CARDI·OH

Ohio Cardiovascular and Diabetes Health Collaborative

SCHOOL OF MEDICINE
CASE WESTERN RESERVE UNIVERSITY

In partnership with:

THE OHIO STATE UNIVERSITY COLLEGE OF MEDICINE

COLLEGE OF MEDICINE AND LIFE SCIENCES THE UNIVERSITY OF TOLEDO

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Ohio Department of Medicaid

Project ECHO®

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Cardi-OH ECHO

Weight Management and Behavior Change: Cases and Discussions

March 24, 2022

Cardi-OH ECHO Team and Presenters

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Structure of ECHO Clinics

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Duration	Item
5 minutes	Introductions and announcements
10 minutes	Didactic presentation, followed by Q&A
40 minutes (20 minutes per case)	Patient case study presentations and discussions
5 minutes	Reminders and Post-Clinic Survey

Disclosure Statements

- The following planners, speakers, and/or content experts of the CME activity have financial relationships with commercial interests to disclose:
  - Marilee Clemons reports advising at Novo Nordisk.
  - Kathleen Dungan, MD, MPH reports receiving consulting fees from Eli Lilly, Boehringer Ingelheim, and Dexcom, research support from Sanofi, Dexcom, Abbott and Viacyte and presentation honoraria from Medscape, UpToDate, and Elsevier.
  - Adam T. Perzynski, PhD reports being co-founder of Global Health Metrics LLC, a Cleveland-based software company and royalty agreements for book authorship with Springer Nature publishing and Taylor Francis publishing.
  - Goutham Rao, MD serves on the Scientific Advisory Board of Dannon-WhiteWave (White Plains, NY), a division of Groupe Danone, S.A., Paris, France.
  - Christopher A. Taylor, PhD, RDN, LD, FAND reports funding for his role as a researcher and presenter for Abbott Nutrition and funding for research studies with the National Cattleman's Beef Association and the American Dairy Association Mideast.
  - These financial relationships are outside the presented work.
- All other planners, speakers, and/or content experts of the CME activity have no financial relationships with commercial interests to disclose.

Person-Centered Language Recommendations

The ADA and the APA recommend language that emphasizes inclusivity and respect:

- **Gender**: Gender is a social construct and social identity; use term “gender” when referring to people as a social group. Sex refers to biological sex assignment; use term “sex” when referring to the biological distinction.
- **Race**: Race is a social construct that is broadly used to categorize people based on physical characteristics, behavioral patterns, and geographic location. Race is not a proxy for biology or genetics. Examining health access, quality, and outcome data by race and ethnicity allows the healthcare system to assist in addressing the factors contributing to inequity and ensure that the health system serves the needs of all individuals.
- **Sexual Orientation**: Use the term “sexual orientation” rather than “sexual preference” or “sexual identity.” People choose partners regardless of their sexual orientation; however, sexual orientation is not a choice.
- **Disability**: The nature of a disability should be indicated when it is relevant. Disability language should maintain the integrity of the individual. Language should convey the expressed preference of the person with the disability.
- **Socioeconomic Status**: When reporting SES, provide detailed information about a person’s income, education, and occupation/employment. Avoid using pejorative and generalizing terms, such as “the homeless” or “inner-city.”

Obesity: Bias and Discrimination

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Learning Objectives

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1. List and describe a minimum of 3 well known findings related to bias and discrimination against people with obesity.
2. List the impact of bias and discrimination upon the physical and mental health of people with obesity.
3. Describe strategies for addressing mental health issues as a cause and consequence of obesity.

Weight Bias & Stigma

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- Weight bias is negative attitudes and beliefs toward a person because of their weight
- Weight stigma is the social label attached to a person who experiences prejudice
  - E.g., exclusion, marginalization, discrimination in workplace, not receiving adequate healthcare

World Health Organization, Weight Bias and Obesity Stigma: Considerations for the WHO European Region. 2017.

Weight Stigma & Health Behaviors

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- Weight stigma is associated with the following:
  - ↑ Disordered eating
  - ↑ Comfort eating
  - ↑ Alcohol use
  - ↑ Sleep disturbances
- Weight stigma is associated with these health behaviors independent of BMI

Lee KM, Hunger JM, Tomiyama AJ, 2021, International Journal of Obesity.

Weight Stigma & Mental Health

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- Weight stigma is associated with the following:
  - ↓ Quality of life
  - ↑ Depressive symptoms
  - ↑ Anxiety symptoms
  - ↑ Psychological distress
  - ↑ Body image dissatisfaction
  - ↓ Self-esteem
  - ↓ Well-being
- Associations not moderated by age, gender, or ethnicity

Emmer C, Bosnjak, M, Mata J 2019, Obesity Reviews.

