

Psychosocial barriers to prenatal physical activity including weight stigma: Strategies for mitigating stigma in exercise consultation and promotion for pregnancy

PRESENTED BY: Taniya S. Nagpal
Assistant Professor, University of Alberta



Land Acknowledgement

The University of Alberta acknowledges that we are located on Treaty 6 territory, and respect the histories, languages, and cultures of First Nations, Métis, Inuit, and all First Peoples of Canada, whose presence continues to enrich our vibrant community.

Learning Objectives

1. Define key terms: Weight stigma and weight bias
2. Understand how weight stigma may be a barrier to prenatal physical activity
3. List strategies you can implement now to reduce weight stigma in prenatal physical activity contexts

Physical activity during pregnancy



- Promotes maternal, fetal and neonatal health
- Prevention of perinatal complications
- Improved labour and delivery outcomes
- Downstream prevention of chronic disease

Regular physical activity

150 minutes per week

Aerobic activity and muscle strengthening

Davenport et al., 2018; Mottola et al., 2018; Australian Government Department of Health, 2021; WHO Guidelines on physical activity and sedentary behavior, 2021

Adherence to physical activity during pregnancy

Low adherence to prenatal physical activity guidelines



Psychosocial barriers to prenatal physical activity

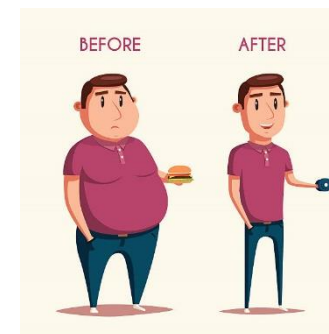
- Social factors and individual factors interacting
- Pregnant individuals with lower socioeconomic status and education levels are less likely to meet physical activity guidelines than higher income or educated groups
- Women from minority ethnic groups have lower physical activity levels than those who are from a European origin
- Pregnant individuals with higher body weight or obesity have low activity levels and are more likely to experience weight stigma



Gaston et al., 2011; Marquez et al., 2009; Tremblay et al., 2011; Incollingo Rodriguez et al., 2019

Weight stigma

- Labels and negative stereotypes associated with weight
- Associates negative personality traits with the individual
- ‘Lazy’, ‘non-compliant’, ‘lacking self-control’
- Further projected in the media



Weight stigma and physical activity

Weight Stigma: Negative social stereotypes and misconceptions associated with body weight

- Weight stigma has been described as the driver of obesity

Stereotypes and Misconceptions Associated with Obesity

- Unhealthy
- Lazy
- Weak-willed
- Unsuccessful
- Lack self-discipline



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Weight stigma and physical activity

Weight Stigma: Negative social stereotypes and misconceptions associated with body weight

- Non-pregnant adults who have obesity identify physical activity settings as a source of weight stigma
- Experiencing weight stigma reduces self-efficacy to be active
- Increases maladaptive coping behaviours like unhealthy eating and avoiding activity



