



Mental Health and Pediatric Obesity

Dr. Alène Toulany and Dr. Elizabeth Dettmer
May 1, 2023



Changing the world by connecting healthcare providers.





Faculty/Presenter Disclosure

- Faculty: Dr. Alène Toulany & Dr. Elizabeth Dettmer
- Relationships with commercial interests:
 - Grants/Research Support: None
 - Speakers Bureau/Honoraria: None
 - Consulting Fees: None
 - Other: Sunlife Foundation
- Potential for conflict(s) of interest:
 - Speakers have no conflicts of interest



1

- Discuss common mental health conditions associated with obesity in children and youth

2

- Review implications of mental health diagnoses on obesity management

3

- Highlight practical treatment approaches and communication strategies

Overarching Goals

- Improve overall physical & emotional health, quality of life, coordination of care
- Engage patients/families in making healthy lifestyle changes and focus on health behaviours they can control
- Contribute to research aimed at improving our understanding child and adolescent obesity and related co-morbidities
- Educate and support care providers

mental health is everyone's responsibility

Key Messages

- Healthy, beautiful, strong bodies come in all shapes and sizes
- Weight management is about improving health and well-being, not simply reducing numbers on a scale
- Dispel view that obesity is simply a lifestyle problem or lack of willpower → complex physiological process
- Eating and weight-related problems are not the fault of the parents or the young person





Caregiver Emotional Burden

Caregivers often -

- feel criticized for inadequate parenting
- are offended by the automatic assumption that the family is inactive and eating poorly





Obese teenager



Google Search

I'm Feeling Lucky



Weight-based stereotypes

- Overweight and obese individuals are:
 - Lazy
 - Unsuccessful
 - Unintelligent
 - Lack self-discipline, restraint, control
 - Unhygienic
 - Socially inept
 - Noncompliant with weight-loss treatment

Puhl & Heuer, 2010
Am J Public Health, 100(6): 1019–1028
Ebbeling et al, 2002; Warschburger, 2005

Weight discrimination

- Weight discrimination has increased significantly over the past decade
- Now comparable to prevalence rates of racial discrimination in America
- Common perception that weight stigmatization is justifiable and might even serve as useful

Puhl & Heuer, 2010
Am J Public Health, 100(6): 1019–1028



How does weight bias impact the care we provide?



When poll is
active respond at

PollEv.com
/elizabethdet487

Send **34841** and your
message to **37607**



How does weight bias impact the care we provide?

Nobody has responded yet.

SEE MORE



Hang tight! Responses are coming in

Our Weight Bias

- Rates of weight bias among educators and health professionals exceed rates in the general population

McVey, Walker, Beyers, Harrison, Simkins, & Russell-Mayhew, 2013



Weight Stigmatization

- Stigmatization triggers emotional stress and undermines adoption of health-promoting behaviors
- Need healthy weight messaging without triggering weight and shape preoccupation
- Potential negative consequences of focusing exclusively on weight instead of overall health

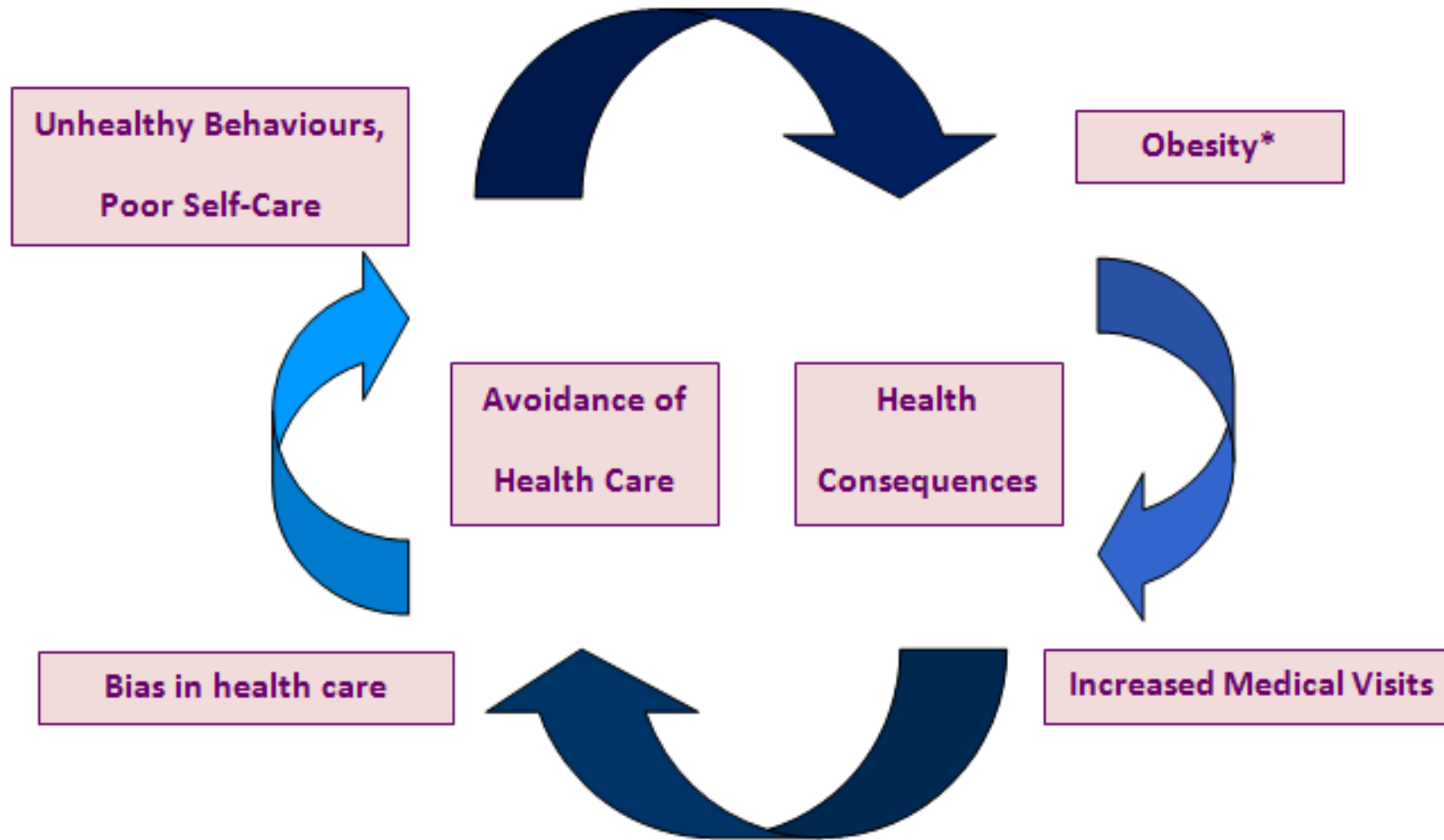
McVey, Walker, Beyers, Harrison, Simkins, & Russell-Mayhew, 2013

