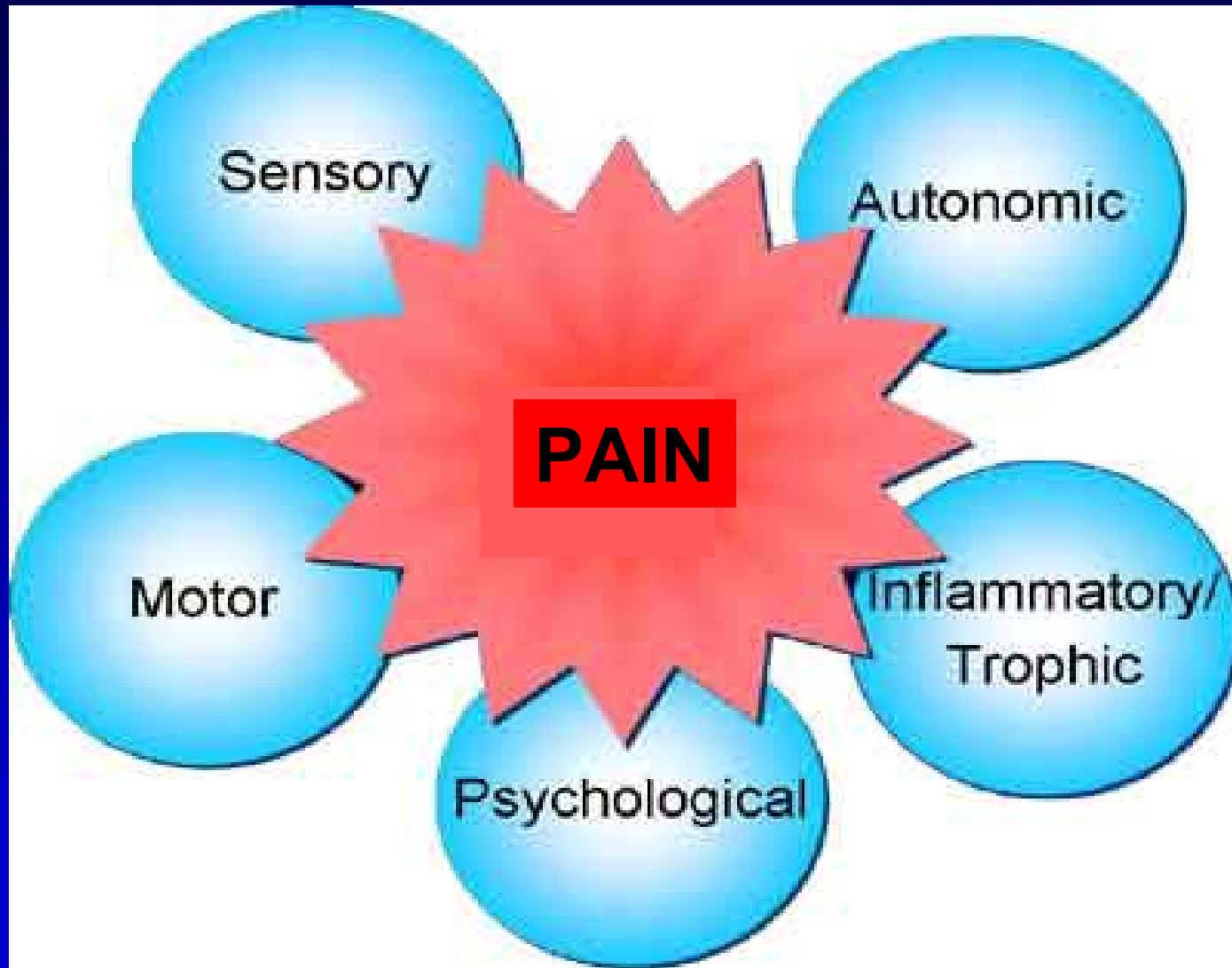


**Rehabilitation: A Comprehensive
Approach to Treating the PERSON with
CRPS**

**Dennis C. Turk, Ph.D.
University of Washington
School of Medicine**

Symptoms of CRPS



Burden of CRPS

Functional Activities

- Physical functioning
- Ability to perform activities of daily living
- Sleep disturbances
- Recreation
- Work

Socioeconomic Consequences

- Healthcare costs
- Disability
- Lost workdays

Social Consequences

- Marital/family relations
- Intimacy/sexual activity
- Social isolation

Emotional Distress

- Depression
- Anxiety
- Anger
- Frustration
- Loss of self-esteem

Beliefs About Acute and Chronic Pain

Acute Pain

**Sxs. have
known causes**

Txs. are available

Cure is anticipated

**Health care professionals
can treat successfully**

Reasonable time course

Chronic Pain

**Sxs. may not have
known causes**

There may be no tx.

