

Unpacking the Complex Relationship Between Pain and Trauma: A Path Towards Healing

Brittany Rosenbloom, PhD CPsych

Women's College Hospital

Department of Anesthesia and Pain Medicine, University of Toronto



Toronto Academic Pain Medicine Institute



Overview

- Estimate the prevalence of trauma and trauma-related symptoms in a chronic pain population
- Defining “trauma”
- Identify the proposed theory for the connection between chronic pain and trauma
- Differentiate between trauma-informed, trauma treatment, and combined treatment for trauma and chronic pain





Some stats



Chronic pain

- Nearly 8 million Canadians have chronic pain (i.e. pain lasting longer than 3 months)
- Certain populations bear more of the burden, particularly vulnerable sectors such as women, elderly, Indigenous Peoples, Veterans, and certain ethnic minorities

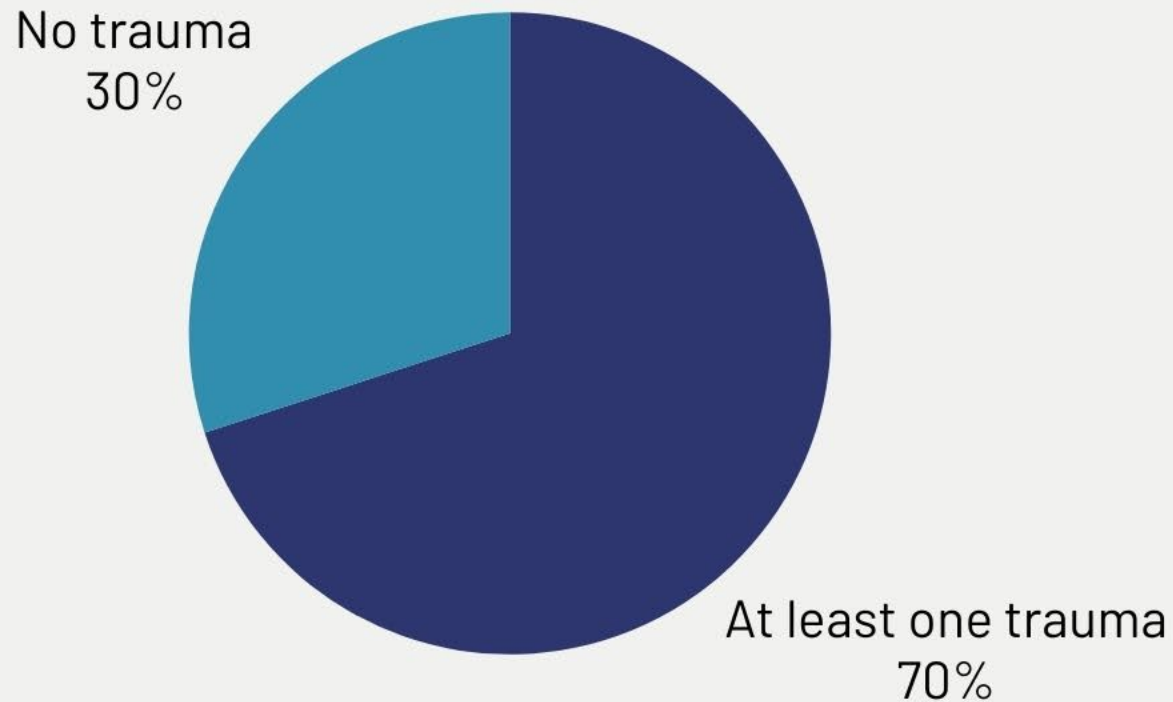


PTSD

- 65% of adults in Canada reported experiencing at least one trauma type in their lifetime (e.g., car collision)
- 6.8% of Canadians have a lifetime diagnosis of PTSD

