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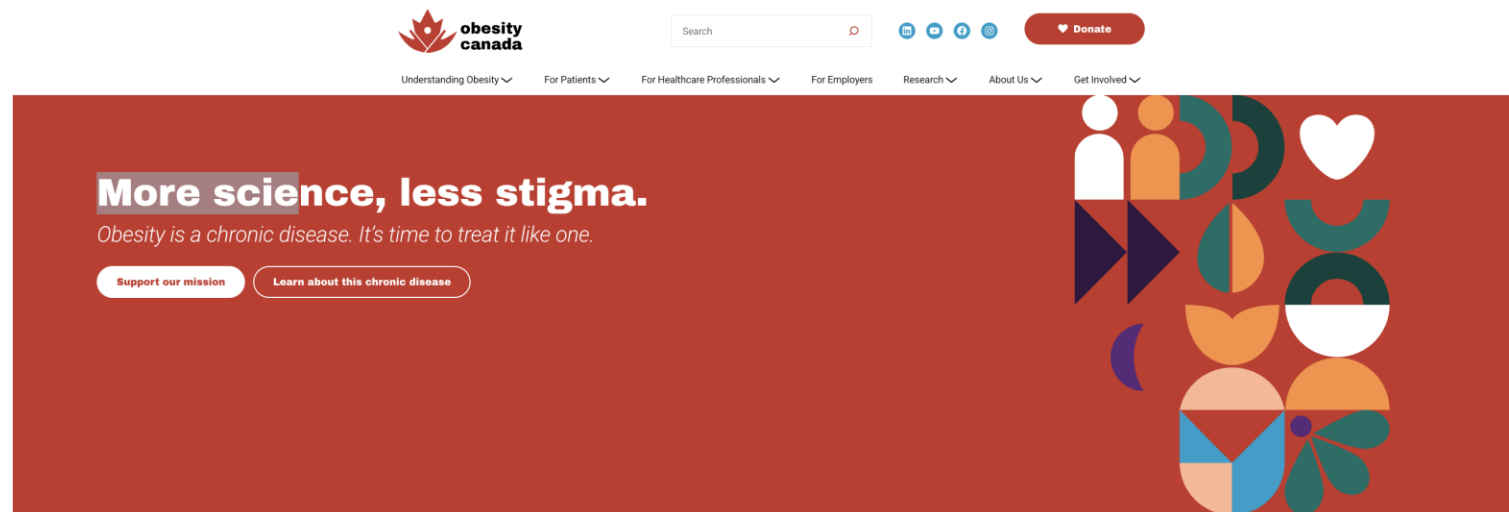
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Cognitive Behavioural Therapy in MBS: Evidence, Predictors and Implementation



Disclosures

Research Funding: Canadian Institute for Health Research Scientific Director, Obesity Canada



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GUIDELINE CPD

Obesity in adults: a clinical practice guideline

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CMAJ Podcasts: author interview at <https://www.cmaj.ca/lookup/doi/10.1503/cmaj.191707/tab-related-content>

KEY POINTS

- Obesity is a prevalent, complex, progressive and relapsing chronic disease, characterized by abnormal or excessive body fat (adiposity), that impairs health.
- People living with obesity face substantial bias and stigma, which contribute to increased morbidity and mortality independent of weight or body mass index.
- This guideline update reflects substantial advances in the epidemiology, determinants, pathophysiology, assessment, prevention and treatment of obesity, and shifts the focus of obesity management toward improving patient-centred health outcomes, rather than weight loss alone.
- Obesity care should be based on evidence-based principles of chronic disease management, must validate patients' lived experiences, move beyond simplistic approaches of "eat less, move more," and address the root drivers of obesity.
- People living with obesity should have access to evidence-informed interventions, including medical nutrition therapy, physical activity, psychological interventions, pharmacotherapy and surgery.

Obesity is caused by the complex interplay of multiple genetic, metabolic, behavioural and environmental factors, with the latter thought to be the proximate cause of the substantial

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Outline

Summarize the Evidence for Cognitive Behavioural Therapy (CBT) in Metabolic and Bariatric Surgery (MBS) Care

Describe effects of CBT for specific populations – what works for whom and when?

