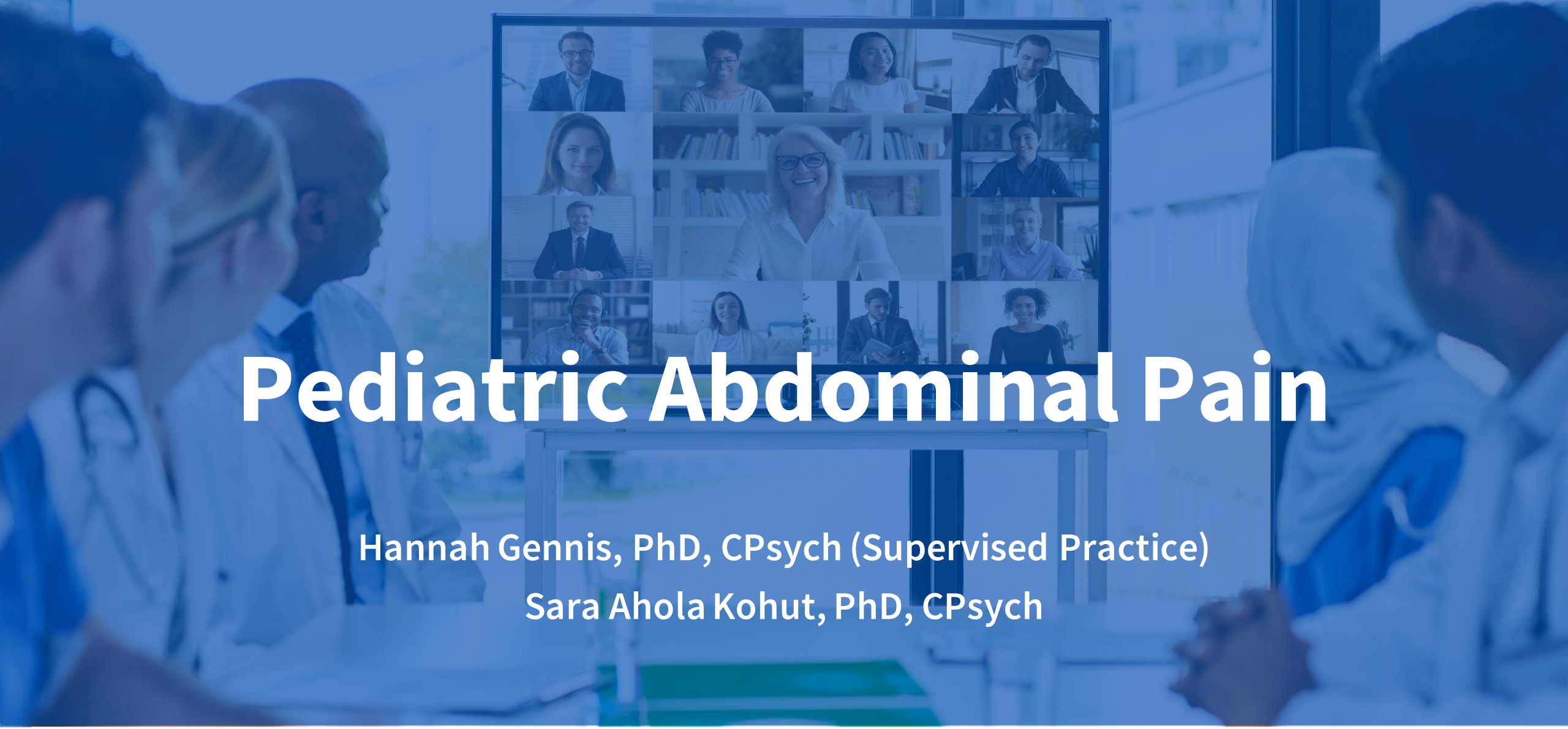


Pediatric Abdominal Pain

Hannah Gennis, PhD, CPsych (Supervised Practice)
Sara Ahola Kohut, PhD, CPsych

Project ECHO®

Changing the world by connecting healthcare providers.

