

Eating disorders and the perinatal period

A stylized illustration of a woman's profile in yellow outline, facing right. Her hair is replaced by a large, dense bouquet of blue and white flowers. The background features soft, wavy teal and blue watercolor-like textures.

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Disclosures

None

Objectives

01

Identify the prevalence and impact of eating disorders during the perinatal period.

03

Explore effective treatment strategies for eating disorders including pharmacotherapy & psychotherapy

02

Discuss the relationship between eating disorders and maternal mental health outcomes

04

Examine the role of interdisciplinary teams in supporting affected individuals

Definition of terms



Negative body image

Thought/feeling of dissatisfaction with one's appearance

Associated with:

- Mental and physical distress
- Drive to be thin
- Eating disorders
- Body dysmorphic disorder

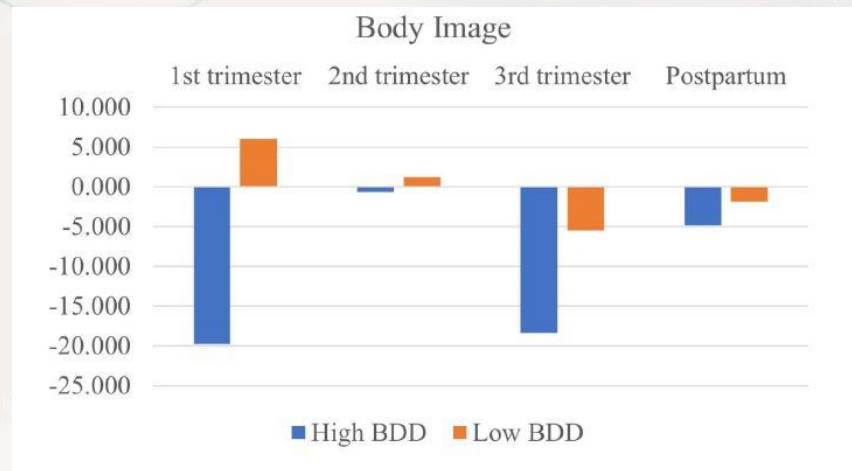


Body dysmorphic disorder

Perceptual disorder

- Excessive & persistent preoccupation with perceived flaws in physical appearance
- Repetitive behaviors or mental acts due to body concern (eg: mirror checking, excessive grooming, skin picking)
- Preoccupation causes clinically significant distress or impairment in functioning
- Preoccupation not better explained by concerns for body fat or weight meeting criteria for an eating disorder

Pregnancy's impact on quality of life and body image



High BDD = high score on The Body Image Disturbance Questionnaire (DIBQ-7)

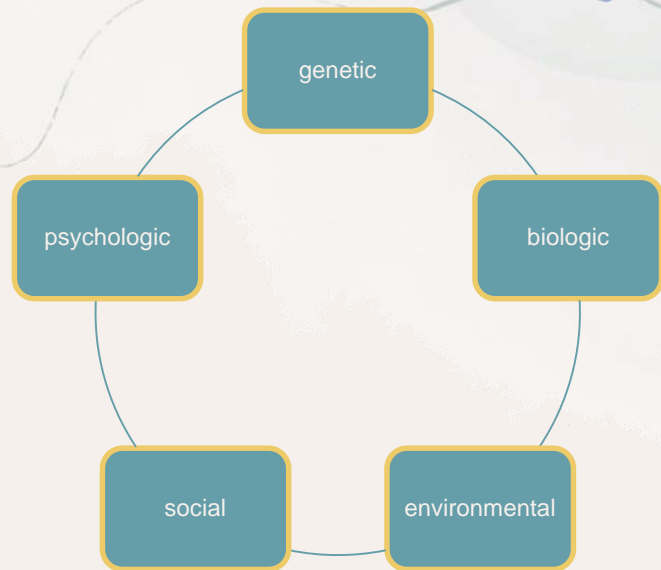
Low BDD = low score on DIBQ-7

Eating disorders (EDs)

Eating disorders are severe psychiatric disorders with complex biopsychosocial etiology

Generalities across eating disorders include:

- body dissatisfaction
- drive for thinness
- personal history of anxiety
- coping by avoidance or perfectionism
- social isolation
- family h/o ED or mental health problems
- sociocultural issues such as weight stigma, bullying or teasing



