Informed Consent Discussion Model: Individuals with Obesity in Pregnancy

Cecilia Jevitt, PhD, RM, CNM, APRN, FACNM

Charlotte Grant, RM

Juliette Mudra, RM

This presentation focuses on:

- the informed consent discussion
- uses people-first language as outlined by Obesity Canada
- uses obesity photos from the Rudd Center for Food Policy and Obesity photo gallery

I have no conflict of interests to declare for this presentation.

Obesity is more than

-a BMI ≥ 30
-over-eating
-lack of physical activity

Obesity is an intergenerational adaptation to multiple socio-economic disparities, and social and physical environments that alter the hypothalamic–pituitary–adrenal axis (HPA) through exposure to chronic stress and endocrine-disrupting chemicals, and broken, nonnutritive food systems.

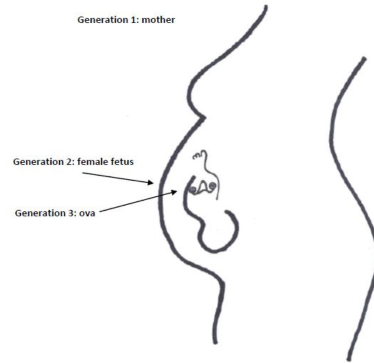
Jevitt 2020

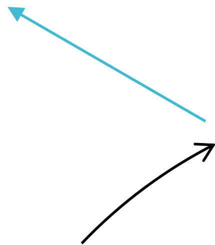
PERINATAL MORBIDITY & MORTALITY

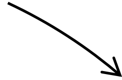
EPIGENETIC CHANGES:

*fetal

*ova in female fetus







ECONOMIC & EDUCATIONAL DISPARITIES:

v access to quality education

v access to living wage

v access to health care

v access to health information

NUTRITIONAL DISPARITIES:

v incidence & duration of breastfeeding

v income for quality nutrition

v availability of nutritious foods

^ exposure to calorie dense, high glycemic index foods

ENVIRONMENTAL DISPARITIES:

^ exposure to endocrine disrupting chemicals

^ increased tobacco product exposure

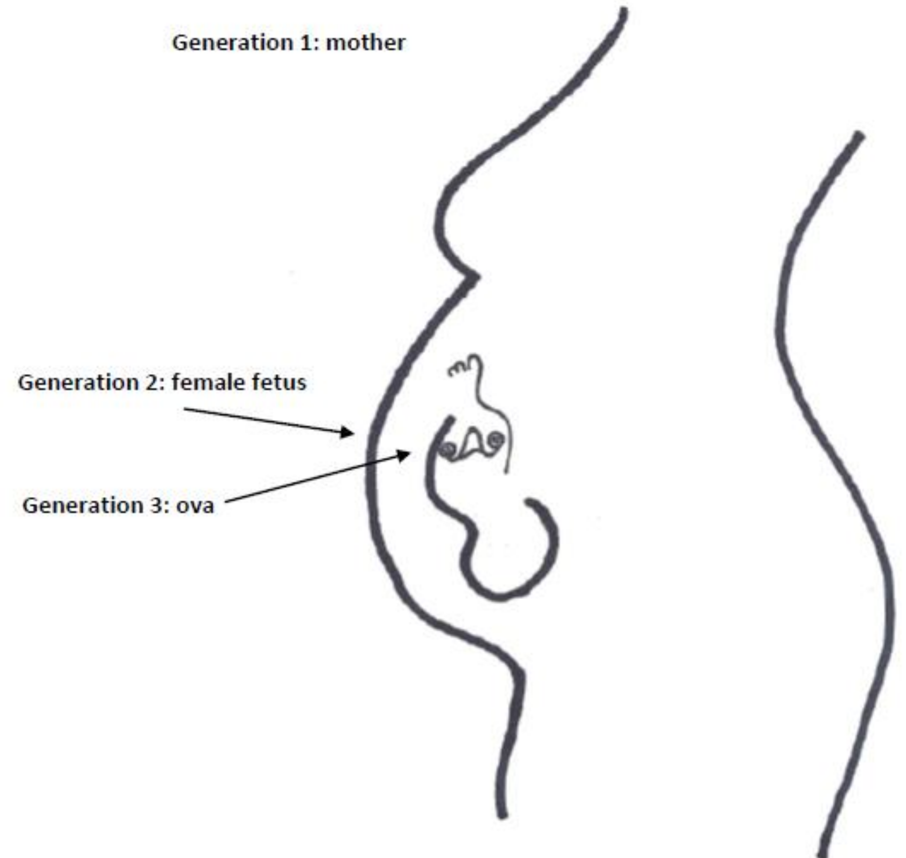
v safety of physical activity

OBESITY:

^ white adipose tissue cytokines & hormones

v satiety signaling from gut microbiome

Obesity has less to do with personal choice than with socioeconomic limits on choices & epigenetics



Nutrients

Paternal Obesity and Undernutrition

- Reduced sperm motility, increased DNA damage
- Altered sperm epigenome and RNA profile
- Altered seminal plasma composition
- Reduced embryo potential
- Epigenetic reprogramming
- Endocrinal misregulation
- Postnatal cardiometabolic disease risk

Maternal Obesity and Overnutrition

- Metabolite and lipid accumulation in follicles and eggs
- Mitochondrial damage
- Cellular and ER stress
- Epigenetic and metabolic reprogramming
- Postnatal cardiometabolic disease risk
- Adverse programming evident after embryo transfer

Maternal Undernutrition

- Preimplantation embryo sensing of maternal nutrients
- Extra-embryonic (TE, PE) compensatory responses
- Epigenetic and metabolic reprogramming
- Resetting fetal growth rate through regulating ribosome biogenesis
- Endocrinal misregulation
- Postnatal cardiometabolic disease risk
- Adverse programming evident after embryo transfer

From Fleming, et al., *Lancet*

WHO?

- Overall, 17.4% of Canadian females ages 18 to 34 and 28.6% ages 35-49 self-report obesity based on body mass index calculations.[2]
- Obesity rates vary province to province with the Maritime Provinces having the highest rates (30-38%) and British Columbia the lowest (22%).
- In the US, about 30% of adults are overweight with 30% being obese.

WHY?

Clients need to know these increased risks

- Increased risk with increasing BMI:
  - Hypertensive disorders of pregnancy
  - Gestational diabetes
  - Macrosomia
  - Stillbirth
  - Cesarean birth
- Risk constant with increasing BMI or clinically insignificant increases:
  - Shoulder dystocia
  - Postpartum hemorrhage
- The largest increases in risk start at a BMI of 36.

Why?

Ethical and legal obligation

- INDICATIONS FOR DISCUSSION, CONSULTATION AND TRANSFER OF CARE, *Registrant's Handbook*, BC College of Nurses and Midwives , March 2020.
- Association of Ontario Midwives guidelines for LOW or HIGH BMI in pregnancy

Why not?

Fear of traumatizing or re-traumatizing

Fear of losing patient

Fear of angry response

Insecure about nutrition knowledge

Lack of time in clinic

- Midwives don't want to belittle or criticize women. (Holton, Allen-Davis, Daley)
- Thinking it caused women more anxiety than benefit, routine weighing during prenatal care was dropped in the UK during the 1990s before the obesity pandemic became apparent. The UK is rethinking that assessment. (Allen-Walker)
- In studies, most women favor nutrition intervention and/or weighing with guidance (Daley, Allen-Walker, Christenson)
- Midwives' knowledge base is easily expanded to include basic eating and activity advice. (Allen-Walker, Daley)

How women with obesity want to be approached and treated

Christenson 2019

- Clients want vital medical information
- Clients wish to feel understood and treated with respect, a non-judgmental attitude
- Midwife's approach is crucial in key sensitive situations