Weight stigma

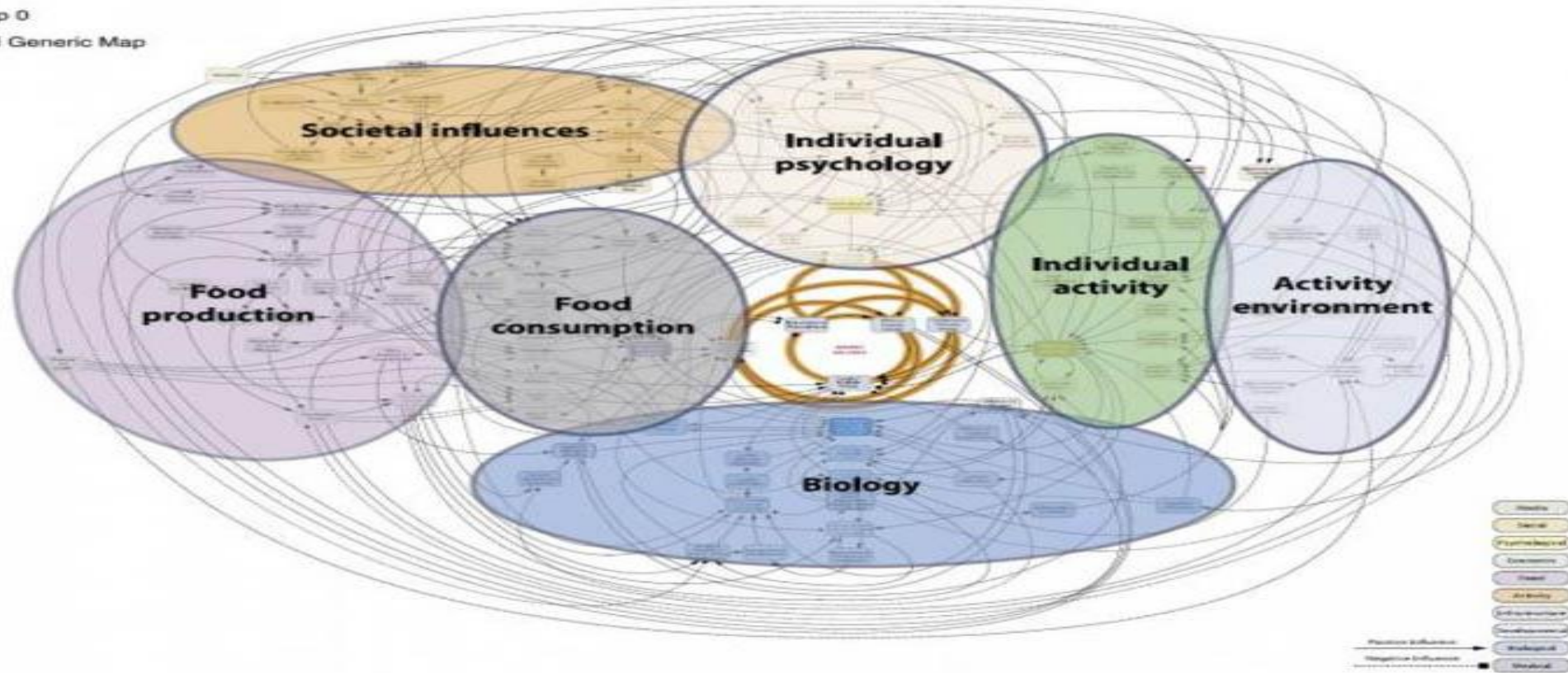
- Prevailing narrative for the cause of obesity:



Individually
Responsible

Obesity – Complex Map

Map 0
Full Generic Map



Weight bias

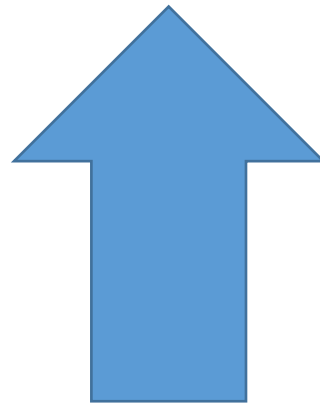
- Negative attitudes and views we hold towards weight
- Our biases may be informed by weight stigma
- Can be implicit bias
- Can lead to weight-based discrimination

<https://obesitycanada.ca/weight-bias/>



Experiencing weight bias & stigma

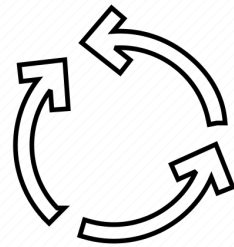
- Shame and guilt
 - Impacts health behaviours



- Stress
- Maladaptive eating behaviours
- Physical inactivity

Experiencing weight bias & stigma

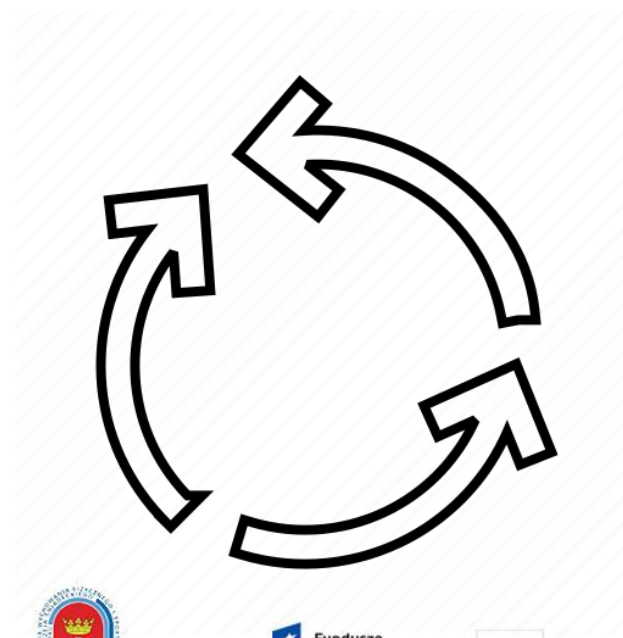
- Increases risk of experiencing internalized weight bias
- Accepts and self-directs negative stereotypes associated with their weight
- Impacts individuals living with obesity
- Associated with poor mental health outcomes and weight gain