Classification of eating disorders

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graph TD; A[Classification of eating disorders] --> B[Restrictive]; A --> C[Binge]; B --> D[anorexia nervosa]; B --> E["avoidant restrictive food intake disorder"]; C --> F[bulimia nervosa]; C --> G[binge-eating disorder];
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Restrictive

anorexia nervosa

avoidant restrictive food
intake disorder

Binge

bulimia nervosa

binge-eating disorder

DSM V restrictive eating disorders

Anorexia nervosa (AN)

- intense fear of weight gain
- distorted perception of body weight and shape
- severe dietary restriction or other weight loss behaviors (eg, purging, excessive physical activity)
- markedly disturbed cognitive and emotional functioning
- associated with perfectionism, OCD, OCPD and pre-occupation with control
- gender: female:male ratio of 10:1
- mean-age of onset – 19.3 years
- Sub-types:

typical AN: underweight range

atypical AN: normal or overweight range but meet other criteria for anorexia (ie: practice restriction or other weight loss behaviors)

binge/purge: may intermittently binge-eat or purge

Avoidant restrictive food intake disorder (ARFID)

- avoidance or restriction of food intake not due to concern about calorie intake or body shape
- weight loss or nutritional deficiencies
- psychosocial impairment
- associated with:
 - disinterest in food
 - food sensitivity (sensory)
 - fear of negative consequences such as choking or vomiting

DSM V binge-eating eating disorders

bulimia nervosa (BN)

- recurrent episodes of binge-eating (eating large amount of food in a discrete amount of time with a sense of lack of control and impulsivity)
- accompanied by compensatory behaviors such as self-induced vomiting, abuse of laxatives or diuretics, fasting and/or excessive exercise
- associated with self-judgment regarding weight, body shape or appearance
- associated with ADHD, borderline personality disorder & bipolar II disorder
- linked to PCOS – hyperandrogenism causing appetite deregulation
- people with BN tend to be in normal or overweight range (if weight is less than BMI threshold, then AN-binge/purge type is used)
- gender: female:male ratio of 3:1
- mean-age of onset: 20 years

binge-eating disorder (BED)

- recurrent episodes of binge eating followed by feeling uncomfortable, disgusted, depressed or guilty
- few compensatory behaviors
- associated with ADHD, borderline personality disorder & bipolar II disorder
- associated with type II DM and metabolic syndrome
- people with BED tend to be in overweight range
- may be far more common than captured in statistics
- mean age of onset: 25.4 years

Other eating disorders

Pica

- Eating non-nutritive or non-food substances impulsively/compulsively
- Common items: hair, chalk, coffee grounds, paper, soap, cloth, talcum powder, ash, clay, dirt or soil, ice
- Per DSM-V, socially normative or culturally acceptable behavior is excluded from the diagnosis of pica
- Associated with nutritional deficiencies, anxiety or stress and childhood adversity
- Co-morbidities: autism spectrum disorders, intellectual disability, schizophrenia and Kleine-Levin Syndrome

Rumination disorder

- Regurgitation of food after eating in the absence of nausea, involuntary retching or disgust
- Most common with infants and developmentally disabled

Other specified feeding or eating disorders (OSFED)

- Clinically significant problem with feeding or eating disorder not meeting full criteria for other disorders



Pica & pregnancy



Pica comes from the Eurasian Magpie who is known to eat unusual objects

In a 2016 meta-analysis, the prevalence of pica during pregnancy was 27.8% across the globe

- Substantial heterogeneity within study models
- Highest prevalence in African countries where the consumption of clay dirt is thought to have health benefits (high in minerals)
- Moderator variables included anemia and decreased educational attainment

In the U.S., the practice of Pica is understudied but seen in African American communities in the Southeast, in particular, and in immigrant communities



Genetics and eating disorders

Twin and adoption studies suggest heritability

Disorder	Heritability rate
anorexia nervosa	28-74%
bulimia nervosa	54-83%
binge-eating disorder	41-57%



Similar to other mental health disorders, genome-wide association studies (GWAS) have not found genes of high impact associated with EDs.