There may be no cure

**Health care professionals
may not be able to treat**

Indeterminate time course

Natural History of Persistent Pain: A Patient's Perspective

Awareness and Interpretation of Symptoms



Help/treatment-seeking



Diagnostic uncertainty



Physician
frustration



Patient frustration



Significant other
frustration

Doctor shopping



Multiple costly, invasive diagnostic tests



Suggestion of psychological causation or malingering



Increased symptom reporting, pain behaviors, and help-seeking



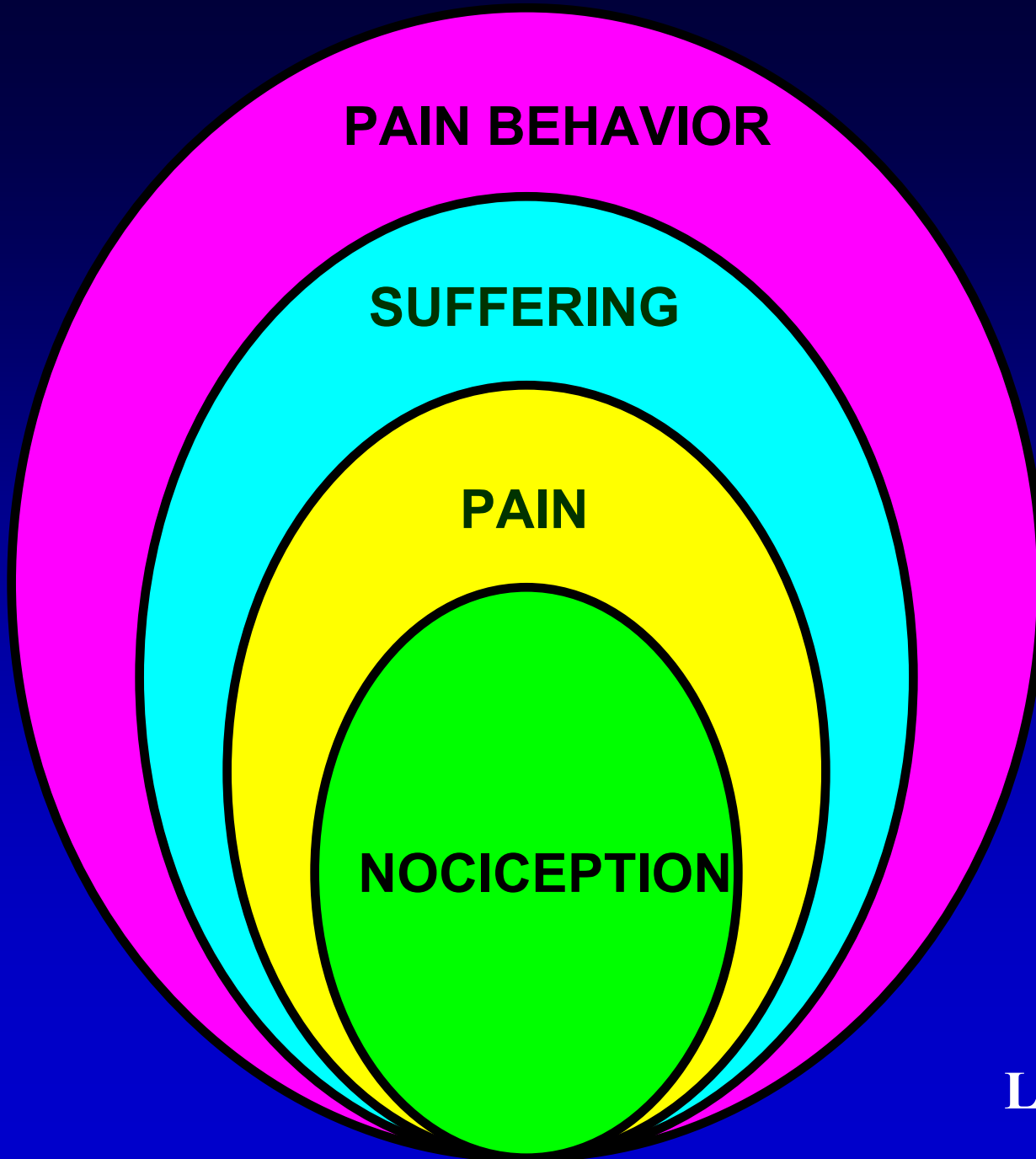
Increased emotional distress

DEMORALIZED



Psychological factors known to influence the experience of pain

- **Uncertainty / Ambiguity**
 - **Unpredictability**
 - **Expectancy / Anticipation**
 - **Meaning of symptoms**
 - **Depression [40-60% of chronic pain patients are depressed]**
- FEAR!**
-
- A diagram illustrating the relationship between psychological factors and fear. Five bullet points on the left list factors: 'Uncertainty / Ambiguity', 'Unpredictability', 'Expectancy / Anticipation', 'Meaning of symptoms', and 'Depression [40-60% of chronic pain patients are depressed]'. Two white arrows originate from the right side of the first two factors and point towards the word 'FEAR!' on the right. The word 'FEAR!' is written in a bold, red, serif font.



