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ACADEMIC AFFAIRS

## ABDOMINAL PAIN: INTEGRATING PSYCHOLOGICAL TREATMENTS INTO MEDICAL CARE

Miranda A.L. van Tilburg, PhD  
University of North Carolina  
Center for Functional GI and Motility Disorders

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### COI

Takeda Pharmaceuticals America Inc  
*Research funding*  
*Investigator initiated project*

The aims of this supported research are not related to the current presentation.

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### Learning Objectives

1. Describe the **role of psychosocial factors** in functional abdominal pain disorders
2. Identify evidence-based **psychological/behavioral treatments** for functional abdominal pain disorders and how to **integrate with medical care**
3. Identify **patients most likely to benefit** from integrated care

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### Psychological factors in FAP

- Anxiety
- Depression
- Coping
- Catastrophizing
- Somatization
- Solicitousness
- Stress
- Trauma
- Etc.

The illustration shows a stylized human torso with a brain and gut highlighted. Above the brain is a box labeled 'BRAIN' with three cartoon figures (one blue, two green) appearing to be in a state of distress or conflict. Below the gut is a box labeled 'GUT' with a single green cartoon figure sitting on it. This visualizes the connection between psychological factors and physical symptoms in Functional Abdominal Pain (FAP).

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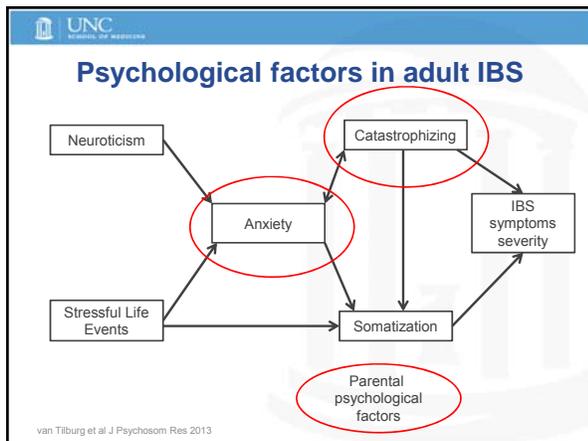
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### Psychiatric disorders and FAP

- About half of FAP patients have psychiatric disorder
- Anxiety disorders usually precedes FAP
- FAP usually precedes development of depression
- Anxiety/depression associated with:
  - » Exacerbation of Pain
  - » More disability
  - » Maintenance of symptoms over time

The illustration shows a simple stick figure sitting at a table with a bowl of food. The figure has a somewhat sad or thoughtful expression, representing the experience of a patient with Functional Abdominal Pain (FAP).

Cunningham et al JPGN 2013; Ghanizadeh et al J Gastroenterol Hepatol 2008; Campo et al Pediatrics 2004; Shelby et al Pediatrics 2013; Mulvaney et al J Am Acad Child Adolesc Psychiatry 2006; Bohman et al BMC psychiatry 2012

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## Coping with FAP

**Mastery effort**

	<b>Positive</b>	<b>Negative</b>
<b>Positive</b> Interpersonal relationships	<b>Engaged copers</b> Problem solving ↓ Pain, disability, depression	<b>Dependent copers</b> Catastrophizing ↑ pain, disability and depression
<b>Negative</b>	<b>Self-reliant copers</b> Acceptance & Minimizing pain ↓ Pain, disability ↑ depression	<b>Avoidant copers</b> Catastrophizing ↑ pain, disability and depression

Walker et al, Pain 2008

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**Pain Catastrophizing =** Magnifying threat of pain  
 Worrying about pain  
 Feeling helpless

*"The pain is terrible; I feel it is never going to get better"*  
*"I can't stand it anymore; nothing will make it better"*

Catastrophizing associated with increased:

- » Pain severity
- » Pain maintenance over time
- » Depression/anxiety
- » Disability

Changing child catastrophizing reduces child pain complaints



Langer et al, Child Health Care 2009; Walker et al J Pediatr Psychol 2007; Lavigne et al J Pediatr Psychol 2013; Levy et al Clin J Pain 2014

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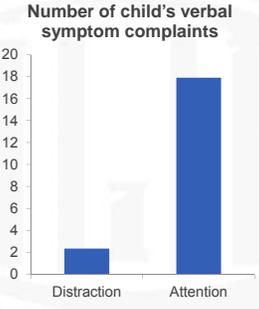
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## Parents and FAP