Animal models for eating disorders



Anorexia nervosa

1. Rodents placed on a restricted feeding schedule with access to a running wheel: a proportion, mostly females with a sensitivity to fear, will choose to exercise rather than eat to the point of death
2. Female adolescent mice bred for an anxious phenotype, exposed to social isolation and caloric restriction, display self-imposed, sometimes fatal, caloric restriction

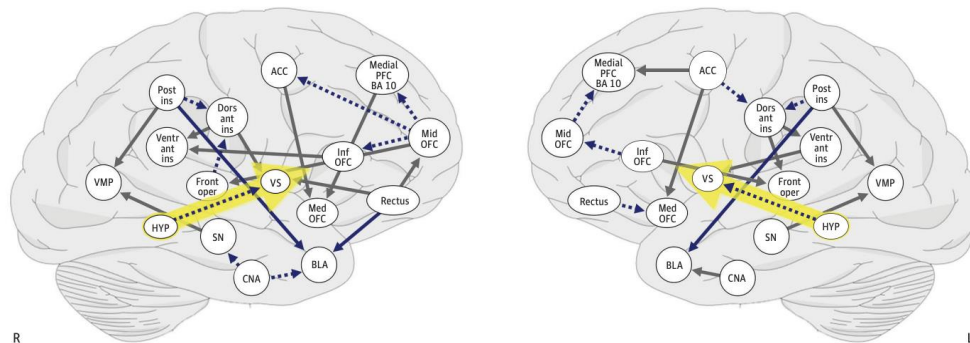
Binge eating

- Animals exposed to a combination of irregular availability of food, sucrose in drinking water and intermittent access to highly palatable food, and stress develop addiction-type behavior towards food.

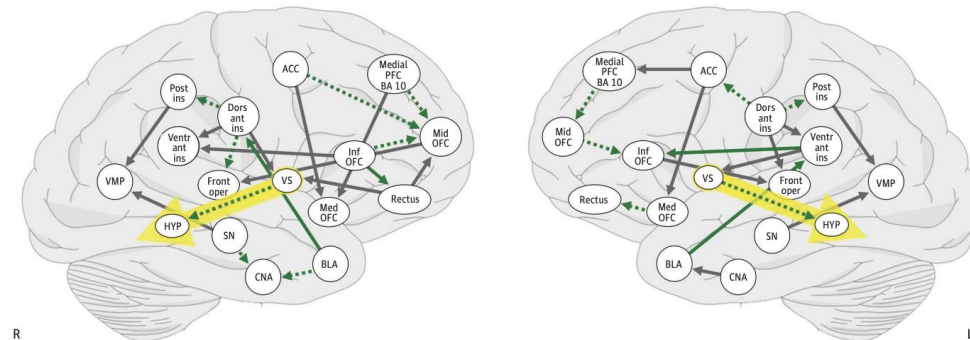
The neuroscience of anorexia nervosa

Figure 1. Effective Connectivity Maps Across Study Groups

A Healthy control women



B Women with an eating disorder



The yellow arrow indicates effective dynamic connectivity in opposite directions between ventral striatum and hypothalamus. ACC, anterior cingulate cortex; BA/BLA, basolateral amygdala; CAN, central nucleus of the amygdala;

HYP, hypothalamus; L, left; OFC, orbitofrontal cortex; PFC, prefrontal cortex; R, right; SN, substantia nigra; VMP, ventral midbrain/pons.

Qualitative research: pregnancy & negative body image

41.7% **Self-conscious**

"It's been really hard. I like to be thin. I have no control over my body gaining weight. It has caused anxiety and depression."

24.5% **Fear/Dislike of
weight gain**

"I feel fat, disgusted, with what I see in the mirror."


12.6% **Feel fat/heavy**



Qualitative research: pregnancy & positive body image

15.2% **More comfortable with
body changes**

21.2% **Appreciation of body**



“During pregnancy I started to accept my appearance more and learn to appreciate my body for what it could do, not just how it could look.”



“The whole process of IVF and being pregnant has destroyed me. I can’t exercise like before. I have to eat. And my body is bulky and disgusting. I don’t recognize it. I can no longer feel my hip bones, and it worries me.”

