Understanding Illness Encouragement and Pain Acceptance in Pediatric Patients with Abdominal Pain

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IRB Number: STUDY00001620

Describe role of Submitting/Presenting Trainee in this project (limit 150 words):

This study is a chart review that utilized data from an existing clinical tracking database. While under the mentorship of Dr. Schurman, trainee was involved in the design and conception of the study (i.e., variables to be examined and how to examine variables of interest), drafting of the IRB, and data analysis and interpretation. The other contributors also reviewed and provided their input on this work.

Background, Objectives/Goal, Methods/Design, Results, Conclusions limited to 500 words

Background:
Parents can respond to their child’s abdominal pain in a variety of ways, and parental illness encouragement (e.g., spoiling, letting child stay home from school) is known to relate to longer periods of illness. Modeling and reinforcement of the “sick role” has been used to explain these processes. Many pediatric patients with abdominal pain will continue to experience symptoms in adulthood, so having a full understanding of what pain management techniques patients adopt is crucial. This study explored the impact of parental illness encouragement on how patients engage in valued activities (i.e., activity engagement) and prioritize controlling their pain (i.e., pain willingness), facets of pain acceptance that have been associated with physical and emotional functioning in chronic pain samples.

Objectives/Goal:
The study aimed to 1) examine the amount of variability in CPAQ-A subscale (activity engagement, AE; pain willingness, PW) accounted for by IBES subscale (release from responsibility, RfR; attention and privileges, ATTN), and 2) determine how API impacts the prediction model. See below for measure details.
**Methods/Design:**
Participants were 119 pediatric patients aged 13.95 ± 2.64 years (86% female; 87% White) seen for initial evaluation in a multidisciplinary abdominal pain clinic. All patients met criteria for a Rome IV functional gastrointestinal disorder. Data included demographics, parent-reported illness encouragement (Illness Behavior Encouragement Scale; IBES), self-reported pain acceptance (Chronic Pain Acceptance Questionnaire for Adolescents; CPAQ-A), and self-reported abdominal pain severity (Abdominal Pain Index; API).

**Results:**
Patients’ typical pain intensity in the two weeks prior to initial evaluation ranged from 2 to 9 on a 10-point scale (M = 5.90; SD = 1.62), with 39.50% reporting daily abdominal pain. While RfR negatively predicted both AE, F(1, 117) = 18.13, p < .001, and PW, F(1, 117) = 4.36, p = .04, ATTN did not add significantly to the prediction model. When abdominal pain severity was added to the prediction model, both API and RfR independently explained a significant amount of variance in AE, R² = .17, R² Adjusted = .16, F(2, 116) = 11.90, p < .001; API, β = -1.91, t(116) = -2.25, p = .03; RfR score, β = -1.04, t(116) = -4.03, p < .001. API and RfR together also explained a significant amount of variance in PW, R² = .09, R² Adjusted = .07, F(2, 116) = 5.65, p = .005; however, API independently predicted PW, β = -1.84, t(116) = -2.60, p = .01, whereas RfR no longer showed a significant independent effect, β = -0.39, t(116) = -1.82, p = .07.

**Conclusions:**
Results suggest that patients experiencing abdominal pain and being released from responsibilities may engage in valued activities less and be less willing to tolerate pain while prioritizing other life goals. Findings highlight the importance of monitoring parenting behavior and encouraging a return to functioning as quickly as possible during routine care. Future work should focus on how abdominal pain, solicitous parenting, and pain acceptance interact to predict other important aspects of functioning (e.g., quality of life) and patient response to tailored treatment pathways.