Presenter Disclosure

- Presenter: Hannah Gennis & Sara Ahola Kohut
- Relationships with commercial interests:
  - SAK: Co-license holder of iPeer2Peer Program @ SickKids
- This program has received financial support from the Ministry of Health (MOH)

Learning Objectives

1. Assess and identify functional abdominal pain disorder using a biopsychosocial lens
2. Recognize how to support patients with functional abdominal pain disorder in your office
3. Identify 3 evidence-based treatments for functional abdominal pain disorder (if referral is needed)

Agenda

- About us
- Case Study
- Functional Abdominal Pain Disorders
- Assessment
  - Revisit Case Study
- Treatment
  - What can be done in clinic
  - When referrals are necessary
  - Revisit Case Study

About Us

Hannah Gennis

- PhD in pediatric pain focused on acute pain in toddlers
- Clinical and Health Psychologist in Supervised Practice
  - IBD
  - Eating Disorders

Sara Ahola Kohut

- Clinical and Health Psychologist
- IBD Centre at SickKids
- Research in resilience building in people with chronic disease
  - Mindfulness
  - Acceptance and Commitment Therapy
  - Peer and social supports

Case Study

Stephanie – 15 year old female

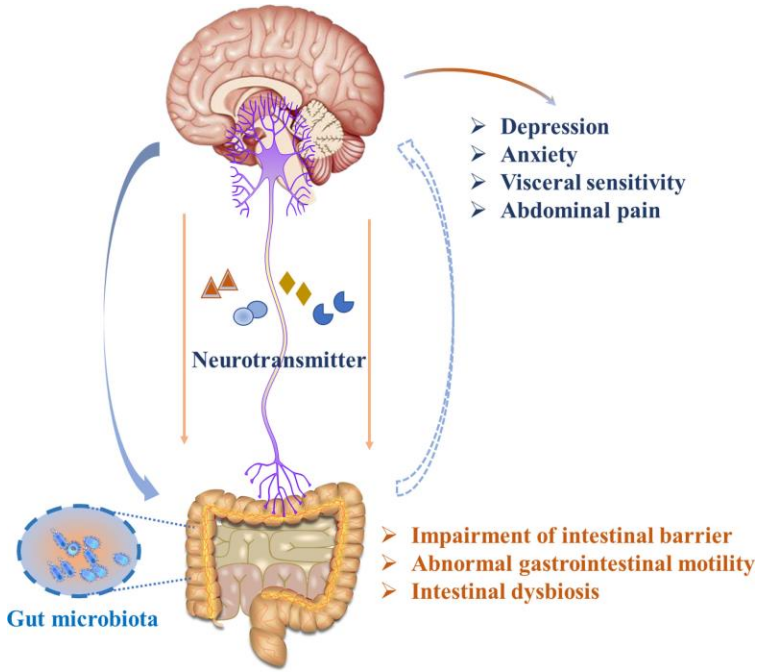
- Ballerina
- High achieving student
- ++ worries, shuts down/avoids feelings
- Independent
- Low assertiveness
- Currently not in romantic relationship; no time

- Complains of intermittent abdominal pain most days
- Pain Ratings:
  - 6.5/10 intensity
  - 9/10 bothersome
- No success with medical treatment previously
- Limited coping skills
- Negative for celiac disease and IBD