Describe implementation factors to consider when using CBT in MBS care

Evidence for CBT to Support MBS Care

The Role of Mental Health in Obesity Management

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Cite this Chapter

Taylor VH, Sockalingam S, Hawa R, Hahn M. Canadian Adult Obesity Clinical Practice Guidelines: The Role of Mental Health in Obesity Management. Available from: <https://obesitycanada.ca/guidelines/mentalhealth>. Accessed [date].

Update History

Version 1, August 4, 2020. Adult Obesity Clinical Practice Guidelines are a living document, with only the latest chapters posted at obesitycanada.ca/guidelines.

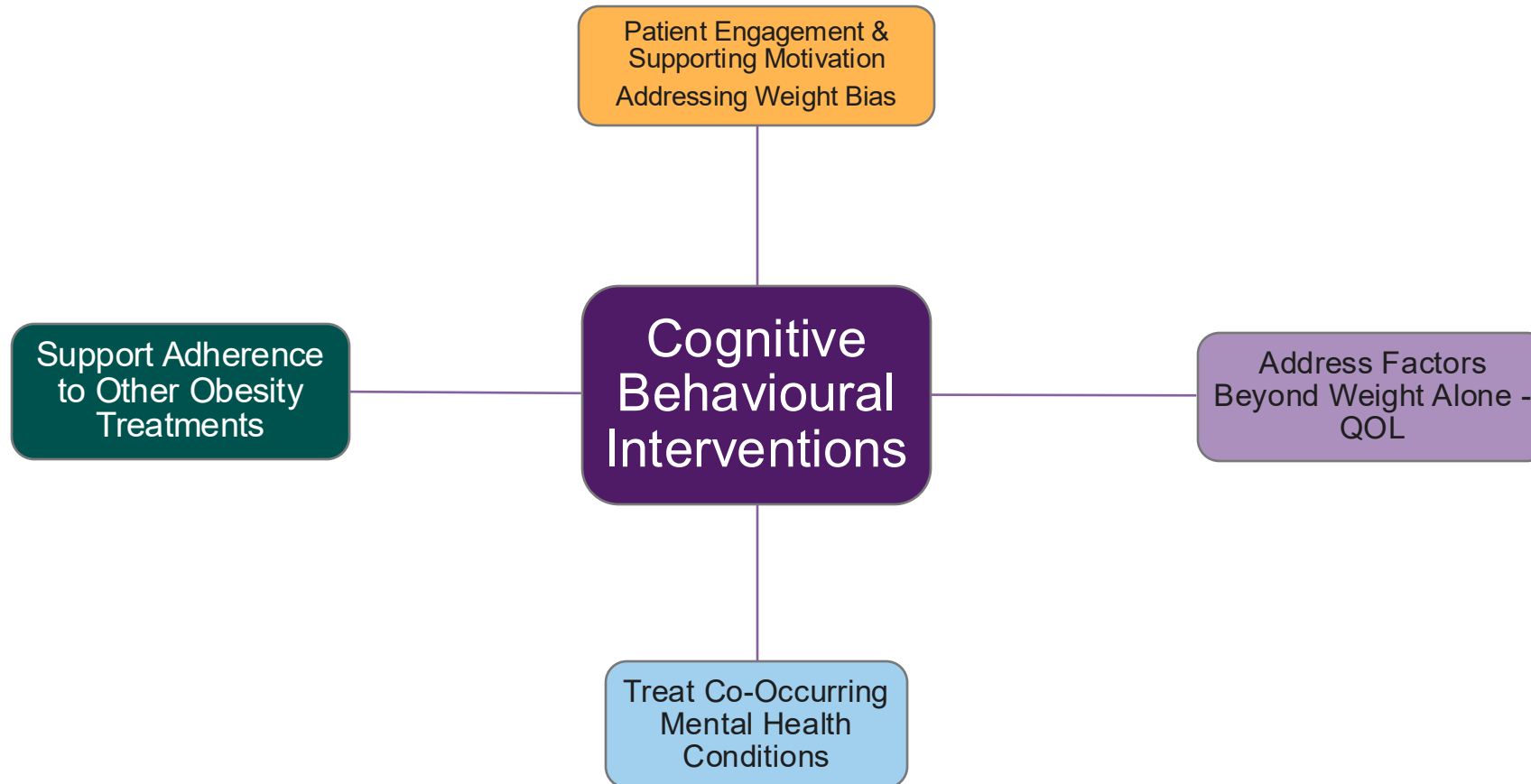
KEY MESSAGES FOR HEALTHCARE PROVIDERS

- Be aware of the links between mental illness and obesity, and ensure you manage the weight gain side effects of medications used in the treatment of mental illness.
- Be aware that mental illness can impact obesity management efforts, and screen patients for potential mental illnesses that need to be addressed.
- Off-indication use of anti-psychotics should be avoided, as significant metabolic adverse effects can occur even when these medications are prescribed at lower doses.
- For patients with severe mental illness who gain weight on anti-psychotic treatments, glucagon-like peptide 1 (GLP-1) has the most safety and efficacy evidence among medications indicated for chronic obesity management in Canada. Cost may be a barrier for individuals trying to access this class of medications.
- When initiating anti-psychotic treatment for the first time, avoid medications with higher metabolic risk, as individuals in their first episode respond well regardless of which medication is prescribed (and are at greatest risk for weight gain).
- Consider switching strategies to a lower metabolic liability anti-psychotic in individuals with severe mental illness who gain weight on an anti-psychotic treatment.
- For patients with severe mental illness who gain weight on anti-psychotic treatments, metformin can be used in conjunction with behavioural obesity management interventions.
- Behavioural obesity management therapy, ideally as part of a multi-modal treatment approach, can be effective in managing weight in individuals with co-occurring mental illness. The intensity of the behavioural intervention will need to increase for individuals with more severe psychopathology in the context of obesity.
- Individuals undergoing bariatric surgery should undergo a pre-surgical mental health screen by a qualified bariatric clinician with experience in mental health to identify early risk factors for poor weight-loss outcomes or mental health deterioration.