PAIN BEHAVIOR

SUFFERING

PAIN

NOCICEPTION

Loeser, 1980

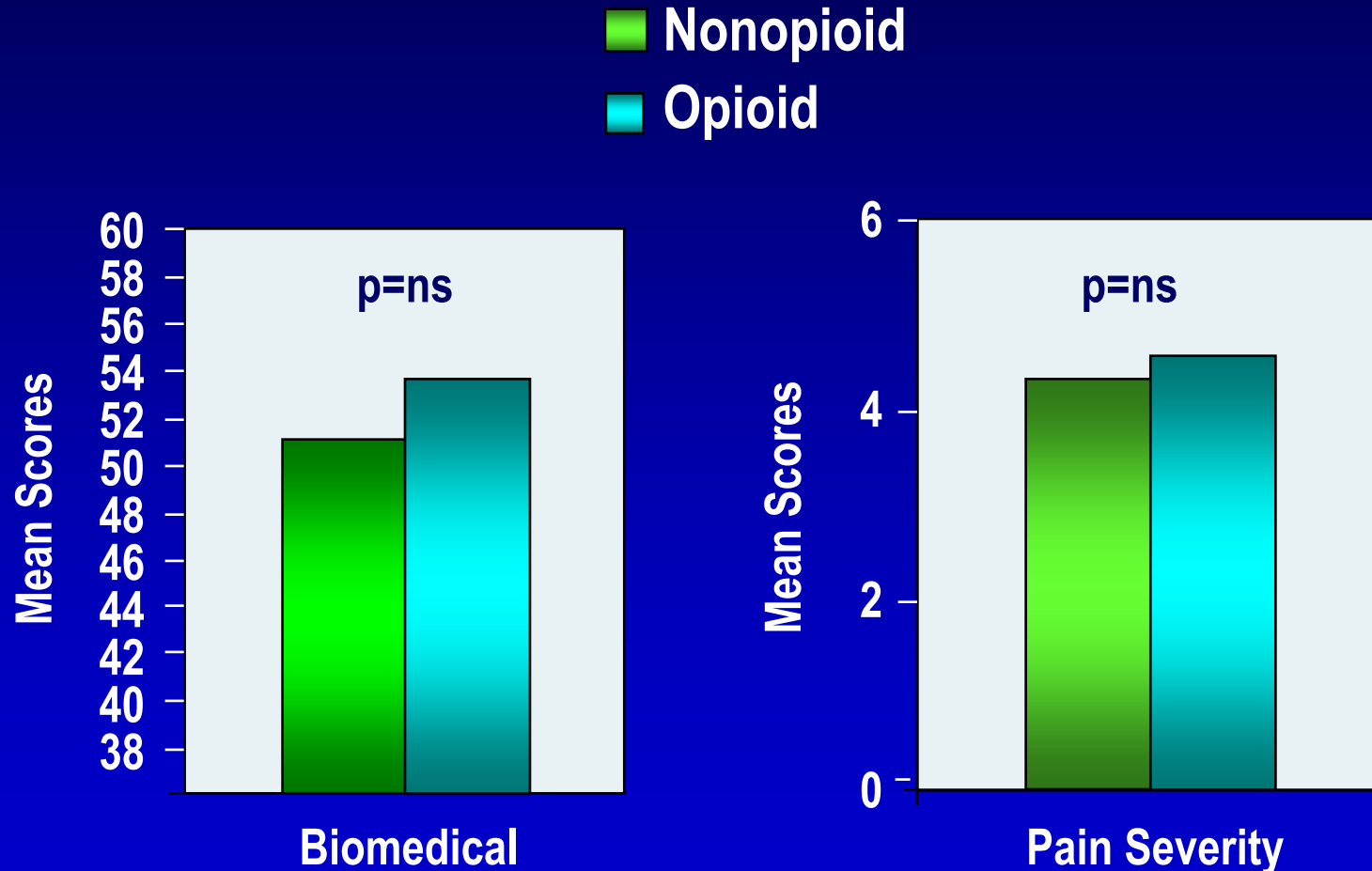
Pain Behaviors



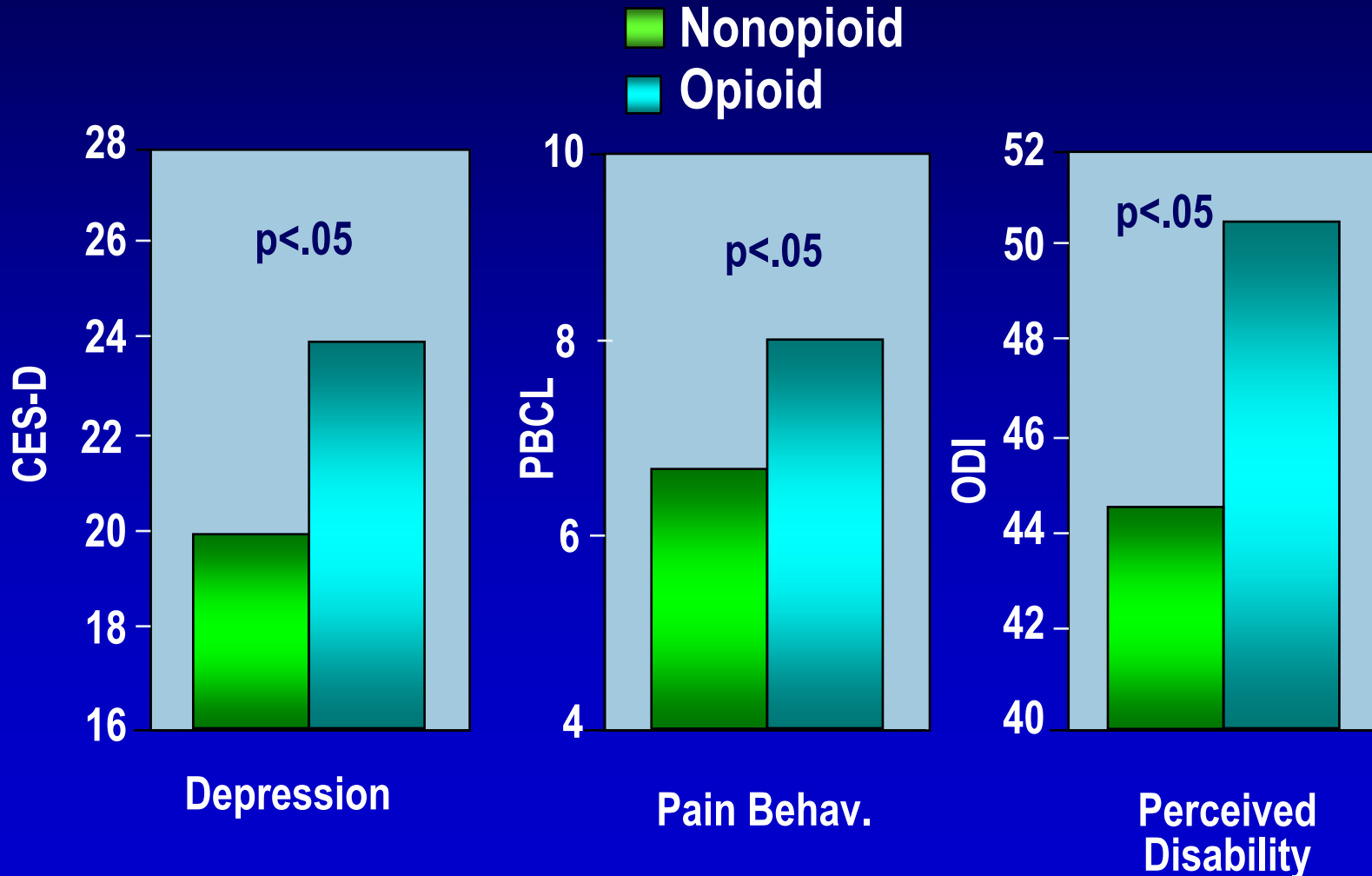
Acquisition of Pain Behaviors

- Direct and **POSITIVE REINFORCEMENT** of pain behaviors
- Indirect reinforcement of pain behaviors by avoidance or withdrawal of undesirable contingencies (**NEGATIVE REINFORCEMENT**)
- Adversive outcomes follow the behavior (**PUNISHMENT**)
- Failure of well-behaviors to be positively reinforced (withdrawal of something desirable, **EXTINCTION**)