- Only 3/17 women with obesity did not want to talk about medical complications for fear of more worry
- *"I can't count the number of times I've been told by caregivers to stop eating candy which I hardly ever do…'but I assume you drink soda?' which I don't.*
- *…you get judged 'Perhaps you should lose weight?' when they could ask instead 'have you ever tried to lose weight?'*
- *It feels like they are very quick at drawing the conclusion that you have chosen to be big.*

ICD TEMPLATE FOR INDIVIDUALS WITH OBESITY

At first visit, in 1st trimester

- Measure height. Have client measure weight.
- Calculate body mass index.
- Complete health history. Determine co-morbid illness (particularly diabetes, hypertension, immune disorders, food allergies or intolerances)
- Initiate discussion of weight gain and healthy eating in pregnancy.
- Determine target weight gain based on 2009 US Institute of Medicine Guidelines.
- Ask client thoughts about this target and weight gain in pregnancy.
- Ask client to describe eating during a usual day. Where is food eaten: home or work? Who prepares food: self, family member or restaurant?
- Identify client's past weight management advantages.
- Ask client which actions and foods might be helpful in weight management during pregnancy. Client initiates the plan.
- Negotiate plan follow-up.

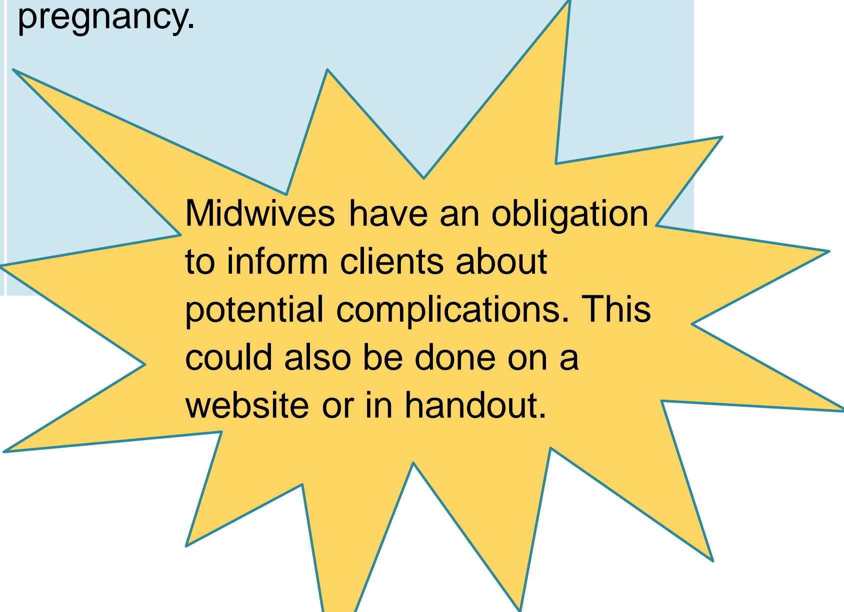
HOW?

TRAUMA INFORMED APPROACHES

- Recognize victimization, trauma
- Provide atmosphere that supports client's need for respect, acceptance and feelings of safety
- Recovery from trauma is primary goal
- Use empowerment model
- Maximize client's choices and control over care
- Base interactions in relational collaboration
- Emphasize strengths, prior adaptations over symptoms, resiliency over pathology
- Attempt to minimize re-traumatization
- Strive to be culturally aware, understand the client's individual context/environment

TRAUMA-INFORMED PRINCIPLE	DIALOGUE BASED ON MOTIVATIONAL INTERVIEWING	COMMENTS
Recognize victimization, trauma	*Pregnancy is a time when the body grows. Everyone needs to gain some weight during pregnancy to have a healthy baby.* *Our weight gain isn't just about how much we eat. It's affected by foods that are pushed at us by marketing or food programs, restaurants that serve portions that are more than we need, and chemicals that act like hormones in our bodies to push them to gain weight.* *Talking about weight gain is difficult for some people. Could we talk about what you are thinking weight gain in pregnancy will be like for you?* Christenson 2019: *"This may be a sensitive subject, but I have to bring it up with all pregnant women."* *"Tell me about your background? What does your ordinary day look like? How has your weight changed over the years?"*	