- Following pre-surgical screening, individuals should receive ongoing monitoring by a healthcare provider for psychiatric symptoms, eating psychopathology and substance use disorders, and for suicidal ideation or self-harm after bariatric surgery. For those individuals continuing psychiatric medications after surgery, monitoring of therapeutic effect is critical to maintaining psychiatric stability.

Recommendations Related to CBT and MBS: Canadian Adult Obesity Guidelines

- Post-bariatric surgery behavioural and psychological interventions to support maintenance of weight loss and to prevent significant weight regain may be useful.
- Bariatric surgery teams should focus on strategies to improve patient engagement during the post-surgery follow-up period, specifically for high-risk patient groups.

Let's Move Beyond Weight Loss in Obesity Care...



QOL = quality of life

Behavioural Therapy/CBT Can Sustain MBS Treatment Effects

- Disordered eating and loss of control overeating are predictors of weight recurrence and worse quality of life (especially mental QOL)
- Depression after metabolic and bariatric surgery is associated with challenges with adherence and worse QOL outcomes
- CBT can be an effective treatment to address disordered eating (binge eating, emotional eating, loss of control overeating) and depression, less evidence for weight loss outcomes long-term

Efficacy of CBT Interventions in MBS Care

- CBT has been shown to improve disordered eating (binge eating symptoms, emotional eating), depressive and anxiety symptoms
- Patient and clinical trial data suggest patients more likely to engage and complete CBT after bariatric surgery (vs. pre-surgery)
 - Patient Interview Data: *"I was really pumped and motivated and focused and everything the first year because I was losing weight, and then once that started to slow down, that's when I started to struggle."*
- Virtual CBT (Tele-CBT) still showed high engagement and retention in treatment
 - Completion rates range from 72% to 84% in multiple trials

Cognitive Behavioral Therapy for Bariatric Surgery Patients: Preliminary Evidence for Feasibility, Acceptability, and Effectiveness

Stephanie E. Cassin, *Ryerson University*
Sanjeev Sockalingam, *University of Toronto and Toronto Western Hospital*
Susan Wnuk, Rachel Strimas, and Sarah Royal, *Toronto Western Hospital*
Raed Hawa, *University of Toronto and Toronto Western Hospital*
Sagar V. Parikh, *University of Toronto*



