



THE EVOLUTION AND UNDERSTANDING OF PAIN

(ONTOLOGICAL AND PHENOMENOLOGICAL FACE OF PAIN)

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Pain – terrifying lord of life / 22. 10. 2018.

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Why are we even talking about pain ?



Scope of the Problem

Data from European pain studies

Survey of chronic pain in Europe: Prevalence, impact on daily life, and treatment
Harald Breivik a,*,1, Beverly Collett b, Vittorio Ventafridda c, Rob Cohen d,
Derek Gallacher d

European Journal of Pain 10 (2006) 287–333

SURVEY ON CHRONIC PAIN 2017
DIAGNOSIS, TREATMENT AND IMPACT OF PAIN
PAIN ALLIANCE EUROPE
JUNE 2017

Fragrant results indicate the devastating impact of chronic pain



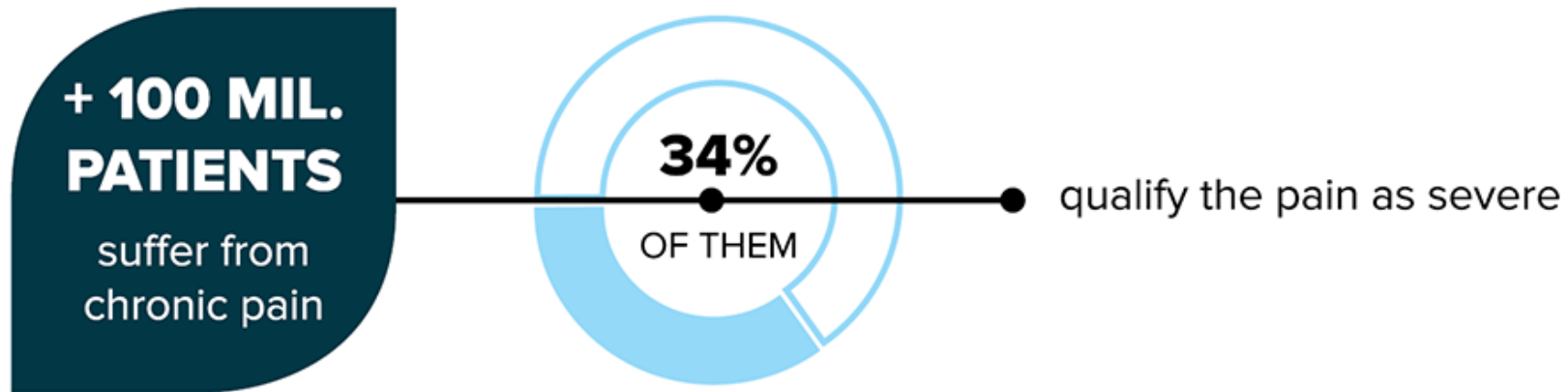
It affects almost **1 in 5 adults** across Europe = **20%**

The prevalence is highest in Norway, Poland, the Netherlands and Italy (> 1 to 4)

Prevalence is the smallest in Spain, but still more than 1 in ten (11%)

One-third of all European families are affected by chronic pain

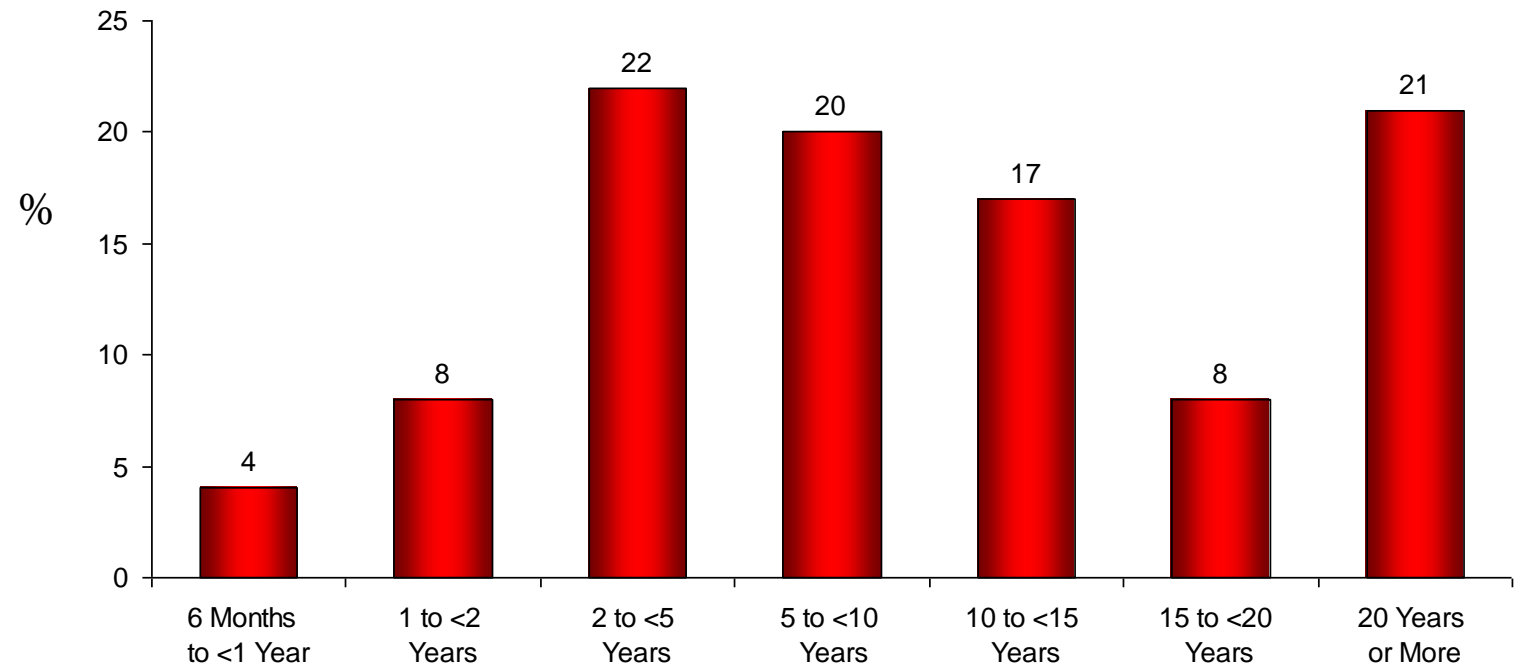
Pain - a widespread problem



The total cost of the consequences of chronic pain is estimated to be as high as **€300 billion**

Patients are forced to live with pain

- **On average** they live with chronic pain for about **7** years
- **A fifth** suffer from pain for more than **20** years



Source: SQ6. For how long have you suffered from pain due to your illness or medical condition?

Pain can ruin (devastate) life!

- HB has an undeniable influence on everyday life
- Eg: lifting, effort, sleep and work
- **One-fourth (26%)** think that their pain has an impact on work (employment)
- **15** working days a year is lost on pain

1 of 5 registers

- Job loss (**19%**)
- Or that he was diagnosed with depression as a result of pain (**21%**)



- **Over 40%** of patients with HB report a sense of impotence, inability to think or function normally.
- **One in six** says that "**the pain is so hard to want to die**".



