Co-funded by the
Erasmus+ Programme
of the European Union
HEPMP
HIGHER EDUCATION PAIN MEDICINE PROJECT

Difficulties with service development in Western Balkan countries-how can they be overcome?

Prof Predrag Stevanovic, NS dr Sandra Radenkovic

Health care system and needs

Serbia has 7.5 million inhabitants.
Cancer is the second most frequent cause of death in Serbia, accounting for 19.7% of the total (2006).

Cancers account for the highest share of diseases requiring Pain medicine care. The health care system is mainly organised in three functional levels.

Primary care is delivered through a network of 158 primary health care centre (PHCC).
The hospital network includes 102 inpatient institutions, 45 of which are general hospitals that serve as first referral institutions and 24 regional hospitals that serve as secondary referral centres.

Tertiary care is provided at a number of specialised institutes and 8 clinical and clinical-hospital centres.

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

CANCER PAIN

Caused directly by the tumor (65-70%)

Antiblastic therapy (25-30%)

Not related to the tumor (0-10%)

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

WORLD POPULATION
10% CHRONIC PAIN
1% PHYSICAL INABILITY

Timely Data Resources, 1997; File 465: Incidence and Prevalence

LUMBAR PAIN

- **The most common type of pain (Bell, 1997)**
- **The second most common reason for visits to the doctor (Lemrow, 1990)**
- **US costs from 1980 to 1990 were $ 11 billion (U.S. Depart. 1993)**

Co-funded by the Erasmus+ Programme of the European Union
HEPMP
HIGHER EDUCATION PAIN MEDICINE PROJECT

- The World Health Organization believes that at least 4 million people suffer from cancer disease pain
- Approximately 70% of patients with advanced cancer have pain due to the disease
- Approximately 80% of pain patients can be adequately treated according to the guidelines of O.M.S.

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

- A further 15-18% of cases the pain can be controlled by the administration of analgesics by alternative pathways or the use of nuromudaltion techniques
-
- There remains 2% of patients in whom the pain will not be completely tretated

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

MULTIDIMENSIONAL pain conception

- Pain intensity is not always related to the amount of damaged tissue.

Psychological factors

- **Affective** (anxiety, fear, anger, depression)
- **Cognitive** (relating to personality, beliefs, imagination, attention)
- **Behavioral** (reflex behavior of pain, interaction with the family)

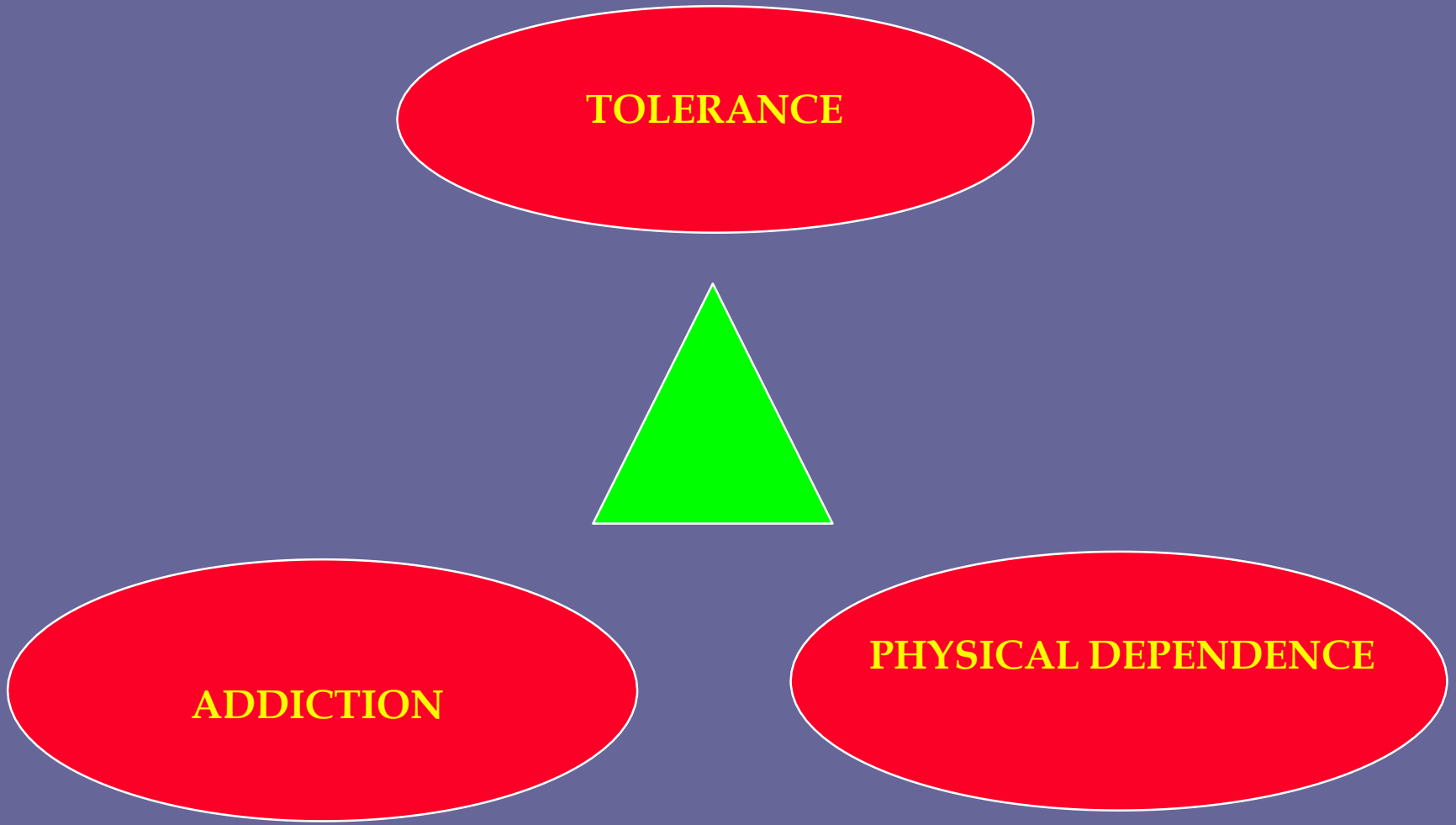
Do not consider these aspects endure to incorrect diagnosis and treatment.