Functional Abdominal Pain Disorders

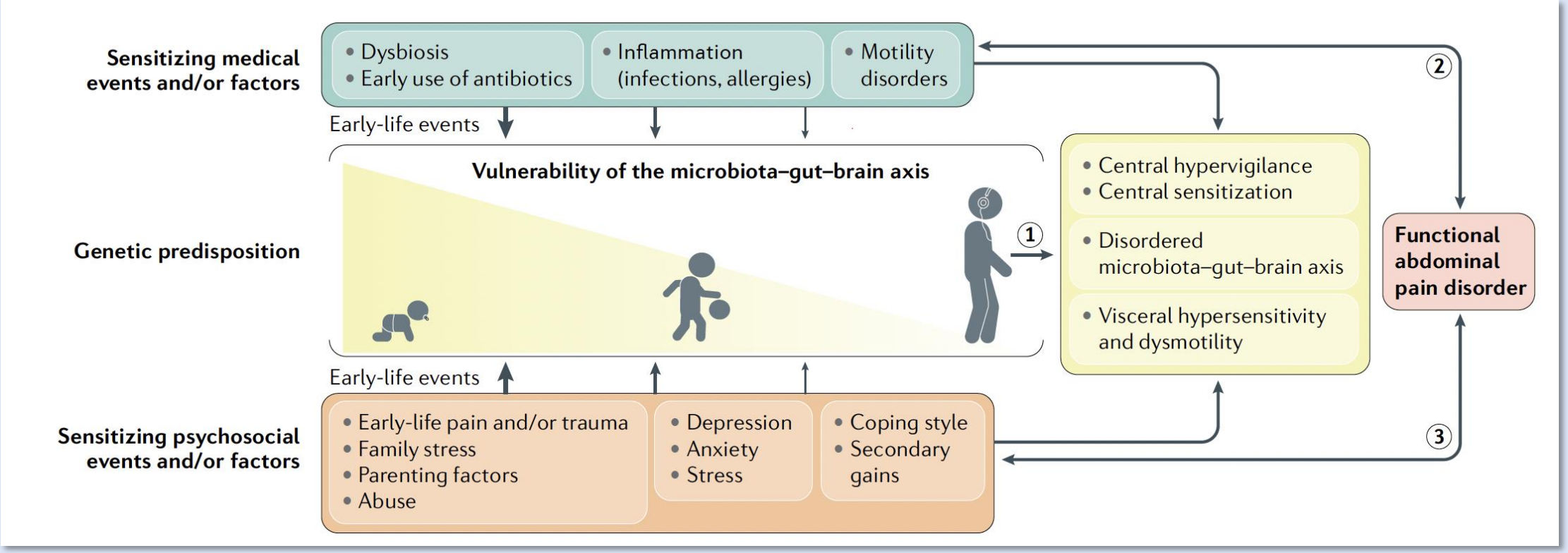
Functional Abdominal Pain Disorders

- Affects up to 25% of infants and children globally
- Functional Gastrointestinal Disorders → Disorders of Gut-Brain Interaction
- Gut-Brain Axis → Microbiota-Gut-Brain Axis
- **Need for a biopsychosocial approach**
  - Assessment
  - Treatment



(Chen et al., 2022; Thapar et al., 2020)

Biopsychosocial Considerations



(Thapar et al., 2020)

ROME IV Criteria

- DGBAs categorized using ROME Criteria
  - Positive diagnosis vs. absence of disease
- Functional Abdominal Pain Disorders
  - Functional Dyspepsia
  - Irritable Bowel Syndrome
  - Abdominal Migraine
  - Functional Abdominal Pain – Not Otherwise Specified

Functional Abdominal Pain – NOS

- *Must be fulfilled at least 4 times per month and include **all** of the following for at least 2 months:
  1. Episodic or continuous abdominal pain that does not occur solely during physiologic events (e.g., eating, menses)
  2. Insufficient criteria for IBS, FD, or abdominal migraine
  3. After appropriate evaluation, the abdominal pain cannot be fully explained by another medical condition

*Criteria fulfilled for at least 2 months prior to diagnosis

Risk Factors

- Sex: Females > Males
- Age: Mixed
- Genetic components
- Parent chronic pain
- Psychological:
  - Mood and anxiety
  - Alexithymia
  - Low distress tolerance
  - Lower QoL
- Headache, fatigue, sleep problems

- Consider personality traits (may be emerging):
  - Trait rigidity
  - Trait perfectionism
- Cognitive style
  - Catastrophizing

(Thapar et al., 2020)

Assessment

Psychosocial Pain Assessment

In addition to overall mental health screen consider:

- Traits and cognitive styles
- Coping and problem-solving style
  - Avoidance vs approach based coping
- Illness narrative
  - Adjustment to the current ‘new normal’/living with pain
  - Parent/child in the moment reactions to pain
    - Goals related to being pain-free
    - Unintentional secondary gains

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Summarizing Stephanie

- Meets criteria for Functional Abdominal Pain – NOS
- Also meets criteria for Generalized Anxiety Disorder
- Evidence of trait perfectionism
- Struggles with distress tolerance, general coping and assertive communication

Treatment

What is Key?