Cancer pain

How much is it represented?

Report EC:

9 million new patients every year

Pain is present at the onset of the disease -
30-40% of patients

at the end of life -
60-80% of patients

Regardless of the treatment, these patients complain of:

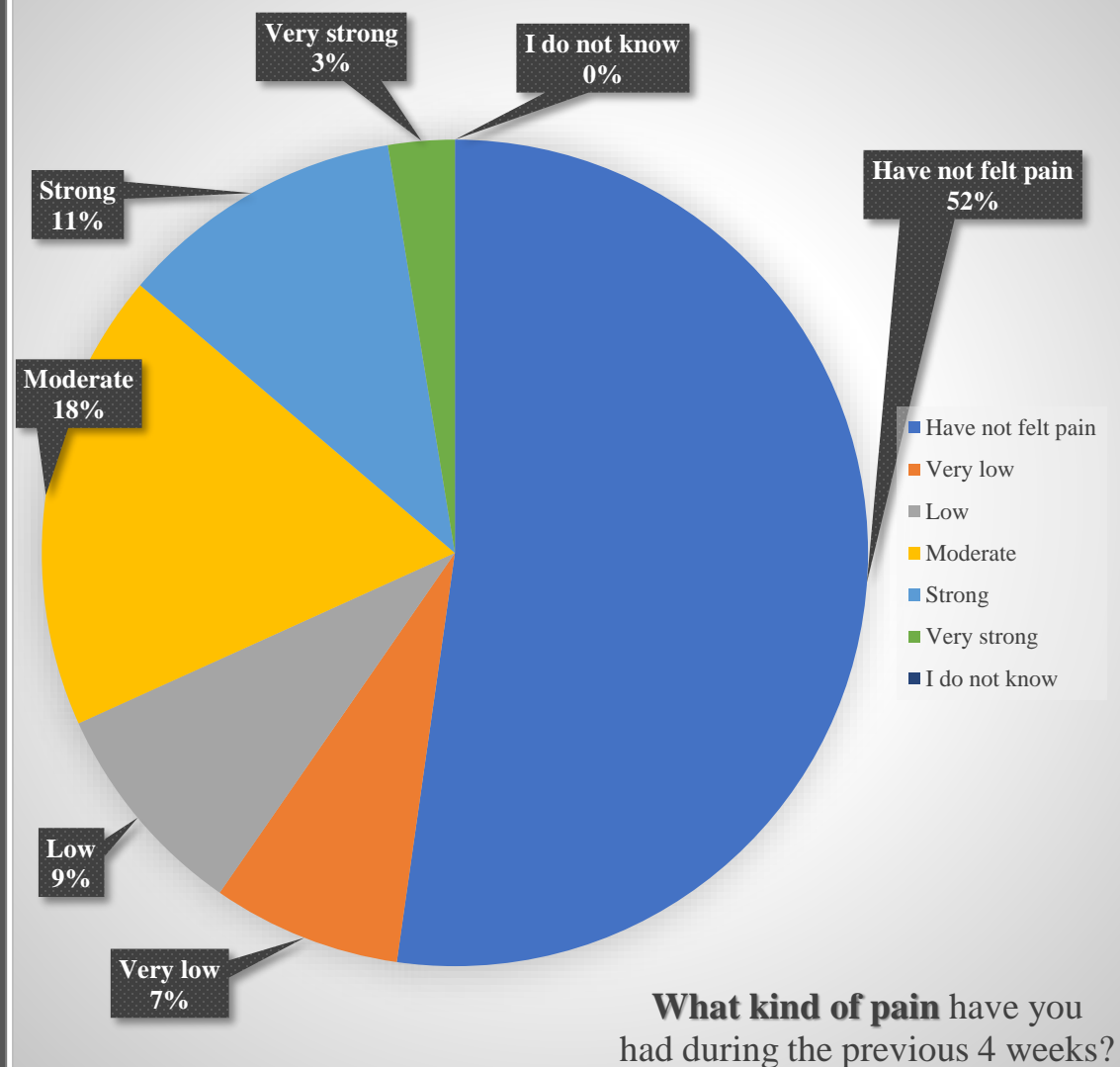
Moderate to severe pain: **40-50%**

Very strong pain: **25-30%**

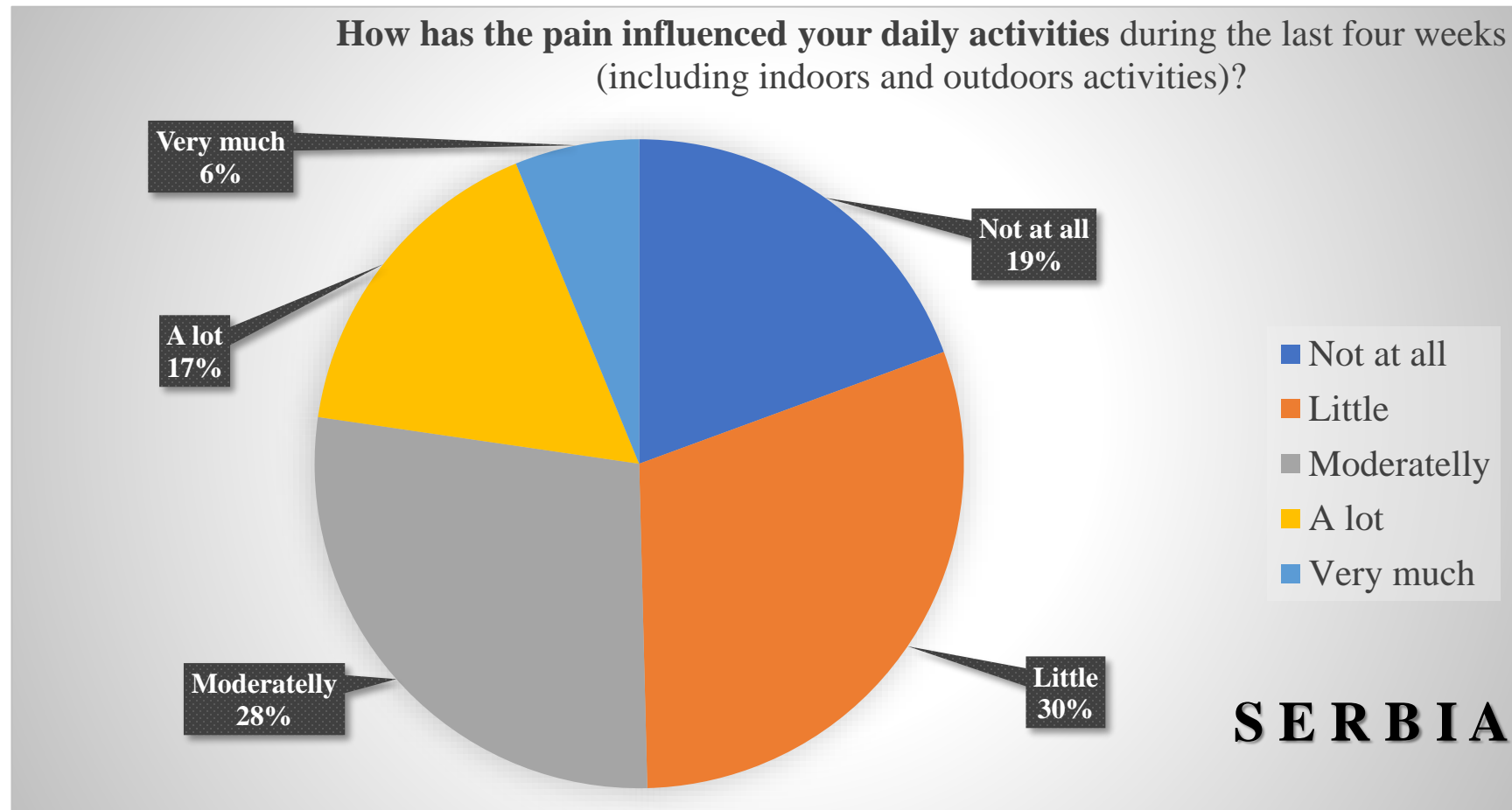


An investigation of pain
intensity and incidence,
pain influence of
everyday activities and
painkillers consumption
in Serbian population in
2013.