TRAUMA-INFORMED PRINCIPLE	DIALOGUE BASED ON MOTIVATIONAL INTERVIEWING	COMMENTS
Provide atmosphere that supports client's need for respect, acceptance and feelings of safety	If the client doesn't want to talk about weight gain: *I hear that this is difficult for you. This isn't about size, appearance or just weight gain.* *Weight gain in pregnancy and what you eat makes a difference to your health and the health of the baby.* *There are some complications that are more common with high weights that you need to know about because we can work together to reduce the chances of those happening. Those complications include diabetes in pregnancy, high blood pressure, babies bigger than 4000g/ 9 pounds, long labor, cesarean section, and blood clots.*	Have scale in a private area. Most digital scales weight up to 400 pounds/182 kg. Have all individuals do a baseline weight if the first visit is in the 1st trimester. Avoid sorting clients by weight: clinic sessions limited to those with obesity, groups for those with obesity-Everyone needs support for eating healthy during pregnancy.



TRAUMA-INFORMED PRINCIPLE	DIALOGUE BASED ON MOTIVATIONAL INTERVIEWING	COMMENTS
Use empowerment model	*Healthy eating can help make your pregnancy more comfortable, your labor easier and reduce your chances of a cesarean section.* *Based on your height and weight, the healthiest weight gain range for you would be __________. How does that seem to you?*	Have person weigh self. Women suggested that all women be weighed at each visit to decrease stigma (Christenson 2019) Use 1990 US Institute of Medicine prenatal weight gain ranges. Women may be astounded at how small the gain needs to be.
Maximize client's choices and control over care	*There are many ways to improve eating. Have you thought of some that might work for you?* *Pregnancy hormones sometimes change taste and smell. Are there some foods that you crave now? How about foods that seem just yucky?*	Avoid prescribing one style of eating. Don't prejudge that an individual with obesity eats fatty or sugared foods and drinks sodas. Women asked for a plan, like a cancer treatment plan; want coaching for lifestyle modification; want midwives to have the time to address them (Christenson 2019)

Prepregnancy BMI	Mean[a] rate of weight gain in the 2nd and 3rd trimester[b]		Recommended total weight gain[a, b] (for singleton pregnancies)	
	kg/week	lb/week	kg	lbs
Underweight (<18.5kg/m^2)	0.5	1.0	12.5 – 18	28 – 40
Normal weight (18.5-24.9kg/m^2)	0.4	1.0	11.5 – 16	25 – 35
Overweight (25.0-29.9kg/m^2)	0.3	0.6	7 – 11.5	15 – 25
Obese (≥30.0kg/m^2)[c]	0.2	0.5	5 – 9	11 – 20

a. 2009 US Institute of Medicine Weight Gain in Pregnancy Guidelines. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2847829/pdf/nihms180944.pdf
b. Calculations for the recommended weight gain range assume a gain of 0.5 to 2 kg (1.1 to 4.4 lbs) in the first trimester (Siega-Riz et al., 1994; Abrams et al., 1995; Carmichael et al., 1997).
c. A lower weight gain may be advised for women with a BMI of 35 or greater, based on clinical judgment and a thorough assessment of the risks and benefits to mother and child (Crane et al., 2009; Oken et al., 2009; Hinkle et al., 2010).

TRAUMA-INFORMED PRINCIPLE	DIALOGUE BASED ON MOTIVATIONAL INTERVIEWING	COMMENTS
Base interactions in relational collaboration	*Healthy eating during pregnancy can be tough. I'm always available if you have questions. If I don't know an answer, we'll work together to find one.*	If you, the midwife, are overweight or obese, be open. *I get how difficult eating just enough is. I struggle with my own eating. If healthy eating were easy, I'd be a size 8. I do have some tips that can help eating be healthy during pregnancy.*
Emphasize strengths, prior adaptations over symptoms, resiliency over pathology	*Most people have tried to manage their weight sometime in the past. Are there things that have worked for you in the past like avoiding some foods or eating more of other foods like fruits?*	See the Advantage List (next slide). If the person names any of those advantages, acknowledge that they can be used again during pregnancy safely. Is the person willing to try this again?

