14th BISOP - endorsed by EFIC and HEPMP



THE PSYCHOLOGICAL ASPECTS OF PAIN, CLINICAL AND THERAPEUTIC IMPLICATIONS

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PERSONAL NARRATIVE

"I am terribly depressed. I can't do the things I used to be able to do because of the pain. Now it takes everything I have to walk two blocks because of the pain."

36 year old female with chronic back pain



"My whole day seems to be spent waiting for the time to take my next pain pill. I know they don't help that much, but it's all I have."

52 year old male veteran with chronic back pain

BIOPSYCHOSOCIAL MODEL OF PAIN

Biobihevioral model

Biological disposition

Behavioral factors

Turk et al. 1983.



Nocicepction
Damage to the tissue
Disease process



<u>Psychological</u>

Pain beliefs
Locus of control
Coping strategies
Emotions
Lack of self-efficacy



Fordyce & Loeser 80th of the XX century

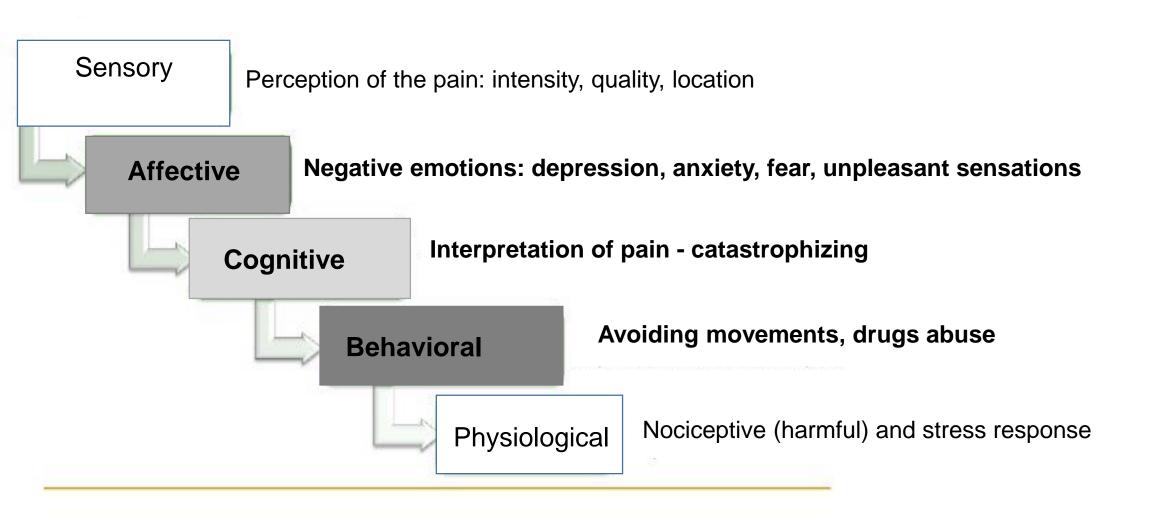
Social

Culture influence

Social learning (reward/punishment)

Classical conditioning

COMPONENTS OF PAIN



AFFECTIVE COMPONENTS

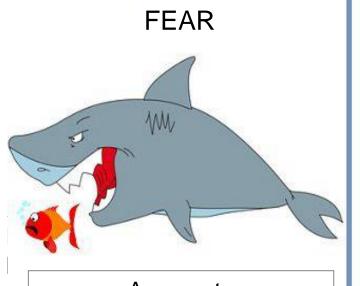
Pain & anxiety disorders

35% GAD, Panic disorder

Pain & PTSD

20-34% of people with ch. pain meets the criteria for PTSD

Chronic pain is present in 45-87% of people with PTSD



Answer to immediate danger

Acts quickly (fight/flight)

ANXIETY



Answer to predicted danger

(-) prediction of the future Avoidance behavioral Pain: fear of movements, physical activity, work

Fear: avoiding movements that intensifies pain and which is thought to be the cause of a new trauma

Avoidance of movements, unnatural body posture, passive attitude: Pain relief

Difficult recovery Phobia

COGNITIVE COMPONENTS

Interpretation influenced by past experiences

Important cognitive, emotional aspects: 1. Beliefs and attitudes

- 2. Expectations
- 3. Cognitive distortions negative thoughts, catastrophizing
- 4. Locus of control
- 5 Coping strategies