Shorter communication

A pilot randomized controlled trial of telephone-based cognitive behavioural therapy for preoperative bariatric surgery patients

Stephanie E. Cassin^{a,b,*}, Sanjeev Sockalingam^{b,c}, Chau Du^c, Susan Wnuk^{b,c}, Raed Hawa^{b,c}, Sagar V. Parikh^{b,d}



Telephone-based cognitive behavioural therapy for female patients 1-year post-bariatric surgery: A pilot study

Sanjeev Sockalingam^{a,b,c,d,*}, Samantha E. Leung^{a,b}, Raed Hawa^{a,b,c}, Susan Wnuk^{a,b,c}, Sagar V. Parikh^{c,e}, Timothy Jackson^{b,f}, Stephanie E. Cassin^{a,c,g,**}



ORIGINAL RESEARCH ARTICLE

Clinical OBESITY WILEY

"If you're offered help, take it": A qualitative study examining bariatric patients' experience of telephone-based cognitive behavioural therapy

Vincent A. Santiago^{1,2,3} | Stephanie E. Cassin^{1,2,4} | Susan Wnuk^{2,3,4} | Chau Du³ | Raed Hawa^{2,3,4} | Sagar V. Parikh^{4,5} | Sanjeev Sockalingam^{2,3,4,6}

Obesity Surgery (2022) 32:1884–1894
<https://doi.org/10.1007/s11695-022-05981-6>



ORIGINAL CONTRIBUTIONS



The Impact of Telephone-Based Cognitive Behavioral Therapy on Mental Health Distress and Disordered Eating Among Bariatric Surgery Patients During COVID-19: Preliminary Results from a Multisite Randomized Controlled Trial

Sanjeev Sockalingam^{1,2,3,4} · Samantha E. Leung¹ · Clement Ma^{3,5} · Raed Hawa^{1,2,4} · Susan Wnuk^{1,2,4} · Satya Dash^{1,6} · Timothy Jackson^{1,7} · Stephanie E. Cassin^{2,4,8}

OBES SURG (2017) 27:670–675
DOI 10.1007/s11695-016-2322-x



ORIGINAL CONTRIBUTIONS

A Pilot Study on Telephone Cognitive Behavioral Therapy for Patients Six-Months Post-Bariatric Surgery

Sanjeev Sockalingam^{1,2,3,7} · Stephanie E. Cassin^{2,3,4} · Susan Wnuk^{1,2} · Chau Du¹ · Timothy Jackson^{1,5} · Raed Hawa^{1,2,3} · Sagar V. Parikh^{2,6}



Article

Food Addiction Is Associated with Binge Eating and Psychiatric Distress among Post-Operative Bariatric Surgery Patients and May Improve in Response to Cognitive Behavioural Therapy

Stephanie Cassin^{1,2,3,*}, Samantha Leung^{3,4}, Raed Hawa^{2,3,4}, Susan Wnuk^{2,3,4}, Timothy Jackson^{4,5} and Sanjeev Sockalingam^{2,3,4,6,*}