Weight Discrimination and Bias

- A nationally representative longitudinal survey in US (N=6,157) examined whether weight discrimination was associated with risk of becoming obese by follow-up among those not obese at baseline
- Participants who experienced weight discrimination were approximately 2.5 X more likely to become obese by follow-up

“Rather than motivating individuals to lose weight, weight discrimination increases risk for obesity”

Cycle of Bias & Obesity



Teasing and Bullying in Adolescence

Adolescent reports of why peers are teased/ bullied, and
observed frequency ($N = 1555$)

Reason for teasing	Primary reason students are teased	Observed sometimes, often, very often
	%	%
Being overweight	40.8	78.5
Gay/lesbian	37.8	78.5
Ability at school	9.6	61.2
Race/ethnicity	6.5	45.8
Physical disability	3.3	35.8
Religion	1.2	20.8
Low income/status	0.8	24.9

Societal Pressures

- Globally, media is a powerful influence on youth today
- Body image messages are ever present & typically imply:
 - Thin women are beautiful, successful, happy
 - Muscular, lean men are handsome, successful



Body Esteem and BMI

- Clear relationship between body esteem and weight classification in youth
 - Youth w/ obesity demonstrate lower self-esteem, higher depression, as compared to 'normal' or overweight peers
 - Higher weight status predictor for higher dietary restraint



Goldfield et al.,
2010

Weight Bias at Home

- 47% of girls and 34% of boys with higher weights report being teased about their weight by their parents
- 72% of adults at higher weights reported they had experienced weight bias from family members as children



Puhl RM et al, J Sch Health (2011)

Puhl RM et al, Psych Bull (2007)

**Should parents talk
to their kids about
their weight?**



It depends...

Discussing Weight with Children



Preventive Medicine

Volume 93, December 2016, Pages 135–146



Review Article

Can it be harmful for parents to talk to their child about their weight? A meta-analysis

Fiona B. Gillison^a,  , Ava B. Lorenc^a, Ester F.C. Sleddens^b, Stefanie L. Williams^c, Lou Atkinson^d

 [Show more](#)