Advantages in Managing Weight

- Prepares own meals (instead of restaurant or fast foods)
- Family eats meals together at least 4 times a week
- Eats 5 servings of fruits or vegetables per day
- Has followed a high fiber, low glycemic, low fat, high fruit and vegetable or My Plate diet
- Avoids sodas or sugar sweetened drinks
- Uses portion controlled, pre-packaged fresh or frozen meals
- TV, computer and phones off while eating
- Decreased daily calories to lose weight
- Has counted calories or reduced portions
- Used a phone or computer app to track eating
- Weight self regularly at home or on a public scale
- Sleeps 6-7 hours a night
- Does some kind of physical activity for 30 minutes at least 5 days a week

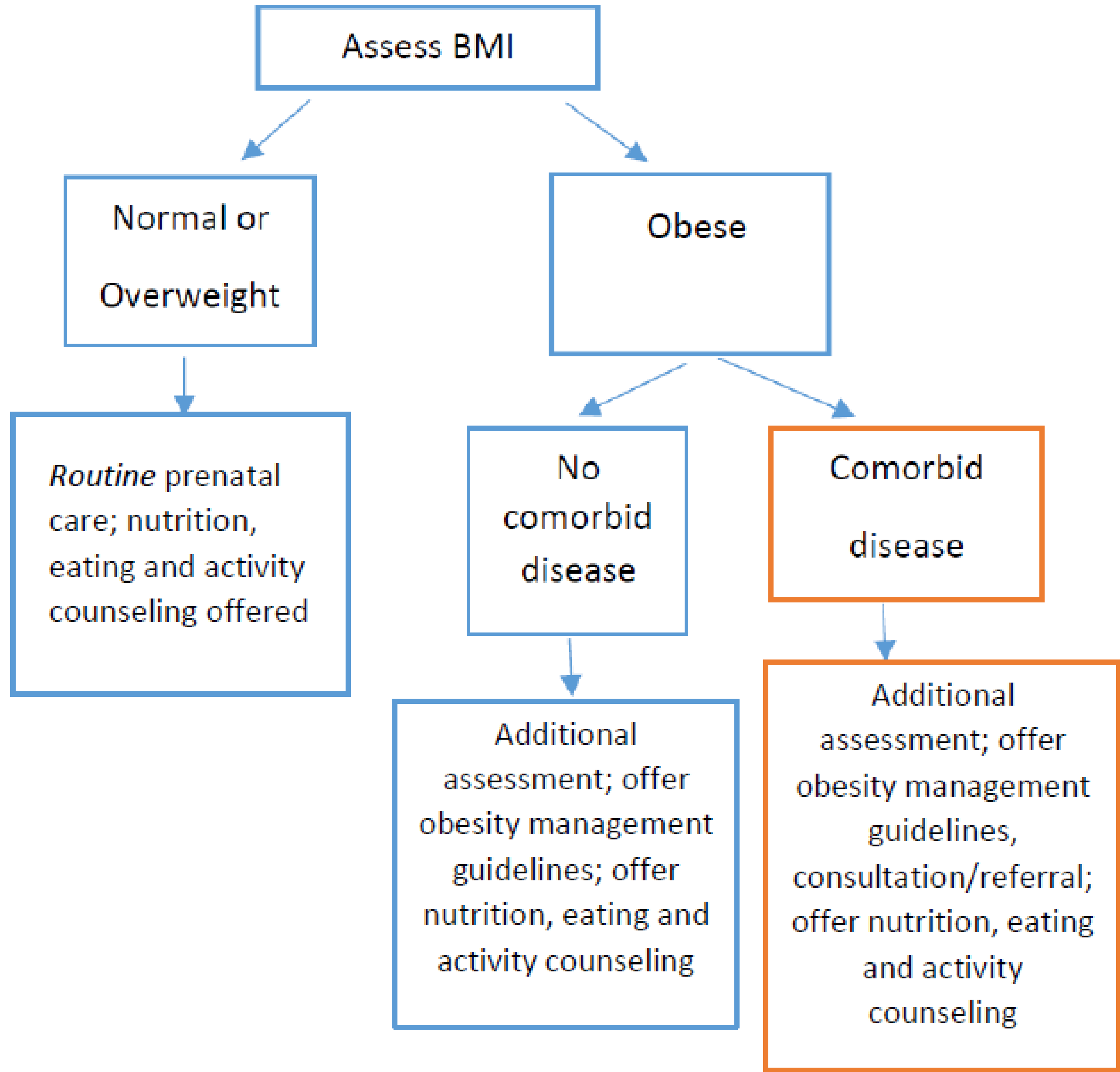
For research base: Jevitt, C. (2016). Best practices in weight management counseling with pregnant women. In Anderson, B., Rooks, J., and Barroso, R. (Eds.), *Best practices in midwifery: Using the evidence to implement change* (2nd Ed.). NY, NY: Springer Publishing Company.