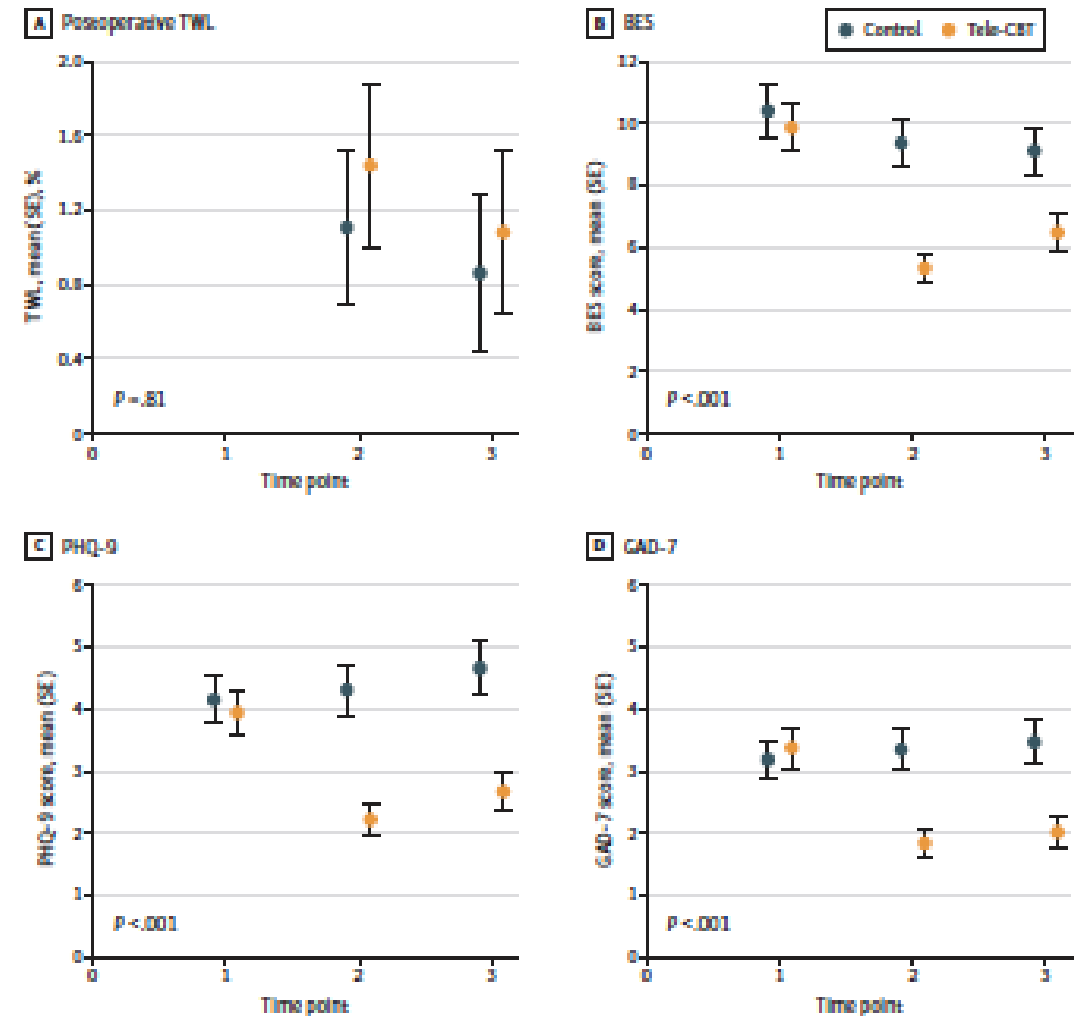


Original Investigation | Nutrition, Obesity, and Exercise

Efficacy of Telephone-Based Cognitive Behavioral Therapy for Weight Loss, Disordered Eating, and Psychological Distress After Bariatric Surgery A Randomized Clinical Trial

