



Web-based Management of Adolescent Chronic Pain (Web-MAP)

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Pediatric Pain: Need for Alternative Treatment Models

- Access to specialized treatment is limited
- Geographical distance to treatment
- Barriers of time and expense to family
- Interventions are largely skills based and self-management approach

Psychological Treatments for Chronic Pain

- Systematic review of RCTs for children (Eccleston, et al., Pain, 2002); 18 studies enrolling n=438 patients
- Conclusions:
 - Headache has the strongest evidence base supporting efficacy of **cognitive behavioral and relaxation therapies**
 - Few studies concerning other types of pain

Primary Components of Cognitive-Behavioral Therapy

- Education
- Cognitive therapy methods
- Exercise and fitness training
- Skills acquisition and rehearsal (e.g., relaxation training)
- Behavioral change by operant methods (usually with parent)
- Generalization and maintenance, relapse prevention

Previous Studies

- Hicks, von Baeyer, & McGrath, 2006 through the Family Help Project at Dalhousie University
- Internet guided self help (internet and telephone support) vs control
- N = 47 children, 9-16 years with recurrent headache or abdominal pain
- 1 and 3 month follow up, significant reduction in pain for approximately 70% of the sample receiving internet guided self help vs 19% of control group
- No change in quality of life

Limitations

- Community based recruitment; pain and impairment less than clinical samples
- Limited focus on parents, just 2 chapters devoted to general parent guidelines
- Not self standing intervention – mailed relaxation tapes, thought journals to participants and required significant telephone coaching, mean = 189 minutes

Web-MAP Study Procedures

- Funded by NICHD R21HD050674
- Sample: 60 children and adolescents (ages 11-17 years) with chronic pain (headache, abdominal, or musculoskeletal pain) and their parents recruited through specialty clinics
- Randomization to two groups: family CBT (CBT group), or Standard Medical Care Waitlist (SMC group)
- Pre-treatment assessment
- Treatment phase (8 weeks)
- Post-treatment assessments (immediately and at 3 months)
- Laptops with dial up available to families

Table 2. Description of Treatment Modules

Teen Modules

- 1: Education about chronic pain and goal setting
- 2: Stress and negative emotions
- 3: Deep breathing and relaxation
- 4: Distraction
- 5: Cognitive skills
- 6: Lifestyle and Sleep
- 7: Activity engagement and pacing
- 8: Relapse prevention

Parent Modules

- 1: Education about chronic pain
- 2: Stress and negative emotions
- 3: Operant strategies I
- 4: Operant strategies II
- 5: Modeling
- 6: Sleep hygiene and lifestyle
- 7: Communication
- 8: Relapse prevention



- www.webmaponline.com



Content

- Modules are designed to mirror face to face treatment and incorporate all of the essential features of CBT for chronic pain
- Developmentally appropriate across 11 to 17 age range
- Experts reviewed content (CBT experts, teens, parents)



Design Elements

- Travel theme developed to capture attention, incorporate fun elements
 - Progress tracked with passport stamps
- Message Center to allow therapist contact and review of assignments



Specific Features

- Relapse prevention – e.g., postcards
 - Module 5
- Peer models
 - Module 1, slide 206
- Assignments – practice
 - <http://www.webmaponline.com/index.cfm?fa=MODULE.assignment&mod=3>
- Interactive elements
 - Module 5, slide 537
 - Module 6, slide 112 and 123

Parent Modules

- www.webmaponline.com
- Information about teen's module
 - Module 2, slide 237
- Focus on building parent skills
- Similar features
 - Parent peer models
 - Module 2, slide 248
 - Assignments



Administrative Interface

- <http://webmaponline.com/index.cfm?fa=ADMINLOGIN.loginPrompt&logout=1>
- Track Users
- Review Assignments
- Run Reports
- Export Data