Mean Scores for Biomedical Findings and Pain Severity by Opioid Prescription



Mean Scores on Psychosocial Variables by Opioid Prescription



Caution !!!

Psychological factors may....

MODIFY the perception of pain and
MODULATE the experience of pain, but
they are rarely the sole **CAUSE(S)** of pain

Signs and Symptoms of CRPS Patients Treated at Pain Clinics

- ✓ **Sleep disturbance**
- ✓ **Physical deconditioning**
- ✓ **Frequent visits with health care providers**
- ✓ **Use (previous and current) of multiple medications**
- ✓ **Depressed**

Signs and Symptoms of CRPS

Patients Treated at Pain Clinics (cont'd)

- ✓ **Fear of pain and further damage**
- ✓ **Decreased self-esteem**
- ✓ **Family stress**
- ✓ **Reduction in sexual activities**
- ✓ **Work issues**
- ✓ **Legal issues**
- ✓ **Financial concerns**

Treatment Options

**Goal --
Pain Control**

Medications
-opioids
-clonidine
-anticonvulsants
-antidepressants

Nerve Blocks*

Neuromodulation

Neuralxial infusions

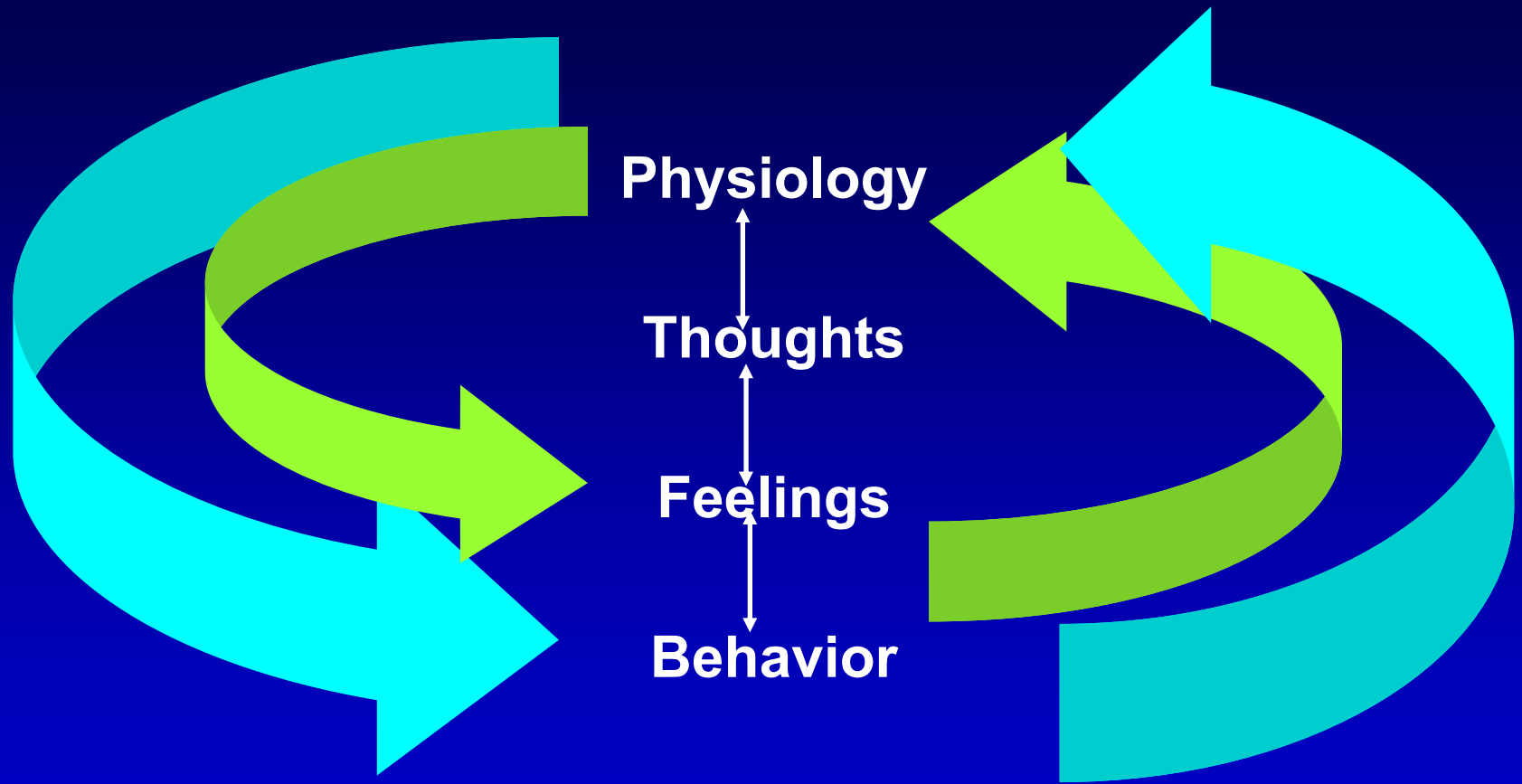
Signs and Symptoms of CRPS/RSD

* Regional, sympathetic

Outdated Biomedical Model of Chronic Pain

- View pain as solely a signal of injury and tissue damage
- Continual quest to find **THE** structural cause
- Attempt a mechanical “fix”
- Provide purely symptomatic treatments
- Provider takes over responsibility and control from the patient

Integrated View of the Person with CRPS



Within a Social Context

New Way of Thinking About Pain

Must assess and address:

- **The biologic basis of impairment & pain**
- **The patient's attitudes and beliefs, emotions, & behavior**
- **Responses by significant others**
- **Social, work, & economic impact and influences**