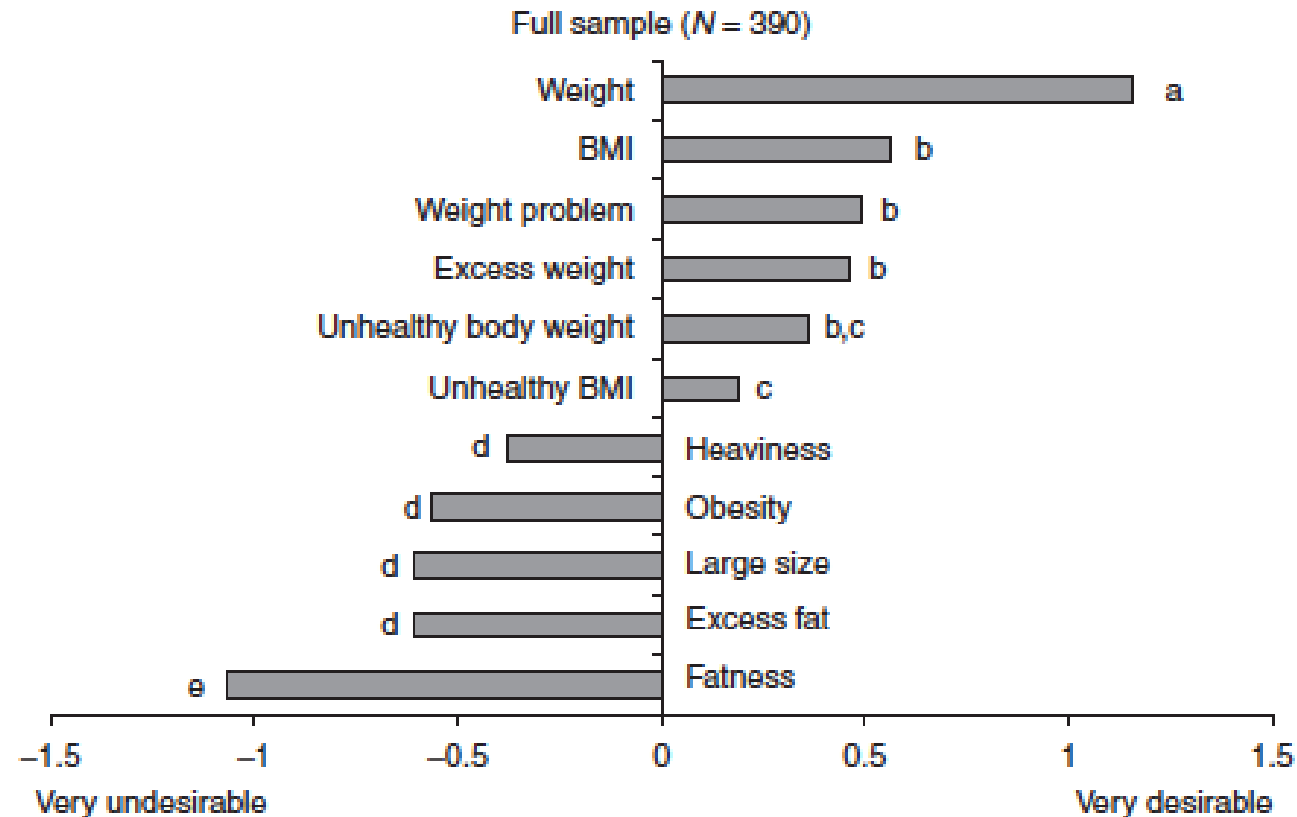
<http://doi.org/10.1016/j.ypmed.2016.10.010>

[Get rights and content](#)

Highlights

- Parental encouragement for weight loss is associated with poorer wellbeing.
- Parental weight criticism is associated with dysfunctional eating in girls.
- Parental encouragement of healthy lifestyles shows no negative effects.
- Interventions to promote positive parent communication benefit wellbeing.