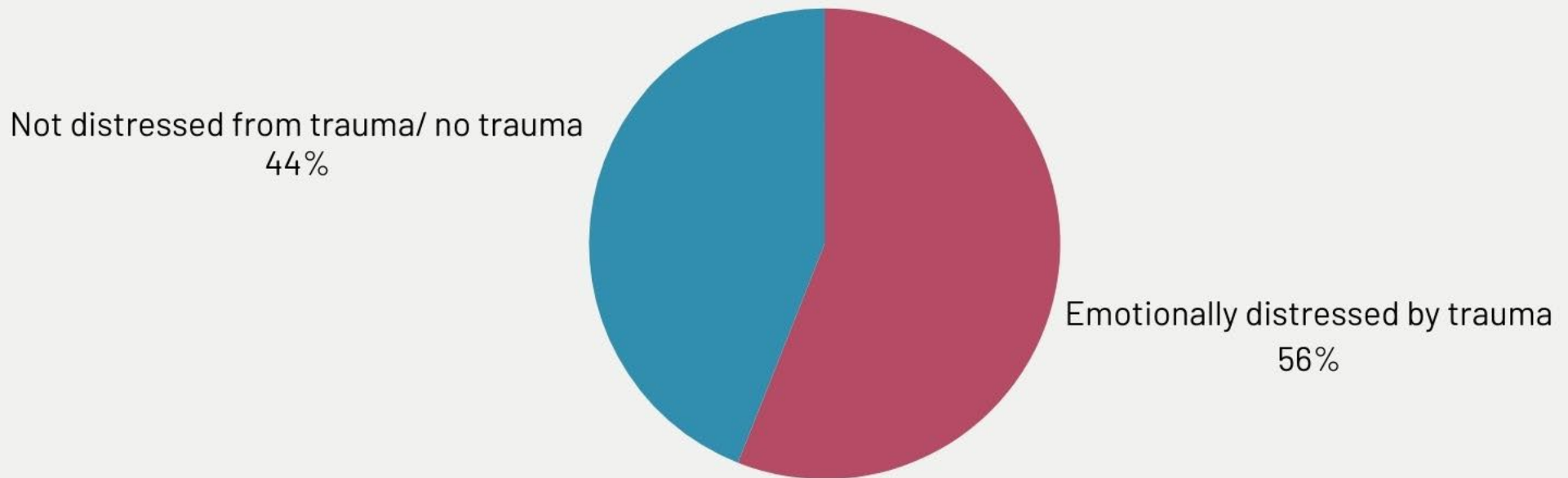
In a tertiary care pain clinic:

> Chronic pain *AND* trauma (n = 1,534)



In a tertiary care pain clinic:

➤ Chronic pain *AND* possible PTSD (n = 1,534)



Trauma, Adversity, & PTSD



What is meant when we say “trauma”

> *DSM-5*

- Could be defined based on Criterion A of the DSM [e.g., index traumatic event = usually externally driven; experiencing stressors outside the range of usual human experience; exposure to actual or threatened death, serious injury, or sexual violence (either direct exposure or via witnessing, learning about, or being repeatedly exposed to aversive details)]

> *ICD-11*

- Same as DSM-5 but also specifies that it could include prolonged, chronic exposure to traumatic experiences, such as childhood abuse, torture, domestic abuse, or slavery

Note: The sociocultural context also may impact symptom presentation, such as whether the event violates culturally-specific moral norms



What about “adversity”?



- Adversity is a broader term than trauma ... it includes potentially distressing or traumatic experiences occurring throughout life, such as:
 - Abuse
 - Neglect
 - Parental loss
 - Family discord
 - Assault
 - Partner violence
 - Workplace abuse
 - National displacement
 - Social injustice

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How do we define PTSD?

> *DSM-5*

- Need index traumatic event
- After event, the following occurs: (1) intrusion symptoms, (2) persistent avoidance of stimuli, (3) negative alterations in cognitions and mood, and (4) marked alterations in arousal and reactivity

> *ICD-11*

- Index trauma + after event the following occurs: (1) re-experiencing, (2) avoidance, and (3) persistent threat.
- And/or can have **complex PTSD** to cover ongoing adversity and trauma (e.g., childhood abuse) that is associated with disturbances in self-organization that include: emotional dysregulation, interpersonal difficulties, and negative self-concept



Making sense of trauma

- “Trauma is not what happens to you. Trauma is what happens inside of you as a result of what happens to you... Think of a car accident where someone sustains a concussion: the accident is what happened; the injury is what lasts... it’s a psychic injury, lodged into our nervous system, mind, and body, lasting long past the inciting incident(s), triggerable at any moment.” – Gabor Mate

What patients say about their trauma & pain



Overlap between chronic pain and trauma...

CHRONIC PAIN

Relationships

Hypervigilance

Avoidance

Behavior

Emotional dysregulation

Self-Worth

Physical symptoms

Negative thoughts & emotions

Identity

Coping

Expectations for the future

fight/flight/freeze

TRAUMA

Internal dialogue with both chronic pain and trauma...

