WEIGHT INCLUSIVE NUTRITION IN PREGNANCY: A LITERATURE REVIEW AND PRACTICE APPLICATION

Brianna Juma Caverzagie; Katherine Arlinghaus, PhD, RD; Jamie Stang, PhD, MPH, RDN University of Minnesota School of Public Health, Division of Epidemiology and Community Health



INTRODUCTION

- Weight stigma outside of pregnancy is associated with decreased healthcare seeking behavior, increased disordered eating behaviors, and increased stress hormones.
- Weight stigma is also related to weight cycling, which is associated with depressive symptoms, cardiovascular disease, and increased morbidity and mortality separate from weight.
- Gestational weight gain (GWG) is monitored during pregnancy, and pregnant people with a higher weight are considered to be at higher risk.
- Given the focus on weight during pregnancy, pregnant people may also be at increased risk for weight stigma.

AIMS:

The goal of this study was to review the literature regarding the following topics:

- 1. Existing pregnancy practice guidelines
- 2. Patient-provider communication and perceptions of pregnancy care
- 3. Experiences of weight stigma in pregnancy
- 4. Potential approaches for attenuating the impact of pregnancy weight stigma

METHODS

- A PubMed MeSH search was conducted with terms related to the aims of this study
- Duplicates and articles unrelated the study aims were removed; reviews were excluded.
- Other relevant works were included as encountered during the review process.
- A total of 48 research papers and practice guidelines, along with five articles from organizations like the Association for Size Diversity and Health (ASDAH) or the National Eating Disorder Association (NEDA) were included.

RESULTS

1. PRACTICE GUIDELINE TAKEAWAYS

- Most practice guidelines encourage a discussion of GWG targets based on BMI and sharing the "risks" associated with a higher-weight pregnancy.
- Recent guidelines from the US Preventative Services Task Force recommend providing at least 2 nutrition counseling sessions to all pregnant people, regardless of pre-pregnancy weight.¹
- Almost no guidelines specify how to approach conversations about weight during pregnancy.

2. PATIENT-PROVIDER COMMUNICATION

Providers

- Do not always share GWG guidelines, and recommendations don't always align with the Institute of Medicine ranges²
- Some providers are uncomfortable discussing GWG, physical activity, and nutrition²

Patients

- Many higher weight pregnant people report feeling too much emphasis is put on weight/risk³
- Some pregnant people wanted more explicit guidance on GWG and physical activity⁴
- Most women were receptive to receiving nutrition information²

Both providers and patients report limited time during appointments as a barrier to discussing nutrition

RESULTS CONTINUED

3. WEIGHT STIGMA IN PREGNANCY

Higher-weight pregnant people:

- Have more negative care experiences³
- Feel an excessive emphasis is put on their risk during pregnancy³
- Fear and experience judgement from providers⁴

Experiences of weight stigma in pregnancy are associated with:

- Feelings of anxiety and shame surrounding the health of their pregnancy⁴
- Poorer dietary choices
- Less engagement with healthcare providers⁵
- Higher risk for Gestational Diabetes
- Negative psychological outcomes during and after pregnancy

4. POTENTIAL APPROACHES FOR WEIGHT-INCLUSIVE PREGNANCY CARE

Intuitive Eating and Mindful Eating

Association between **intuitive eating** in pregnancy and:

- GWG within guidelines, though results are mixed
- Body satisfaction
- Less disordered eating
- Fewer depressive symptoms
- Positive perceptions of gestational weight gain
- Improved GDM outcomes from pregnancy through one-year postpartum⁶

Association between **mindful eating** in pregnancy and:

- Healthier diet and higher intake of fruits and vegetables⁷
- Lower intake of snack foods⁷
- Better glucose tolerance⁸

Mindful eating/activity intervention:8

- Decreased stress
- Improved ability to regulate emotions
- Decreased emotional eating
- Increased light physical activity

Existing Framework: The 5As of Healthy Pregnancy Weight Gain ™

- Of all the guidelines reviewed, only one provided a framework for discussing GWG: The 5A's of Health Pregnancy Weight Gain™
- This framework might improve provider communication surrounding GWG⁹

DISCUSSION

- Weight stigma is present in pregnancy and may impact health.
- Equally offering nutrition services to all pregnant people, regardless of pre-pregnancy weight, aligns with recent recommendations.
- Practices like intuitive eating, mindful eating, the 5As[™], or focusing first on needs and concerns of the pregnant person – rather than weight alone – might be strategies to support weight-inclusive care.
- Almost no explicitly weight-inclusive pregnancy care practices have been tested and studied, as existing literature is mostly observational.
- Limited time in prenatal care settings makes WIC a viable setting to test weight-inclusive practices and fill current gaps in the literature.

SELECTED KEY REFERENCES*

1. US Preventive Services Task Force, Davidson KW, Barry MJ, et al. Behavioral Counseling Interventions for Healthy Weight and Weight Gain in Pregnancy: US Preventive Services Task Force Recommendation Statement. JAMA. 2021;325(20):2087-2093. doi:10.1001/jama.2021.6949

2. Whitaker KM, Wilcox S, Liu J, Blair SN, Pate RR. Patient and provider perceptions of weight gain, physical activity and nutrition counseling during pregnancy: a qualitative study. Womens Health Issues Off Publ Jacobs Inst Womens Health. 2016;26(1):116-122. doi:10.1016/j.whi.2015.10.007

3. Incollingo Rodriguez AC, Smieszek SM, Nippert KE, Tomiyama AJ. Pregnant and postpartum women's experiences of weight stigma in healthcare. BMC Pregnancy Childbirth. 2020;20:499. doi:10.186/s12884-020-03202-5
4. Hurst DJ, Schmuhl NB, Voils CI, Antony KM. Prenatal care experiences among pregnant women with obesity in Wisconsin, United States: a qualitative quality improvement assessment. BMC Pregnancy Childbirth. 2021;21:139. doi:10.1186/s12884-021-03629-4

5. DeJoy SB, Bittner K, Mandel D. A Qualitative Study of the Maternity Care Experiences of Women with Obesity: "More than Just a Number on the Scale." J Midwifery Womens Health. 2016;61(2):217-223. doi:10.1111/jmwh.12375
6. Quansah DY, Gross J, Gilbert L, Helbling C, Horsch A, Puder JJ. Intuitive eating is associated with weight and glucose control during pregnancy and in the early postpartum period in women with gestational diabetes mellitus (GDM): A clinical cohort study. Eat Behav. 2019;34:101304. doi:10.1016/j.eatbeh.2019.101304

7. Hutchinson AD, Charters M, Prichard I, Fletcher C, Wilson C. Understanding maternal dietary choices during pregnancy: The role of social norms and mindful eating. Appetite. 2017;112:227-234. doi:10.1016/j.appet.2017.02.004 8.Epel E, Laraia B, Coleman-Phox K, et al. Effects of a Mindfulness-Based Intervention on Distress, Weight Gain, and Glucose Control for Pregnant Low-Income Women: A Quasi-Experimental Trial Using the ORBIT Model. Int J Behav Med. 2019;26(5):461-473. doi:10.1007/s12529-019-09779-2

9. Weeks A, Halili L, Ferraro ZM, Harvey AL, Deonandan R, Adamo KB. A Pilot Study Evaluating the Effectiveness of the 5As of Healthy Pregnancy Weight Gain. J Midwifery Womens Health. 2020;65(4):546-554. doi:10.1111/jmwh.13081