



# Opioid Management; 6 Building Blocks Shared Learning Call

July 16, 2020

Facilitators

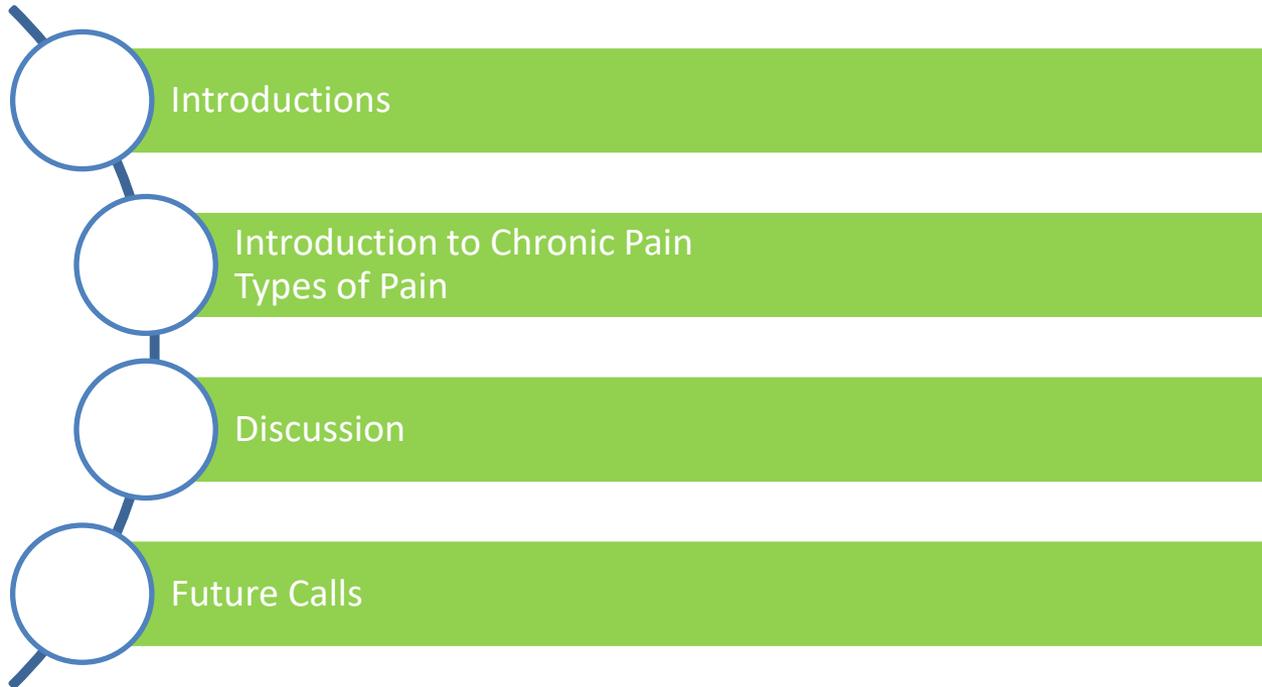
Sarah LaRue, MS CRC

Taylor Miranda, MPH



# Agenda

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# Who is in the room?

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- Tell us about you and your organization
- What do you expect to get out of today's call?

# Purpose of Calls:

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- An opportunity for the program sites to help one another through implementing improvements to opioid management with chronic non cancer pain.
- A time to share successes and to brainstorm through the real challenges that arise in this difficult work.
- Not a report out of what sites have done, but a sharing of ideas about how to do the work.
- Your entire Opioid Improvement Team should attend the call, if possible.