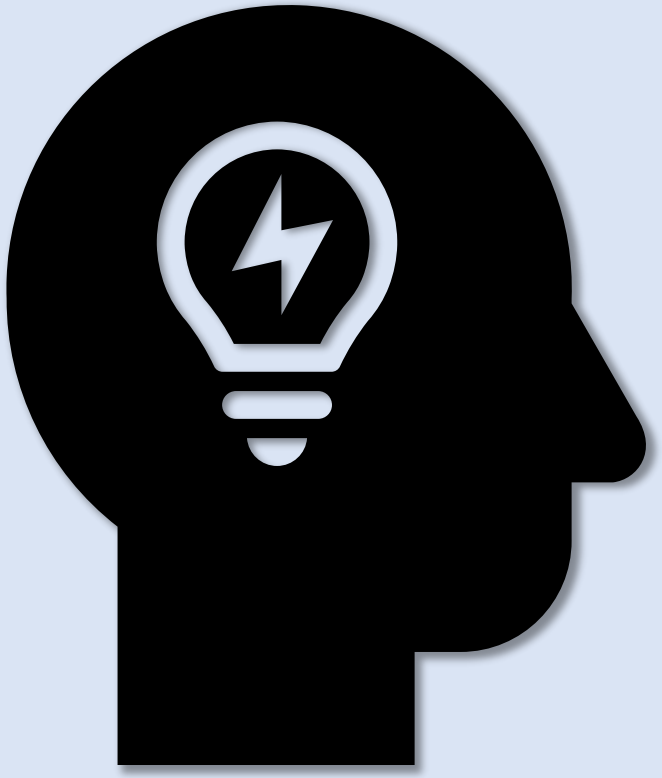
Education

Communication

Relationship

(Thapar et al., 2020)

Education



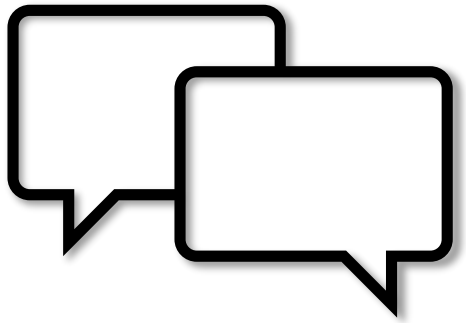
- Validate the challenges
- Encourage youth to remain engaged in what is important to them
  - What works?
- Discuss stress from a physiological perspective
  - Microbiota-Gut-Brain Axis

Talking about Microbiota-Gut-Brain Axis

- Use the patient's own words
- Use metaphors
- Non-threatening ways of talking about MGBA
  - butterflies in stomach
  - location of serotonin receptors
  - colonic motility and circadian rhythms
- Everyone has functional pain
  - Use an example from your own life!

Communication

- Non-judgmental, validating youth's experience
- Open discussion with pediatric patients
- Consider this an ongoing and evolving discussion
  - Developmental tasks/needs evolve
  - Supports identifying misunderstandings and goals
- Openness supports trust
- Modeling how to communicate needs to others



3 Sentence Summary

An approach to communicating needs in healthcare contexts*

1. Your name, age, diagnosis, and relevant history
2. Your current treatment plan
3. Your question or request

**also works well in education, social, and most human contexts!*

Relationships: What can you do in clinic?

- Life is about relationships
  - Social disruption (over and above physical impairment) predicts emotional well-being in people with chronic/recurrent pain
- Don't underestimate the importance of your relationship with the youth!
  - You can set the tone
  - Promote self-care, self-compassion, & positive health behaviours
- Tips and tricks in clinic using the Resilience 5 Model
  - Specific approaches to anxiety during clinic appointments