SERBIA



An investigation of pain intensity and incidence, pain influence of everyday activities and pain killers consumption in Serbian population in 2013.



Co-morbidity of Chronic Pain & Mental Illness

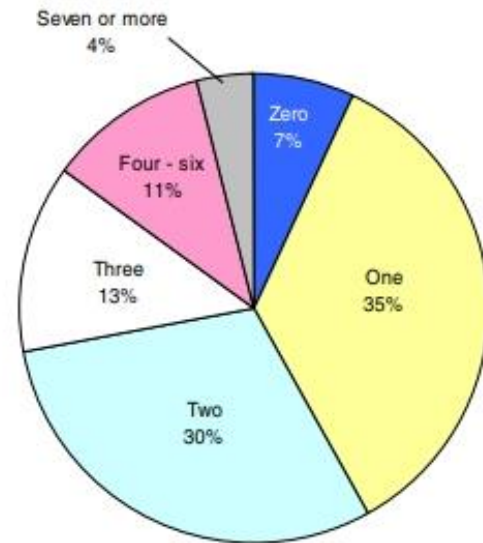
- **15.4%** Psychiatric Illness base rate.
- **51-58%** Rate of Psychiatric Illnesses among patients with CP.
 - **4X** the prevalence of general population.
- Over **80%** of PTSD patients have co-morbid CP.

What about treatment?

- **Two-thirds** of those with a pain are always "**ready to try new treatment**"
- Without treatment : **26%**
- **13%** patients ≥ 85 receive treatment
- **38%** patients in the group of 65-74 god

Different clinicians meet with pain, but rarely pain specialists

How many doctors respondents report seeing
(n= 4780)



Reasons why respondents see more than one doctor
(based on respondents seeing more than one doctor)
(n= 2696)

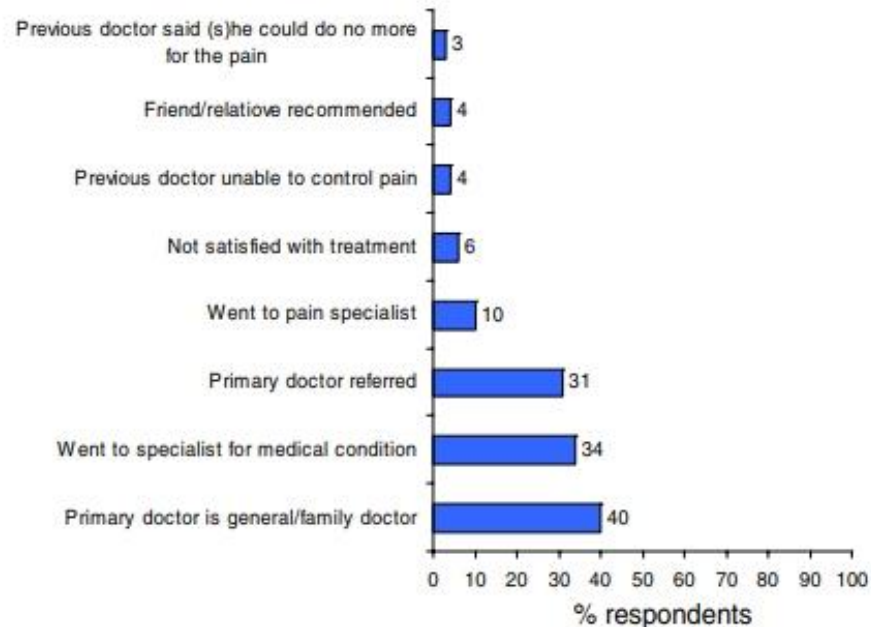


Fig. 11. The number of different doctors the chronic pain patients see and why they see more than one doctor. Answers to structured interview questions: “How many different doctors (including your current doctor) have treated you for your pain?” and “Please tell me your reasons for seeing more than one doctor for pain treatment.”