# Introduction to Chronic Pain

## Types of Pain

Rachael Rzasa Lynn, MD

16 July 2020

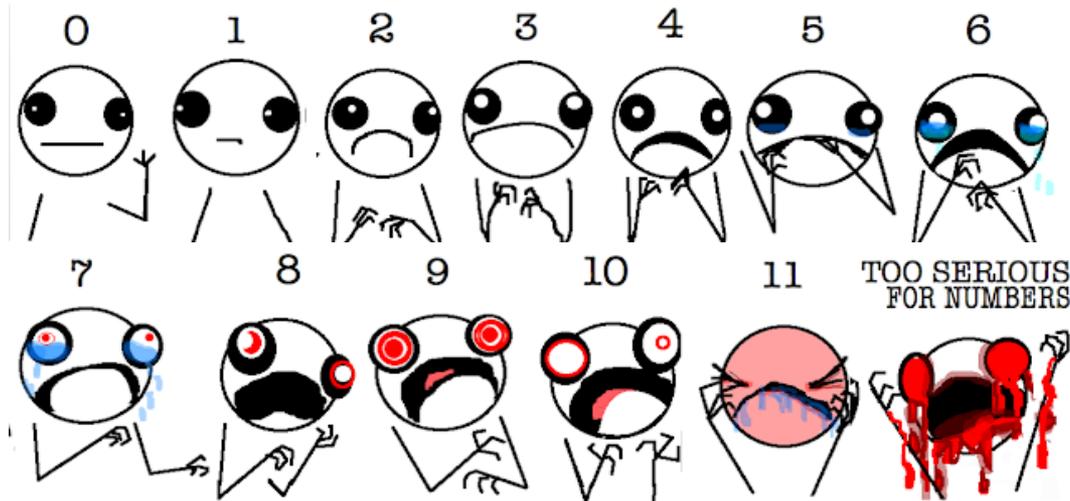
# What is Pain



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

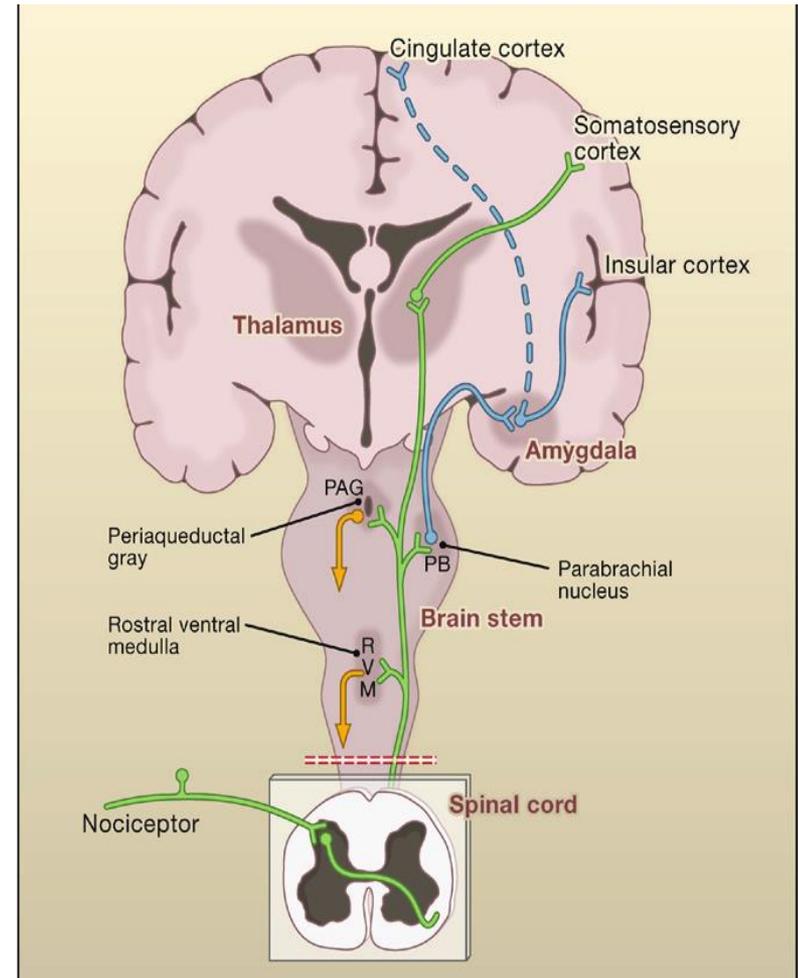
# Classification of Pain

- Simplified, there are 3 types of pain (IASP):
  - Nociceptive pain
  - Neuropathic pain
  - Nociplastic pain



# Nociceptive Pain

- Actual or threatened damage to (non-neural) tissue activates peripheral nociceptors
- Nociceptors detect **intense** stimuli
  - Mechanical
  - Thermal
  - Chemical
- Stimuli transduced into electrical signals
  - noxious stimulus → electrochemical impulses in peripheral nerves → spinal cord → brain



# Pain is Multidimensional

- ALL pain is a psychological state
  - Nociceptor activation alone  $\neq$  pain!

Patients may “report pain in the absence of tissue damage or any likely pathophysiological cause; usually this happens for psychological reasons. There is usually no way to distinguish their experience from that due to tissue damage if we take the subjective report. If they regard their experience as pain, and if they report it in the same ways as pain caused by tissue damage, it should be accepted as pain.”