Pain catastrophizing:

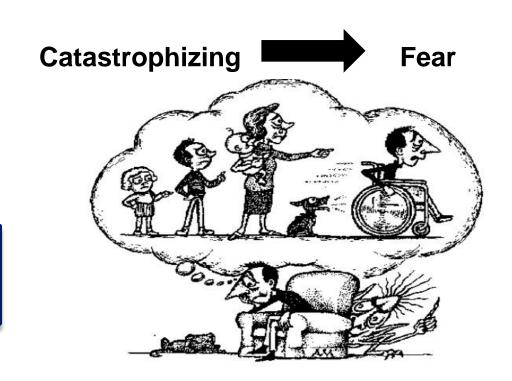
A person imagines the worst outcome:

"If the pain does not stop, I'll end up in a wheelchair"

Such thoughts interfere with recovery, complicate treatment, increase the risk for chronic pain, disability

Pain catastrophizing:

The tendency to increase the risk of pain, feelings of helplessness, inability to inhibit pain-related thoughts



COPING STRATEGIES

Active coping strategies:

" Pain is temporary "

Motivation to return to normal life, social activities ...

Passive coping strategies:

Motivated by fear and avoidance of pain (cognitive components) and painful activities (behavioral components)

This avoidance results in pain and is a bad prognostic sign of recovery

(-) feelings: anger, hostility, depressed mood

Anger and hostility - endangering the therapeutic relationship - exacerbates the condition of the patient

BIHEVIORAL COMPONENTS

Fear-avoidance model of pain

Principle I:

Short-term benefits (eg analgesics) - ↓ pain Long-term damaging!!!

Principle II:

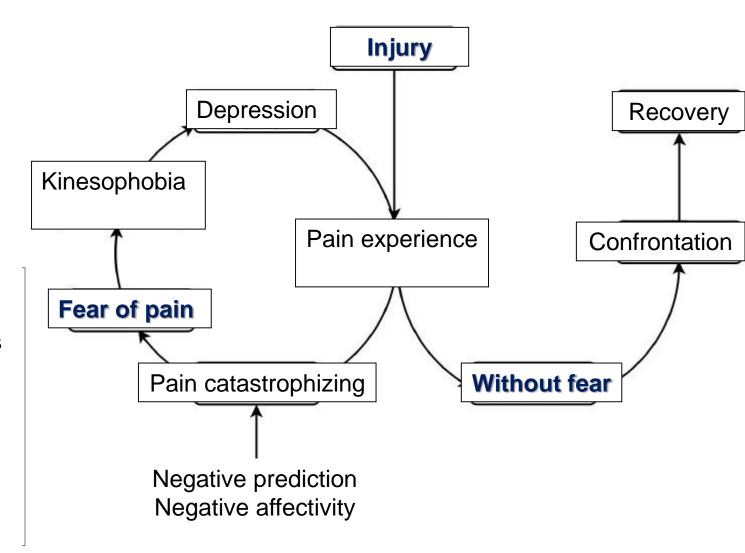
Changes in life routines, partnerships:

- "I can no longer do my homework "
- " Partner will do it instead of me "

External (+) reinforcement:

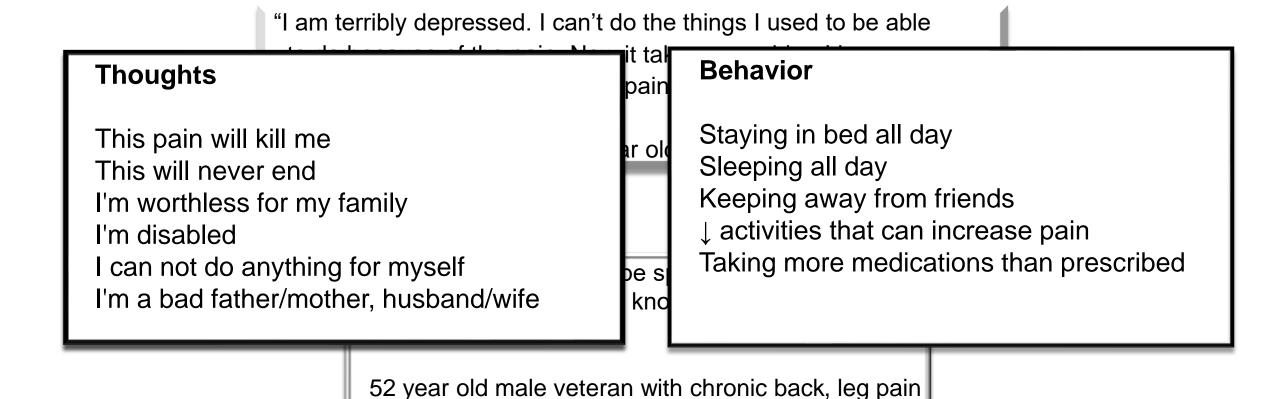
↑ attention of partners, family members, friends