Weight Stigma & Physiological

- Experiencing high-frequency weight stigma, study showed
  - ↑ Risk for developing type 2 diabetes mellitus
  - ↑ HbA1C levels
  - Sustained salivary cortisol elevation

Wu YK, Berry DC, 2017, J Adv Nur.

How to Support Your Patients

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- Use less stigmatizing language such as “increased body weight,” “higher BMI”
- Use person-first language (i.e., person with increased body weight vs obese person)
- Ask for permission to talk about their weight
- Avoid blanket statements like “Maybe you should eat less fast food.”
- Emphasize SMART goals rather than general statements (e.g., you need to lose 50 pounds)

Emmer C, Bosnjak, M, Mata J 2019, Obesity Reviews.

Types of Stigma Related to Excess Weight

- Implicit Bias (These are attitudes or stereotypes that affect, in an unconscious manner, how an individual understands them and acts on them.)

- Explicit Bias (These are outward attitudes or stereotypes that generate intentional, conscious discrimination and prejudices towards other persons, such as those who are overweight or obese.)

Types of Weight Stigma

- The experience of a weight stigma situation

This denotes how an overweight or obese individual perceives negative attitudes (e.g., stigma, discrimination, prejudice, stereotypes) or inappropriate behaviors (e.g., teasing, bullying, verbal and physical attacks and being treated unfairly) directed towards him or her because of weight.

- Internalized Weight Stigma

This denotes a measure of an individual's belief in stereotypes relating to negative self-evaluations.

Wu Y, Berry DC, 2018, J Adv Nurs.

Stigmatizing Situations Inventory

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Appendix Stigmatizing Situations Inventory-Brief (SSI-B)

Below is a list of situations that people encounter because of their weight. Please indicate whether, and how often, each of these situations happens to you.

0 Never	1 Once in your life	2 Several times in your life	3 About once a year	4 Several times per year	5 About once a month	6 Several times per month	7 About once a week	8 Several times per week	9 Daily

Being singled out as a child by a teacher, school nurse, etc., because of your weight.	0 1 2 3 4 5 6 7 8 9
Being stared at in public.	0 1 2 3 4 5 6 7 8 9
Children loudly making comments about your weight to others.	0 1 2 3 4 5 6 7 8 9
Having a doctor recommend a diet, even if you did not come in to discuss weight loss.	0 1 2 3 4 5 6 7 8 9
Having a romantic partner exploit you, because she or he assumed you were 'desperate' and would put up with it.	0 1 2 3 4 5 6 7 8 9
Overhearing other people making rude remarks about you in public.	0 1 2 3 4 5 6 7 8 9
Not being hired because of your weight, shape or size.	0 1 2 3 4 5 6 7 8 9
Having family members feel embarrassed by you or ashamed of you.	0 1 2 3 4 5 6 7 8 9
Having people assume you overeat or binge eat because you are overweight.	0 1 2 3 4 5 6 7 8 9
Being glared at or harassed by bus passengers for taking up 'too much' room.	0 1 2 3 4 5 6 7 8 9

Vartanian, LR, 2015, Obesity, Science, & Practice.

Weight Bias Internalization Scale

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TABLE 1 | Original items of the WBIS and modified items of the C-WBIS.

Original items (WBIS)	Modified items (C-WBIS)
1. As an overweight person, I feel that I am just competent as anyone.	1. No matter how much I weigh, I can do just as much as everyone else
2. I am less attractive than most other people because of my weight.	2. I am less attractive than other people because of my weight
3. I feel anxious about being overweight because of what people might think of me	3. I feel anxious about my weight because of what people might think of me
4. I wish I could drastically change my weight	4. I wish I could change my weight a whole lot
5. Whenever I think a lot about being overweight, I feel depressed.	5. whenever I think a lot about my weight, I feel depressed
6. I hate myself for being overweight.	6. I hate myself because of my weight
7. My weight is a major way that I judge my value as a person.	7. My weight strongly influences what I think of myself confidence and worth as a person
8. I don't feel that I deserve to have a really fulfilling social life, as long as I'm overweight.	8. Because of my weight, I don't deserve having a lot of friends and fun
9. I am OK being the weight that I am.	9. I am satisfied with my weight
10. Because I'm overweight, I don't feel like true self.	10. Because of my weight, I don't feel like true self
11. Because of my weight, I don't understand how anyone attractive would want to date me.	11. Because of my weight, I don't understand why attractive peers would want to play with me.

Chen, H, Ye YD, 2021, Frontiers in Psychology.

Case Example 1

Note: Patient provided verbal permission to share information for this presentation

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- Ms. S is 31-year-old, single white, Middle Eastern woman who is a candidate for weight loss surgery. BMI = 40. DX: depression and anxiety, night eating syndrome, mixed hyperlipidemia, PCOS, OSA.
- She shared that she went shopping and the clerk told her they did not have those size clothes down here. You have to get those bigger clothes upstairs. She stated that she ran out of the store and could not breathe. No wonder people with weight problems are depressed or want to commit suicide. “I was so angry and embarrassed when she said this to me.”