Prevalence of eating disorders

general
population

pregnancy

	anorexia nervosa	bulimia nervosa	binge- eating disorder	total
U.S. population study, DSM IV Lifetime prevalence	0.6%	1.0%	2.8%	4.4%
U.S. population study, DSM V Lifetime prevalence Women only	0.9%	1.5%	3.5%	5.9%
U.K. ALSPAC study, DSM IV Pregnant women	1.5%	1.8%		3.3%
Norwegian MoBa, DSM IV Pregnant women	0.1%	0.2%	4.7%	5%

Easter et al. British Journal of Obstetrics and Gynecology 2011

Hoek et al. Current Opinion Psychiatry. 2016

Watson et al. Norsk Epidemiolog. 2014

Psychiatric co-morbidities of eating disorders

Psychiatric co-morbidity is seen in > 70% people with EDs

- Anxiety disorders, especially social anxiety
- Obsessive-compulsive disorder
- Major depression
- Bipolar disorder
- Attention-deficit disorder
- Personality disorders
- Non-suicidal self-injury
- Suicidality
- Substance use disorders
- Postpartum depression and anxiety

Menstrual irregularities and eating disorders

	Anorexia nervosa (AN)	Bulimia nervosa (BN)
amenorrhea	66-84%	7-40%
oligomenorrhea	6-11%	36-64%

- For AN, menstrual irregularities are thought to be due to hypothalamic-pituitary-gonadal axis disruption
 - Low leptin (due to low fat mass + caloric restriction) disrupts GnRH release by hypothalamus
- For BN & BED, mechanism of menstrual cycle irregularities is less clear
 - Hormonal disruption possibly causative for bingeing behaviors with PCOS and hyperandrogenism
 - Bingeing may cause high testosterone via high insulin levels
- Women diagnosed with PCOS have higher rates of BN, BED and disordered eating independent of BMI

Amenorrhea – absence of menstrual periods

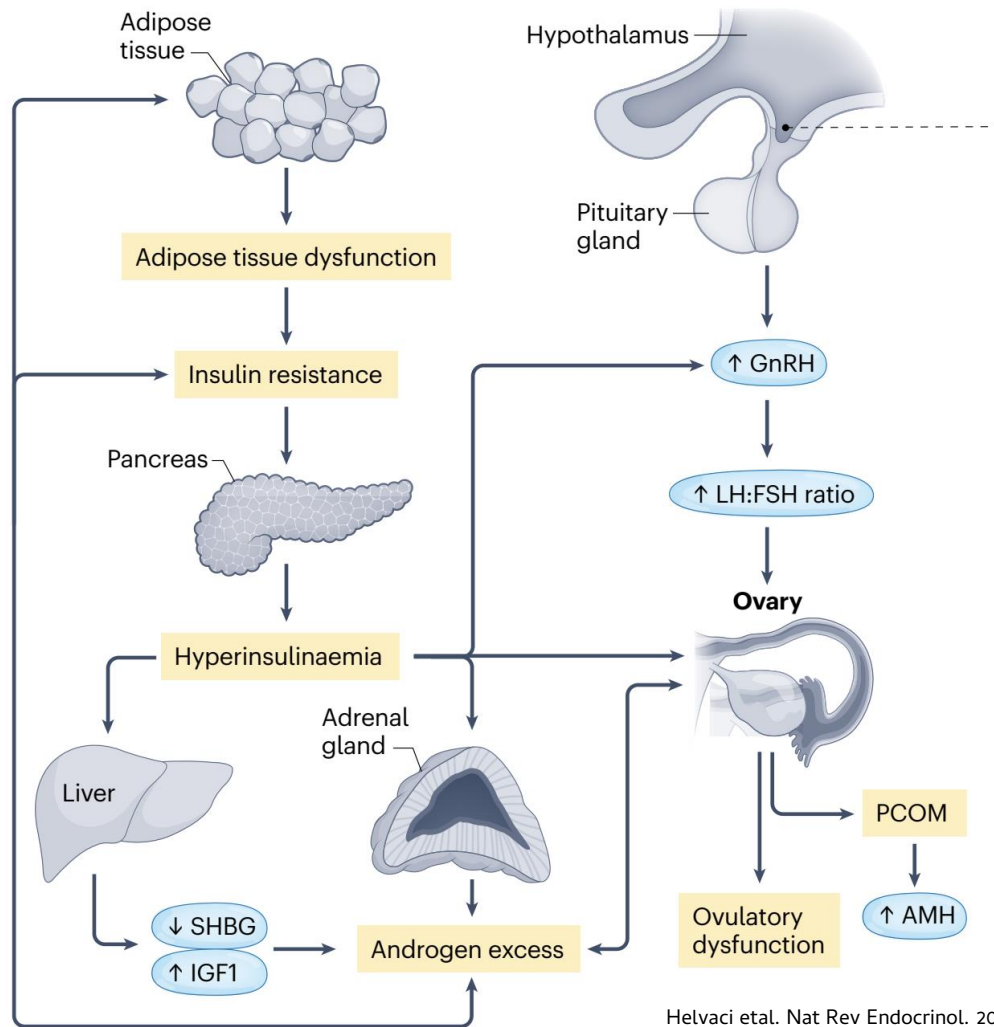
Oligomenorrhea – infrequent or irregular menstrual periods (eg: > 35d intervals, < 9 periods/year)