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

THERAPY

- Drugs (anti-inflammatories, analgesics, opioids, muscle relaxants, adjuvants)
- Physics (eg TENS, US, magnet th, massage, etc.)
- Infiltration (trigger points, intra-articular, epidural)
- Surgical (osteosynthesis, removal of the cause)
- Radiotherapy
- Chemotherapy
- Neuromodulation
- Psicological support

Opioids Therapy



Co-funded by the Erasmus+ Programme of the European Union
HEPMP
HIGHER EDUCATION PAIN MEDICINE PROJECT

Co-funded by the
Erasmus+ Programme
of the European Union
HEPMP
HIGHER EDUCATION PAIN MEDICINE PROJECT

We need an organization of integrated multidisciplinary structures that can deal with such a complex problem as chronic pain

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

Organization of a pain therapy service

- **The principles on which the activity of a center that deals with chronic pain is based are the following:**

- Easy access to the facility (reservation, waiting time)
- Multidisciplinary approach (anesthesiologist, psychologist, rheumatologist, neurologist, radiologist)
- Integrated multidimensional therapeutic approach
- Opportunity of day hospitalization and possibly also for several days
- Integration with Palliative Care services

Pain therapy network in Italy

The Local Pain Therapy Network is a functional and integrated aggregation of pain treatment activities provided by family doctors (AFT), in hospital, in outpatient centers (spoke) and hospital centers (hubs).

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

Tab. 1 - Centri Spoke

NOME STRUTTURA	QUALIFICA DELLA STRUTTURA	ASL COMPETENTE	INDIRIZZO	CAP	COMUNE
Unità di Cure Palliative e Terapia Antalgica	UO Anestesia e rianimazione e terapia antalgica	ASL 1	via Prado	54100	Massa
Unità di Cure Palliative e Terapia Antalgica	UO Anestesia e rianimazione e terapia antalgica		piazza Sacco e Vanzetti	54033	Carrara
Ambulatorio di terapia antalgica – Pistoia	UO Anestesia Rianimazione e Terapia del Dolore	ASL 3	viale Matteotti	51100	Pistoia
Ambulatorio di terapia antalgica – Pistoia	UO Anestesia Rianimazione e Terapia del Dolore		Ospedale San Jacopo di Pistoia	51100	Pistoia
Ambulatorio di terapia del dolore - Pescia	UO Anestesia Rianimazione e Terapia del Dolore		via Cesare Battisti 2	51017	Pescia
Sezione Terapia del Dolore	UO Anestesia e Rianimazione	ASL 4	piazza Ospedale 5	59100	Prato
Terapia Antalgica - Pontedera	UO Anestesia e Rianimazione	ASL 5	via Roma,150	56025	Pontedera
Ambulatorio di terapia del dolore e interventistica	UO Anestesia e Rianimazione	ASL 6	C/O Ospedali Riuniti – viale Alfieri 37	57100	Livorno
Ambulatorio di terapia del dolore – Poggibonsi	Dipartimento Terapie intensive	ASL 7	Loc. di Campostaggia	53036	Poggibonsi
Ambulatorio di terapia del dolore – Montepulciano	Dipartimento Terapie intensive		via Provinciale 5 Loc Gracciano	53045	Montepulciano
Ambulatorio ospedaliero di terapia del dolore – Montevarchi	UO Anestesia e Rianimazione	ASL 8	piazza del Volontariato 2	52025	Montevarchi
Ambulatorio di terapia del dolore – Grosseto	UO Anestesia e Rianimazione	ASL 9	via Senese 161	58100	Grosseto
Ambulatorio di terapia del dolore – Orbetello	UO Anestesia e Rianimazione		Loc. La Madonnella	58015	Orbetello
Ambulatorio di terapia del dolore – Massa M.ma	UO Anestesia e Rianimazione		V.le Risorgimento	58024	Massa M.ma
S.O.S. Centro Multidisciplinare di Terapia del Dolore	UOS	ASL 10	Viale Michelangelo 41	50125	Firenze
Ambulatorio di Terapia Antalgica	UOS	ASL 11	c/o ospedale san giuseppe – Viale Boccaccio	50053	Empoli
Ambulatorio di terapia del dolore	UOC Anestesia e Rianimazione	ASL 12	Via Aurelia 335	55043	Camaiore