Only **23%** of patients face a "pain specialist,, in developed countries

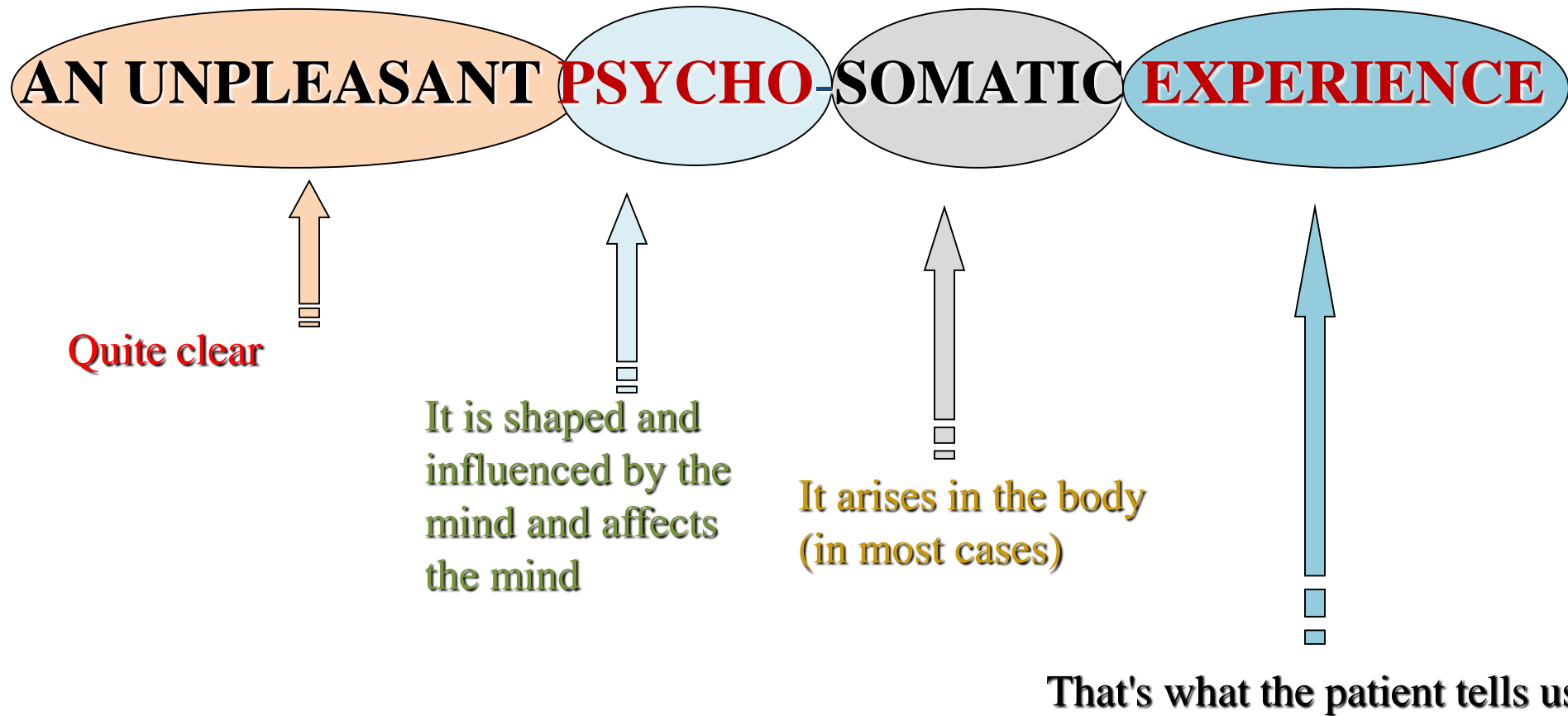


And what are we actually talking about today?

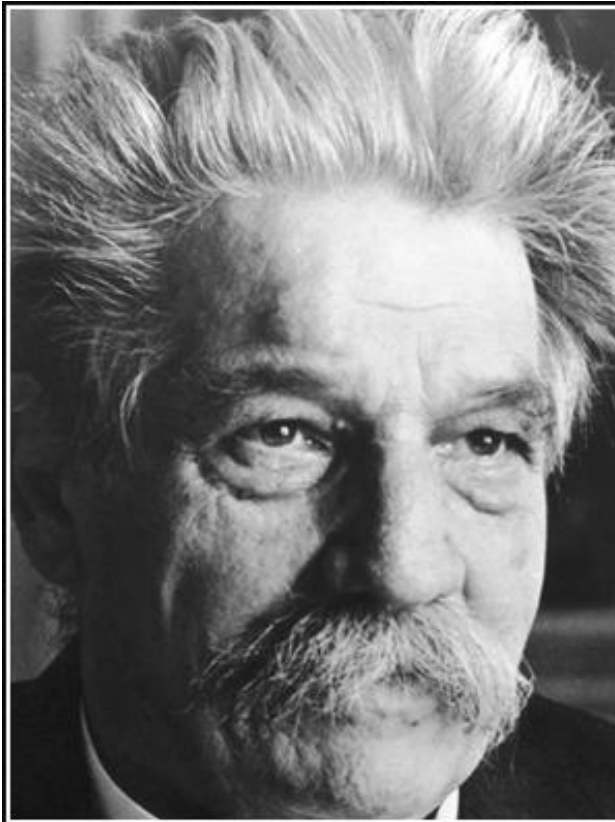
PAIN

“An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage”.*

* The International Association for the Study of Pain (**IASP**)



PAIN - SUFFERING



Pain is a more terrible lord of
mankind than even death itself.

— *Albert Schweitzer* —

EVOLUTION OF KNOWLEDGE ABOUT PAIN

- Even the emergence of medicine itself can be linked to attempts to remove pain.
- The principles of treating and understanding of pain reflects the sole understanding of disease and treatment at a given moment
- Pain theories
 - influenced the way of assessment, monitoring and treatment of pain,
 - as well as the level of priority given to this issue in practical life.



Iceman of the Alps - “Otzi”

- Oldest, best preserved corpse.
- 5300 years old.



Myths

ATTITUDES, BELIEFS, PRACTICE

**The pain
must be bear**

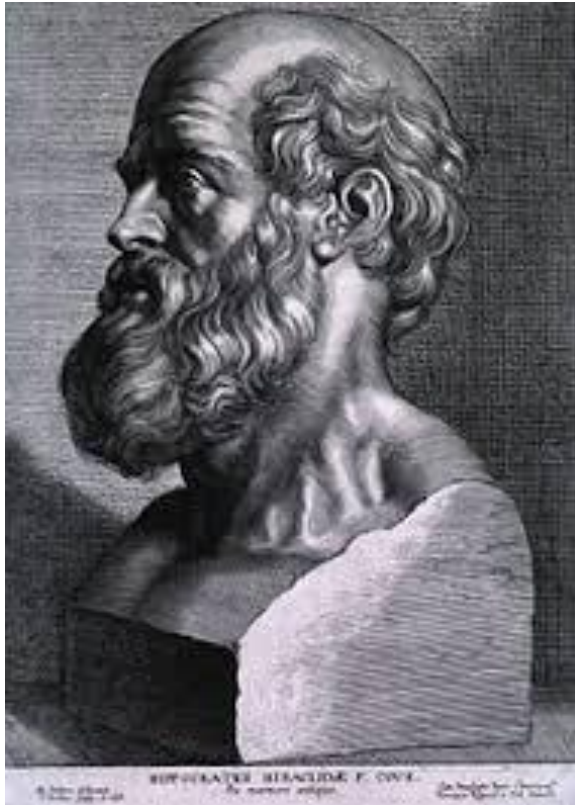
Prehistoric Medicine: myths and legends



Asclepius is the god of medicine and healing in ancient Greek, love child of Apollo and Coronis. His mother was killed for being unfaithful to Apollo but the unborn child was rescued from her womb. Asclepius means "to cut open." Daughters: Hygieia (hygiene) and Panacea ("all healing")



**Pain is determined
by Physical lesion**



Hippocrates of Kos
(c. 460 – c. 370 BC)



Aelius Galen or Claudius Galen
(129 – c. 200 / c. 216)

Renaissance



In his 1664 [*Treatise of Man*](#), [René Descartes](#) theorized that the body was more similar to a machine, and that pain was a disturbance that passed down along nerve fibers until the disturbance reached the brain.

