

Persistent Pain Waitlist Workshop: Piloting a Group-Based CBT Intervention for Pediatric Pain

Ari M. Romano-Verthelyi, M.S. and Michelle Swanger-Gagne, Ph.D.
 University of Rochester Medical Center, Department of Pediatric Rheumatology



Introduction

- Amplified Musculoskeletal Pain Syndrome (AMPS) encompasses a spectrum of chronic, idiopathic pain disorders (Sherry, 2015)
 - All subtypes include (Weiss & Stinson, 2018)
 - intensified pain signal
 - increased functional disability
 - Treatment involves a multi-disciplinary approach, including psychotherapy, PT/OT, and consultation with a physician (Gmuca & Sherry, 2017; Sherry, 2015; Weiss & Stinson, 2018)
- Unfortunately, logistical barriers can impede service acquisition, including time, cost, and access to care (Coakley et al., 2017; Darnall et al., 2016)
 - Consultation with URM's Dept of Pediatric Rheumatology indicated the need for patients to receive information and services while on the waitlist for treatment
- Group-based interventions have been developed and shown to effectively treat pediatric chronic pain (Coakley et al., 2017)
- Thus, the purpose of this study was to pilot a workshop for youths and parents with AMPS. Results of this study will be aimed at informing future intervention efforts.

Workshop Curriculum

Day 1

- Pain & How it Affects Values-Based Living
- Pain Psychoeducation
 - Autonomic nervous system
 - Biopsychosocial model, systems informed
- Apply the science: diaphragmatic breathing
- Video on sleep hygiene

Day 2

- Brief review of stress as a trigger
- Automatic thoughts
 - How to challenge them
 - Leaves on a stream/mindfulness
- Avoidance - Adaptive. And. Impairing.
 - Make a plan to ride the wave

