Addressing Mental Health Needs of Individuals Who Experience Recurrent Weight Gain Following Metabolic and Bariatric Surgery:

The "Bari-Mind" Program

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Conflicts of Interest Disclosure

- Nothing to Disclose

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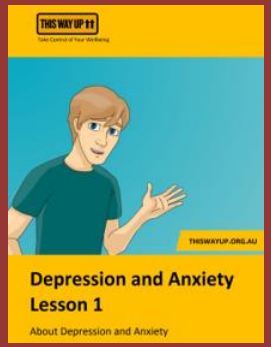
  (PI: Connors)

Background

- Recurrent weight gain following MBS → increased risk for depression and anxiety
- Evidence Gap: What's the most effective psychological intervention?
  - Get the ***right care*** to the ***right people*** at the ***right time***

“Bari-Mind” Program*



Online cognitive behavioral therapy (iCBT)

+

Peer-led virtual support groups

*Adapted from separate PCORI-funded clinical trial:

SCAN ME

Protocol Paper

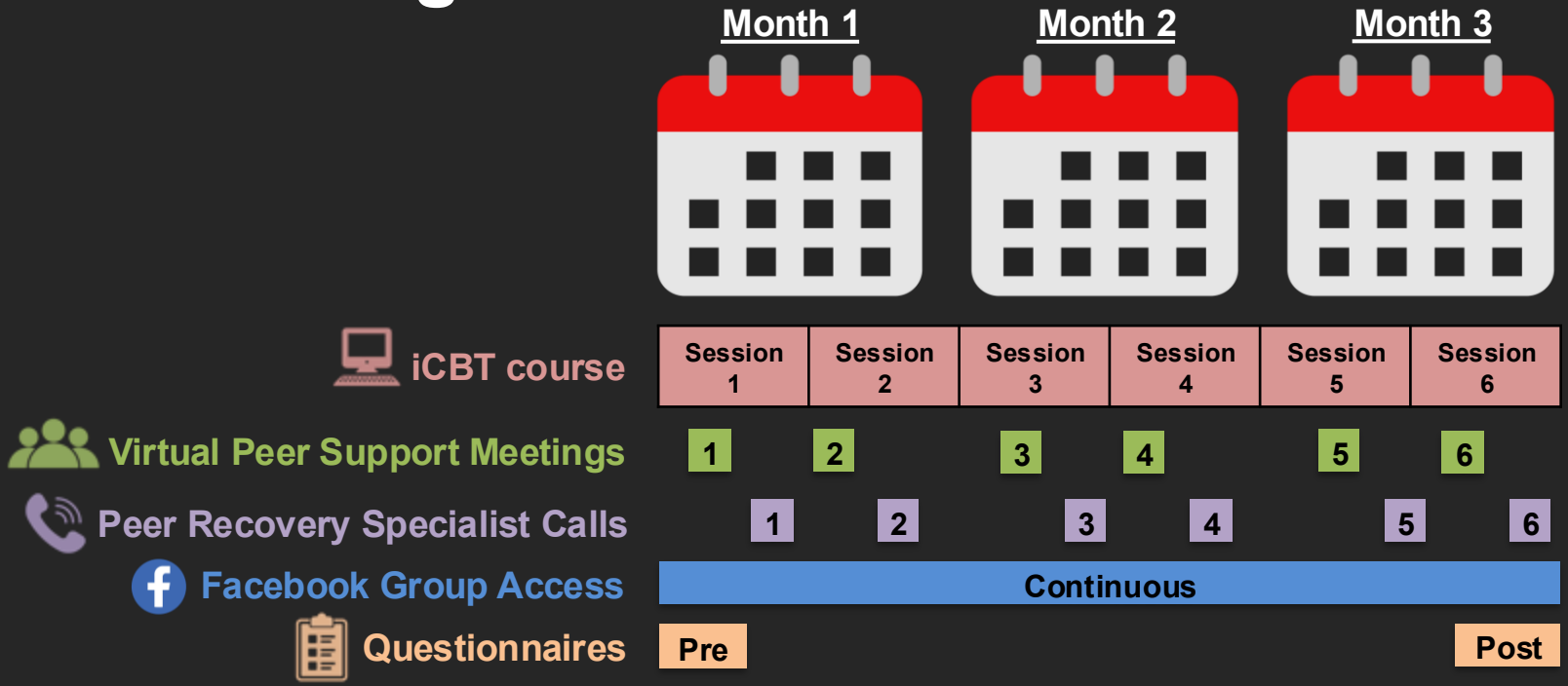
Objectives

Evaluate the
acceptability
and
preliminary effectiveness
of the Bari-Mind program