Resilience 5

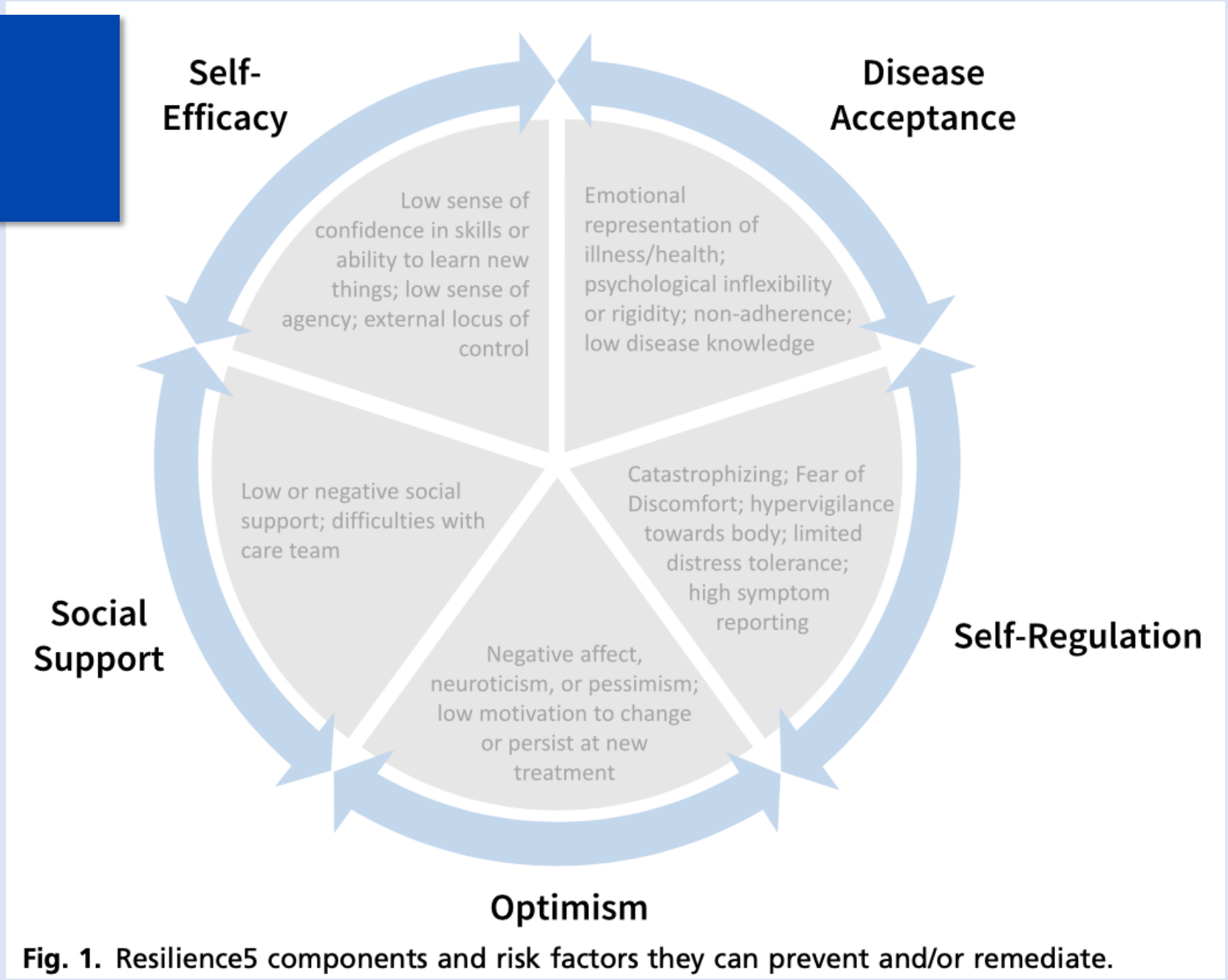


Fig. 1. Resilience5 components and risk factors they can prevent and/or remediate.

(Ahola Kohut & Keefer, 2023)

Resilience 5

Self-Efficacy

- Highlight what they are doing well
- Feedback for effort and not outcome
- Be mindful with language around success/failure of treatment and outcomes
  - a medication failed vs the patient failed a medication
  - being unremarkable as a 'good' outcome
- Recommending and/or offering assertiveness training

Disease Acceptance

- Offering education and clear care plan
- Acknowledging efforts for engaging in life
- Validating the frustrations of living with uncertainty and pain while highlighting other patients' similar lived experience
- Encouraging flexible approach to living with pain while aiming for resolution
  - Not trying to have total control over all symptoms

Resilience 5

Self-Regulation

- Offering mental health education and supports
  - making referrals as necessary
- Encouraging learning and engaging in coping skills
  - CBT/ACT, mindfulness, relaxation, and gut-directed hypnosis
- Note when patients successfully engage in adaptive coping
- Validating emotional concerns and emotional aspects of pain

Optimism

- Having an optimistic outlook on the patient's ability and capacity to learn and cope
- Asking patients and families what is going well, what is going right?
- Focusing on what patients and families were able to accomplish despite symptoms or setbacks
- Sharing optimism in new treatments and approaches to living with pain