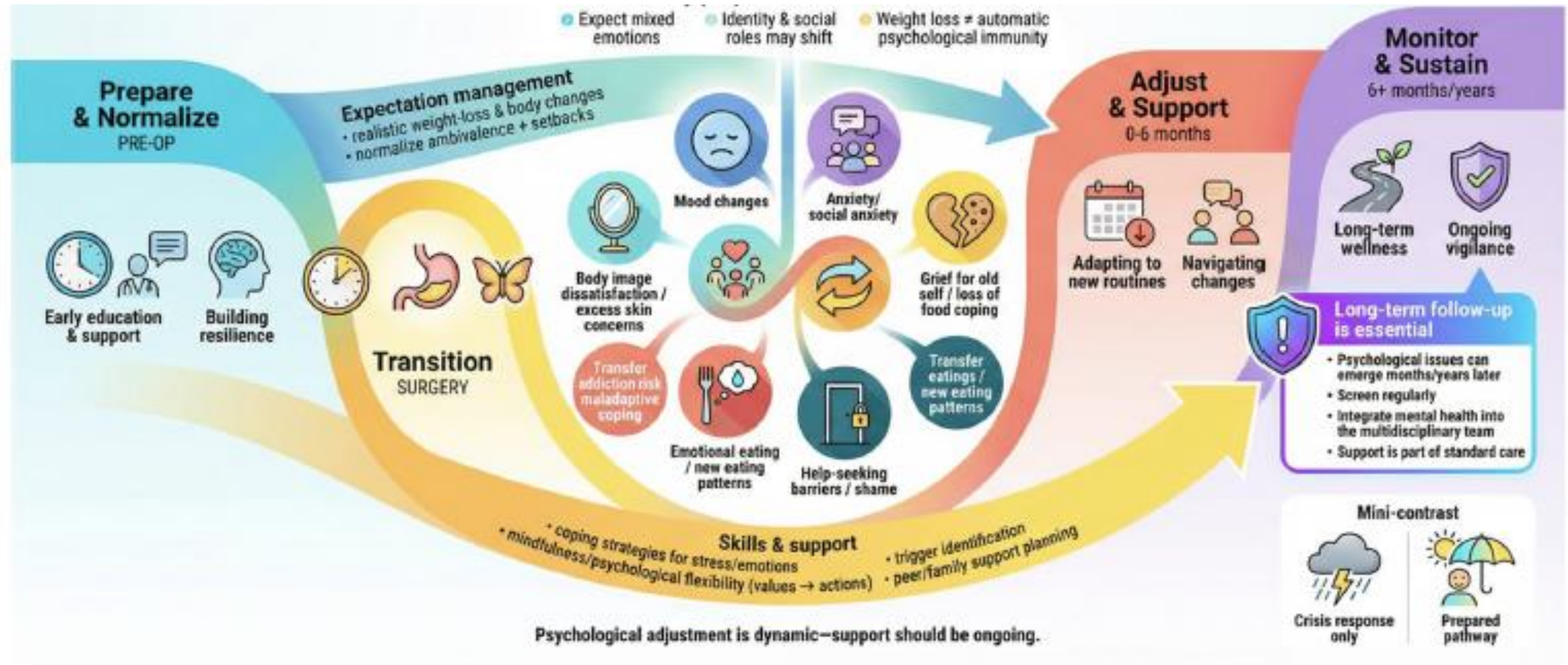
Sanjeev Sockalingam, MD, MHPE; Samantha E. Leung, MSc; Clement Ma, PhD; George Tomlinson, PhD; Raed Hawa, MD; Susan Whuk, PhD; Timothy Jackson, MD, MPH; David Urbach, MD; Allan Okrainec, MD; Jennifer Brown, MSc, RD, CBE; Daniella Sandre, PsyD; Stephanie E. Cassin, PhD

- Cognitive behavioural therapy (CBT) can be effective for depressive, anxiety and disordered eating in obesity care
- Data from the largest study to date in patients after MBS
- N = 306 patients in RCT
- Telephone-based CBT (7 sessions over 2 months)



Predictors of CBT Response and Implementation Considerations

Better Prepared than Surprised: A General Proactive, Responsive and Longitudinal Approach



Psychological preparedness and counseling framework for MBS across the patient journey



There is growing recognition that obesity is a complex condition shaped by psychological, behavioural, and environmental factors.

Precision-based care (i.e., tailoring treatment to the individual) is gaining traction as a strategy to improve outcomes.⁹ Identifying who benefits most from virtual interventions like Tele-CBT supports this personalized approach and may enhance post-operative care.

The objective of the current study is to identify which psychosocial factors predicted a response to Tele-CBT.



Moving Towards Precision-Based Psychosocial Care in MBS

Sample

n = 204 metabolic/bariatric surgery (MBS) patients pooled across 4 clinical trials

Intervention

Manualized virtual CBT delivered over ~7 sessions
Participants completed pre-post questionnaires to assess disordered eating, depressive and anxiety symptoms

Goal

Identify which patients benefit most from Tele-CBT to support precision-based, equitable post-MBS



3 Key Predictors of Virtual CBT Response (Lower Binge Eating)

Higher Rurality → Greater Improvement

Rural patients with limited in-person access benefited most from the phone-delivered format. Rurality scores were a significant independent predictor of response, suggesting Tele-CBT effectively closes a geographic access gap.

Higher Education → Less Improvement

Lower-education patients responded more more strongly to structured CBT support, indicating that manualized telephone delivery delivery may be especially well-suited for patients who benefit from guided, step-by-step by-step psychoeducation.