René Descartes

(31 March 1596 – 11 February 1650)





Drew Leder

„Medical education still begins with the dissection of a cadaver, just as the clinical case ends in the pathologist’s lab”

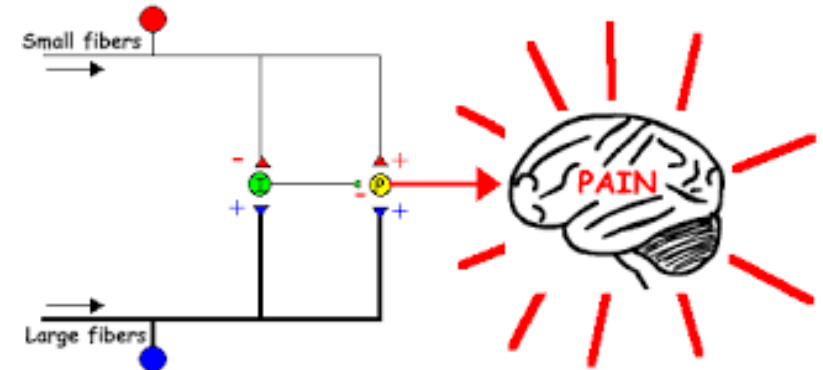


THE MOST RELEVANT THEORIES OF PAIN

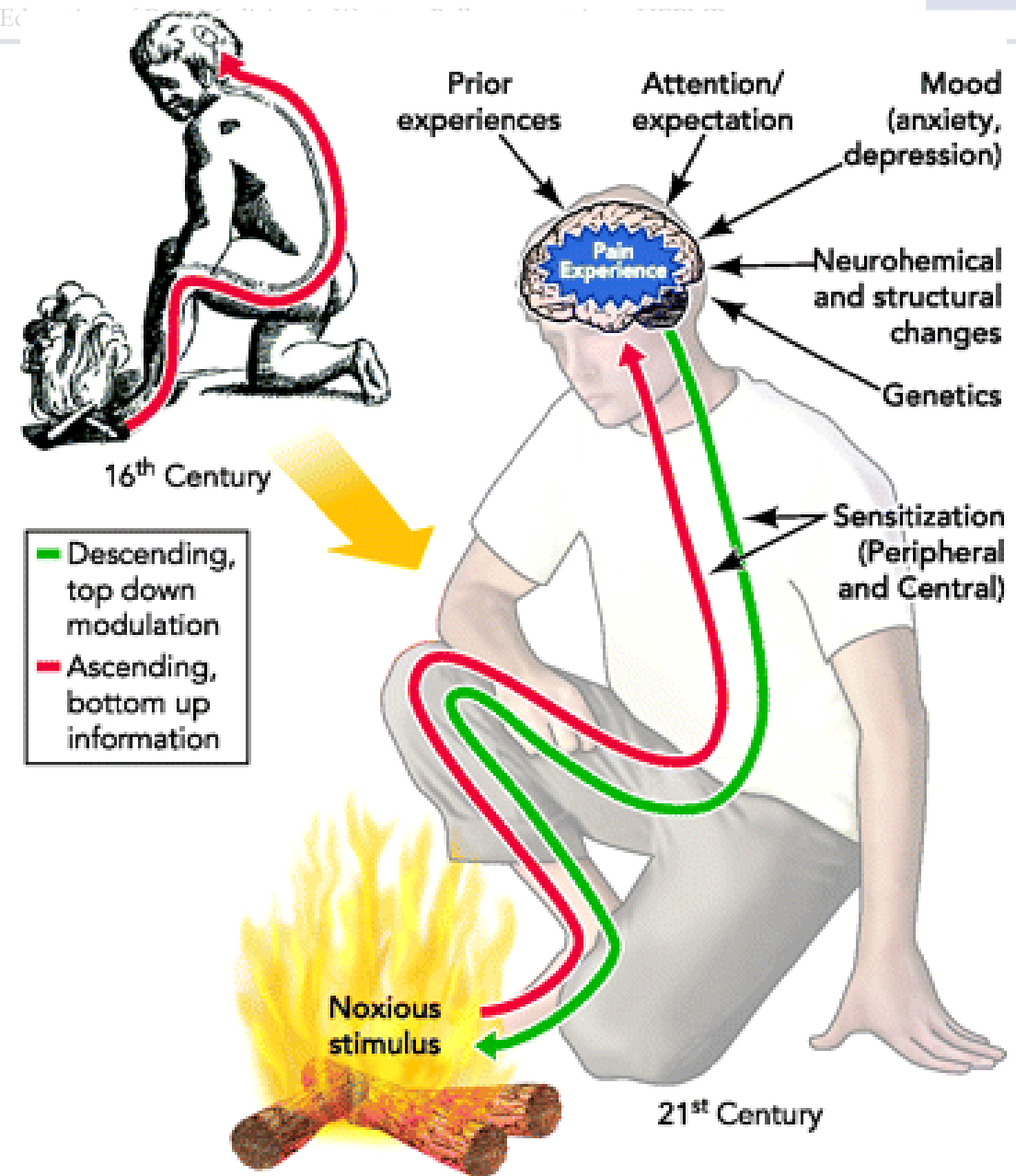
- Specificity theory
- Intensive theory
- Competing theories
- Pattern theory

Gate Control Theory

- Ronald Melzack & Patrick Wall (1965)
- Diverse factors in pain perception
- Melzack's research: “body-self neuromatrix”
- Cortical Neuroplasticity
- **Importance of CNS & psychological factors**



Biomedical Model of Pain





TOWARDS ONTOLOGY OF PAIN AND PAIN PHENOMENA

	Symp- tom	Signs (= Objectively Observable Features)	Physical Basis	Examples
CP: Canonical Pain				
PCT: Pain with Concordant Tissue Damage	Pain	Manifestation of tissue damage Report of pain concordant with stimulus sufficient to cause this tissue damage Protective response	Activation of nociceptive system through peripheral tissue damage	Primary sunburn Pain from strained muscle Pain from fracture Pulpitis
VP: Variant Pain				
PNT: pain with peripheral trauma but no concordant tissue damage	Pain	Report of pain associated with stimulus intensity insufficient to cause tissue damage	Activation of pain system through cognitive mechanisms regarding threat of tissue damage, the latter often based on peripheral non-nociceptive input to the CNS	Secondary sunburn without tissue damage Myofascial pain disorder Tension-type headache Chronic back pain
NN: neuropathic nociception (pain with no peripheral trauma)	Pain	Report of pain No identifiable pathological peripheral stimulus History of probable causes	Disordered nociceptive system Neuropathic (for example in result of demyelination of nerve fibers)	Trigeminal neuralgia Post-herpetic neuralgia Diabetic neuropathy
PRP: Pain-Related Phenomena Without Pain				
PBWP: pain behavior without pain		Sick role behaviors accompanied by normal clinical examination Report of pain discordant with physical signs Grossly exaggerated pain behaviors Identified external incentives	Description of pain relates to mental states such as anxiety, rather than peripheral tissue locus Misinterpretation of sensory signals by the emotional or cognitive systems Deception by patient	Factitious pain Malingering Anxiety-induced pain report
TWP: tissue- damage without pain		Manifestation of tissue damage normally of the sort to cause pain No reported pain	suppression of pain system by one or other mechanism	Stress associated with sudden emergencies Physiological damping of the pain process caused by adrenalin Placebo induced opioid analgesia Genetic insensitivity to pain

Aristotle (384-322 BC) -
DeAnima- "Pain is a quality of
the soul."

322 BC

1640's

Renaissance – Descartes
dualistic.

Freud - psychosomatics.