TRAUMA-INFORMED PRINCIPLE	DIALOGUE BASED ON MOTIVATIONAL INTERVIEWING	COMMENTS
Attempt to minimize re-traumatization		If an eating disorder is identified, offer counseling or nutrition referral. Congratulate small changes. If weight gain is excessive, see each visit as a new start. *Is there anything different you'd like to try this month?*
Strive to be culturally aware, understand the client's individual context/environment	*Are there special diets that you follow, like avoiding pork or eating vegetarian?* *Can you tell me about foods your family traditionally eats during pregnancy?* *Holidays are coming up. Are there holiday foods that might change your usual eating?*	Know the common foods and eating restrictions of cultures in your clientele.

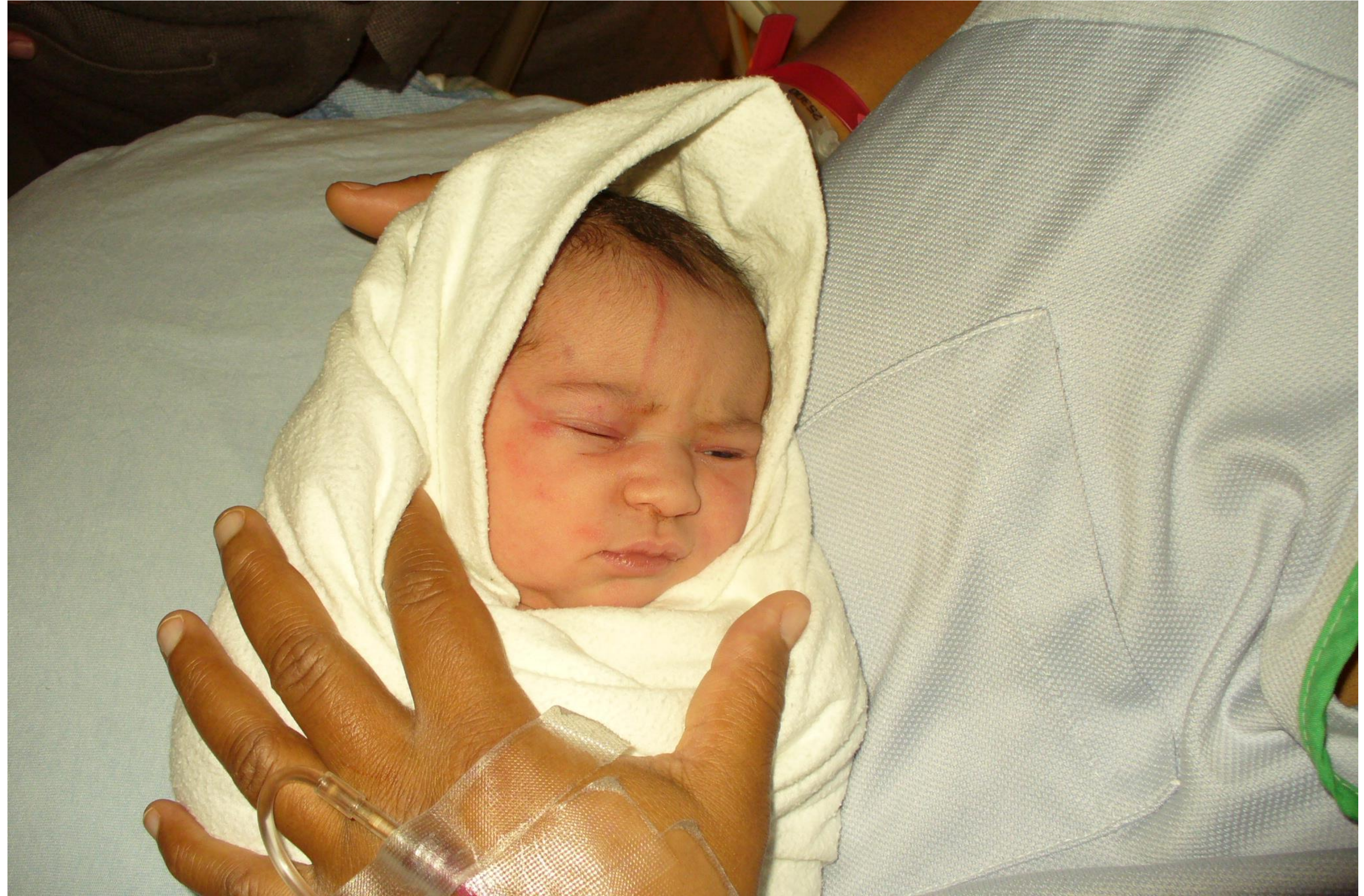
* Prenatal care is never routine-It should always be individualized