# Nociceptive Pain

- Nociceptive pain is protective
  - Helps prevent injury
    - Reflex withdrawal
    - Behaviors to avoid further contact
      - Guarding/protection of injured tissue



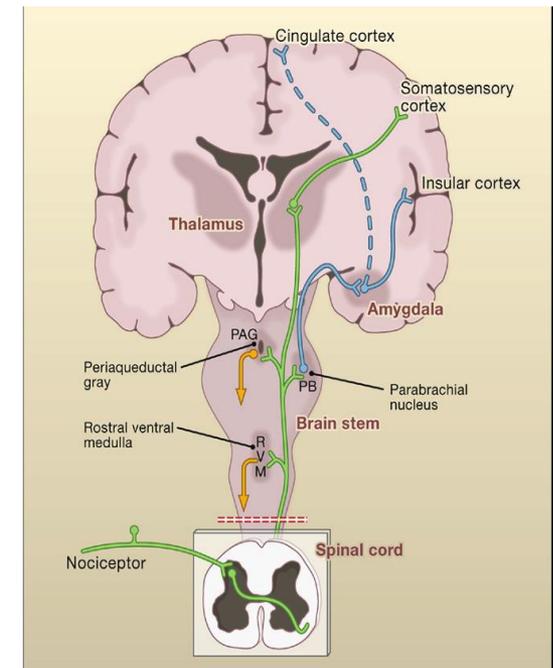
- Examples: arthritis pain, acute post-traumatic pain
- **Somatic pain** and **visceral pain**

# Nociceptive Pain

- Adaptive:
  - Hypersensitive when risk of further damage is high
  - Subsides to baseline when tissue injury has resolved
    - Long-lasting but not permanent
  - Becomes chronic via both peripheral and central mechanisms

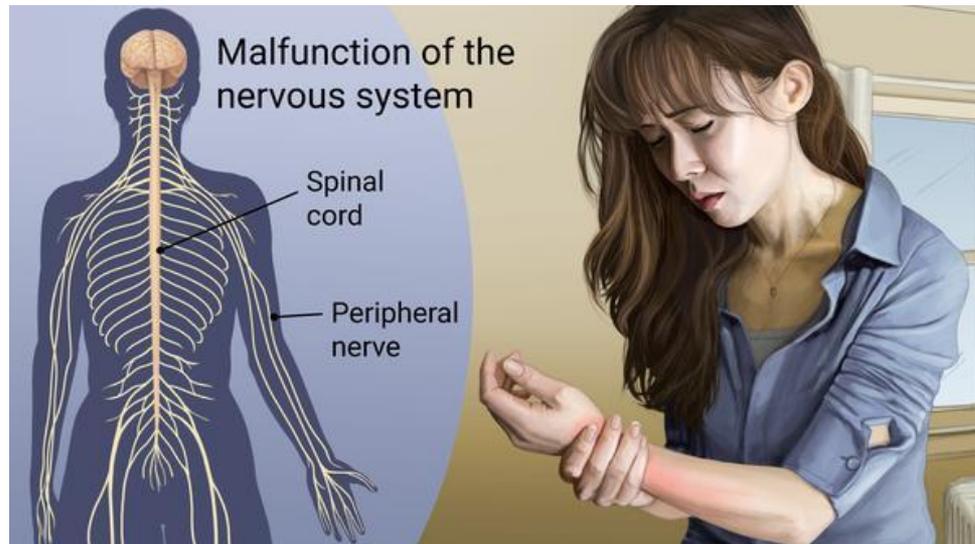
# Neuropathic Pain

- “Pain arising as a direct consequence of a lesion or disease affecting the somatosensory system.”
  - At any point(s) within somatosensory pathways
  - Sustained by aberrant processing
- No protective effect