Terminology is Important



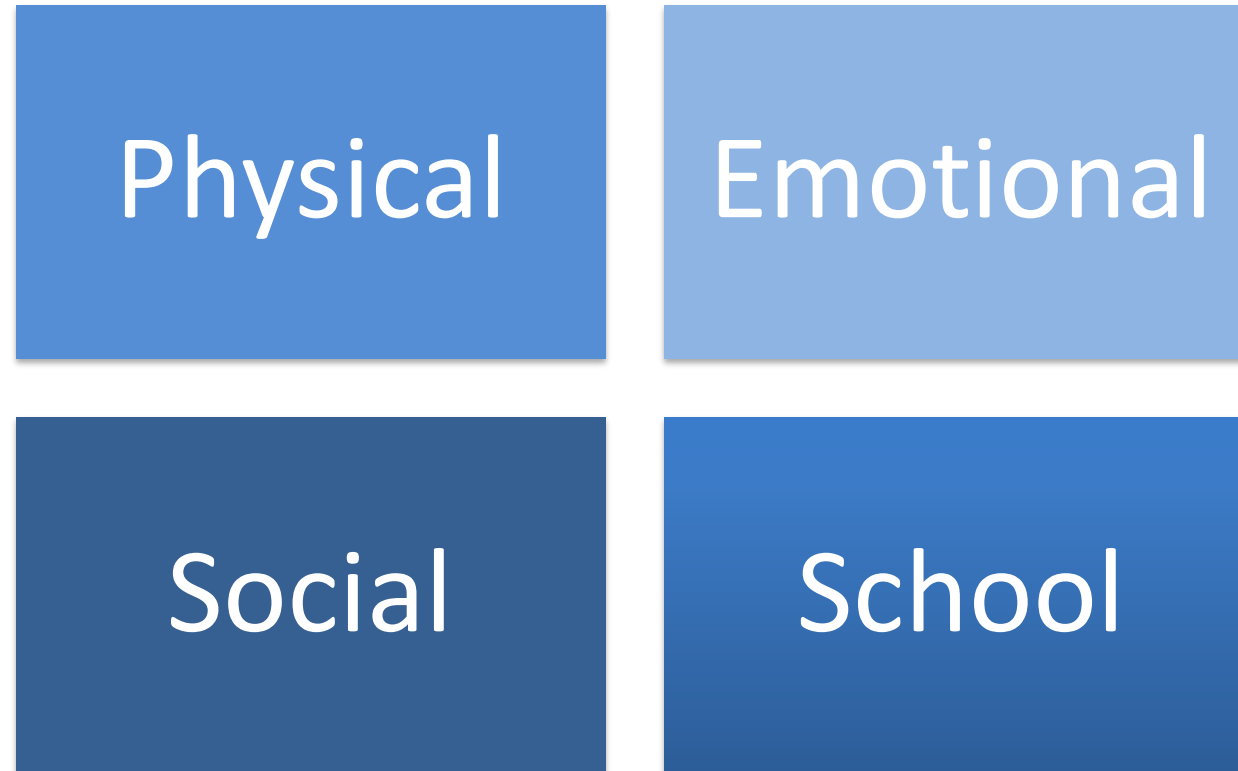
Volger et al., 2012

Communicating about Weight

- <https://www.youtube.com/watch?v=Jbv5ScID3Ls>



Health-Related Quality of Life

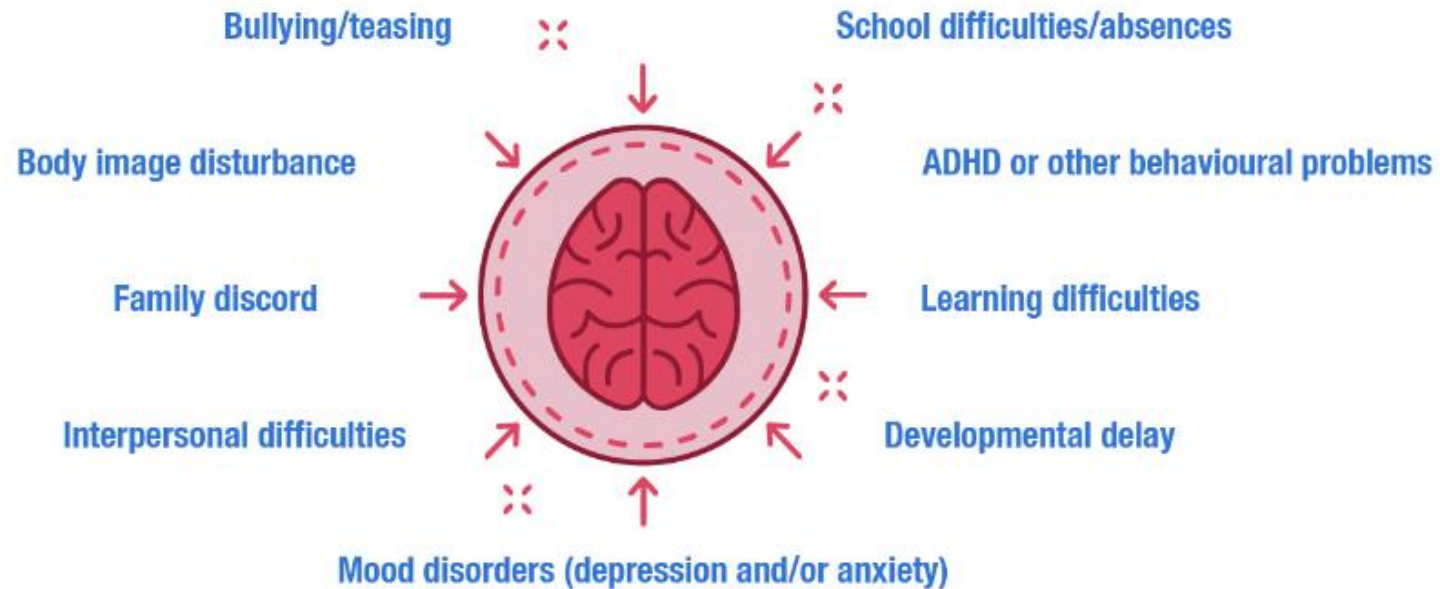


Obesity and Quality of Life

- Landmark study found that adolescents with obesity rated their QOL very similarly to youth undergoing chemotherapy for cancer treatment (Schwimmer et al., 2002)
- Systematic review including longitudinal studies showed that obesity is a more often a precursor of diminished QOL, not a consequence (Tsiros et al., 2009)



