of answers for each specific items of the ''general organization'' section.

**Table(s)/Figure(s)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Po**  **or** | **O**  **K** | **Goo**  **d** | **Very**  **Good** | **Excell**  **ent** |
| **The general organisation of the**  **meeting** |  |  |  |  |  |
| Logistic preparation and organization of  meeting | 0 | 0 | 2 | 10 | 53 |
| Content of the Agenda | 0 | 0 | 0 | 8 | 57 |
| Arrangements of the meeting (venue,  equipment, etc.) | 0 | 0 | 3 | 11 | 51 |

## Results of evaluation of general working communication

**Description**

During the course “Radiotherapy modalities in pain management” the ''Event Evaluation List'' was delivered to all the attendees. Among all the forms delivered, 65 returned back. These were collected, scanned to make them available on the website, and the original forms stored at the Medical Faculty in University of Belgrade.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Poor** | **OK** | **Goo d** | **Very Goo**  **d** | **Exce llent** |
| **General working communication** |  |  |  |  |  |
| Communication before the meeting | 0 | 1 | 0 | 5 | 59 |
| Duration and timetable of the meeting | 0 | 0 | 2 | 5 | 58 |
| Quality of materials provided during the  meeting | 0 | 0 | 0 | 5 | 60 |
| Quality of presentations | 0 | 0 | 0 | 8 | 57 |
| Communication between the coordinator of the project and the other  partners | 0 | 0 | 0 | 5 | 60 |
| Engagement of the participants in the  activities and discussions | 0 | 0 | 1 | 4 | 60 |
| Objectives in the agenda regarding the  HEPMP project are reached | 0 | o | 1 | 3 | 61 |

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| Among attendees, only 1 (1.53%) have described a poor quality in at least one item of the form referring to the general working communication of the meeting. Four attendees (3.07%) have described an acceptable quality (OK or Good) in at least one item of the form referring to the general working communication. Most of the attendees (59, 90.76%) have described a high level of quality (very good-excellent) in all the items of the form referring to the general working communication of the “Radiotherapy modalities in pain management” meeting.  Unfortunately, no additional comments were available that might allow the meeting coordinator to better understand the reason for a poor or only acceptable answers. |
| **Table(s)/Figure(s)** |
| Frequencies of answers for each specific items of the ''general working organization'' section |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Po**  **or** | **O**  **K** | **Goo**  **d** | **VeryGo**  **od** | **Excell**  **ent** |
| **Overall success of the meeting** |  |  |  |  |  |
| Mode of reaching the decisions at the meeting | 0 | 0 | 1 | 4 | 60 |

**Results of evaluation of overall success of the event**

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| **Description** |
| During the course “Radiotherapy modalities in pain management” the ''Event Evaluation List'' was delivered to all the attendees. Among all the forms delivered, 65 returned back. These were collected, scanned to make them available on the website, and the original forms stored at the Medical Faculty in University of Belgrade.  Among attendees, only 1 (1.53%) have described an acceptable quality (OK or Good) in at least one item of the form referring to the overall success of the event. Most of the attendees (64, 98.46%) have described a high level of satisfaction (very good-excellent) in all the items of the form referring to the overall success of the Florence meeting. |
| **Table(s)/Figure(s)** |
|  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Opportunities to express your opinion and  influence decisions | 0 | 0 | 2 | 5 | 58 |  |
|  | Achievement of the meeting and project goals | 0 | 0 | 0 | 7 | 58 |  |
|  | Discussion of tasks for the upcoming activities and  meetings | 0 | 0 | 0 | 4 | 61 |  |
|  | Assignment of follow-up tasks | 0 | 0 | 0 | 5 | 60 |  |
| Frequencies of answers for each specific items of the ''overall success of the meeting'' section | | | | | | | |

Please indicate your suggestions for further event’s improvement:

Location, date Signature

Prof Kristina Gopcevic

Belgrade 18.11.2019.