Non-White Identity → Greater Greater Improvement

Non-White patients demonstrated greater greater binge eating improvement, highlighting highlighting Tele-CBT's potential to reduce reduce longstanding racial and ethnic disparities in access to psychological care after after bariatric surgery.



These predictors accounted for 9.7% of variance in CBT response. These results point toward a precision-care framework care framework that can help clinicians identify who is most likely to benefit from Virtual CBT, enabling more targeted, more targeted, equitable allocation of post-surgical psychological resources. Additional studies needed in this area... this area...

Long-Term Effects of CBT: The Need for Booster “Doses”

Obesity Surgery
<https://doi.org/10.1007/s11695-025-08163-2>



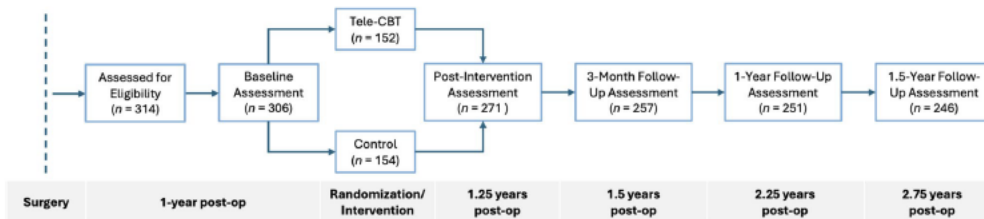
RESEARCH



A Randomized-Controlled Trial Examining Telephone-Based Cognitive Behavioral Therapy for Patients After Metabolic and Bariatric Surgery: 18 Month Follow-up Results

Stephanie E. Cassin^{1,3} · Katey E. Park^{1,2,3} · Samantha E. Leung² · Clement Ma^{3,4} · George Tomlinson³ · Raed Hawa² · Susan Wnuk^{2,3} · Timothy Jackson^{2,3} · David Urbach⁵ · Allan Okrainec² · Jennifer Brown⁶ · Daniella Sandre⁶ · Sanjeev Sockalingam^{2,3,4}

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- CBT delivered at 1 year post-MBS
- Patients were followed between 1 year post-surgery to 3 years post-surgery
- Usual care = interprofessional team vs. Tele-CBT (7 sessions)
- Results:
 - Sustained effect on emotional eating 12 months post-intervention
 - Binge eating, depression and anxiety effects not sustained
- Interpretation:
 - A need for booster sessions to maintain the effect of CBT

Implementation Considerations

Factor	Considerations Based on Evidence
Target Selection	CBT reliably reduces disordered eating and psychological distress but not weight
Delivery Modality	Virtual CBT reduces complexity of access; can improve disordered eating up to 12 months post-intervention
Patient Preparedness and Expectation Management	Aligns with Canadian Adult Obesity Clinical Practice Guidelines' shift in obesity care toward health and quality-of-life outcomes rather than weight loss alone
Access Barriers	Insurance coverage for post-op psychological services is frequently limited. Remote delivery necessary due to travel limitations
Integration into multidisciplinary aftercare	Need to focus on accessible ways to implement psychological care into bariatric care pathways including to support primary care Training and capacity building key
Workforce & supervision structure	Stepped care models are recommended specifically to fit resource-constrained bariatric settings – low to high intensity based on need
Patient Readiness	Developing personalized care approaches and shared decision making
Timing of Interventions	Optimal initiation is post-surgery about >1 year post-op and ideally before significant weight recurrence. Longitudinal booster sessions likely needed

Examining the Feasibility and Effectiveness of Online Patient Self-Guided CBT Training Modules to Manage Distress and Disordered Eating after Bariatric Surgery: A Pilot Study

Sanjeev Sockalingam, Katey Park, Mahreen Hasan, Susan Wnuk, Anne Simon, Asha Maharaj, Timothy Jackson, Raed Hawa & Stephanie Cassin

Background

Psychosocial interventions, such as **Cognitive Behavioural Therapy (CBT)**, are recommended in the clinical care of patients undergoing Metabolic Bariatric Surgery (MBS).¹ CBT incorporates behavioural interventions (e.g., goal setting, self-monitoring, behavioural activation) and cognitive interventions (e.g., identifying, challenging, and altering counterproductive thoughts). Clinical guidelines recommend CBT as a first-line treatment for many of the psychological disorders that are prevalent among MBS patients, including binge eating disorder and depression, with empirical research also supporting the efficacy of CBT for weight management in obesity care.²