CHRONIC PAIN

I don't know who to trust Shame Bad things happen to me
No one cares helpless other people's fault nothing I can do can't deal
no one will help me everyone leaves me lose it overwhelm
Grief my body failed me fear worthless Nothing will ever change
can't control my emotions alone my fault
I don't trust my body unsafe no hope sad can't feel anything
not the same person anymore I'm broken

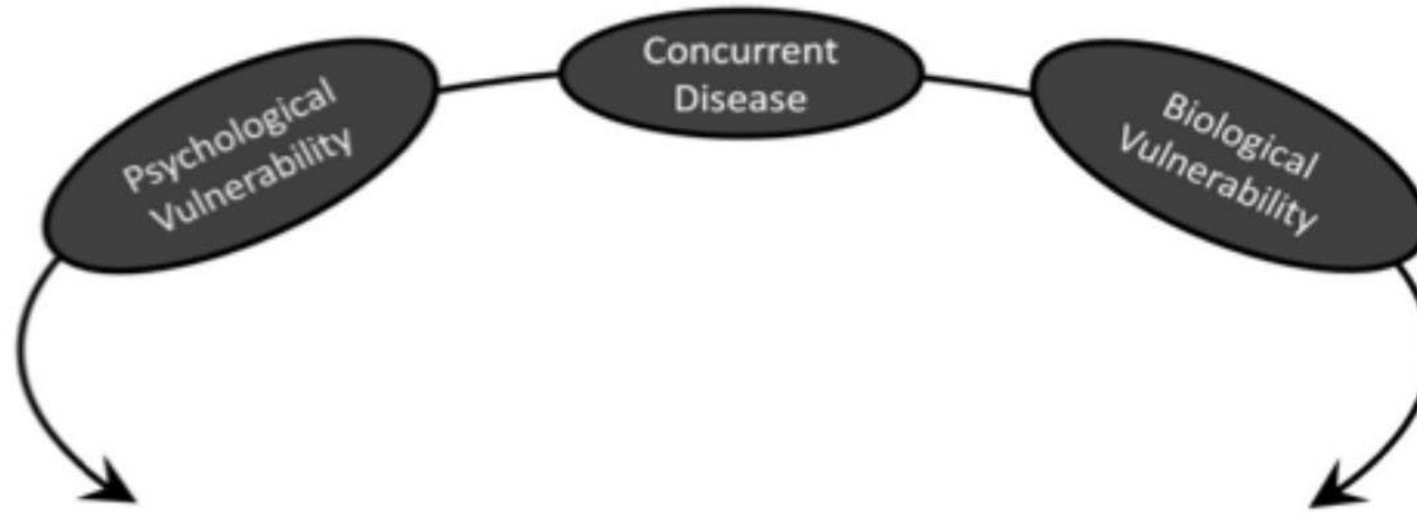
TRAUMA



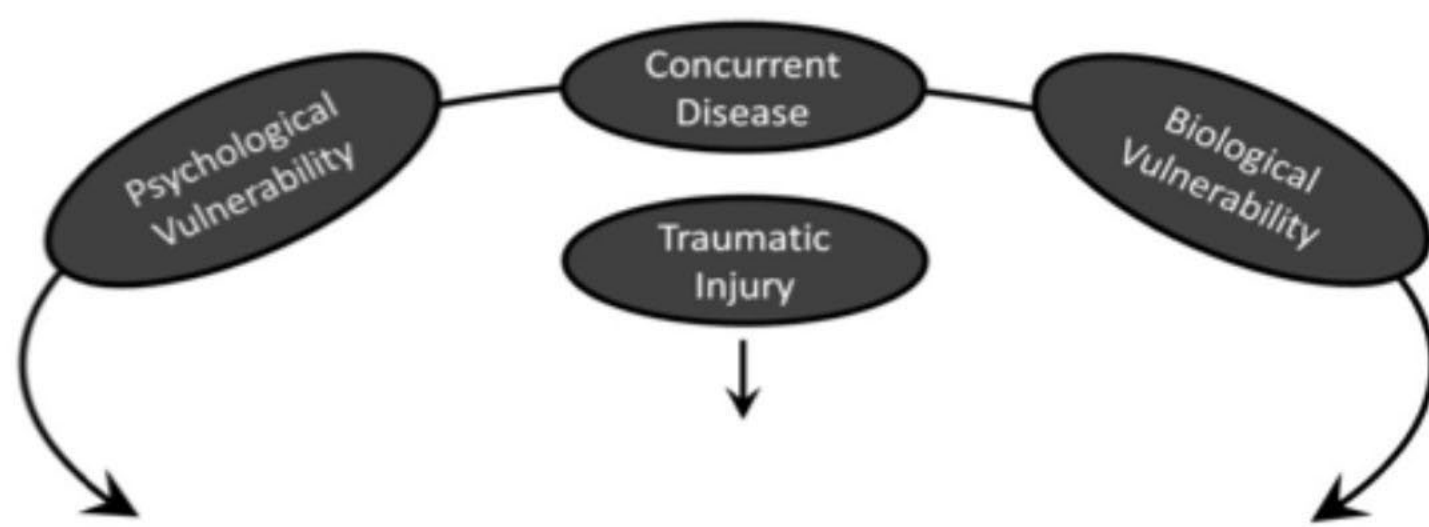
Theoretical Connection between PTSD and Pain