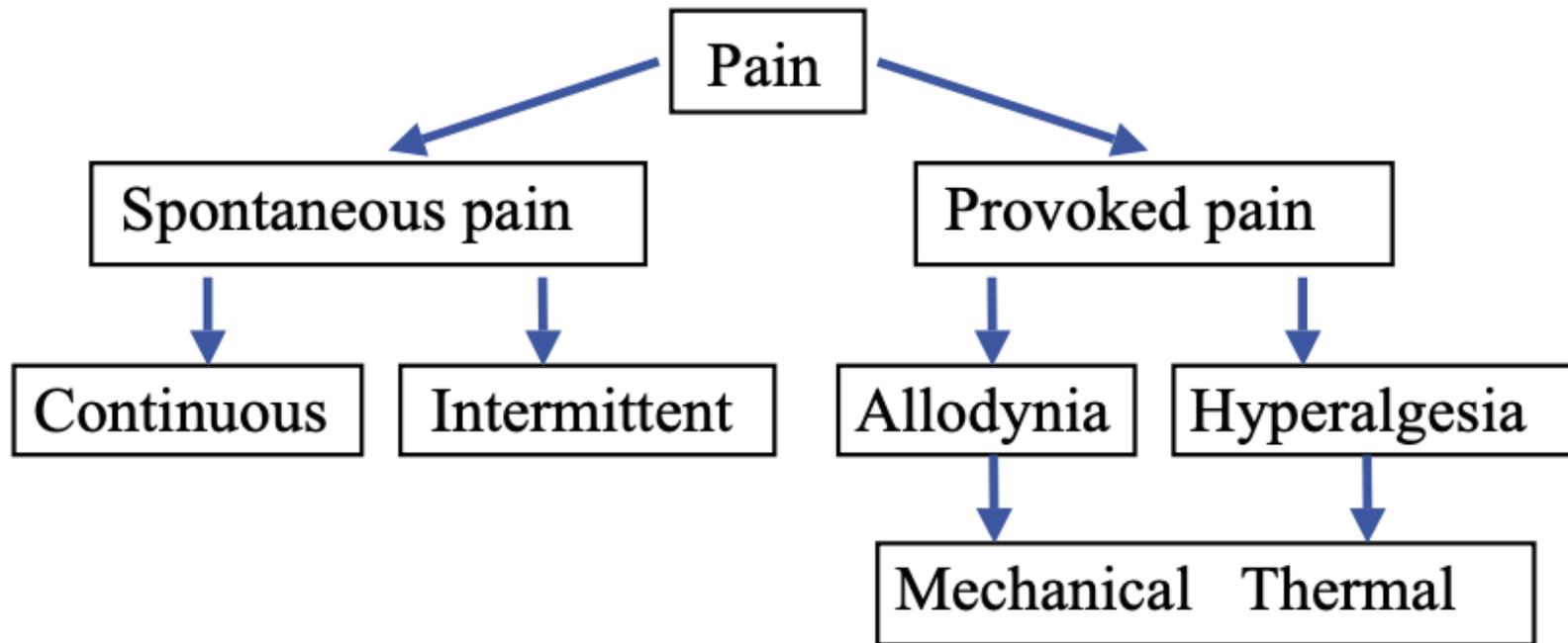
# Neuropathic Pain

- A clinical description (NOT a diagnosis)
  - According to IASP:
    - “requires a demonstrable lesion or a disease”
    - symptoms or signs alone  $\neq$  neuropathic
    - testing may be inconclusive or even inconsistent so...  
use clinical judgment



# Neuropathic Pain

- Positive symptoms: paresthesias, dysesthesias
- Negative signs: (sensory deficits) = neural damage
- Pain characteristics do not tell etiology



LANSS\* DN4\* NPQ painDETECT ID Pain

***Symptoms:***

Pricking, tingling, pins and needles	X	X	X	X	X
Electric shocks or shooting	X	X	X	X	X
Hot or burning	X	X	X	X	X
Numbness		X	X	X	X
Pain evoked by light touching	X		X	X	X
Painful cold or freezing pain		X	X		

# Neuropathic Pain

- Subsets
  - Peripherally generated pain:
    - cervical or lumbar radiculopathy, spinal nerve lesions, and brachial or lumbosacral plexopathies
  - Centrally generated pain:
    - involves injury to the central nervous system at the level of the spinal cord or above.
  - Sympathetically maintained pain:
    - may be generated peripherally or centrally
    - characterized by localized autonomic dysregulation
      - Complex Regional Pain Syndrome

# Central Pain States

- *Central pain*: Pain initiated or caused by a primary lesion or dysfunction in the central nervous system.
  - Can be produced by any type of vascular, demyelinating, infectious, inflammatory, or traumatic lesion in the **brain** or **spinal cord**
    - Eg, post-stroke pain
- *Central sensitization*: Increase in the excitability of neurons in the spinal cord
  - Increased responsiveness of **nociceptive** neurons in the central nervous system