Pearl and Puhl, 2018

Internalized weight bias

- Self-blame
- Focuses obesity on individual responsibility
- Reduces motivation for weight motivation and compliance to health recommendations
- Driver of obesity



Some stats...

- 63% higher likelihood to experience bullying if child has obesity
- 54% of adults who have obesity report stigma at work
- More than 70% of media representation of obesity (images and videos) use weight stigmatizing messaging
- 64% of patients who have obesity report experiencing weight bias from a healthcare provider
- Income status is associated with weight stigma and management of obesity including access to physical activity



Weight Stigma is Capturing Attention

- Oscars: The Whale
- Trailer: <https://www.youtube.com/watch?v=nWiQodhMvz4>
- Roundtable: <https://www.youtube.com/watch?v=-Ka4jLFrWVc>



Break



Weight stigma and pregnancy



1/3

pregnant women
experience weight-related
stigma



Healthcare

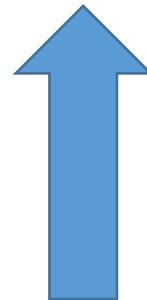


Media



Social Networks

- Pregnant individuals living with obesity are at an increased risk of experiencing weight stigmatizing situations



- Excessive gestational weight gain
- Postpartum depression
- Maladaptive eating
- Gestational diabetes

Incollingo Rodriguez et al., 2020; Nippert et al., 2021; Nagpal et al., 2022

Scoping Review: Causal factors of prenatal weight stigma in clinical settings

- 18 studies
 - 1) Avoidance of weight-related discussions
 - 2) Assuming lifestyle behaviours
 - 3) Poor communication discussing risks

Review > [Patient Educ Couns.](#) 2020 Nov;103(11):2214–2223. doi: 10.1016/j.pec.2020.06.017.
Epub 2020 Jul 2.

Summarizing recommendations to eliminate weight stigma in prenatal health care settings: A scoping review

Taniya S Nagpal ¹, Rebecca H Liu ², Laura Gaudet ³, Jocelynn L Cook ⁴, Kristi B Adamo ⁵

Interviews: Pregnant women living with obesity

- Interviewed Canadian pregnant women in their third trimester receiving high-risk obstetrical care for obesity and co-morbidities
- Wanted to understand experiences of weight bias during pregnancy and their suggestions on how to improve the delivery of prenatal care
- Coded data by content analysis: Experiences and Suggestions



Nagpal et al., 2021

Interview Results:

Experiences of weight bias in prenatal clinical settings:

Poor communication about risk

Generalizations about lifestyle

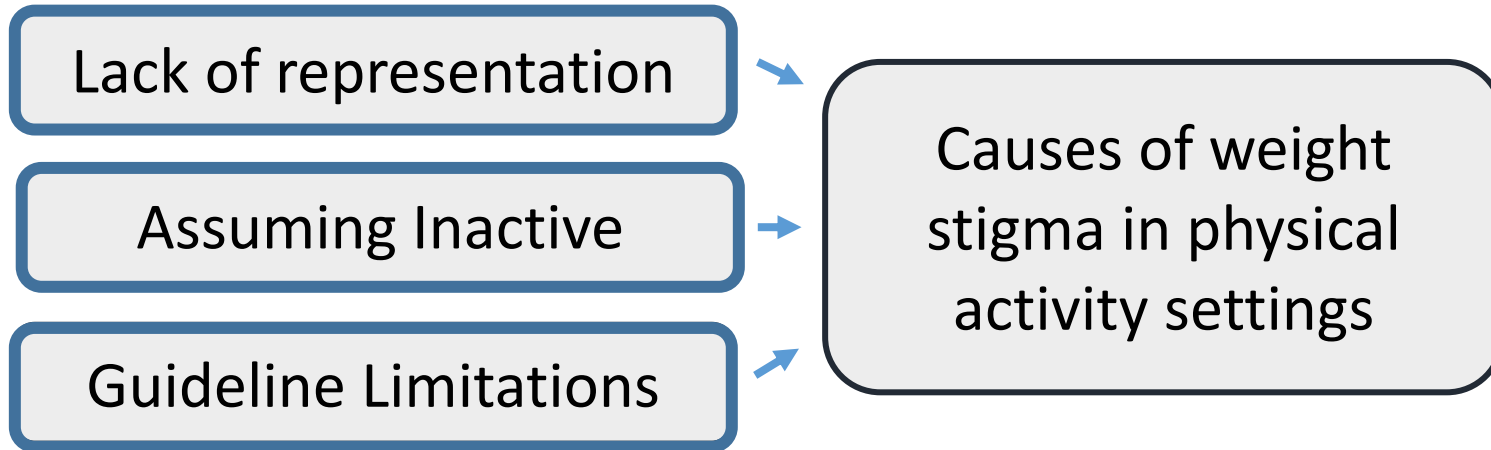
Focusing only on weight

Weight stigma and physical activity in pregnancy

- Qualitative study exploring weight stigma in physical activity contexts
- Pregnant individuals with obesity (receiving specialized care for obesity) were recruited
- Semi-structured interviews



Weight stigma and physical activity in pregnancy



Weight stigma and physical activity in pregnancy

- Pregnant individuals do experience weight stigma in relation to physical activity
- Weight stigma may be a barrier to adhering to guidelines
- Prospective studies with objective measures of physical activity and measurement of implications weight stigma may have on maternal and newborn health are needed



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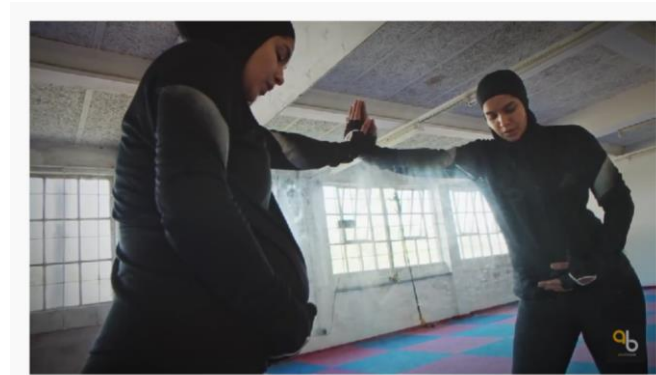


But what do we do right now?

- What can you do now to prevent weight stigma in your delivery of care and services?
- How do we make physical activity more inclusive?
- First...let's ask the hard questions that force us to reflect on potential implicit biases

What does an active pregnancy look like?
Are there pregnant body ideals?

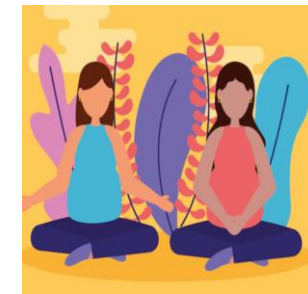
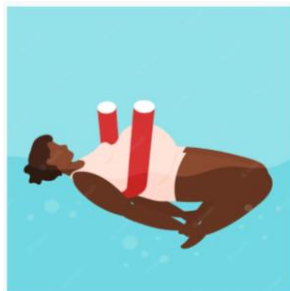
<https://www.youtube.com/watch?v=h8bwiQVUSEg>



Nike: The Toughest Athletes

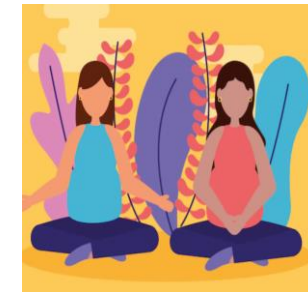
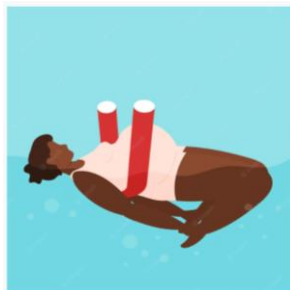
Reducing weight stigma during pregnancy – What can we do in physical activity contexts?