Tele-CBT

Our team has developed and evaluated Tele-CBT, a therapist-delivered virtual CBT intervention for individuals who have undergone MBS. Large randomized controlled trials have demonstrated significant effects of virtual one-on-one CBT in reducing disordered eating, depressive symptoms and anxiety in patients after MBS.³



SELF-CBT

SELF-CBT (Self-Empowerment and Learning Framework for CBT) is an 8-module, self-guided asynchronous online intervention adapted from Tele-CBT that teaches core CBT skills without requiring individual therapist sessions.

Implementing CBT into MBS programs is challenging due to a lack of resources and clinicians able to deliver this virtual psychological treatment. To address this implementation gap and reach more patients living with obesity, we developed SELF-CBT.

Objectives

The objective of this pilot feasibility study is to assess patient engagement with, adherence to, and acceptability of SELF-CBT for MBS patients.

Methods

This was a **mixed-method study** with participants who had MBS and reported symptoms of binge eating. Participants completed standardized measures of binge eating (BES), depression (PHQ-9), anxiety (GAD-7), and self-rated health-related quality of life (rating on scale of 0 to 100) at baseline and post-intervention. Feasibility and acceptability were assessed at post-intervention, and participants were invited to complete a 1-hour qualitative interview about their experiences with SELF-CBT. The findings presented here are preliminary and are based on data from the first 15 participants.

Results

Program completion: 12/15 participants (80%) completed all eight SELF-CBT modules.

	Pre- SELF-CBT Mean (SD)	Post- SELF-CBT Mean (SD)	t	df	p
Binge Eating (BES)	25.21 (7.28)	15.93 (11.61)	4.50	13	<.001**
Depression (PHQ-9)	9.40 (4.69)	5.27 (4.64)	4.02	14	0.001**
Anxiety (GAD-7)	7.27 (4.37)	4.80 (5.63)	1.98	14	0.068
Health Related Quality of Life (1 to 100)	57.50 (14.90)	70.71 (16.62)	-3.65	13	0.003**

Qualitative Themes:

Convenient and Flexible Delivery	Engaging, Varied Learning Format	Empathetic and Obesity-Informed Content	Changes in Eating Behaviours
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“It was helpful that I could do it anywhere that I chose, whether that be on my phone, my laptop, wherever.”

“I found it very accessible ... I thought it was, like, a good mix of formats and media, and, made it a little bit more engaging.”

“[The module reminded me that] progress isn't always perfectly linear, like, there will be times where you backtrack, and then... as long as you're making general progress. So, I found it encouraging and empathetic in that way”

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Conclusion

SELF-CBT could serve as a highly accessible digital intervention that can be easily disseminated and implemented across MBS clinics. Its virtual nature makes it scalable and adaptable for various clinical settings, facilitating access to care for patients in MBS programs.

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Summary

- A proactive, precision-based, and longitudinal approach – integrated into standard MBS pathways rather than offered reactively – is key to sustained psychological wellbeing
- Effective CBT reliably improves disordered eating, depressive, and anxiety symptoms after MBS, with less consistent effects on weight – supporting a shift toward health and quality-of-life goals.
- Virtual/telephone-delivered CBT achieves strong engagement and completion (72–84%), helping close geographic and equity gaps in access to psychological care.
- Treatment effects are not uniformly durable – longitudinal, stepped-care models with booster sessions are needed to sustain benefit over time.
- Future research should further advance precision-based, culturally response care tailored to individual patient needs and consider additional technology-enabled delivery modalities*

Thank You...QUESTIONS

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3 Lessons

Introduction to Cognitive Behavior Therapy (CBT) for Behavioral Change in Obesity Care



Nicole Pearce

This program equips healthcare professionals with foundational knowledge of Cognitive Behavioral Therapy...

Acknowledgement:

- UHN Bariatric Surgery Program & our Patient Research Group
- UHN Bariatric Surgery and Medical Program Psychosocial Research Lab
- Obesity Canada and CAMH teams

<https://education.obesitycanada.ca/introductory-courses/>

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