GnRH = gonadotropin releasing hormone

PCOS – polycystic ovary syndrome



Pathophysiology of PCOS



Type 1 (insulin-dependent) diabetes mellitus and eating disorders

EDs in people with diabetes are both more prevalent and more deadly.

A recent meta-analysis found a pooled prevalence of

- 24% patients with IDDM have ED symptoms
- 21% patients skip insulin to control their weight (leading to both hyperglycemia and wasting of glucose in urine.)

Risk factors:

- high BMI
- body dissatisfaction
- deficient coping strategies
- symptoms of depression



Reproductive complications associated with eating disorders

Nutritional

Micronutrient deficiencies
High-fat diet in binge-eating disorders
Low-protein diet in anorexia, risk for epigenetic impact



Obstetrical

Higher miscarriage rate
Hyperemesis gravidarum
Fetal growth issues
Increased cesarean section rate
Pre-term delivery

Reproductive-Endocrinology

Unplanned pregnancy
Infertility



Postpartum

Resumption of ED
Postpartum depression & anxiety
Breastfeeding difficulties/early termination
Other feeding difficulties/poor infant growth
Poor maternal-infant bond

Pregnancy trajectories with anorexia nervosa

Preconception

Unplanned pregnancy
(2x risk compared to general population)

Infertility (in subset of pts h/o
hospitalization due to AN)

During pregnancy

Active symptoms can diminish

Depression & anxiety

Anemia due to low ferritin

High caffeine use (>2500 mg/d)