Common Psychological Comorbidities



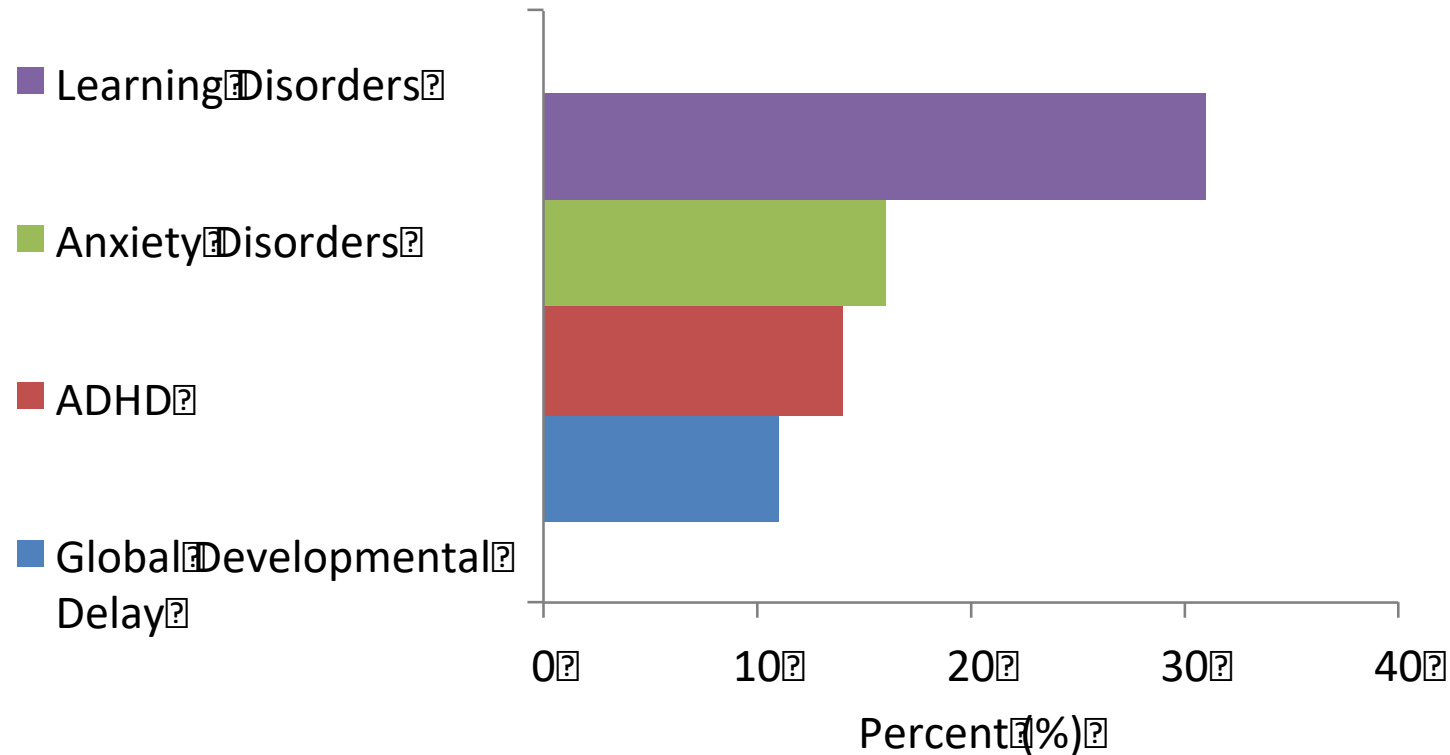
Mental Health Status



Characteristics of children and youth attending a tertiary care weight management program

¹Mohipp, C., ^{1,2}Hammond, N., ^{1,2}Clark, L., ^{1,2}Hadjiyannakis, S., ¹Rutherford, J., ¹Kazoun, F., ^{1,3}McLaren, C., & ¹⁻³Buchholz, A.
¹Children's Hospital of Eastern Ontario (CHEO) Research Institute, ²University of Ottawa, ³Carleton University, Department of Psychology

Mental Health Comorbidities (n=209)





Family Issues

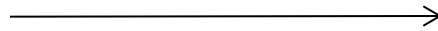
- Family share in unhealthy eating habits
- Patient identified as problematic
- Boundary issues
- Siblings with significant medical conditions
- Past and/or current food insecurity
- Parental/family discord
- CAS involvement

Depression and Childhood Obesity

- 21-50% of youth with overweight / obesity report elevated depressive symptoms (McElroy et al., 2004; Abbas et al., 2015, Sheinbein et al, 2019; Wang et al., 2019)
- Meta-analyses of longitudinal studies show the relationship is likely bidirectional (Luppino et al., 2010 JAMA; Wang et al., 2019)

Mechanisms Linking Obesity & Mood Disorders

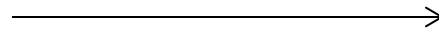
Obesity



Depression

- Stigma, shame, guilt
- Weight teasing/bullying/ social marginalization
- Reduced sleep quality
- Dieting or disordered eating
- Biological factors (impaired neurotransmitter function, inflammation, microbiome)

Depression



Obesity

- Emotional eating/binge eating
- Reduced sleep
- Reduced physical activity + increased sedentary behaviour/screen time
- Dysregulated neurotransmitters that moderate food reward/hunger
- HPA-axis impacts neurotransmitters/appetite hormones (cortisol, GLP1, ghrelin, leptin)

Child Obesity & ADHD

- Children who are overweight or obese are twice as likely to be diagnosed with ADHD (Erhart et al, 2012)
- Data from the National Survey of Children's Health (N=46,707) indicate 18.9% prevalence of obesity in children with ADHD (Chen et al. 2010)
- 28.6% of adolescents with severe obesity were found to have ADHD (Leib et al, 2019)



How ADHD May Impact Eating

- Difficulty with attention → decreased control of overeating
- Impulsivity → disinhibited eating patterns
- Dysregulation of the dopaminergic reward systems → unhealthy food intake /immediate rewards & gratification
- Lack of executive functioning skills (poor planning & organization) → difficulties controlling eating behavior
- Inattention → lack of awareness in hunger and satiety

Kang & Kwack, 2020

Risk of Eating Disorders

Adolescents who are overweight /obese are 4.91 times more likely to develop an eating disorder compared to their peers.



Veses et al., 2014

Disordered Eating



Emotional eating

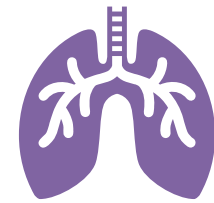
(Goossens et al. 2009)



Binge Eating Disorder

Prevalence of binge/loss of control eating estimated at 26% to 42% for youth with obesity

(He, Cai & Fan, 2017; Pasold et al., 2014; Carriere, et al., 2019)



Bulimia Nervosa

Significant increased risk for bulimia in obese relative to normal-weight males (7.86% increase) and females (3.27% increase)

(Flament et al., 2015)

DSM V – Binge Eating Disorder

Recurrent episodes of binge eating (same as bulimia nervosa)

- 1. Eating much more rapidly than normal
- 2. Eating until feeling uncomfortably full
- 3. Eating large amounts of food when not feeling physically hungry
- 4. Eating alone because of embarrassment
- 5. Feeling disgusted with oneself, depressed, or very guilty after overeating