Tab. 2 – Centri Hub

NOME STRUTTURA	QUALIFICA DELLA STRUTTURA	AZIENDA SANITARIA COMPETENTE	INDIRIZZO	CAP	COMUNE
SOD Cure palliative e Terapia del dolore	SOD	AOU Careggi	viale Pieraccini 85	50139	Firenze
Ambulatorio di Terapia Antalgica	UOS	AOUC	Largo Piero Palagi 1	50134	Firenze
Servizio di terapia del dolore e cure palliative pediatriche	Struttura semplice	AOU Meyer	viale Pieraccini 24	50139	Firenze
UO Terapia del Dolore	UO Terapia del Dolore	AOU Pisana	via Roma 67 Edificio 1 ingresso B	56126	Pisa
UOS Terapia Antalgica	UOC Anestesia	AOU Senese	viale Bracci	53100	Siena
Centro del dolore reumatologico	UOC Reumatologia	AOU Senese	Viale Bracci	53100	Siena

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

AIM OF PAIN THERAPY NETWORK

- Acute pain control (post-operative, post-traumathic, delivery)
- Treatment of chronic pain of neoplastic and non-neoplastic origin
- The functional recovery of the patient
- The improvement of quality of life
- Pain control at the end of life

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

Careggi Pain Clinic

- 2 anestesiologist
- 1 oncologist
- 1 consultant for phytotherapy *(dedicated project)*
- 1 consultant for acupunture *(project for supportive care in oncology)*

- 15000 outpatient visits a year
- 50 neuromodulation devices implant (*hospitalized patients*)
- 2000 inpatient visits
- 1000 psychological visits
- Integration with territorial Palliative Care Service
- Integration with Spoke centers of our area

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

Pathways

- End of life in hospital *(group of experts in palliative care supporting end-of-life decisions)*
- *Communication*
- *Education*
- *Psycological support*
- *Social support*
- *Religious support*

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

Pathways

Discharge from the hospital for patients needing palliative care

–Hospice

–House

Continuity of care

Co-funded by the
Erasmus+ Programme
of the European Union
HEPMP
HIGHER EDUCATION PAIN MEDICINE PROJECT

Pathways

- Selection of patients for neuromodulation techniques

- Early palliative care (next project)

Quality control

– use of quality indicators and methods for verifying the quality and quantity of services, as well as their cost in order to guarantee the quality of assistance to the patients

– Budget

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

Quality Indicators

- They must take into account the patient (citizen-user)
- Indicators related to resources and organization
- Indicators related to the behavior of operators, health structures, satisfaction

Institutional accreditation

Co-funded by the
Erasmus+ Programme
of the European Union
HEPMP
HIGHER EDUCATION PAIN MEDICINE PROJECT

Accreditation of the network

Requirements:

1.Regional organizational structure of coordination of the Pain Therapy Network
2.Facilities of the Pain Therapy Network
3.Protection of the citizen to access pain therapy
4.Continuity of care
5.Operation of multi-professional dedicated teams
6.Continuous training for operators
7.Quality of life measurement
8.Active and global care and safeguard of the dignity and autonomy of the assisted person
9.Information programs for the population on pain therapy
10.Performance evaluation programs and regional information system
11.Tariff system and interregional compensation

Co-funded by the
Erasmus+ Programme
of the European Union
HEPMP
HIGHER EDUCATION PAIN MEDICINE PROJECT

The Project "Hospital and Territory without Pain

Training, information and awareness-raising project, whose purpose is to increase the attention of health professionals towards the "pain problem» consequently, improve the care process specifically aimed at any origin pain control.