1. Increase visibility of body diverse representation of active pregnancies
2. Take a person-oriented approach when consulting about exercise
3. Integrate opportunities to learn from lived experience
4. Self-reflect on implicit biases



Reducing weight stigma during pregnancy – What can we do in physical activity contexts?

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References

- Davenport et al. Prenatal exercise for the prevention of gestational diabetes mellitus and hypertensive disorders of pregnancy: a systematic review and meta-analysis. *Br J Sports Med.* 2018;52(21):1367-75.
- Davenport et al. MH, Impact of prenatal exercise on neonatal and childhood outcomes: a systematic review and meta-analysis. *Br J Sports Med.* 2018;52(21):1386-96.
- Evidence-based physical activity guidelines for pregnant women. *Australian Government Department of Health.* 2020. [2021-12-19]. <https://www.health.gov.au/resources/publications/evidence-based-physical-activity-guidelines-for-pregnant-women>
- Gaston et al., Exercise during pregnancy: a review of patterns and determinants. *Journal of Science and Medicine in Sports.* 2011
- Himmelstein et al. 2017. Intersectionality: An Understudied Framework for Addressing Weight Stigma. *Am J Prev Med.*
- Incollongo Rodriguez AC, Dunkel Schetter C, Brewis A, Tomiyama AJ. The psychological burden of baby weight: Pregnancy, weight stigma, and maternal health. *Soc Sci Med.* 2019;235:112401. doi:10.1016/j.socscimed.2019.112401
- Mottola et al. 2019 Canadian guideline for physical activity throughout pregnancy. *Br J Sports Med.* 2018 Nov;52(21):1339–46.
- Nagpal et al. 2020. Summarizing recommendations to eliminate weight stigma in prenatal health care settings: A scoping review. *Patient Educ Couns.*
- Nagpal et al. 2021. Women's Suggestions for How To Reduce Weight Stigma in Prenatal Clinical Settings. *Nurs Womens Health.*
- Nagpal et al., 2021. Beyond BMI: Pregnancy-related weight stigma increases risk of gestational diabetes. *Prim Care Diabetes.*
- Obesity Canada. 2018. Overcoming weight bias. Retrieved from: <https://obesitycanada.ca/wp-content/uploads/2018/10/Overcoming-Weight-Bias-11x17-May-2018-Eng-Fr4.pdf>
- Obesity Canada. 2018. It's Complicated! Systems science and obesity. Retrieved from: <https://obesitycanada.ca/snp/its-complicated-systems-science-and-obesity/>
- Obesity Canada. 2021. Weight bias. Retrieved from: <https://obesitycanada.ca/weight-bias/>
- Pearl et al. 2019. Weight bias internalization in a commercial weight management sample: prevalence and correlates. *Obes Sci Pract.*
- Pearl and Puhl. 2018. Weight bias internalization and health: a systematic review. *Obes Rev.*
- Phelan et al. 2015. Impact of weight bias and stigma on quality of care and outcomes for patients with obesity. *Obes Rev.*
- Puhl and Suh. 2015. Health Consequences of Weight Stigma: Implications for Obesity Prevention and Treatment. *Curr Obes Rep.*
- Public Health Agency of Canada. 2019. Addressing Stigma: Towards a More Inclusive Health System. Retrieved from: <https://www.canada.ca/en/public-health/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/addressing-stigma-toward-more-inclusive-health-system.html>
- Rodriguez and Nagpal. 2021. The WOMBS Framework: A review and new theoretical model for investigating pregnancy-related weight stigma and its intergenerational implications. *Obes Rev.*
- Tomiyama et al. 2018. How and why weight stigma drives the obesity 'epidemic' and harms health. *BMC Med.*
- Turan et al. 2019. Challenges and opportunities in examining and addressing intersectional stigma and health. *BMC Medicine*, 17, 7.
- Wharton S, Lau DCW, Vallis M, Sharma AM, Biertho L, Campbell-Scherer D, et al. Obesity in adults: a clinical practice guideline. *Cmaj.* 2020;192(31):E875-e91.
- WHO guidelines on physical activity and sedentary behaviour. *World Health Organization.* [2021-12-19]. <https://www.who.int/publications/i/item/9789240015128>

All images: Freepix, Google



Thank you

Questions?

tnagpal@ualberta.ca

 **@TaniyaNagpal11**