Comprehensive Treatment Plan for CRPS

➤ **Biological Approaches**

- pharmacologic and/or nonpharmacologic therapies

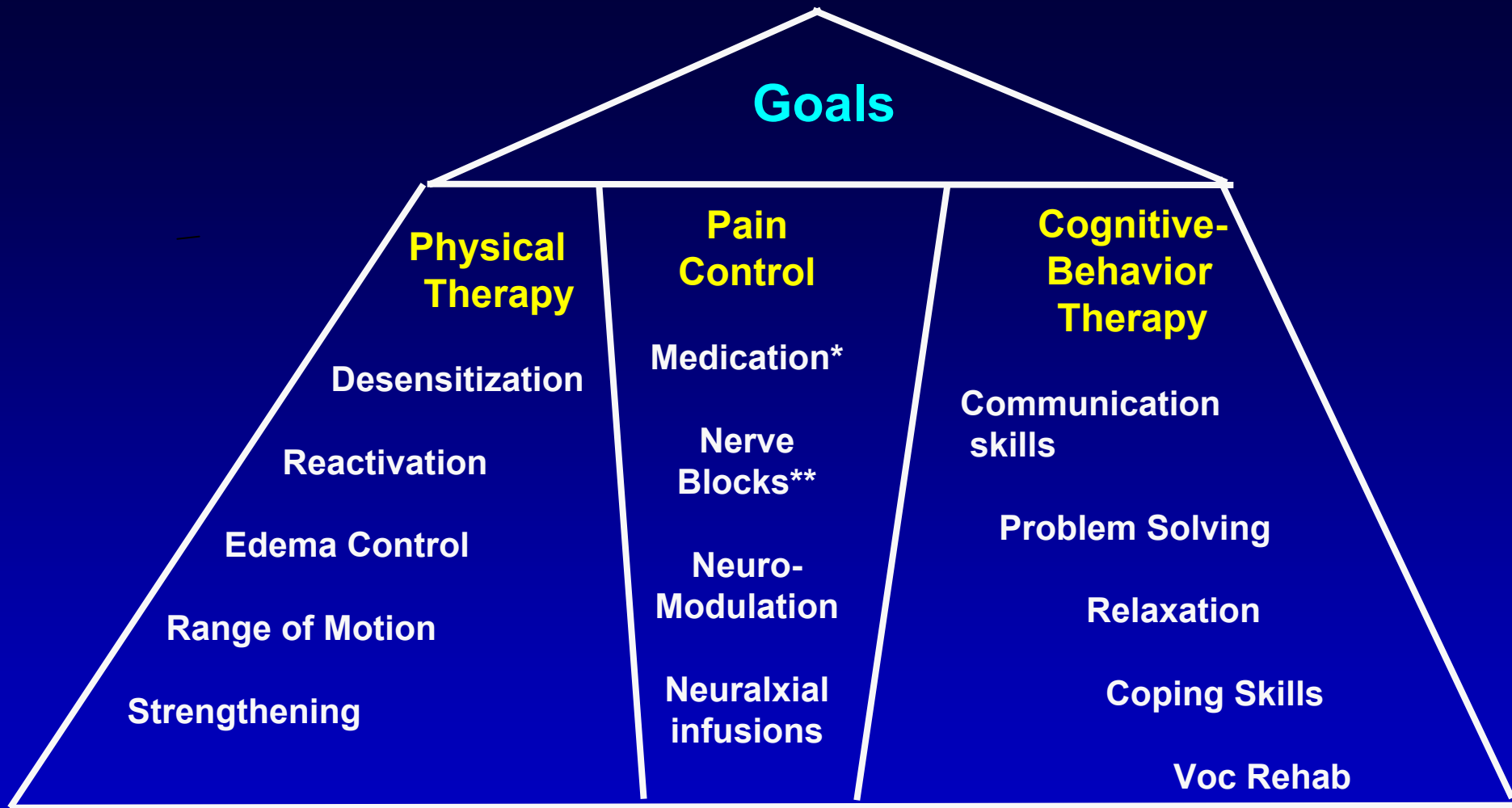
➤ **Psychological Interventions**

- mood disturbances
- coping skills
- sleep disturbance

➤ **Social/Rehabilitative Issues**

- family/social relations
- work issues
- physical rehabilitation
 - physical/occupational therapy
 - home exercise program