Methods

- Population:
  - 23 adults (96% female, 61% White)
- Setting:
  - Recruited from IU Health Bariatric Clinic
- Eligibility:
  - ≥24 months post-MBS (RYGB or SG)
  - >10% weight gain from nadir
  - ≥3 score on PHQ-4

Bari-Mind Program



Results: Quantitative Analysis

	Score *M*(*SD*)		Paired Samples Test *t*(*df*)	Significance (*p*)	Effect Size (*d*)
	Pre	**Post**			
Primary Outcomes (*n* = 13)					
Depression (PHQ-9)	15.62 (5.09)	10.00 (5.72)	3.44 (12)	.005**	0.96 “large”
Anxiety (GAD-7)	12.38 (6.31)	9.31 (5.15)	2.45 (12)	.031*	0.68 “medium”
Secondary Outcomes (*n* = 13)					
Weight (pounds, self-reported)	239.55 (60.82)	231.91 (56.79)	1.09 (12)	.297	0.32 “small”
Weight-related Quality of Life (PROS)	12.85 (6.24)	11.31 (6.84)	1.57 (12)	.142	0.44 “small”
Bariatric Adherence (BSSQ)	11.08 (2.50)	12.00 (2.92)	-1.68 (12)	.118	0.47 “small”

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Results: Qualitative Analysis

- Post-treatment group interviews
- Conventional content analysis
  - Categories:
    1. Benefits
    2. Facilitators
    3. Barriers
    4. Recommendations

Results: Benefits

1. Anxiety and Stress Management
2. Social Connection
3. Awareness and Regulation of Emotions
4. Miscellaneous (e.g., increased accountability)

*"It's been nice having other people because I didn't know anybody else who had surgery…it's been **nice having somebody to talk to**."*

*"It made me **notice things about myself and my emotions**."*

Results: Facilitators

1. iCBT – Relatable Content
2. iCBT – Ease of Use
3. Peer Group – “Safe Space”
4. Peer Group – Sharing of Ideas
5. Miscellaneous (e.g., group timing)

*“A **safe space** for me to communicate without feeling like a failure or feeling like I'm going to be judged.”*

*“I like the peer groups. Hearing from other people...they've all had such **great ideas of how we can help each other** and everything.”*

Results: Barriers

1. Competing Demands
2. Technology
3. Program Logistics
4. Lack of Structure

"*I'm **not too computer savvy**…plus I have a 'no tech' phone…it made it harder to access everything.*"

"*We really didn't focus a lot on the lessons. They [peer facilitator] would ask us if we had anything we wanted to discuss about it, but **it wasn't really structured**...*"

Results: Recommendations

1. iCBT Characteristics
2. Peer Group Meeting Times
3. Facebook Asynchronous Support
4. Peer Group Structure
5. Technical Assistance

"*[Provide an example] of somebody who is trying not…to gain the weight back or* ***how they would feel if they gained the weight back*** *and how that would have brought them down.*"

"*Bring* ***more*** *of that 'This Way Up' stuff into the peer sessions.*"

Conclusions

- Combined iCBT + peer support improved depression and anxiety symptoms
- Program was acceptable to participants
- Future Directions: Timing of “Bari-Mind” program vs. lifestyle intervention following recurrent weight gain onset?

Contact

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“This Way Up” Course Outline

Lesson Description	Topics	Skills & Strategies
Lesson 1: About Anxiety and Depression		
Explains what depression and anxiety are and how to manage the physical symptoms.	Symptoms of anxiety and depression, how anxiety and depression work, cognitive behavioral therapy, the lethargy cycle, the fight or flight response, psychological benefits of exercise, sleep hygiene	Controlled breathing, progressive muscle relaxation, physical exercise
Lesson 2: Identifying Thoughts and Tackling Low Activity		
How to identify the unhelpful thoughts that maintain anxiety and depression and how to improve mood.	Unhelpful thinking styles	Thought monitoring, behavioral activation, activity scheduling
Lesson 3: Dealing with Thoughts		
How to tackle unhelpful thinking styles and rumination.	Self-criticism and depression, rumination and worry	Thought challenging, attention shifting, behavioral experiments
Lesson 4: Tackling Avoidance		
Explains the role of avoidance in depression and anxiety, and how to overcome avoidance.	Avoidance and safety behaviors	Graded exposure, structured problem solving
Lesson 5: Mastering Your Skills		
How to trouble-shoot exposure therapy and how to use exposure to overcome fear of worry itself.	Positive and negative beliefs about worry	Graded exposure, worry stories, assertive communication skills
Lesson 6: Staying Well		
Review of progress, skills learned, what patients would like to accomplish moving forward	Lapses and relapses	Relapse prevention planning