

# REFRAME THE PAIN: A PILOT RCT OF PARENT-LED MEMORY-REFRAMING INTERVENTION TO ALTER CHILDREN’S MEMORIES FOR PAIN

Maria Pavlova, MSc<sup>1</sup>, Melanie Noel, PhD<sup>1,2,3,4</sup>, Serena Orr, MD, MSc, FRCPC<sup>1,5</sup>

<sup>1</sup>University of Calgary, <sup>2</sup>Alberta Children’s Hospital Research Institute, <sup>3</sup>Owerko Centre, <sup>4</sup>Hotchkiss Brain Institute, <sup>5</sup>Alberta Children’s Hospital

## Background

Parent-child interactions regarding pain experiences have been argued to play a powerful role in children’s pain outcomes.

To date, the research has focused on the parent-child interactions with regards to *immediate*, usually *experimental* or *acute*, pain experiences.

Parent-child reminiscing, or talking about past, provides a snapshot of parent-child verbal interactions and influences developmental trajectories [3].

Parent-child reminiscing offers a unique framework to examine how *past chronic pain* experiences are narrated, constructed, and reconstructed.

Parent-child reminiscing about *past pain* differs from reminiscing about other negative events and impacts how children remember their acute pain [2].

Parent-child reminiscing characterized by emotion- and coping-focused language has been linked to children’s outcomes in the context of chronic pediatric conditions [1].

No studies examined parent-child reminiscing about past chronic pain experiences.

## Study Aim

To characterize parent-child reminiscing about past chronic pain flare-ups.

## Acknowledgements



UNIVERSITY OF  
CALGARY



## Reminiscing Themes

### FOCUSING ON FACTS

Reiterating specific facts regarding past headaches/migraines (e.g., length, trigger, sensations).

*Parent: I do remember the circumstance, but I do not remember [the headache] that much.*

*Child: I slept, did not really eat and felt like I was dying.*

Carly, 14 years old, and her mother

*Parent: We were shoe shopping or whatever, we went to a mall for Christmas shopping.*

*Child: And it was really not fun. I had to sit in the car for a while, as it hurt so bad. Pretty not fun.*

James, 16 years old, and his mother

### PREVENTION

Learning from past headaches/migraines to prevent future headaches (e.g., monitoring hydration, ensuring sleep hygiene).

*Child: I think I drink lot of water these days though.*

*Parent: It’s lights. They always get you. You need to limit them.*

Nina, 12 years old, and her mother

*Parent: Was it the toast that triggered a headache?*

*Child: Nah...the only foods that actually do trigger headaches are ranch [dressing], watermelon and this one other.*

Jack, 16 years old, and his mother

### COMMUNICATION

Acknowledging how challenging it is to communicate about pain and distress, seeking support and validation.

*Child: Uh, I don’t want you to stress about every single headache, but there are times when it’s like “kay, I’m not doing great, I don’t want you to be scared about it, but I’m scared about it” and I’m panicking and I’m in pain.*

*Parent: Ok, but I don’t know when you do that because you don’t communicate that with me.*

Gregory, 14 years old, and his mother

*Parent: I remember we...left you alone during that time.*

*Child: Which was really nice of you, because if you had come into my room, I probably would have screamed at you because I was in a lot of pain.*

*Parent: Because that would’ve helped.*

*Child: No, it really wouldn’t have but I’m saying I was in a lot of pain, and I don’t convey my thoughts when I’m in pain.*

Sasha, 18 years old, and her mother

## Sample

30 youth and one of their parents

60% girls, 92% mothers

$M_{age}$  = 13.5 years (*range* 8 to 18 years)

Presenting with recurring headaches/migraines

## Procedure

Participants completed a narrative elicitation task using a video-conferencing platform (i.e., Zoom).

Youth and one of their parents reminisced about two salient events that involved past headaches/migraines.

The narratives were recorded and analyzed using Inductive reflexive thematic analysis.

## Conclusions

Parent-child reminiscing offers a novel way to examine how the experience of pediatric chronic pain is shaped by parent-child verbal interactions.

Future studies will examine the links between reminiscing style and children’s psychological functioning and pain outcomes.

Novel treatment targets may include modifying the way children and parents narrate about past pain flare-ups to alleviate children’s pain-associated distress and aid recovery from and/or adaptation to chronic pain.

## References

- [1] Guidotti L, Solari F, Bertolini P, Gebennini E, Ghiaroni G, Corsano P. Reminiscing on acute and chronic events in children with cancer and their parents: An exploratory study. *Child: Care, Health and Development* 2019;45(4):568-576.
- [2] Pavlova M, Lund T, Nania C, Kennedy M, Graham S, Noel M. Reframe the Pain: A Randomized Controlled Trial of a Parent-Led Memory-Reframing Intervention. *J Pain* 2021.
- [3] Salmon K, Reese E. The benefits of reminiscing with young children. *Current Directions in Psychological Science* 2016;25(4):233-238.