1895

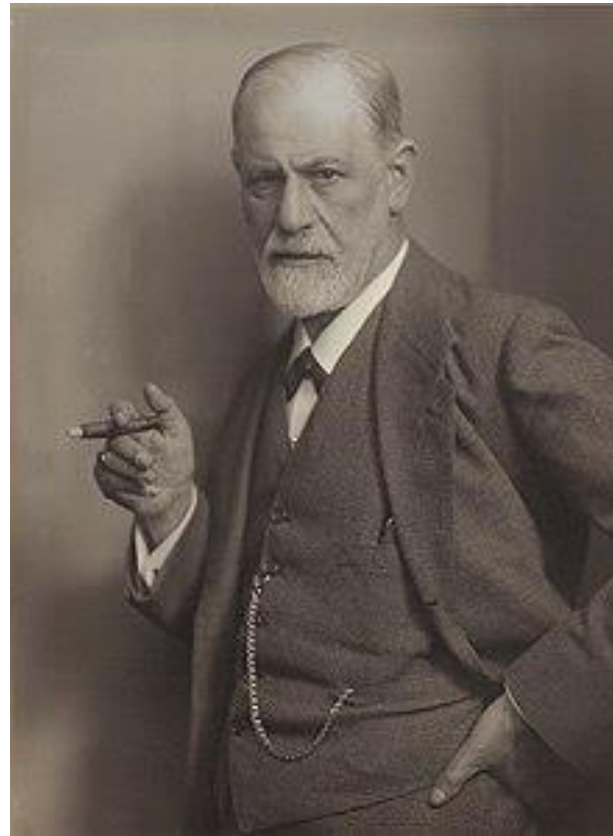


Historical Influences

Over time and through different cultures, understanding and expressing of pain reflects the contemporary spirit of the epoch.

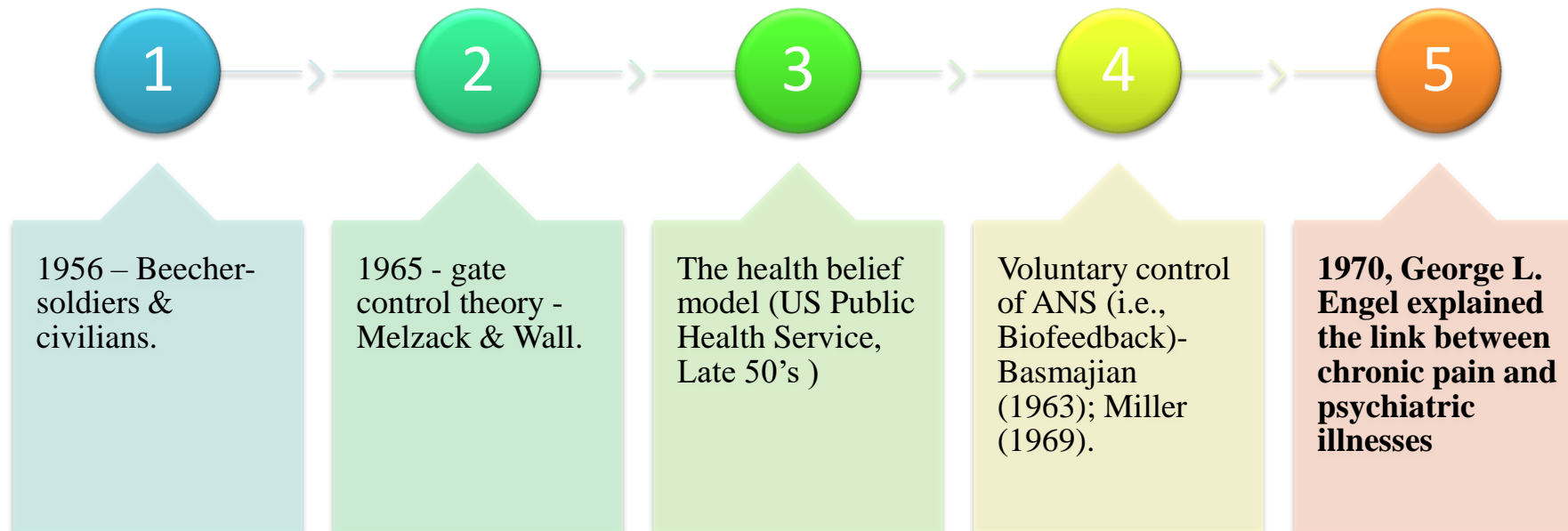


MODIFICATION OF PARADIGM



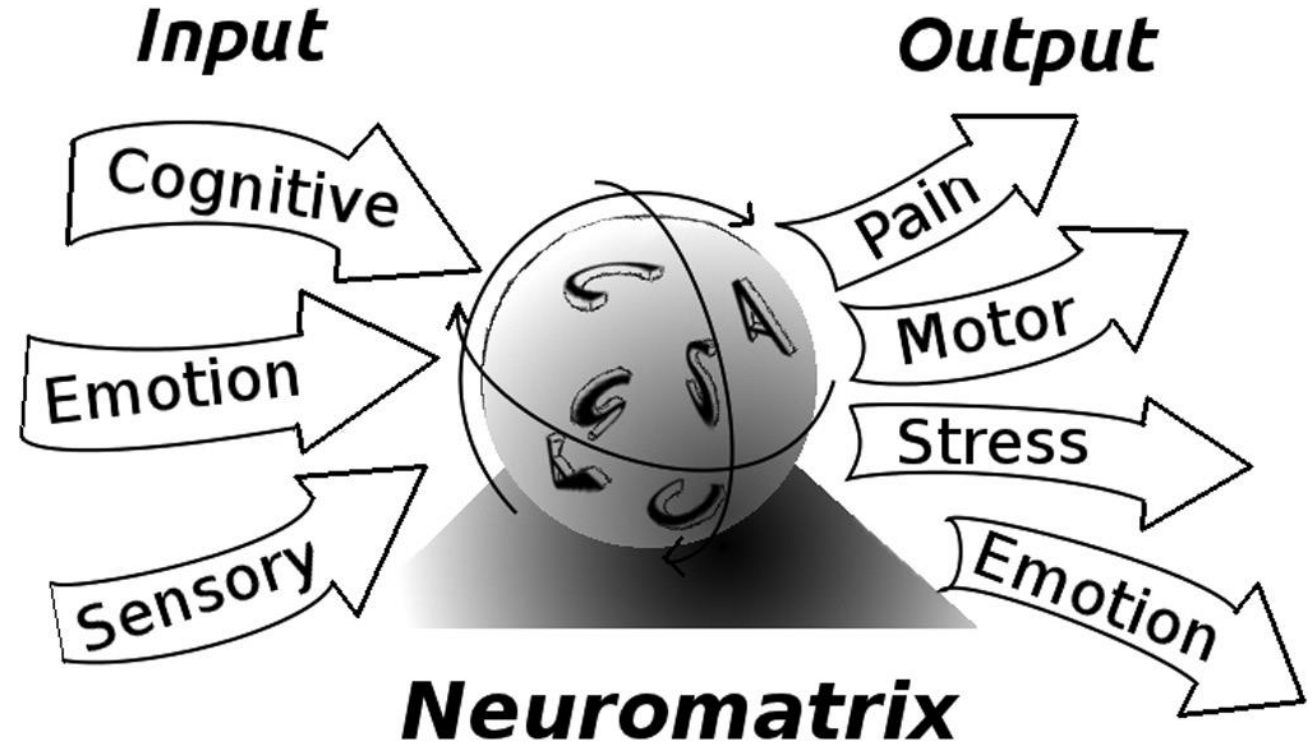
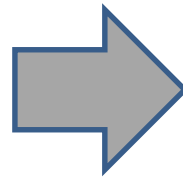
Sigmund Freud
(6 May 1856 – 23 September 1939)