# Central Sensitization

- Gain of function in CNS: abnormal responsiveness
  - Pain from stimuli that do not normally activate nociceptive pathways
    - Activation in response to **subthreshold** input
  - Hypersensitivity even after initial cause resolved
    - **Increased response** to input to which they normally respond
  - Change in how CNS responds to sensory input
    - Not dependent on the intensity, duration or presence of stimuli

# Nociplastic Pain

- IASP: “Pain that arises from altered nociception despite no clear evidence of actual or threatened tissue damage causing the activation of peripheral nociceptors or evidence for disease or lesion of the somatosensory system causing the pain.”
  - Patients can have a combination of nociceptive and nociplastic pain

# Central Sensitization

- Involved in neuropathic pain, inflammatory pain (eg, OA), migraine and irritable bowel syndrome
- May be fundamental in the abnormal and widespread pain sensitivity in fibromyalgia

# Mechanistic Stratification of Medications Used to Treat Neuropathic Pain

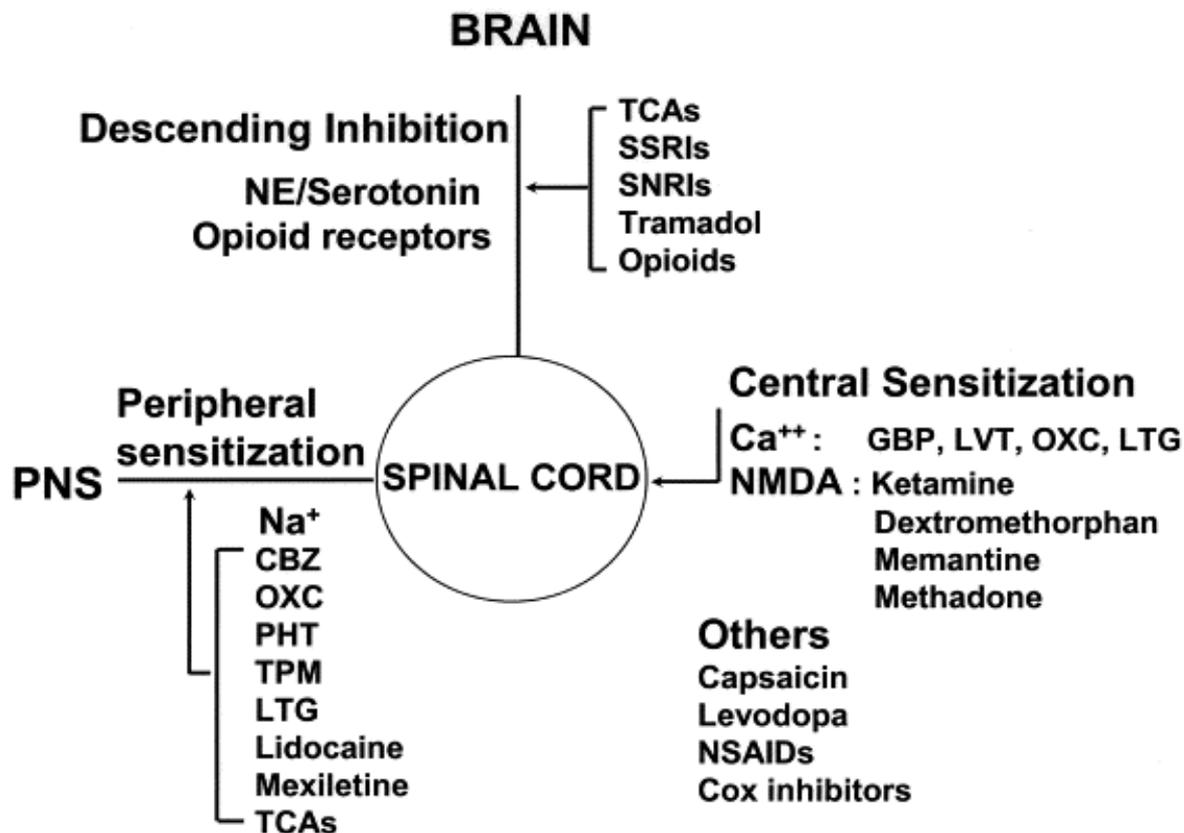


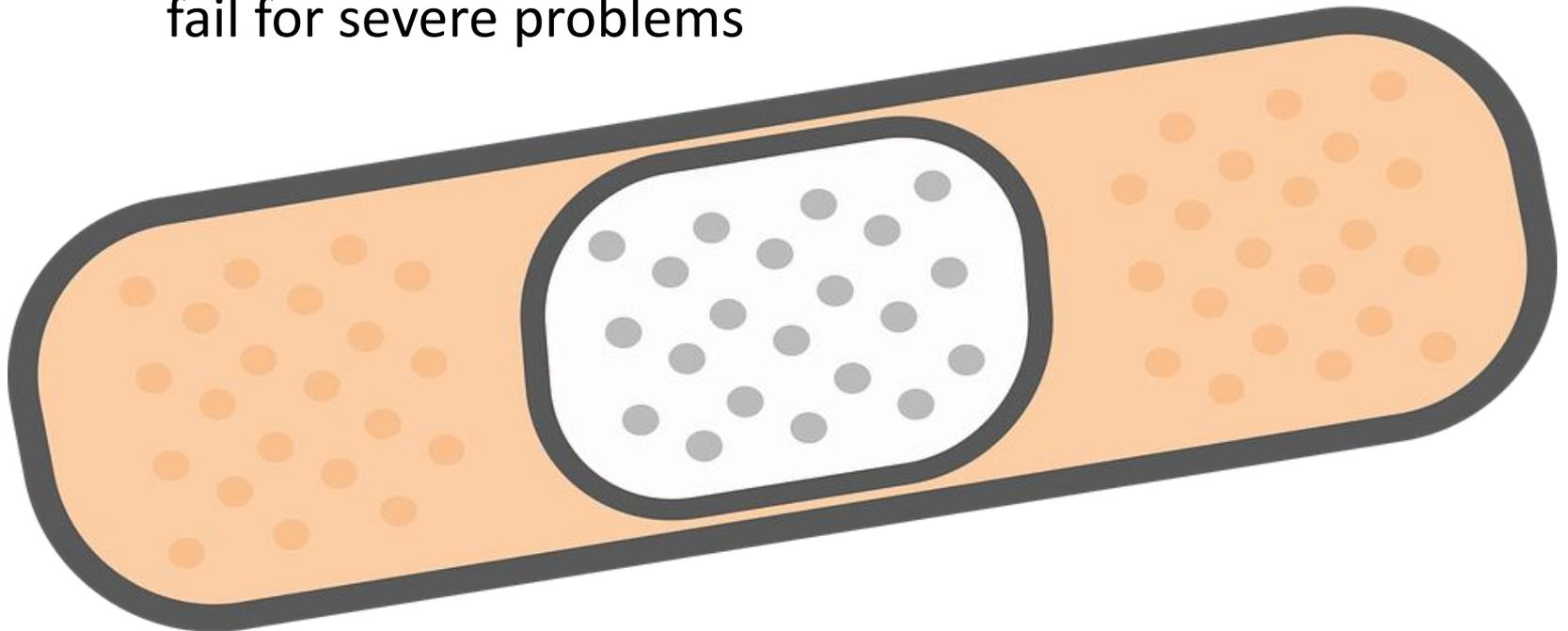
Fig. 4. Mechanistic stratification of antineuralgic agents. PNS = peripheral nervous system; CBZ = carbamazepine; OXC = oxcarbazepine; PHT = phenytoin; TPM = topiramate; LTG = lamotrigine; TCA = tricyclic antidepressant; NE = norepinephrine; SSRI = selective serotonin re-uptake inhibitor; SNRI = serotonin and norepinephrine re-uptake inhibitor; GBP = gabapentin; LVT = levetiracetam; NMDA = N-methyl-D-aspartate; NSAID = nonsteroidal anti-inflammatory drug.

# Fibromyalgia

- Diagnosis
  - Based on the total of number of painful areas out of 19 parts of the body plus level of severity of:
    - Fatigue
    - Waking unrefreshed
    - Cognitive (memory or thought) problems
    - Plus number of other general physical symptoms
- Etiology: peripheral & **central nervous system**
- Treatment: “strongly recommended to avoid opioid” medications, as these further sensitize and make pain persist