➤ **Complementary Approaches**



Signs and Symptoms of CRPS/RSD

* opioids, clonidine, anticonvulsants, tricyclic antidepressants

** Regional, sympathetic

Treatment Goals for Patients With CRPS

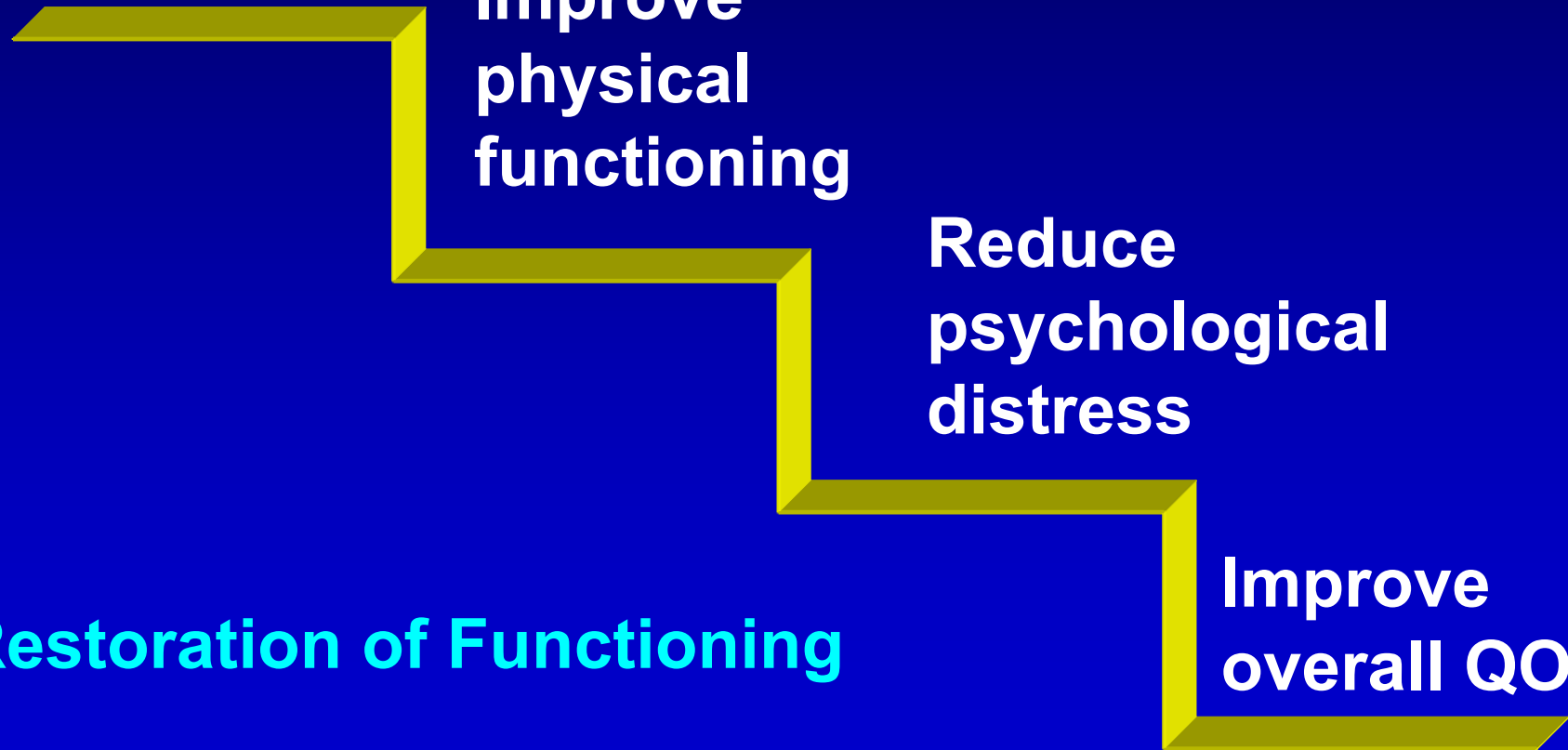
Reduce pain

Improve
physical
functioning

Reduce
psychological
distress

Restoration of Functioning

Improve
overall QOL



Guidelines for Homework

- ✓ **Be clear and specific: what, when, where, how much or how often?**
- ✓ **Identify and discuss pt. and significant others concerns**
- ✓ **State purpose of each task, encourage questions**
- ✓ **Check pt.'s understanding, ask them to repeat assignment**
- ✓ **Have pt. write down the details**
- ✓ **Ask pt. to anticipate problems & what they will do**
- ✓ **Ask pt. to record activity, problems that arose, what did they do?**
- ✓ **Review, discuss problems, reinforce effort not just success**

Why Do Patients Relapse?

- **Pt. non-adherent**
- **Faulty memory**
- **Lack of sufficient intrinsic reinforcement**
- **Failure to alter environment**
- **New problems arise**
- **No or insufficient attention given to preparing pt. for generalization and maintenance**
- **Treatment not effective or inappropriate**

Relapse Prevention

- ✓ **Anticipate relapse, be proactive**
- ✓ **Explain importance of adherence**
- ✓ **Address pt.'s understanding**
- ✓ **Teach how to deal with problems, set-backs, side-effects, nonadherence**
- ✓ **Encourage the use of monitoring charts**
- ✓ **Encourage self-reinforcement for effort**
- ✓ **Enlist assistance of significant others**

The “A's” of Pain Patient Management”