- Parents decide if child stays home from school or visits a doctor (disability).
- Parents help child cope
- Parental attention shows empathy but can inadvertently increase symptoms and disability

**Number of child's verbal symptom complaints**



Parental Response	Number of child's verbal symptom complaints
Distraction	2
Attention	18

Walker et al Pain 2006

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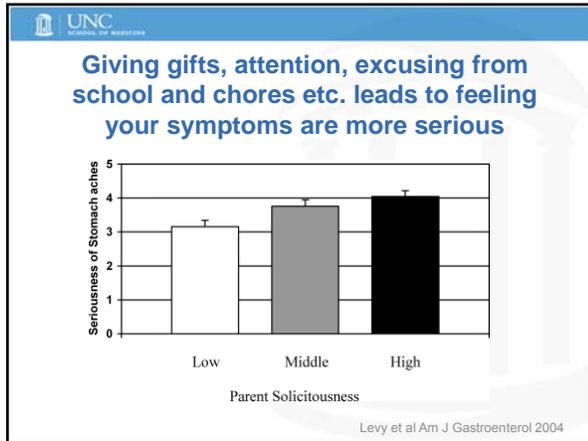
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- ### Psychological Treatment of FAP
- Cognitive Behavioral Therapy (CBT)
    - » Addresses thoughts about pain and coping with pain
    - » Usually includes both child and parent
    - » Aimed at reducing disability and increasing quality of life
    - » Most widely studied (6 RCT). All but one trial positive.
  - Hypnotherapy/Guided Imagery
    - » Natural state of selective focused attention in which person is more open to suggestions to change mind and body.
    - » Impressive long-term results in 2 RCT
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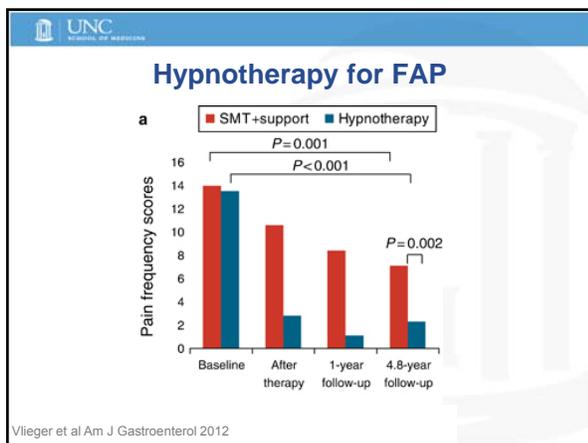
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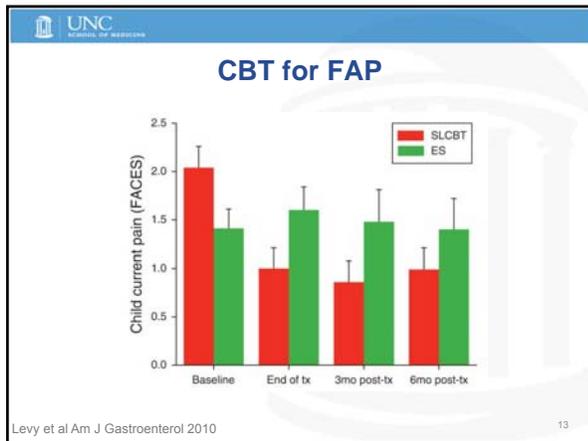
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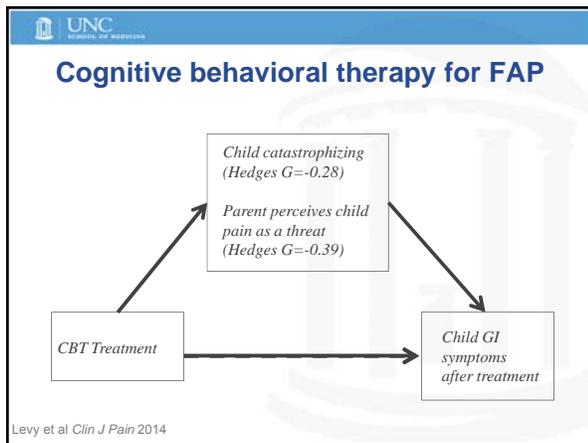
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### Single treatments not very efficacious