Case Example 2

Note: Patient provided verbal permission to share information for this presentation

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- Ms. S is a 49-year-old, single, African-American woman who is a candidate for weight loss surgery. BMI = 66. DX: MDD, PTSD, psychological factors affecting morbid obesity, essential hypertension, prediabetes, chronic systolic heart failure, OSA, knee and back pain, osteoarthritis of the hip.
- She shared that: “I’ve been on a diet my whole life. I could not eat what everyone else was eating. I was told I was too big for my age.”
- She stated that: “I am like this [*pointing to her body*] because of how I was treated.”
- “Eating was like rebelling against my family.”

Strategies for Mental Health Issues as a Cause and Consequence of Obesity

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STUDIES

- Acceptance and commitment therapy (ACT) + mindfulness + self-compassion
- Cognitive behavioral interventions targeting weight stigma

Palmeira L, Gouveia JP, Cunha M, 2017, Appetite. Pearl RL, Wadden TA, Bach C, Gruber K, Leonard S, Walsh OA, Tronieri JS, Berkowitz RI, 2020. J Consult Clin Psychol.

ACT + Mindfulness + Self-compassion

- An RCT group study by Palmeira, Gouveia, Cunha, 2017 2017 (N=73)
- Compared treatment group, Kg Free (N=36) with TAU vs TAU only (N=37)
- This RCT consisted of 10 weekly sessions and two booster sessions aimed at improving quality of life by removing weight self-stigma and correcting unhealthy eating patterns.

ACT Plus Study Interventions

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Intervention	Purpose
Psychoeducation: understanding emotions and relationship with food	Deshaming and to reduce self criticism. To increase awareness of hunger and satiety cues.
Practice mindful eating skills during every session.	Develop a nonjudgmental attitude towards one's experiences regarding eating.
Create obtainable goals towards a healthier life and identifying and removing barriers	To increase motivation
Cultivate cognitive, acceptance and distress tolerance skills to cope with unwanted internal experiences related to weight stigma.	Develop a more flexible and accepting relationship with one's weight and eating habits and to decrease avoidant behaviors.
Psychoeducation about self-compassion. Tools to cultivate self-compassion and loving kindness. * Booster sessions to cope with relapses	To tackle weight self-stigma, self-criticism and increase motivation for self care.

ACT + Mindfulness + Self-compassion

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- Compared to TAU, the intervention with TAU resulted in improved: health-related QOL and an increase in exercise from 1 to 4 times per week. Self-stigma about weight, self-criticism, unhealthy eating habits, BMI, general health problems, and weight-related avoidance decreased.
- Scores on the self-compassion measure did not significantly increase between groups.

Cognitive Behavioral Intervention Targeting Weight Stigma

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- An RCT group study by Pearl et al., 2020, (N=72) compared CBT for weight-based internalization and stigma program (BIAS) with behavioral weight loss (BWL) (N= 36) vs BWL only (N = 36)

- This RCT consisted of 12 weekly sessions, two bi-monthly, and two monthly sessions. Follow up occurred at 26 weeks.

Cognitive-Behavioral Intervention Targeting Weight Stigma

Pearl et al., 2020 Its aims were to:

- Reduce weight-based internalization (WBI) and improve coping with weight stigma
- Test other measures of psychological and physical health between groups
- Participants: men and women 18-65. BMI ≥ 30kg/m2.

BWL Intervention (60 Minutes)

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- Self monitoring
- Social support
- Stimulus control
- Portion sizes
- Goal setting

Weight-based Internalization and Stigma Program (BIAS) (30 minutes)

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- Psychoeducation about weight and weight bias
- Challenging stereotypes, cognitive distortions, and myths related to weight
- Relationship in the ABCD model
- Cognitive restructuring and reappraising stigmatizing situations
- Interpersonal skills training
- Reducing self criticism
- Body and self acceptance
- Self compassion
- Empowerment

CBT Study Findings

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- Both groups showed substantial reductions in weight bias internalization and there were no differences between groups
- Mood, body image, measures of eating behaviors and self-monitoring skills improved across both groups but not between groups
- % Weight loss was significant in both groups atweek 26 but did not differ between groups

CBT Study Findings

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- Significant reductions in systolic and diastolic blood pressure at week 12 but not week 26 for both groups
- No difference in CVD risk factors between groups
- Compared to BWL only: Greater improvements on the weight self-stigma questionnaire (WSSQ) total score at week 12 and on the self-devaluation subscale at week 12 and 26 for the BWL with BIAS group

Summary

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- Weight stigma can increase risks for mental health problems and physiological problems.
- Treatments are available but are sparse and further studies are needed.

Thank you!

Questions/Discussion