Emergence of Psychosomatic Medicine



Biomedical To Biopsychosocial Model

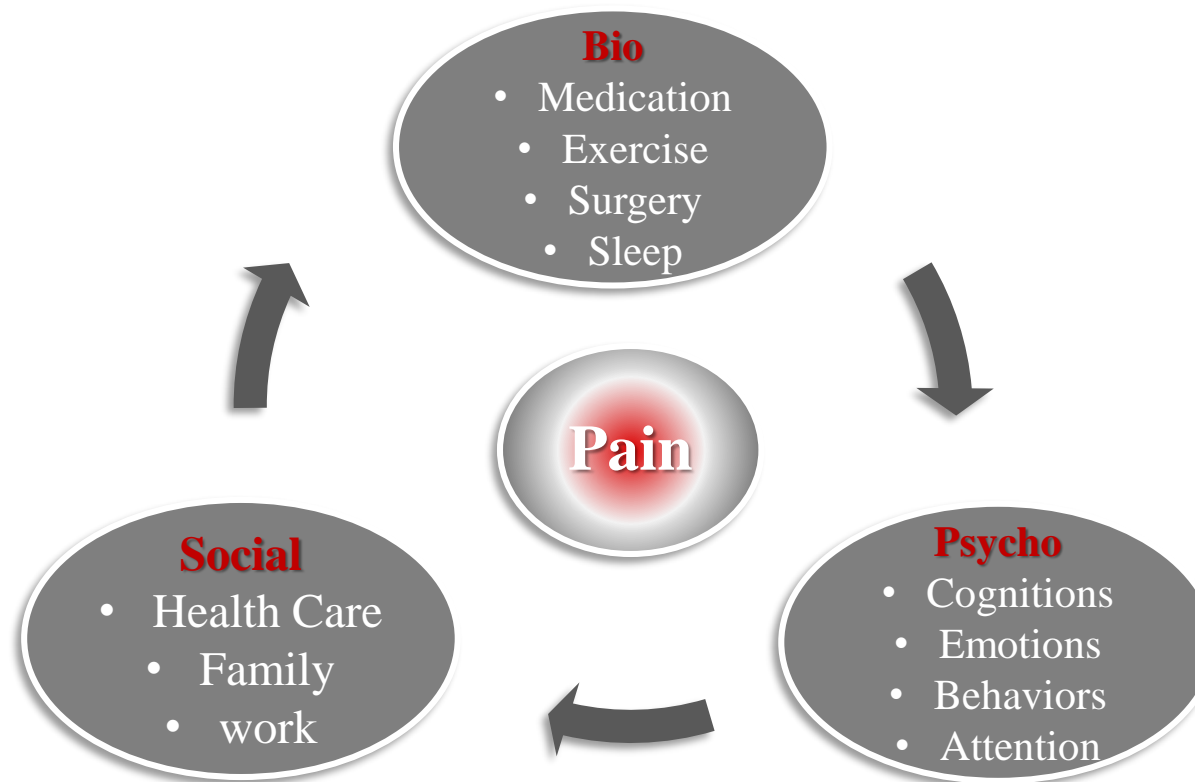
Cultural transformation in the way pain is viewed, assessed, and treated