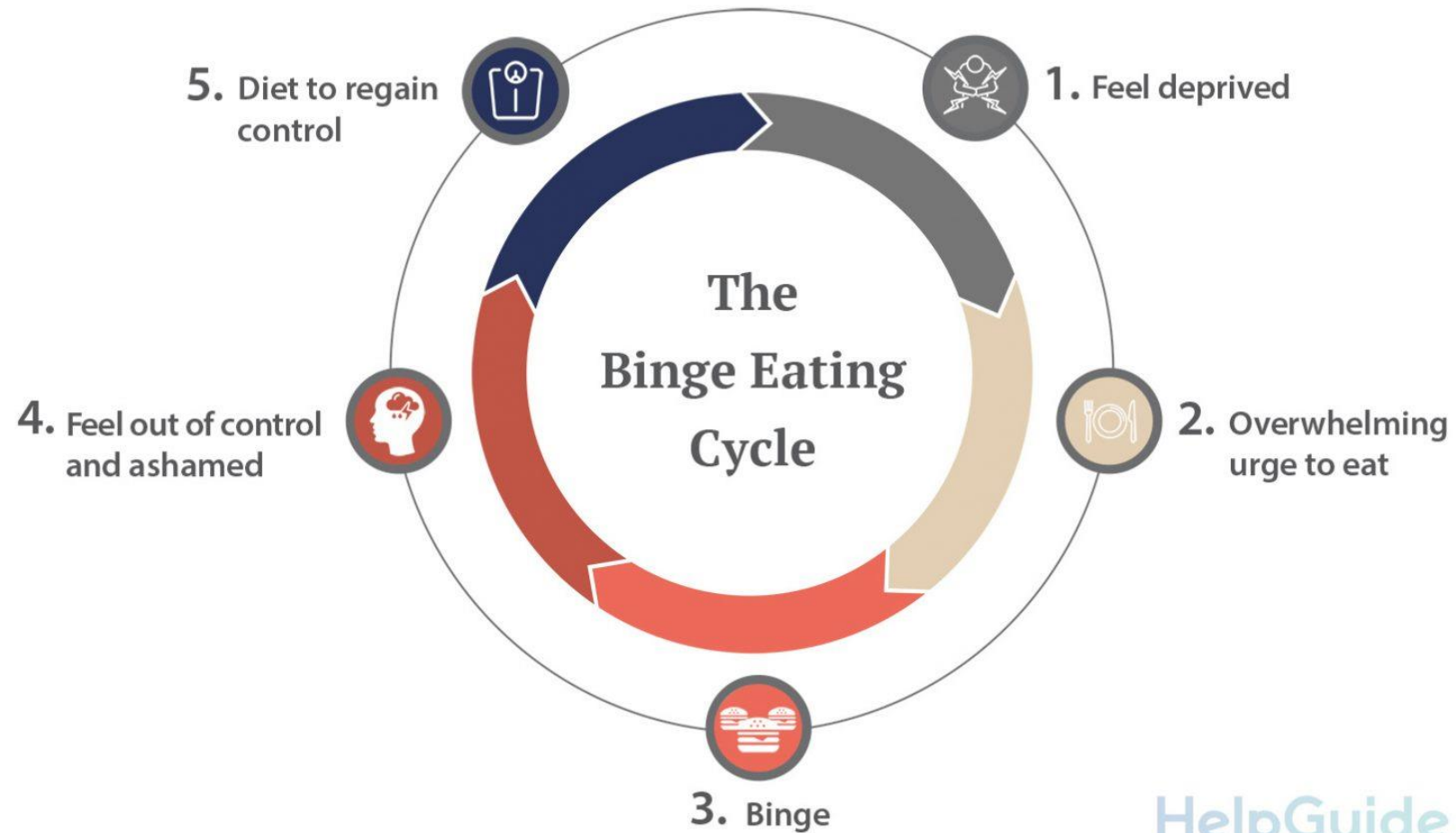
Binge eating episodes are associated with ≥ 3 of the following:

- Marked distress regarding binge eating
- At least once a week for 3 months
- Not associated with recurrent use of inappropriate compensatory behavior



“Attempts to limit calorie intake in children with obesity may also affect the onset and maintenance of binge eating.”

Kang & Kwack, 2020





Treatment Goals

Eating Disorders

- Improve body image
- Normalize eating
- Stabilize weight
- Improve quality of life
- Reduce medical co-morbidities
- Reduce psychological co-morbidities
- Empower families

Obesity

- Improve body image
- Normalize eating
- Stabilize weight
- Improve quality of life
- Reduce medical co-morbidities
- Reduce psychological co-morbidities
- Empower families

How can you help?

Change the Focus

- Focus on health & behaviour instead of weight
- Weight stabilization
- Improved self-esteem and quality of life
- Improved fitness



Obesity Counseling



- Weight loss of 5% accrues metabolic benefits
- Weight stabilization can be considered successful if on upwards trajectory
- Other potential benefits as, if not more, important – stress, sleep, QOL, mental health

Health At Every Size Framework

- Size acceptance
- Recognize stigma and biases
- Understand and validate body image concerns
- No-dieting approach (focus on healthy balanced eating instead)



Best Weight \neq Ideal Weight

- ❖ An ideal BMI is not a realistic goal for many children with obesity
- ❖ Setting unachievable goals can set-up for failure
- ❖ Best BMI is achieved through sustained positive health behaviours
- ❖ Important to help children and families improve body image and move towards body size acceptance



Freedhoff & Sharma (2010)



A patient's best weight is whatever weight they can achieve while living the healthiest lifestyle they can truly enjoy.