Persistent nicotine use

IUGR, SGA & small head

8 cases of prenatal IVH due to

vitamin K deficiency

Preterm delivery

↑ Infant mortality

Postpartum

Postpartum hemorrhage

Difficulties and earlier

termination of breastfeeding

Recurrence of active AN

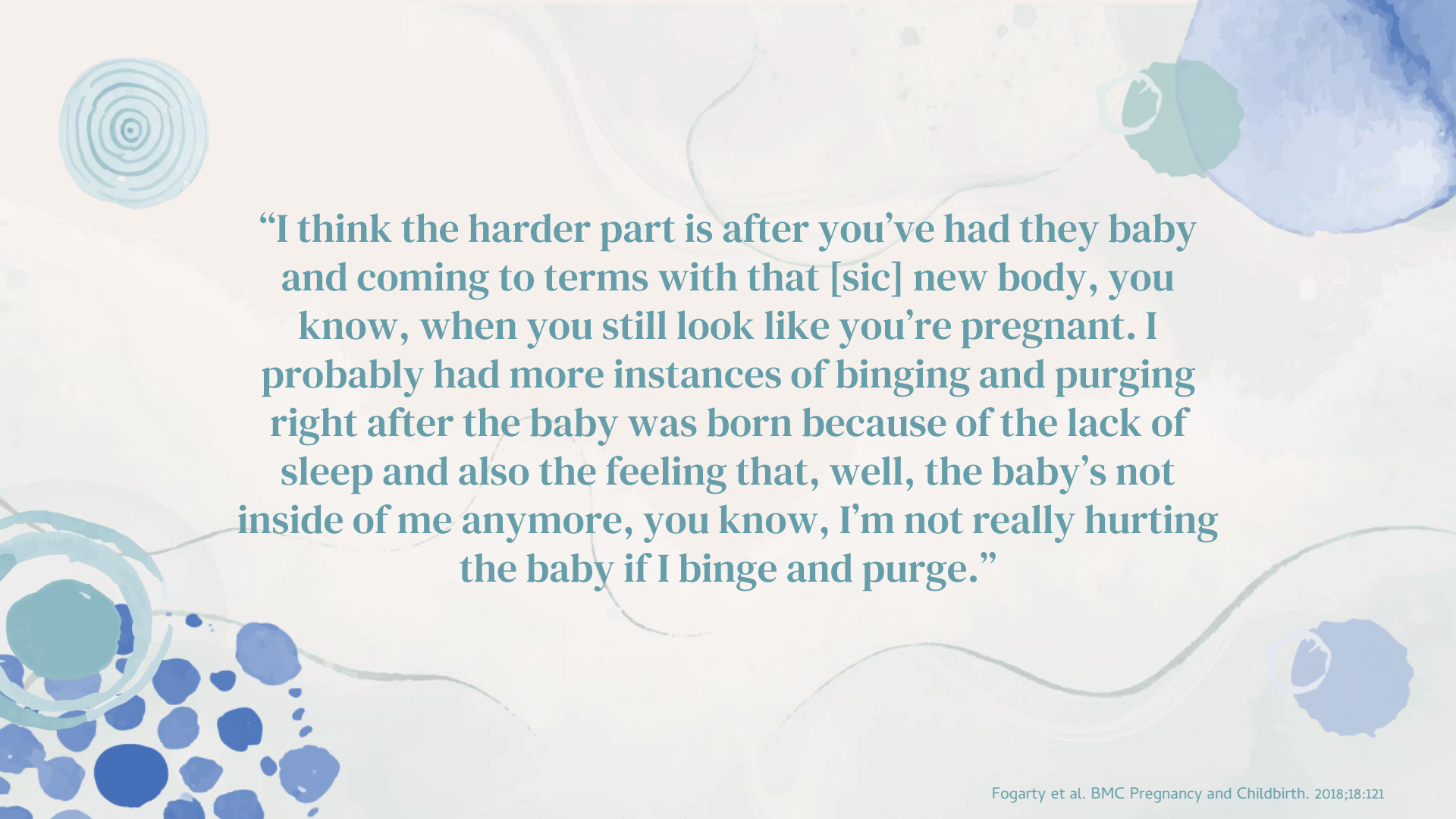
Postpartum depression & anxiety

Epigenetic changes related to

antenatal protein deficiency in

mom leading to obesity, DM &

HTN in offspring



“I think the harder part is after you’ve had they baby and coming to terms with that [sic] new body, you know, when you still look like you’re pregnant. I probably had more instances of bingeing and purging right after the baby was born because of the lack of sleep and also the feeling that, well, the baby’s not inside of me anymore, you know, I’m not really hurting the baby if I binge and purge.”

Pregnancy trajectories with bulimia nervosa

Preconception

Infertility due to HPA dysregulation

During pregnancy

increased miscarriage rate (w/ active bulimia)
Purging symptoms can diminish
Binging can persist or diminish
Excessive weight gain
Greater intake of caffeine
Depression & anxiety

Postpartum

Recurrence of active BN
Postpartum depression & anxiety
Difficulty with postpartum weight loss

Pregnancy trajectories with binge eating disorder (BED)

Preconception

Infertility due to HPA dysregulation

During pregnancy

Active symptoms tend to persist or worsen w/ high carb and fat intake
Depression & anxiety
Higher rates of nicotine use
Excessive gestational weight gain
LGA
High rate of C/S

Postpartum

Recurrence of BED
Postpartum depression & anxiety
Lower rates of breastfeeding
Difficulty w/ postpartum weight loss

Screening for eating disorders

In 2022, the United States Preventive Services Task Force (USPSTF) published a statement that for asymptomatic individuals with a normal or high body mass index, evidence is insufficient to determine the balance between the benefits and harms of universal screening for EDs.

Harms of screening:

- Unnecessary referrals
- Lack of access to effective treatment
- Increased stigma and feeling labeled

The USPSTF did recommend screening for higher risk patients:

- Signs or symptoms of an eating disorder
- History of trauma



Signs & symptoms of eating disorders



- History of Type 1 DM
- History of PCOS
- Oligomenorrhea or amenorrhea
- Unexplained infertility
- Hyperemesis gravidarum persisting past 20 weeks gestation
- Rapid and significant weight gain or loss
- Lack of weight gain over 2 consecutive prenatal visits after 1st trimester
- Abnormally low BMI
- Unexplained hyperkalemia or other electrolyte abnormalities
- Dental problems indicating reduced dental enamel due to frequent emesis