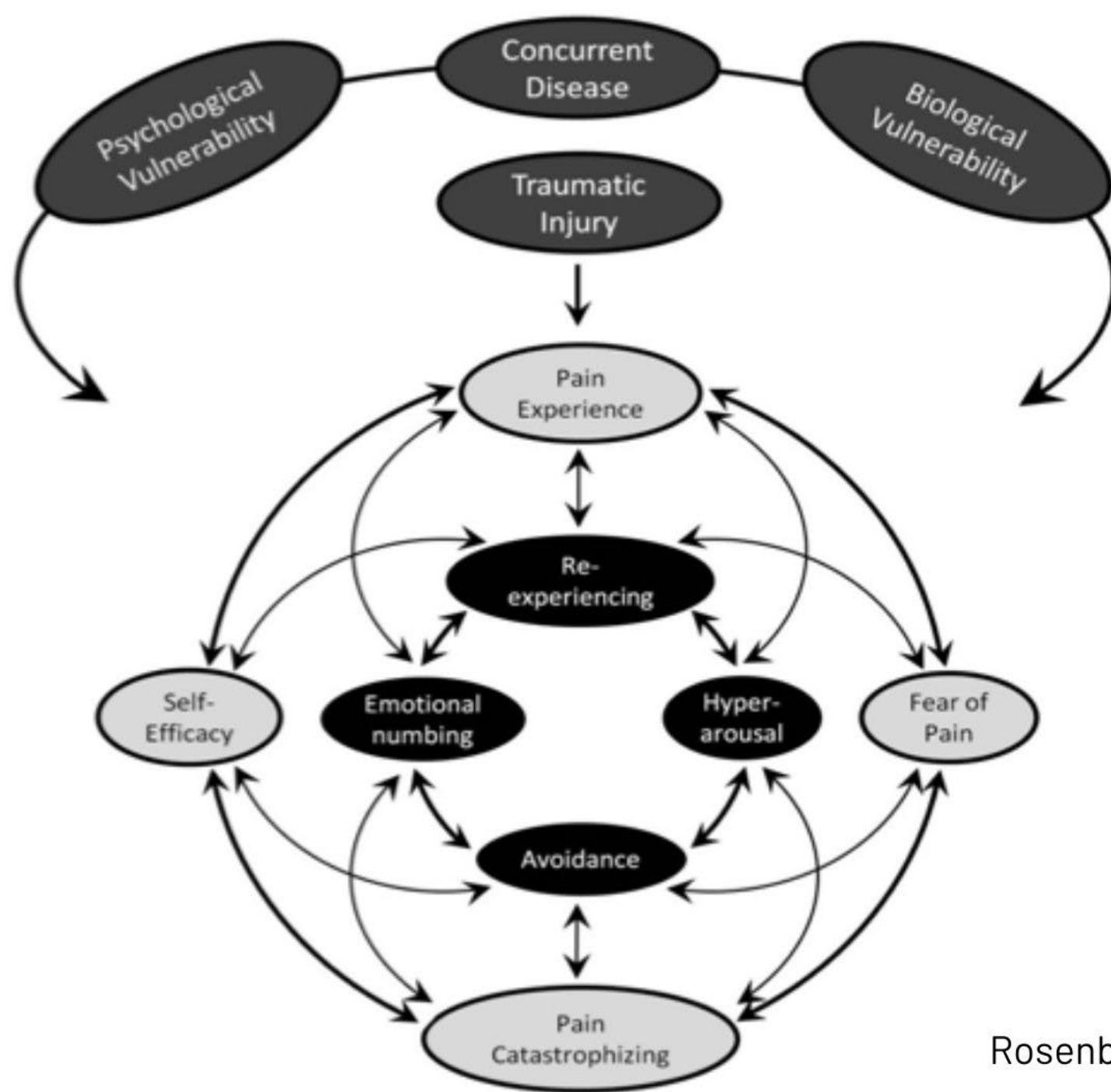
Shared Vulnerability Model



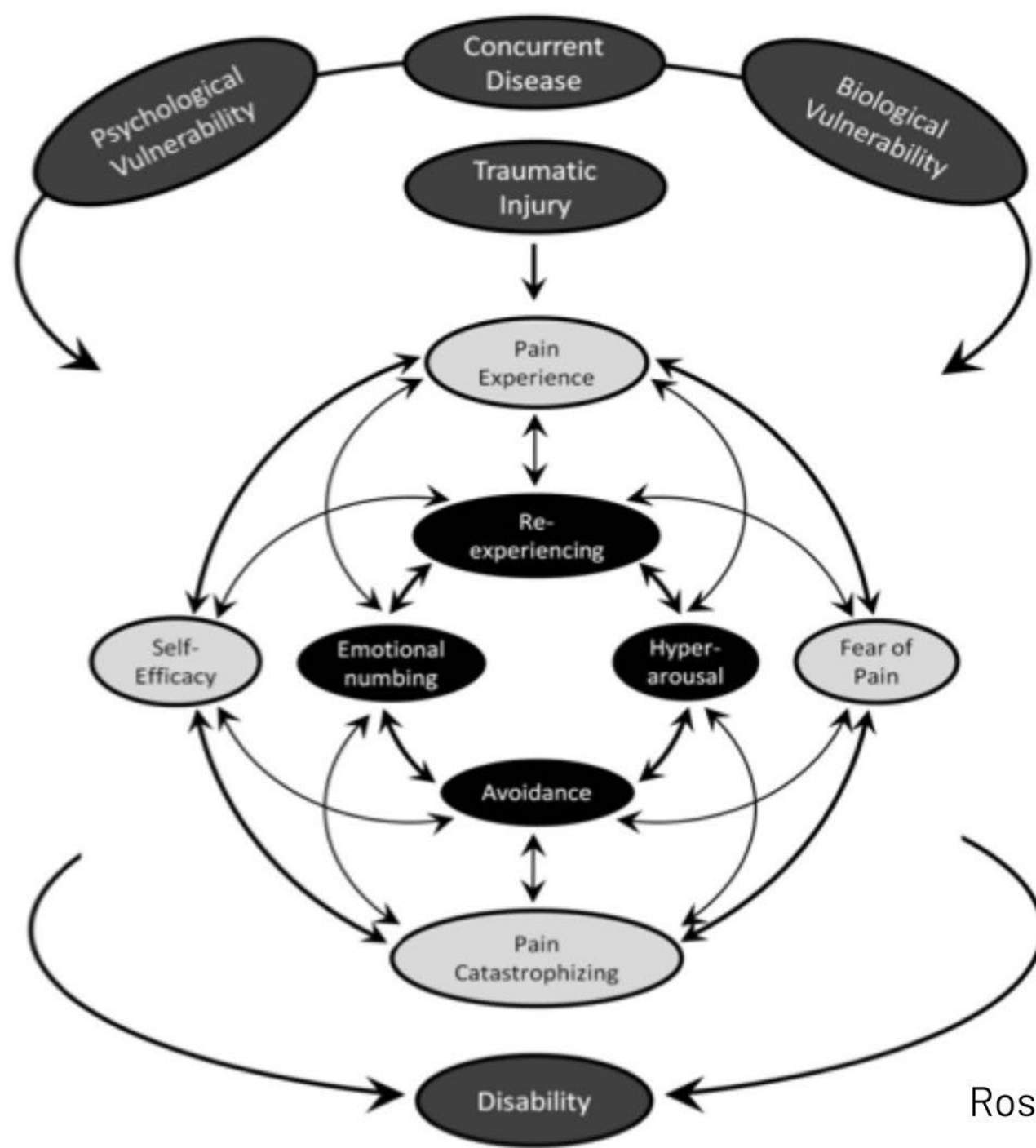
- Psychological Vulnerability (e.g., anxiety sensitivity)
- Biological Vulnerability (e.g., low threshold for startle, pre-existing HPA axis sensitivity)



Mutual Maintenance Model



Rosenbloom et al, 2013



Rosenbloom et al, 2013

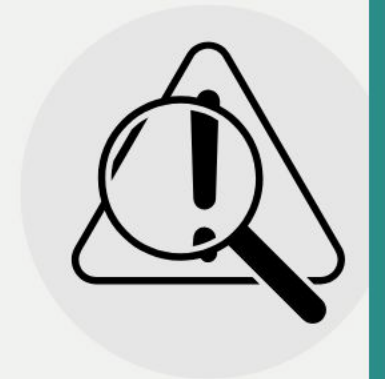
Treating trauma and pain



Treating Co-Occurring PTSD and Pain

➤ The Problem...