Freedhoff & Sharma, 2010

Barriers to Providing Counseling

- Time
- Low financial reimbursement
- Low patient motivation
- Lack of parental support
- Low self-perceived proficiency
- Lack of support (dietitian)

*Barlow Pediatrics 2002; Jelanian
Clin Ped 2003*

Invest in your Assessment



Allows you to
establish rapport with
youth/family

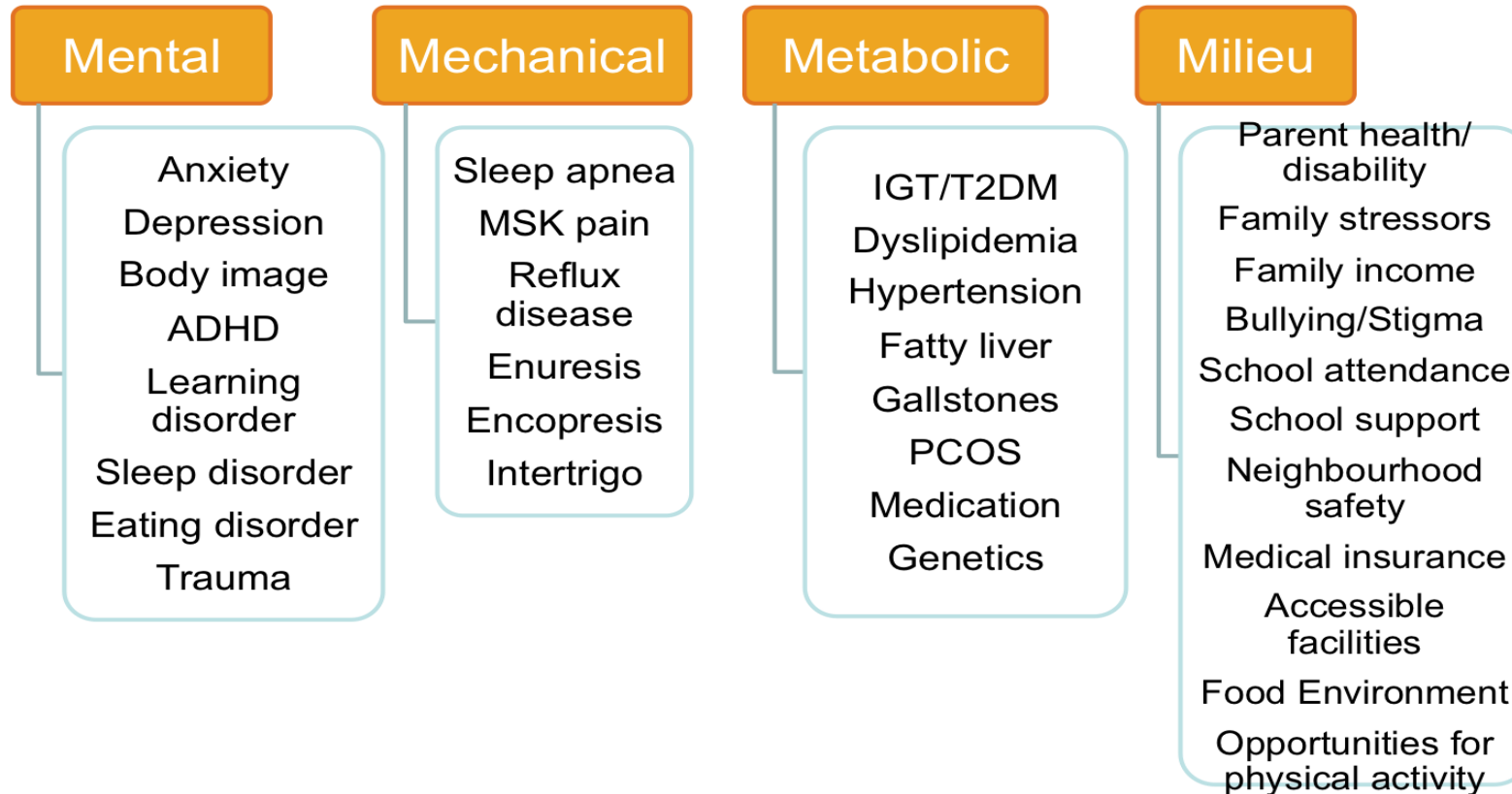
Let families tell you
their story, everyone's
perspective
separately

More likely to hear
about mental health
issues

Identify facilitators
and barriers of
change

Allow additional
time/visit for
psychoeducation

The 4 M's of Pediatric Obesity





- Motivational Interviewing spirit
- Respectful, collaborative stage
- Nonthreatening, supportive manner