*Even in obesity classes II & III, up to 18% of individuals will not have co-morbid disease

Activity includes sleep



Midwifery Magic – *the ability to help three generations in a single pregnancy*



Allen-Walker V, Hunter AJ, Holmes VA, McKinley MC. Weighing as part of your care: a feasibility study exploring the re-introduction of weight measurements during pregnancy as part of routine antenatal care. et al. BMC Pregnancy and Childbirth (2020) 20:328. https://doi.org/10.1186/s12884-020-03011-w.

Arthur C, Di Corleto E, Ballard E, Kothari A. A randomized controlled trial of daily weighing in pregnancy to control gestational weight gain. Arthur et al. BMC Pregnancy and Childbirth (2020) 20:223. https://doi.org/10.1186/s12884-020-02884-1 .

Brownfoot FC, Davey M-A, Kornman L. Routine weighing to reduce excessive antenatal weight gain: a randomized controlled trial. BJOG; 2015, DOI: 10.1111/1461-0528.13735.

Christenson A, Johansson E, Reynisdottir S, Torgerson J, Hemmingsson E (2019) ". . .or else
I close my ears" How women with obesity want to be approached and treated regarding gestational weight management: A qualitative interview study. PLoS ONE 14(9): e0222543. https://doi.org/10.1371/journal.pone.0222543 .

Daley AJ, Jolly K, Jebb SA, Lewis AL, et al. Feasibility and acceptability of regular weighing, setting weight gain limits and providing feedback by community midwives to prevent excess weight gain during pregnancy: randomized controlled trial and qualitative study. BMC Obesity (2015) 2:35. DOI 10.1186/s40608-015-0061-5.

Elliot DE, Bjelajac P, Fallot RD, Markoff LS. Trauma-informed or trauma-denied: principles and implementation of trauma-informed services for women. *J Community Psychology.* 2005;33(4)461–477.

Holton S, East C, Fischer J. Weight management during pregnancy: a qualitative study of women's and care providers' experiences and perspectives. BMC Pregnancy and Childbirth (2017) 17:351. DOI 10.1186/s12884-017-1538-7.

International Weight Management in Pregnancy (i-WIP) Collaborative Group. Effec of diet and physical activity based interventions in pregnancy on gestational weight gain and pregnancy outcomes: meta-analysis of individual participant data from randomized trials. BMJ. 2017 Jul 19. doi: 10.1136/bmj.j3119.