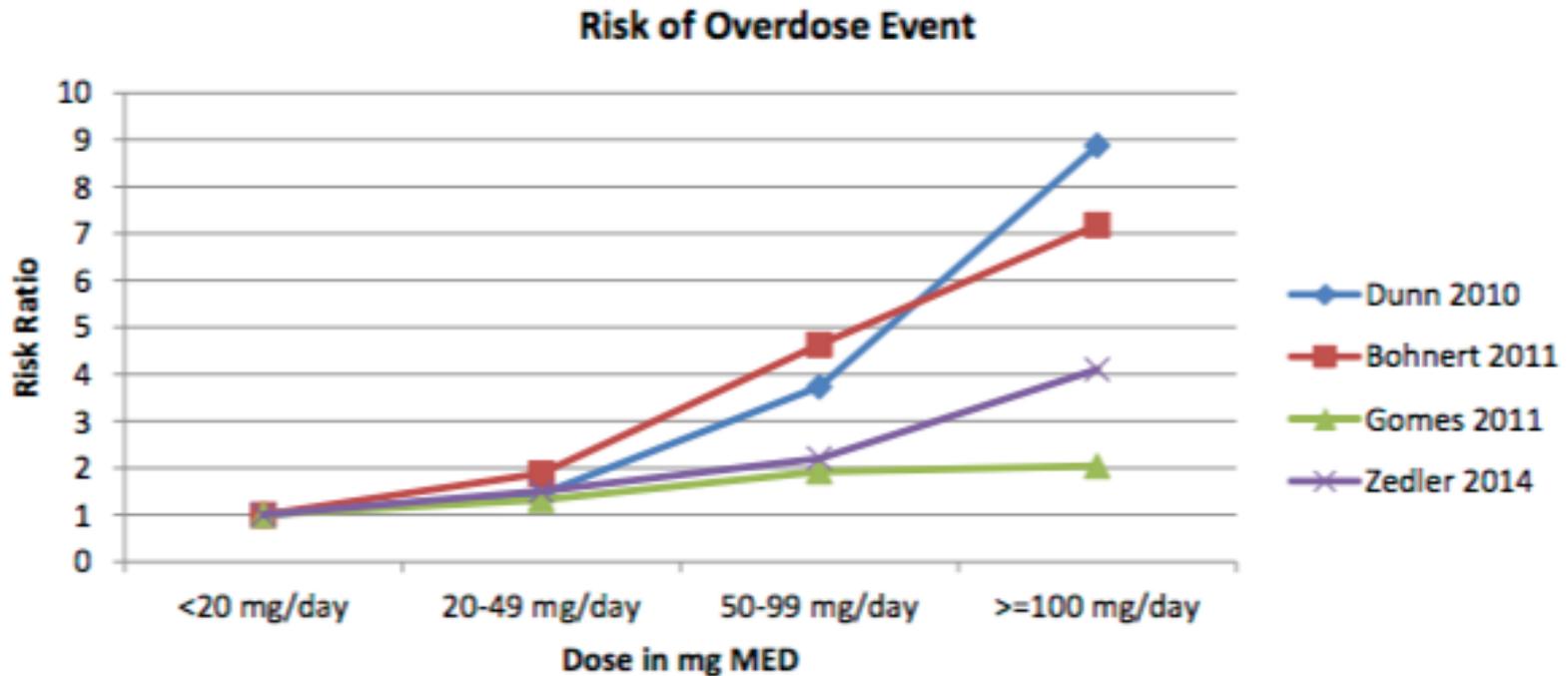
# Opioids are like Band-Aids®

- Efficacy says nothing about the cause of the pain
- Do not treat the cause
- Not always the best tool for the job
  - Things may look better for a while but eventually may fail for severe problems



# Opioid Overdose Risk

- There is NO completely safe dose
  - Risk of overdose proportional to dose



# Discussion

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## Overall, how helpful was today's session for you?

- a. Very helpful
- b. Somewhat helpful
- c. Neither helpful nor unhelpful
- d. Somewhat unhelpful
- e. Very unhelpful

**Chat In**

**What is one thing you will try this week,  
as a result of this session?**

## Poll

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### Overall, how satisfied are you with today's session?

- a. Very satisfied
- b. Somewhat satisfied
- c. Neither satisfied nor dissatisfied
- d. Somewhat dissatisfied
- e. Very dissatisfied

**Chat In**

What do you need us to cover in upcoming sessions to help you?

# Schedule

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Shared Learning Calls will take place every other month  
8:00AM – 9:00AM on the 3<sup>rd</sup> Thursday.

- **2020 Dates**

- **May**      **Thurs 5/21**
- **July**      **Thurs 7/16**
- **Sept**      **Thurs 9/17**
- **Nov**      **Thurs 11/19**