- (-) reinforcement:
- ↓ the level of responsibility in performing daily activities



CHALLENGE OF PAIN

Negative thoughts, pain beliefs, pain-related behaviors - can become very resistant to change



BURDEN OF CHRONIC PAIN

Functional activity

Physical functioning

Ability to perform daily activities

Sleep disorders

Work

Recreation

Psychological problems

Depression

Anxiety

Anger

Loss of self-esteem

Social Consequences

Family / Family Relations
Intimacy / Sexual Activity
Social isolation

Financial Consequences

Healthcare costs

Disability

Sick leave

AIMS OF CHRONIC PAIN TREATMENT

- Identify, treat basic disease
- Reduce the frequency, severity of pain
- Optimize the functioning of an individual
- Reduce suffering, emotional stress
- Improve quality of life

Principles of pain treatment

Treatment of comorbid conditions - eg depression

Treatment rarely leads to "healing"

Patient directed goals

Behavioral-specific functional goals

Possible, meaningful goals (eg reduction of 2 points from 0 to 10 on the numbing scale of pain - clinically significant)

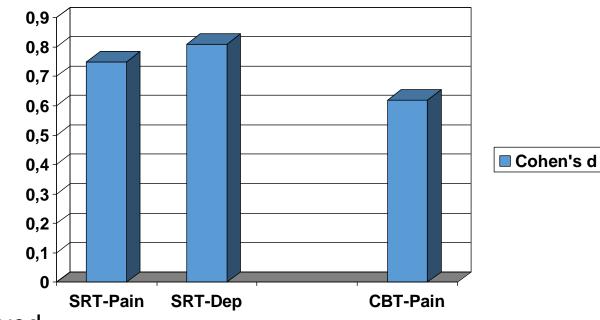
Empowering patients (and partners) through reassurance, encouragement and education

Promotion of regular exercise, healthy and active lifestyle

Development of adaptive pain management strategies

PSYCHOTHERAPY

- Supportive therapy
- Self-regulatory treatments (SRTs)
- Biofeedback
- Relaxation training (autogenic training)
- Hypnosis
- Cognitive-Behavioral Therapy (CBT)
- Reconceptualization of pain as a problem to be solved
- Training skills



Hoffman et al. (2007).

Gradual behavior change, eg:

Reduction of analgesics
Increase activity level

PSYCHOPHARMACOTHERAPY

New affective stabilizers:

pregabalin (lyrica, epica) - neuropathic pain lamotrigine, gabapentin (neurontin)

Old affective stabilizers:

valproate, carbamazepine

Antidepressants

Tricyclics - analgesic effect separated from antidepressant amitriptyline, nortriptyline

SSRI - little evidence of analgesic effect

SNRI (norepinephrine, serotonin)
Neuropathic pain, pain with depression (duloxetine, venlafaxine)

COPING WITH PAIN IN DIFFERENT CULTURES

PAIN CULTURE IN SERBIA

Suffering from pain is a characteristic of the great heroes

"O sons, my falcons,

Then they will beat us and torture us,

.....

Oh sons, my falcons, don't be with the heart of the widow, but be the heart of the hero."

Serbian epic poem "Old Vuyadin" ("Stari Vujadin")



The Serbian Epic Ballads an anthology Translated into English verse by Goeffrey N. W. Locke