Resilience 5

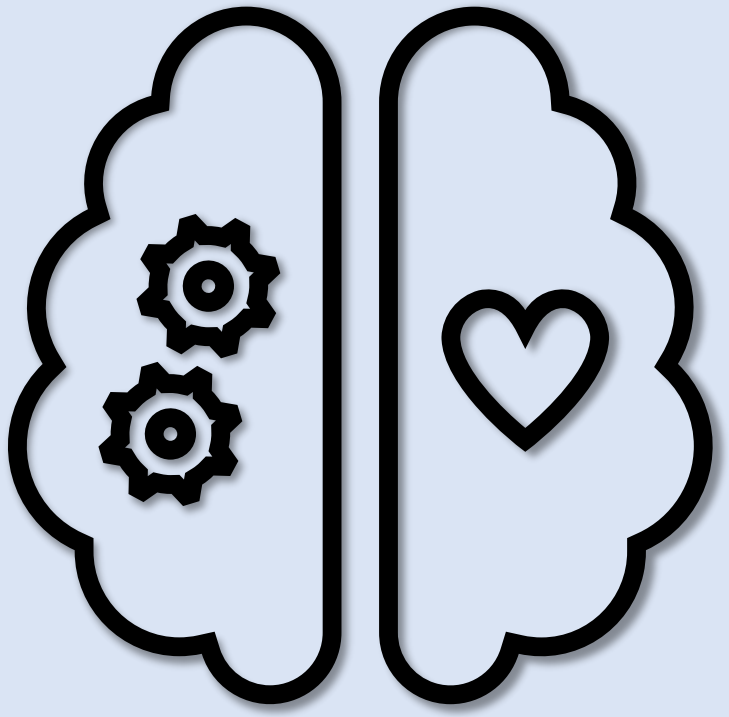
Social Support

- Inviting families to engage in the chronic pain community
- Involving families in research as patients partners
- Active listening and collaborating by allowing space for families to ask questions and make informed decisions
- If needed, refer for social skills training

*Note on caregivers

- If caregiver distress is present, encourage them to obtain their own mental health or social support
- Making note of miscarried helping or lack of caregiver/family/social supports

