Resilience Coaching for Adolescent Chronic Musculoskeletal Pain: Protocol for a Pilot Randomized Controlled Trial of Promoting Resilience in Stress Management (PRISM)

Visit Article

Background
Levels of self-perceived psychological resilience are low to moderate among youth with chronic musculoskeletal pain (CMP). Furthermore, resilience has been associated with symptom severity in CMP. Resilience coaching programs may therefore be of benefit in the nonpharmacologic management of adolescent CMP and may serve as an adjunctive way to access mental health services in an approachable and affordable way.

Objective
The main goal of the study is to assess the feasibility, acceptability, and preliminary efficacy of the resilience coaching program called Promoting Resilience in Stress Management (PRISM) and to obtain the data needed to plan a larger trial.

Methods
The Resilience Coaching for Adolescents with Chronic Musculoskeletal Pain pilot study is an investigator initiated, 2-arm, randomized controlled trial (RCT) of PRISM in the interdisciplinary management of CMP among adolescents. The study will compare usual care versus PRISM+usual care among adolescents newly diagnosed with CMP in the outpatient setting. One caregiver per patient will also be enrolled. The control group will receive usual care with no specific intervention. The treatment arm will receive PRISM, which is a remotely delivered, 1-on-1resilience coaching program, consisting of 4 required skill-based sessions and an optional final session. Sessions will be delivered every 1-2 weeks, lasting about 3 months in total. The primary outcome is the Functional Disability Inventory (FDI) score at 3 months postrandomization. The secondary objectives are to evaluate potential patient- and caregiver-level moderators of PRISM and identify facilitators of and barriers to engagement in PRISM. The estimated sample size is 65 patient-caregiver dyads per group, for a total of 130 dyads.

Results
The trial is currently open. Initial Institutional Review Board approval was obtained on April 4, 2023, and protocol version 4 was amended on January 14, 2025. Recruitment began on May 8, 2023, and recruitment is anticipated to be completed on August 1, 2025.

Conclusions
Resilience coaching has demonstrated excellent feasibility, acceptability, and efficacy in teenagers with chronic illness; however, evidence to support its use in adolescent CMP is lacking. Resilience coaching has the potential to improve patient outcomes in this population. This pilot RCT will demonstrate acceptability, feasibility, and preliminary efficacy and reveal critical barriers to and facilitators of engagement. This will inform a larger multisite trial to evaluate the definitive efficacy of the intervention.

Journal:

JMIR Research Protocols

Authors: Gmuca S, McGill M, Butler N, Xiao R, Cronholm PF, Young JF, Palermo TM, Weiss PF, Rosenberg AR

Related Content

- Fostering Resilience in Adolescents with Chronic Musculoskeletal Pain
  Adolescent Health & Well-Being