- Lack of evidence for:
  - » Dietary treatment  
Cochrane 2008; van Tilburg & Felix, 2013
  - » Pharmacological txt  
Cochrane 2008, Korterink et al 2015
- Some evidence for:
  - » Cognitive Behavioral Therapy (CBT)
  - » Hypnotherapy  
Cochrane 2008, Rutten et al 2015

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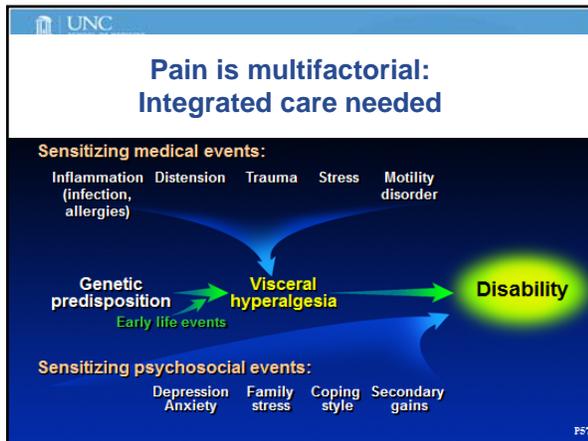
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## Integrated care of pain

- Coordinated care from several disciplines:
  - » Pediatricians
  - » Psychologists
  - » Others (physiotherapy, nutrition)
- 1 RCT and 9 non randomized trials:
  - » Large effects on disability
  - » Moderate effects on pain

Hechler et al Pediatrics, 2015

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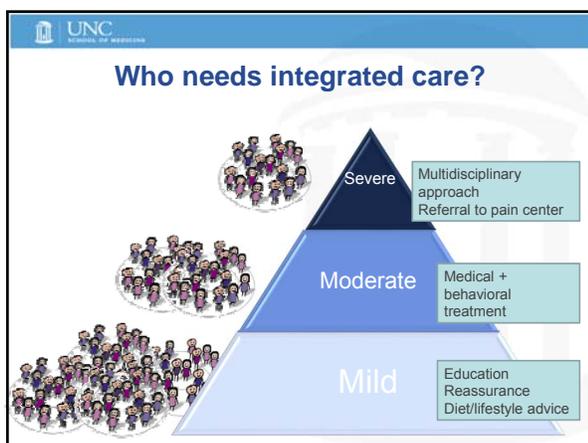
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### How to deliver integrated care?

- (a) Integrate psychologist in GI practice
  - » Less stigma and dropout
  - » Adds value: fewer medical appointment/calls
  - » Can be billed under health and behavior code
- (b) Referral to outside psychologist.
  - » Families may be resistant to referral
  - » Lack of therapists
  - » Make sure psychologist knows how to deal with pain and does not simply focus on treating anxiety.




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### Other options for integrated care

- Multidisciplinary pediatric chronic pain clinics
  - » For most severely disabled patients
  - » Available in 24 states
- E-treatments
  - » Skype (laws differ by state)
  - » Internet/phone CBT (Palermo et al *Pain* 2015)
  - » Audio-recorded hypnotherapy (van Tilburg et al *Pediatrics* 2009)
  - » Phone (Levy et al, NASPGHAN 2015)




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### Important tips

- All children with moderate symptoms can benefit
  - » No moderators found in our own studies
  - » Anxiety not special indication for care
  - » High disability will have highest need
- Not every families open to integrative care
  - » Those who do will have better outcomes
  - » Integrated care is beneficial for organic disease such as IBD as well




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### Important tips-continued

- Know the psychologist
  - » Treatment main focus on pain instead of anxiety
  - » Educate psychologist on GI issues
- Remain available
  - » Sends the message that it is important and you do not want to get 'rid' of family
  - » Schedule regular follow-up appointments




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### How to find a psychologist?

- American Pain Society Multidisciplinary Care centers for Chronic pain ([tonya.palermo@seattlechildrens.org](mailto:tonya.palermo@seattlechildrens.org))
- NASPGHAN list for psychologists working in GI (NASPGHAN.org →professional education→ motility resources; [tiburg@med.unc.edu](mailto:tiburg@med.unc.edu))
- Outside of academic centers: Contact Society of Pediatric Psychology Division 54 Pediatric Gastroenterology Interest Group for local recommendations (<http://www.apadivisions.org/division-54/sigs/gastroenterology/index.aspx>)
- American Society of Clinical Hypnosis (ASCH.net)

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