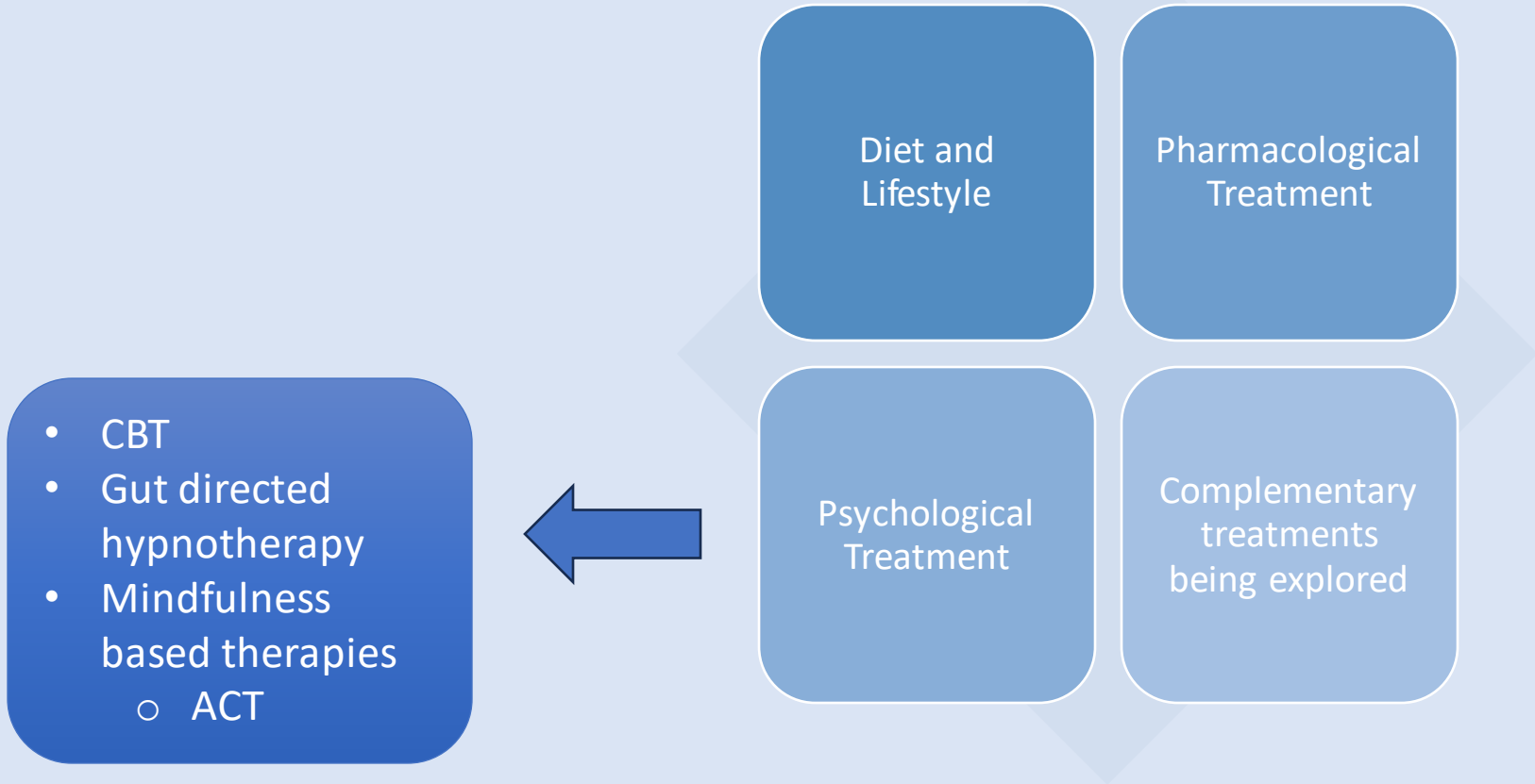
Supporting Anxiety in the Room



- Remind patients they won't feel this way forever
- Control the 'controllables'
  - List controllables
- Unpredictability is inevitable
  - List what has not changed or been cancelled?
- Present-moment focused
  - Do not allow past to colour current experience
- and/both vs but
  - What is going right?

Multidisciplinary Treatment

Multidisciplinary Treatment



Cognitive Behavioural Therapy

- Most widely studied and well-supported therapy (Person and Keefer, 2019)
  - Improves pain (Abbot et al., 2018; Bonnert et al., 2017; Gordon et al., 2022; Levy et al., 2010, 2013)
  - Improves bowel symptoms (van Tilburg et al., 2017)
  - Improves quality of life (van Tilburg et al., 2017)
- What is the mechanism? (van Tilburg, 2023)
  - Targets gut-specific thoughts and behaviours
    - e.g., catastrophizing, pain threat, and gut-specific anxiety and avoidance

Gut Directed Hypnotherapy

- On par with CBT with respects to evidence base (e.g., Puckett-Perez & Gresl, 2022)
  - Improvement of pain (Abbott et al., 2018; Vlieger et al., 2012, 2017)
  - Improvement in somatization (Rutten et al., 2017; Vlieger et al., 2012)
  - Reductions in depression and anxiety (Rutten et al., 2017)
  - Improvements in quality of life (Rutten et al., 2017)
- What is the mechanism?
  - hypothesis: BGA via central pain processing, visceral sensitivity, and motility (Chogle et al., 2023)

**Clinical experience: well tolerated, especially those who may present as less engaged*

Mindfulness-Based Therapies

- Fewer studies to date but promising evidence (Person and Keefer, 2019)
  - Reduction in pain and improved quality of life (Korterink et al., 2016)
  - Reduction in functional disability, symptom impact, and anxiety (Ali et al., 2017)
  - Improvements in school absenteeism; remained one year post intervention (Korterink et al., 2016)
  - Improvements in emotional well-being in chronic illness (Ahola Kohut et al., 2017)
- *Acceptance and Commitment Therapy Veehof et al., 2016; Hughes et al., 2017; Santucci et al., 2020
  - Third wave cognitive behavioural therapy approach, as effective as CBT
  - Goal of therapy is psychological flexibility vs elimination of pain
  - Uses both formal and applied mindfulness

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Resources

- Paediatric Project ECHO
  - Module on abdominal pain (and others!)
- ROME foundation: https://theromefoundation.org/
- Solutions for Kids in Pain: https://kidsinpain.ca/
- AboutKidsHealth Pain Learning Hub
  - https://www.aboutkidshealth.ca/pain
  - https://www.youtube.com/user/aboutkidshealth