Jevitt, C. Obesity and socioeconomic disparities: rethinking causes and perinatal care. *J Perinatal & Neonatal Nurs.* 2019;33(2):126-135.

Jevitt, C. (2016). Best practices in weight management counseling with pregnant women. In Anderson, B., Rooks, J., and Barroso, R. (Eds.), *Best practices in midwifery: Using the evidence to implement change* (2nd Ed.). NY, NY: Springer Publishing Company.

McCann MT, Newson L, Burden C, Rooney JS, Charnley MS, Abayomi JC. A qualitative study exploring midwives' perceptions and knowledge of maternal obesity: Reflecting on their experiences of providing healthy eating and weight management advice to pregnant women. *Matern Child Nutr*. 2018;14:e12520. https://doi.org/10.1111/mcn.12520.

Rasmussen KM, Catalano PM, Yaktine A. New guidelines for weight gain during pregnancy: what obstetrician/gynecologists should know Curr Opin Obstet Gynecol. 2009; 21(6): 521–526. doi:10.1097/GCO.0b013e328332d24e.

Rogozinska E, Marlin N, Jackson L, et al. Effect of antenatal diet and physical activity on maternal and fetal outcomes: individual patient data meta-analysis and health economic evaluation. Health Technology Assessment. 2017;21(41). DOI: 10.33 10/hta21410.

Wilkinson S, Beckman M, Donaldson E, McCray S. Implementation of gestational weigh gain guidelines-what's more effective for ensuring weight recording in pregnancy? BMC Pregnancy and Childbirth (2019) 19:19 https://doi.org/10.1186/s12884-018-2162-x .

CLINICAL PRACTICE GUIDELINES

American College of Obstetricians and Gynecologists (ACOG). Obesity in pregnancy. ACOG Committee Opinion #549. 2013. Washington, DC: ACOG.

Denison FC, Aedla NR, Keag O, Hor K, Reynolds RM, Milne A, Diamond A, on behalf of the Royal College of Obstetricians and Gynaecologists. Care of Women with Obesity in Pregnancy. Green-top Guideline No. 72. *BJOG* 2018; https://doi.org/10.1111/1471-0528.15386.000:1–45.

National Institute for Health and Care Excellence. Intrapartum care for women with existing medical conditions or obstetrics complications and their babies-obesity, 2019. https://www.nice.org.uk/guidance/ng121/chapter/Recommendations#obesity.

National Institute for Health and Care Excellence. NICE Guideline PH 27: Weight management before, during and after pregnancy. 2010, reviewed and revised 2017. Available from: https://www.nice.org.uk/guidance/ph27/resources/surveillance-report-2017-weight-management-before-during-and-after-pregnancy-2010-nice-guideline-ph27-4424111104/chapter/Surveillance-decision.

Ontario Association of Midwives. Clinical Practice Guideline 12: The management of high or low body mass index during pregnancy. 2019. https://www.ontariomidwives.ca/sites/default/files/2020-06/CPG-Management-low-or-high-body-mass-index-2019-PUB.pdf

SOGC CLINICAL PRACTICE GUIDELINE. Maxwell C, Gaudet L, Cassir G, et al. Guideline No. 391-Pregnancy and Maternal Obesity Part 1: Pre-conception and Prenatal Care. Society of Obstetricians and Gynecologists of Canada. | VOLUME 41, ISSUE 11, P1623-1640, NOVEMBER 01, 2019DOI:https://doi.org/10.1016/j.jogc.2019.03.026

SOGC CLINICAL PRACTICE GUIDELINE. Maxwell C, Gaudet L, Cassir G, et al. Guideline No. 392-Pregnancy and Maternal Obesity Part 2: Team Planning for Delivery and Postpartum Care. VOLUME 41, ISSUE 11, P1660-1675, NOVEMBER 01, 2019. DOI:https://doi.org/10.1016/j.jogc.2019.03.027

For more detail:
cecilia.jevitt@ubc.ca