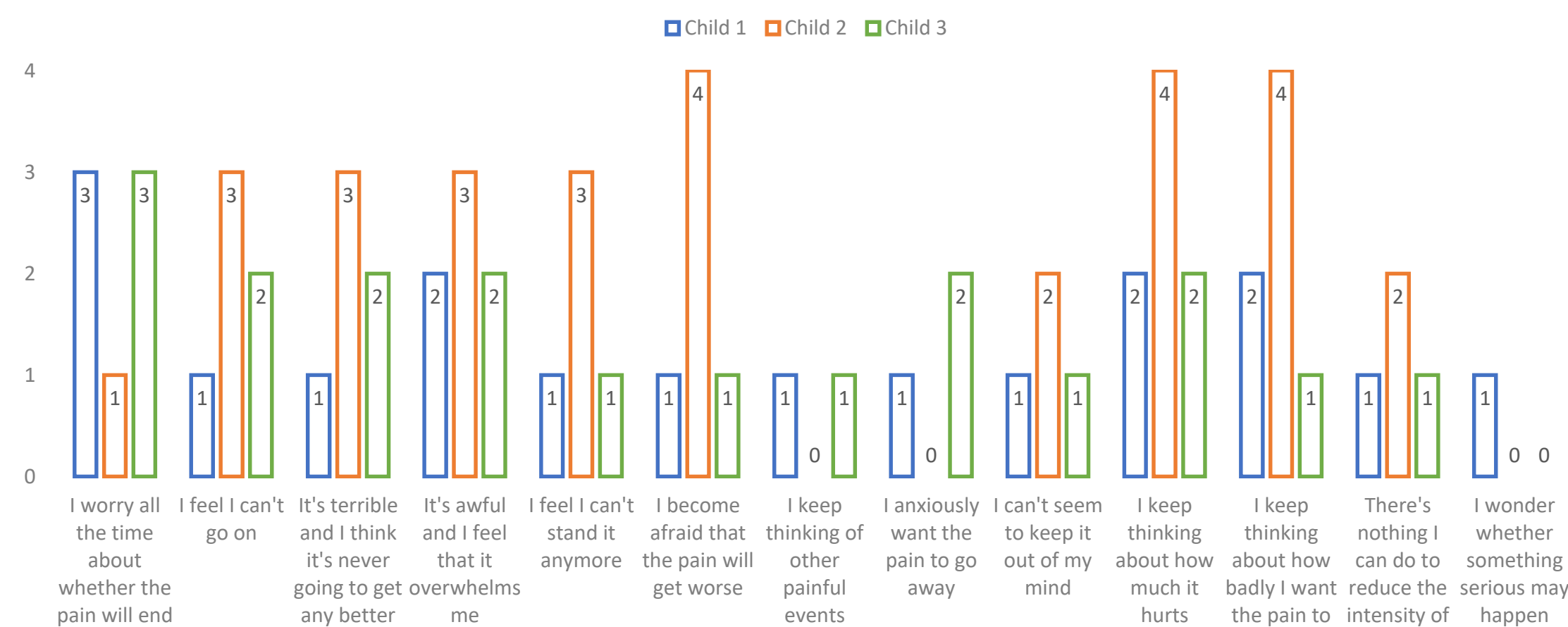
Methods

- Research Design
 - Two 90-minute workshops took place over two weeks via Zoom for parents and teens involved with AMPS (i.e., about to be seen, being seen)
 - 13 families were invited via phone and MyChart
 - 3 families declined; 6 families agreed
 - 4 families (1 parent per teen) attended week 1
 - 2 families (2 parents per teen) attended week 2
- Participants were White, non-Hispanic, and in late adolescence. They varied in terms of gender
- Measures
 - Demographic questions
 - Pain Catastrophizing Scale (Sullivan, Bishop, & Jayne, 1995)
 - Pain Self-Efficacy Scale (Bursch, Tsao, Meldrum, & Zeltzer, 2006)
 - Program Evaluation Questions

Results

- Families who attended week 2 were significantly more likely to:
 - Be on the waitlist for evaluation/treatment with the AMPS Clinic
 - Have divorced parents and bring a second parent to week 2
- 85.7% reported that they would recommend this workshop to families with chronic pain
- 57.1% recommended families participate when initially diagnosed
- Others suggested it take place at the beginning of treatment and/or as a refresher/booster workshop a few months post-treatment
- Overall, families reported liking the program and finding it useful
 - Families appreciated learning strategies to manage chronic pain, as well as learning that they were not alone in their experiences
 - Recommendations included shorter sessions over more weeks and an earlier start time

Pain Catastrophizing Scale



Note. 0 = Not at all; 1 = To a Slight Degree; 2 = To a moderate degree; 3 = To a great degree; 4 = All the Time

Results cont.: Pain Self-Efficacy Scale

Independent t-tests compared parents and children's answers and indicated that joint analysis was appropriate

3 youths and 5 parents completed this scale at week 1.

When you/your child is in pain, how sure are you that you/your child...	Participants (N = 8)	
	M	SD
...can make it through a day of school?	3.50	1.07
...can be with friends?	3.50	0.53
...can do well in school?	3.50	0.93
...can do house chores?	2.50	0.93
...can take care of themselves?	3.50	0.93
...can do homework?	3.13	1.13
...can do things with family?	3.25	1.04

Note. 1 = Very Unsure; 2 = Pretty Unsure; 3 = In the Middle; 4 = Pretty Sure; 5 = Very Sure

Discussion

- It was notable that parents and children did not meaningfully differ in their pain interpretations
 - Lends additional support to our workshop including parents in groups
- Participants appeared to have some uncertainty as to whether teens would be able to engage in functional behavior when experiencing pain.
 - Teens similarly varied in the extent of their catastrophizing
 - Future studies would be encouraged to examine how such uncertainty and variability might predict amenability to treatment in the long-term
- Unexpectedly, it proved challenging to recruit attendees.
 - Given the feedback requesting changes to the structure of the workshop (e.g., time of day, length of each session), a different format may help future recruitment.
- Though attrition occurred, it was notable that families who completed the workshop brought additional caregivers to session 2.
 - Relatedly, most participants reported that they found the workshop helpful, especially if they were just beginning their experience with the AMPS Clinic
 - Considering that families reported appreciating pain-related strategies and the decreased sense of isolation in their pain experience, we would encourage continued efforts to provide psychoeducational information to families in group format.
 - The decreased sense of isolation particularly suggests that there may be added benefit in providing this information in a group format.
- Though our findings are limited by our small sample size, our project nonetheless provides valuable data to inform future efforts to provide group-based intervention to youths and families struggling with chronic pain.

Acknowledgment

Thank you to the department's Education Committee for funding the cost of the poster. Thank you also to the Department of Pediatric Rheumatology for their feedback, support, and collaboration. Most of all, I would like to thank Dr. Michelle Swanger-Gagne for her invaluable, guidance, mentorship, support, and direction in the development of this QI project.