*Volger et al. Obesity 2012;
Puhl et al. Pediatrics 2011*

Motivational Interviewing

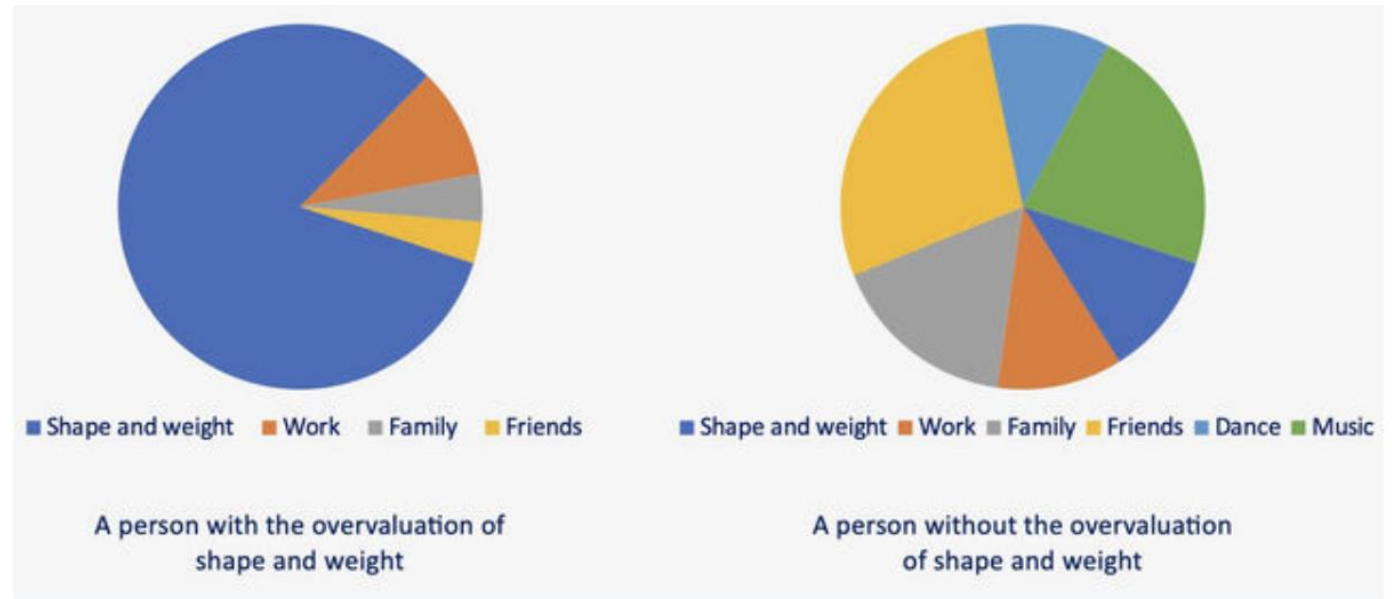
- Uses a nonthreatening, supportive manner
- Sets a respectful, collaborative stage
- Asks permission to discuss tough topics and to provide information

Volger et al. Obesity 2012;

Puhl et al. Pediatrics 2011

Talking about Body Image

- How do you feel about your health; body; weight?
- Do you feel like your weight interferes with anything?
- Does anyone make comments about your body or your weight?
- Do you feel like you spend a lot of time and energy thinking about nutrition or your body?



Assessing Disordered Eating

- Have you ever tried to lose weight?
- Is anyone in your family on a diet?
- Do you ever think of eating when you feel stressed, bored, angry, sad?
- What time of day are you most hungry?
- Does it ever happen that you lose control of your eating – and just can't stop? Feeling disgusted, depressed, or guilty



Success is different for
every child and family



Agree on Goals and Plan Follow Up

- Summarize (written) goals
- Earlier follow-up is better
- Plan for building on changes over time for sustainability
- Setbacks expected → learning opportunity

Evidenced-Based Treatments

Family-Based Therapy:

- Externalization of the illness, blame reduction, parental empowerment, competence, and efficacy in facilitating healthy behaviours

(Eisler, Dare, et al., 2000; Lock & LeGrange, 2005)

Cognitive-Behavioural Therapy:

- Stimulus control, automatic thoughts/feelings, thinking traps, distorted body image, importance of self-monitoring, goal setting, distorted body image

(Fairburn, 2008; Kang & Kwack, 2020)

Evidenced-Based Treatments

Motivational Interviewing (MI)

- Ambivalence, stages of change, therapeutic relationship, validation, non-judgmental stance

(Wade et al., 2009)

Dialectical Behavioural Therapy (DBT)

- Affect recognition and regulation, distress tolerance, mindfulness-based strategies

(Telch et al., 2001; Ritschel, Lim, & Stewart, 2015)

Referrals for specialized services

- Ontario Pediatric Bariatric Network (https://meant2prevent.ca/wp-content/uploads/2023/01/OPBNUUpdated_26Jan2023.pdf)
- Eating disorder programs (for AN, BN, sometimes BED)
- Community dietitians & therapists with a specialty in eating disorders/obesity



Summary

- Obesity and co-morbid mental health problems in children and youth are highly prevalent
- Addressing obesity requires time and a sensitive approach avoiding shame and blame
- Choose words carefully as patients have often experienced significant judgement and may be very sensitive.



Evidence and real-life learnings from the heart of care
A Knowledge Translation Casebook for healthcare professionals



Join by
Web

PollEv.com
/elizabethdet487

Join by
Text

Send **34831** and your message
to **37607**



What if anything will you change in your practice after participating in this ECHO session?

SEE MORE





Mental Health and Pediatric Obesity

Dr. Alène Toulany and Dr. Elizabeth Dettmer
May 1, 2023



Changing the world by connecting healthcare providers.