Co-funded by the Erasmus+ Programme of the European Union
HEPMP
HIGHER EDUCATION PAIN MEDICINE PROJECT

MINIMUM REQUIREMENTS

- Identification of a company manager for the Project and Constitution of the Painless Hospital Committee (COSD). Appoint in each department of at least one responsible medical and nursing referent for pain therapy ……
- Analysis and evaluation of current knowledge on the pain of the staff
- Identification and preparation of pain detection tools…..
- The measurement of pain is the responsibility of the nurse, who will have to receive the appropriate training to perform this task
- Programming of training activities according to the

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

The training must be permanent and have a multidisciplinary character …

Elaboration in the various hospital areas of pharmacological and non-pharmacological treatment protocols ……

- Analgesic drugs must be available in all departments… special attention to morphine adequate diffusion ….to complementary medicine

…

- Preparation of adequate information tools ……

Co-funded by the
Erasmus+ Programme
of the European Union
HEPMP
HIGHER EDUCATION PAIN MEDICINE PROJECT

- Periodic evaluation of the project results:
  - prevalence of pain in the hospital
  - pain measurement in the medical record
  - degree of patient satisfaction
  - level of preparation of health workers
  - consumption of analgesic drugs and dissemination of non-pharmacological techniques

Co-funded by the Erasmus+ Programme of the European Union
HEPMP
HIGHER EDUCATION PAIN MEDICINE PROJECT

COMPLEMENTARY THERAPIES

Pain is one of the most common reasons for which patients turn to Complementary and Alternative Medicine and, in particular, to acupuncture, herbal medicine, homeopathy and manual therapies, which are the most widespread complementary medicines (National Health Interview Survey 2007).

Co-funded by the
Erasmus+ Programme
of the European Union
HEPMP
HIGHER EDUCATION PAIN MEDICINE PROJECT

ACUPUNTURE

- the guidelines of the American College of Physicians and the American Pain Society (Chou 2007) recommend acupuncture for subacute or chronic low back pain, stating that it may be an additional therapeutic option when pain does not respond to self- care

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

PHYTOTHERAPY

- Systematic review of the Cochrane Collaboration, (2014)

- includes 14 randomized controlled trials (2,050 adult participants with acute, subacute, chronic and non-specific back pain)

- Conclusion: for short-term symptomatic therapy of back pain, the phytotherapic of first choice is Harpagophytum procumbens in dry extract, enough to supply 50-110 mg / day of arpagoside. Capsicum frutescens cream probably presents more favorable results than placebo in people with chronic back pain

Co-funded by the
Erasmus+ Programme
of the European Union
HEPMP
HIGHER EDUCATION PAIN MEDICINE PROJECT

Early Palliative Care

Co-funded by the
Erasmus+ Programme
of the European Union
HEPMP
HIGHER EDUCATION PAIN MEDICINE PROJECT

Early palliative care

- The simultaneous care model (taking charge of the oncological patient)
- The simultaneous care model is the most accredited one today to guarantee the best therapeutic result both in terms of life expectancy and quality of life.
- In particular, as far as pain is concerned, it is desirable that this symptom be detected as vital parameter and inserted in the patient's graphic with periodic monitoring.

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

Sensory and affective dimensions of advanced cancer pain. Psychooncology. 2002 Jan-Feb;11(1):23-34.

The present study was designed to explore the extent to which advanced cancer pain is explicable in terms of both physical pain intensity and affect. Most notably, it expanded on previous findings by more clearly elucidating the relationship between several discrete emotional states and the total experience of cancer pain.

One hundred and eleven patients with cancer pain attending a Pain and Symptom Control Clinic were studied.

- Visual Analogue Scales (VASs) were used to quantify overall pain intensity and the accompanying affect. Then, correlations were calculated to evaluate the relationships both between and within these two variables. Overall, the participants rated both the pain intensity and the negative affect associated with that pain as high.

Of the examined affective components of pain, frustration and exhaustion were found to be the most significant. In addition, some gender differences were identified in terms of frustration, anger, fear, exhaustion, helplessness, and hopelessness.

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

THE CRITICAL PASSAGE from **"CURE" to "CARE"**

Patient crisis

- Need to balance the existential crisis of the patient and his family
- The existential crisis makes them more sensitive to offers of alternative or overly optimistic treatments and therapies
- More realistic therapeutic attitudes can therefore be ignored or rejected

Co-funded by the Erasmus+ Programme of the European Union
HEPMP HIGHER EDUCATION PAIN MEDICINE PROJECT

Early palliative care for patients with advanced cancer: a cluster-randomised controlled trial

Lancet. 2014 May 17;383(9930):1721-30

BACKGROUND: Patients with advanced cancer have reduced quality of life, which tends to worsen towards the end of life. We assessed the effect of early palliative care in patients with advanced cancer on several aspects of quality of life

INTERPRETATION: Although the difference in quality of life was non-significant at the primary endpoint, this trial shows promising findings that support early palliative care for patients with advanced cancer.

THE END