- ✓ **A**ssessment and **re**assessment
- ✓ **A**ction (comprehensive and integrated treatment plan)
- ✓ **A**nalgesia
- ✓ **A**ctivities of daily living
- ✓ **A**dverse effects
- ✓ **A**dherence to tx
- ✓ **A**berrant behaviors

Regular Monitoring and Adjustment

- ✓ Monitor pain intensity, physical, and emotional functioning
- ✓ Adjust medication, manage side effects, change medication
- ✓ Goals to reduce pain levels, increase psychosocial functioning, and improve quality of life

Steps to Help Pts. with CRPS

- ✓ **Accept** pain as **real**
- ✓ **Protect** from excessive invasive testing
- ✓ **Set realistic goals**
- ✓ **Expect to treat** but **not to cure**
- ✓ **Evaluate** in terms of what they **do** not what they **say**
- ✓ **Prescribe medication** on **time-contingent**, not prn basis

Steps to Help Pts. with CRPS (cont'd)

- ✓ Prescribe **gradual increase** in physical exercise
- ✓ Clarify difference between **hurt** and **harm**
- ✓ Educate **family** to encourage pts. increased activity
- ✓ Focus on pt.'s **activities not pain**
- ✓ Help pt. to get involved in **pleasurable activities**

Conclusions

- **Chronic pain is a complex phenomenon in which psychosocial and behavioral factors as well as physical ones play important roles.**
- **Assessment of chronic pain sufferers must attend to pts thoughts, feelings, and behavior as well as anatomy and physiology.**
- **Environmental factors must be considered to achieve optimal outcomes.**

Most Important Take Home Message

Treat the **PERSON** . . .

not just their

Bodies and Symptoms !!!