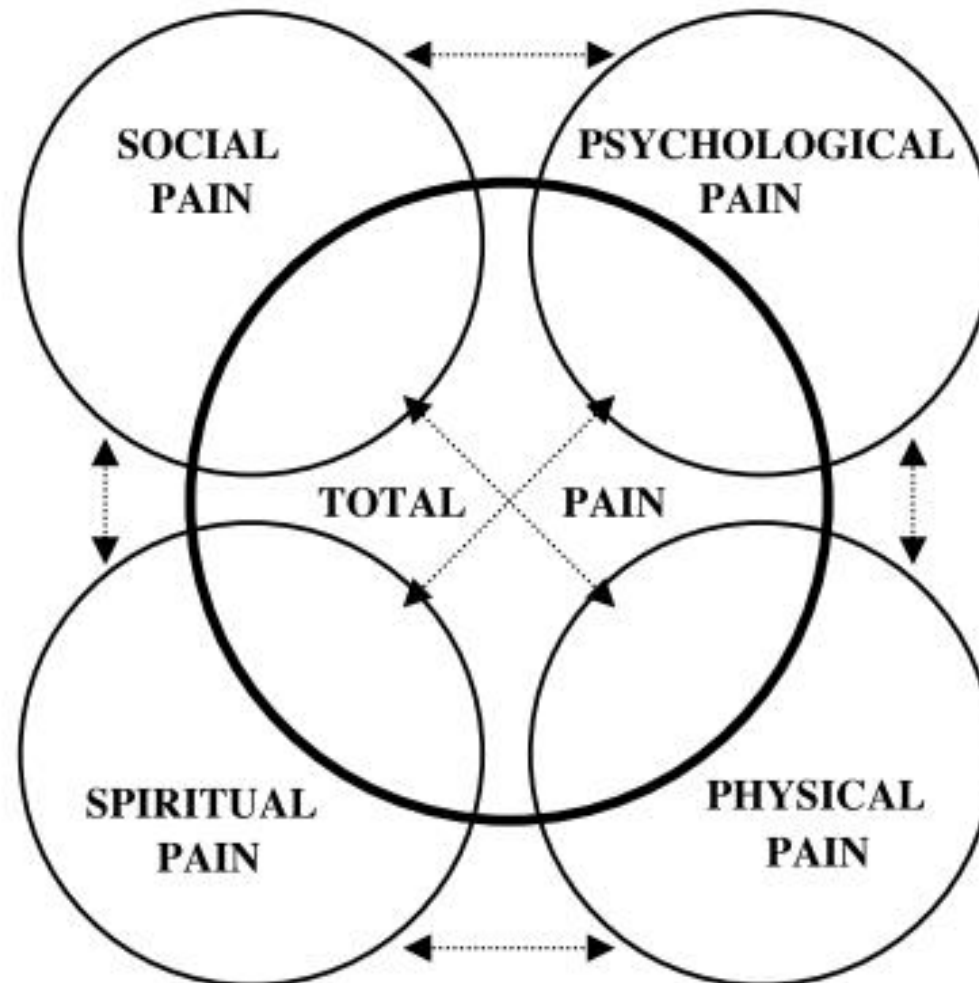
Biopsychosocial Model of Pain

PAIN

Not just a symptom but your patient's lived experience



„The Total Pain“ experience: an interactive model



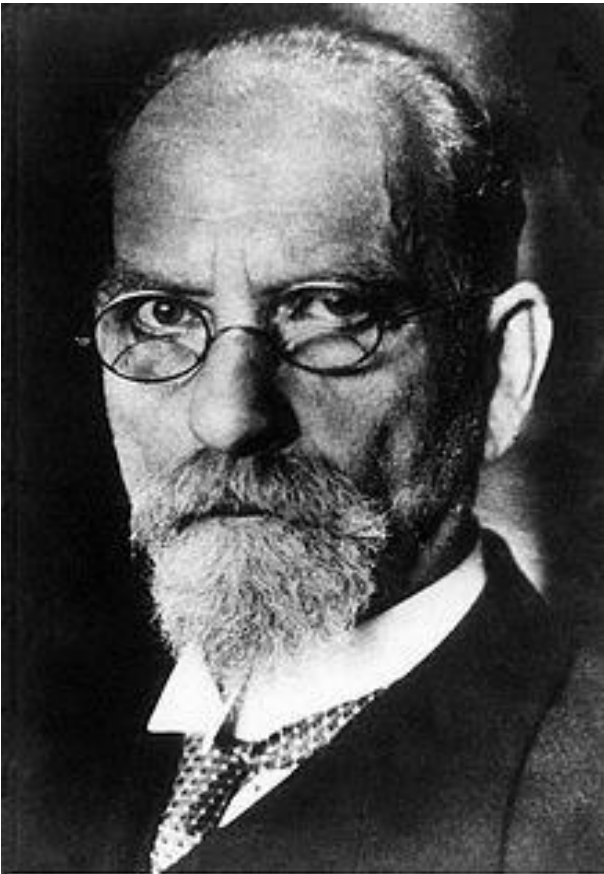
Multidisciplinary pain management programs



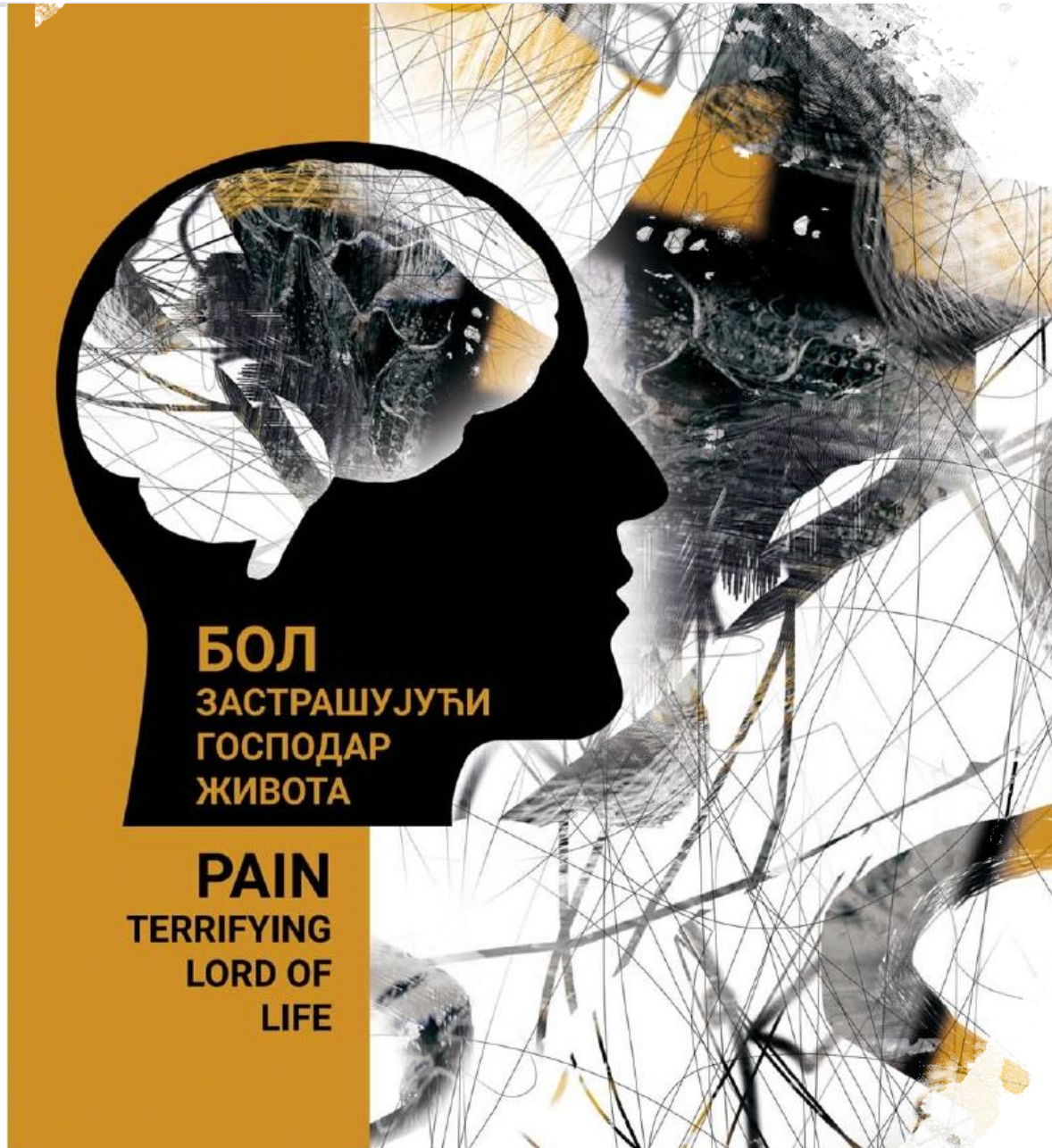
*...we are not ourselves when nature,
being oppressed, commands the **mind** to
suffer with the **body**.*

Shakespeare, *King Lear*

PHENOMENOLOGICAL ASPECTS



Edmund Gustav Albrecht Husserl (8 April 1859 – 27 April 1938)



„LIVED BODY“

The singularity of the
relationship between the body,
the mind, and the world –
Merleau-Ponty:

**“I am conscious of the
world through my body”**

PATIENT'S PERCEPTION OF TOTAL PAIN

P

Physical pain: Osteopathic lesion, deep tissue or bone pain “tender”

A

Anxiety: emotional discomfort, angry, depression

I

Interpersonal interactions: Family strains, isolation

N

Nonacceptance of the caregivers: doubting of their faith, sense of hopelessness





Madjar I: The lived experience of pain in the context of clinical practice. In Handbook of phenomenology and medicine. Edited by Toombs S. Dordrecht: Kluwer Academic Publishers; 2011. p:263–277.

- „To understand pain we need to understand the person in pain and a phenomenological gaze can help us to do that. The key is our attentiveness to the lived experience of the person in pain, and our willingness, individually and as members of health care teams, to work as much with as on our patients. The cognitive and technical work of pain diagnosis and treatment needs to go hand in hand with the supportive, and the affirming acts that make possible for the patient's voice to be heard and to be valued.”

*The **good physician** treats the disease; the **great physician** treats the patient who has the disease. -Sir William Osler, circa 1900*





**And so
we came
here !**

- Under-treatment of pain
- Pain as the 5th vital sign
- Pain as a human rights issue

How we can move forward?

(CONCLUDING REMARKS)

The first step towards solving the problem of pain lies in **education**:

- Education of healthcare professionals,
- Patients,
- Raising awareness of the general population about the significance of this problem through the public health campaigns against pain.





Co-funded by the
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HEPMP
HIGHER EDUCATION PAIN MEDICINE PROJECT

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Strengthening Capacities for Higher Education of Pain Medicine in Western Balkan countries - HEPMP

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

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HEPMP

HIGHER EDUCATION PAIN MEDICINE PROJECT

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Thank you for your attention !

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