"Treatments for PTSD have developed independently from those for CP. Treatment guidelines routinely list PTSD and CP separately, and clinical settings typically treat PTSD and CP by different professionals, in different clinics, using disorder-specific treatments." (Lumley et al 2022)



PAThway Forward Team



Pain and Trauma Healing (PATH): The Plan

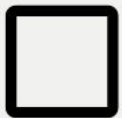
➤ Conduct a systematic review and meta-analysis



First, we have conducted a systematic review and meta-analysis to identify existing psychotherapeutic interventions that concurrently target trauma and chronic pain



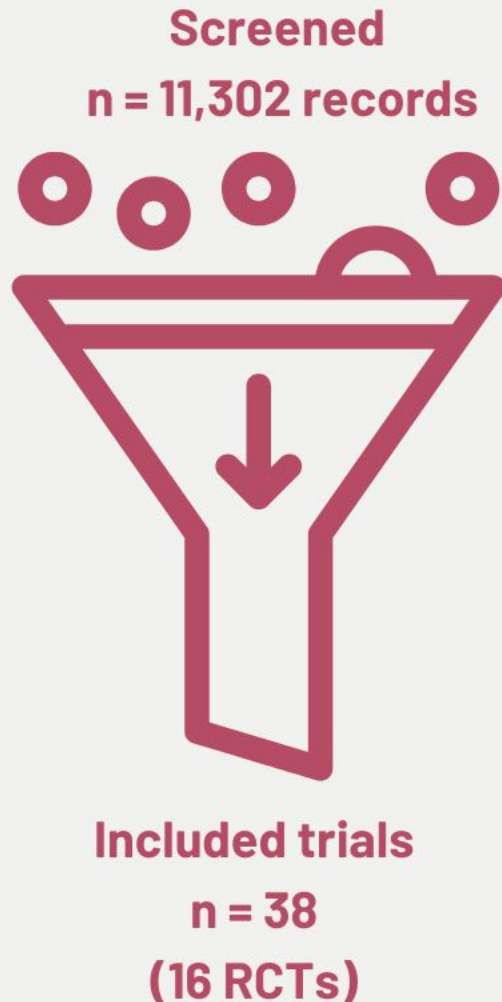
Second, we are assessing the efficacy of psychotherapies for trauma and chronic pain



Third, develop a large scale RCT to assess efficacy in a complex population



Current Evidence



Types of therapies evaluated in the RCTs:

1. Emotional awareness and expression therapy (EAET)
2. Yoga and mantram repetition
3. Eye movement desensitization and reprocessing (EMDR)
4. Teaching recovery techniques
5. Biofeedback + cognitive behavioural therapy (CBT)
6. Mindfulness based stress reduction (MBSR)
7. Acceptance and commitment therapy (ACT)
8. Stress inoculation training + pharmacotherapy
9. Trauma focused cognitive behavioural therapy (TF-CBT)
10. Cognitive behavioural therapy (CBT)

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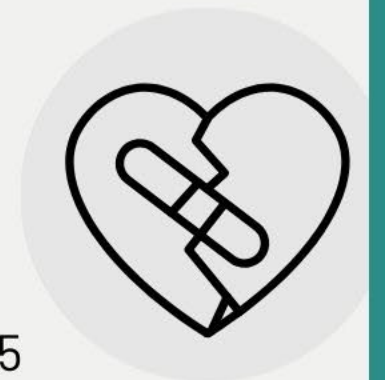
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BUT... not all studies had both pain and trauma outcomes evaluated, control groups varied, risk of bias was high (n=12/16), only a few with large samples, and little rationale for treatment modality.



What can be done, right now...

- Here are some universal trauma-informed principles:
 - Using empathetic communication and active listening
 - Also, think sensitive and compassionate
 - Demonstrating respect for patients' experiences
 - Involving patients in treatment decisions
 - Avoiding invasive procedures without adequate explanation or consent
- Screen your patients with a validated trauma screener (e.g., PLC-5, VA Trauma Screener) to direct care
- One size does not fit all, consider personalized care





Thank you!

brittany.rosenbloom@wchospital.ca