Organization, Year	Screening Recommendation
AAP, 2020 ¹⁰	Pediatricians should screen for eating disorders by monitoring and assessing risk factors and symptoms at annual and sports physicals. Pediatricians should monitor and identify changes in height, weight, BMI, and vital signs longitudinally. If findings indicate that an eating disorder may be present, the pediatrician should conduct thorough medical and psychological assessments to identify if an eating disorder diagnosis is appropriate. After diagnosis, the pediatrician may continue to monitor the patient, help set weight goals, refer the patient to eating disorder specialists ideally with expertise among this age group, and continue to care for the patient as part of a multidisciplinary team.
ACOG, 2018 ¹¹	ACOG recommends that practitioners be able to identify signs of disordered eating and screen at risk patients, especially considering the presence of many gynecological symptoms, including irregular menstrual cycles, amenorrhea, pelvic pain, atrophic vaginitis, and breast atrophy.
APA, 2012 ¹²	The APA recommends that practitioners working with young athletes pay special attention to disordered eating. Assessment of weight, body image, amenorrhea, and nutrition can help screen and identify athletes suffering from or at risk for eating disorders.
NICE, 2017 ¹³	Patients who present symptoms of eating disorders should be assessed and treated as soon as possible. Guidelines highlight that reliance on screening tools alone, such as SCOFF, is not sufficient for diagnosis.
AED, 2016 ¹⁴	All high-risk patients should be monitored for symptoms of eating disorders, which may present in patients of any age, race, gender, or size. Screening with validated tools, such as SCOFF, can help identify patients who may need treatment or referral to specialty care.
SAHM, 2015 ¹⁵	Guidelines state that medical providers should be able to recognize and diagnose eating disorders in adolescents and young adults and highlight the importance of medical providers in monitoring for medical complications in the context of multidisciplinary care for those with eating disorders.
AACAP, 2015 ¹⁶	AACAP recommends mental health practitioners screen all preteen and adolescent patients for eating disorders through height and weight assessments and screener questions about eating patterns and body image. Concern about these results should lead to referral for further evaluation. For older patients, the following screening instruments are recommended: The Eating Disorder Examination Questionnaire, Eating Disorder Inventory, and Eating Attitudes Test. For younger children, the following screening instruments are recommended: The Kids' Eating Disorder Survey, the Children's Eating Disorder Questionnaire, the Child-Eating Attitudes Test, and the Eating Disorder Inventory for Children.

Abbreviations: AACAP=American Academy of Child and Adolescent Psychiatry; AAP=American Academy of Pediatrics; ACOG=American Congress of Obstetricians and Gynecologists; AED=Academy for Eating Disorders; APA=American Psychological Association; EDI=Eating Disorder Inventory; EDI-C=Eating Disorder Inventory-Children; NICE=National Institute for Health and Care Excellence; SAHM=Society for Adolescent Health and Medicine.

EATING DISORDER EXAMINATION QUESTIONNAIRE - SHORT (EDE-QS)

Name: _____ Date: _____ Weight: _____ Height: _____

ON HOW MANY OF THE PAST 7 DAYS....	0 days	1-2 days	3-5 days	6-7 days
1. Have you been deliberately <u>trying</u> to limit the amount of food you eat to influence your weight or shape (whether or not you have succeeded)?	0	1	2	3
2. Have you gone for long periods of time (e.g., 8 or more waking hours) without eating anything at all in order to influence your weight or shape?	0	1	2	3
3. Has thinking about <u>food, eating or calories</u> made it very difficult to concentrate on things you are interested in (such as working, following a conversation or reading)?	0	1	2	3
4. Has thinking about your <u>weight or shape</u> made it very difficult to concentrate on things you are interested in (such as working, following a conversation or reading)?	0	1	2	3
5. Have you had a definite fear that you might gain weight?	0	1	2	3
6. Have you had a strong desire to lose weight?	0	1	2	3
7. Have you tried to control your weight or shape by making yourself sick (vomit) or taking laxatives?	0	1	2	3
8. Have you exercised in a driven or compulsive way as a means of controlling your weight, shape or body fat, or to burn off calories?	0	1	2	3
9. Have you had a sense of having lost control over your eating (at the time that you were eating)?	0	1	2	3
10. On how many of these days (<i>i.e. days on which you had a sense of having lost control over your eating</i>) did you eat what other people would regard as an <u>unusually large amount of food in one go</u> ?	0	1	2	3

OVER THE PAST 7 DAYS ...	Not at all	Slightly	Moderately	Markedly
11. Has your weight or shape influenced how you think about (judge) yourself as a person?	0	1	2	3
12. How dissatisfied have you been with your weight or shape?	0	1	2	3

Screening tools:

Eating Disorder Examination Questionnaire- short (EDE-QS)

Longer form, more specific

Positive Screen ≥ 15

Sensitivity 0.81

Specificity 0.87

Positive predictive value 0.40

Prnjak K et al. BMC Psychiatry. 2020

Bryant E et al. J of Eating Disorders 2022



Screening tools:

The Screen for Disordered Eating (SDE)

1. Do you often feel the desire to eat when you are emotionally upset or distressed?
2. Do you often feel you cannot control what or how much you eat?
3. Do you sometimes make yourself throw up (vomit) to control your weight?
4. Are you often preoccupied with the desire to be thinner?
5. Do you believe yourself to be fat when others say you are thin?

Scoring: yes = 1

Shorter form, less specific

Positive Screen ≥ 2

Sensitivity 0.91

Specificity 0.58

Positive predictive value 0.28

Do you take insulin? Yes No If No, do not complete this form.

Living with diabetes can sometimes be difficult, particularly regarding eating and diabetes management. Listed below are a variety of statements regarding diabetes management. For each statement, tick (✓) the ONE answer that indicates how often this is true for you during the PAST MONTH.

How often this is true for you during thepast month...	Never	Rarely	Sometimes	Often	Usually	Always
Losing weight is an important goal to me	0	1	2	3	4	5
I skip meals and/or snacks	0	1	2	3	4	5
Other people have told me that my eating is out of control	0	1	2	3	4	5
When I overeat, I don't take enough insulin to cover the food	0	1	2	3	4	5
I eat more when I am alone than when I am with others	0	1	2	3	4	5
I feel that it's difficult to lose weight and controlmy diabetes at the same time	0	1	2	3	4	5
I avoid checking my blood sugar when I feel like it is out of range	0	1	2	3	4	5
I make myself vomit	0	1	2	3	4	5
I try to keep my blood sugar high so that I will lose weight	0	1	2	3	4	5
I eat in a way to get ketones	0	1	2	3	4	5
I feel fat when I take all of my insulin	0	1	2	3	4	5
Other people tell me to take better care of my diabetes	0	1	2	3	4	5
After I overeat, I skip my next insulin dose	0	1	2	3	4	5
I feel that my eating is out of control	0	1	2	3	4	5
I alternate between eating very little and eating huge amounts	0	1	2	3	4	5
I would rather be thin than to have good control of my diabetes	0	1	2	3	4	5
Sub-totals						

Scoring instructions: 1. Calculate the mean of all non-missing items. 2. Multiply this value by 16. Possible total score 0 to 80. A score >20 indicates more disordered eating behaviour and warrants in depth conversations/referrals.	TOTAL SCORE	/80
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Screening tools:

Diabetes Eating Problem Survey- Revised (DEPS-R)

Bryant et al. J of Eating Disorders. 2022
Niemi PE et al. Eat Behav. 2024

Treatment for anorexia nervosa

Outcome of outpatient treatment depends on severity of illness

- 25% patients recover completely
- 25% do not respond to outpatient treatment

Psychological:

- Teens: family-based interventions common
- Adults: individual psychotherapy more common
- Specialized eating-disorder psychotherapy focusing on behavioral change

Nutritional:

- Re-feeding protocols differ center to center with some favoring more aggressive protocols (faster weight gain)
- No good data on efficacy of specific micronutrient or oral nutritional supplementation

Medication:

- olanzapine is the only psychotropic with evidence of efficacy in promoting weight gain in AN.
- bupropion (esp IR formulation) is contraindicated in patients with low BMI due to seizure risk
- no FDA-approved medications

Management during pregnancy:

- Requires multidisciplinary approach including MFM, nutrition, perinatal psychotherapy, eating disorder psychotherapy

Treatment for binge eating spectrum disorders



Psychological

- CBT either via individual psychotherapy or guided self-help depending on resources has been found to be the most effective psychotherapy for binge-eating disorders
- Dissonance-based group treatment was found to be more effective than mindfulness-based group



Pharmacotherapy

- Various psychotropics (antidepressants, antipsychotics, stimulants, mood stabilizers) more effective than placebo in over 30 studies
- High-dose fluoxetine (60 mg/d) is the SSRI with the greatest efficacy per placebo-controlled studies but these were not head-to-head studies
- Only FDA-approved agent for binge eating disorders is lisdexamfetamine

Prevention of eating disorders

Universal prevention: **media literacy**

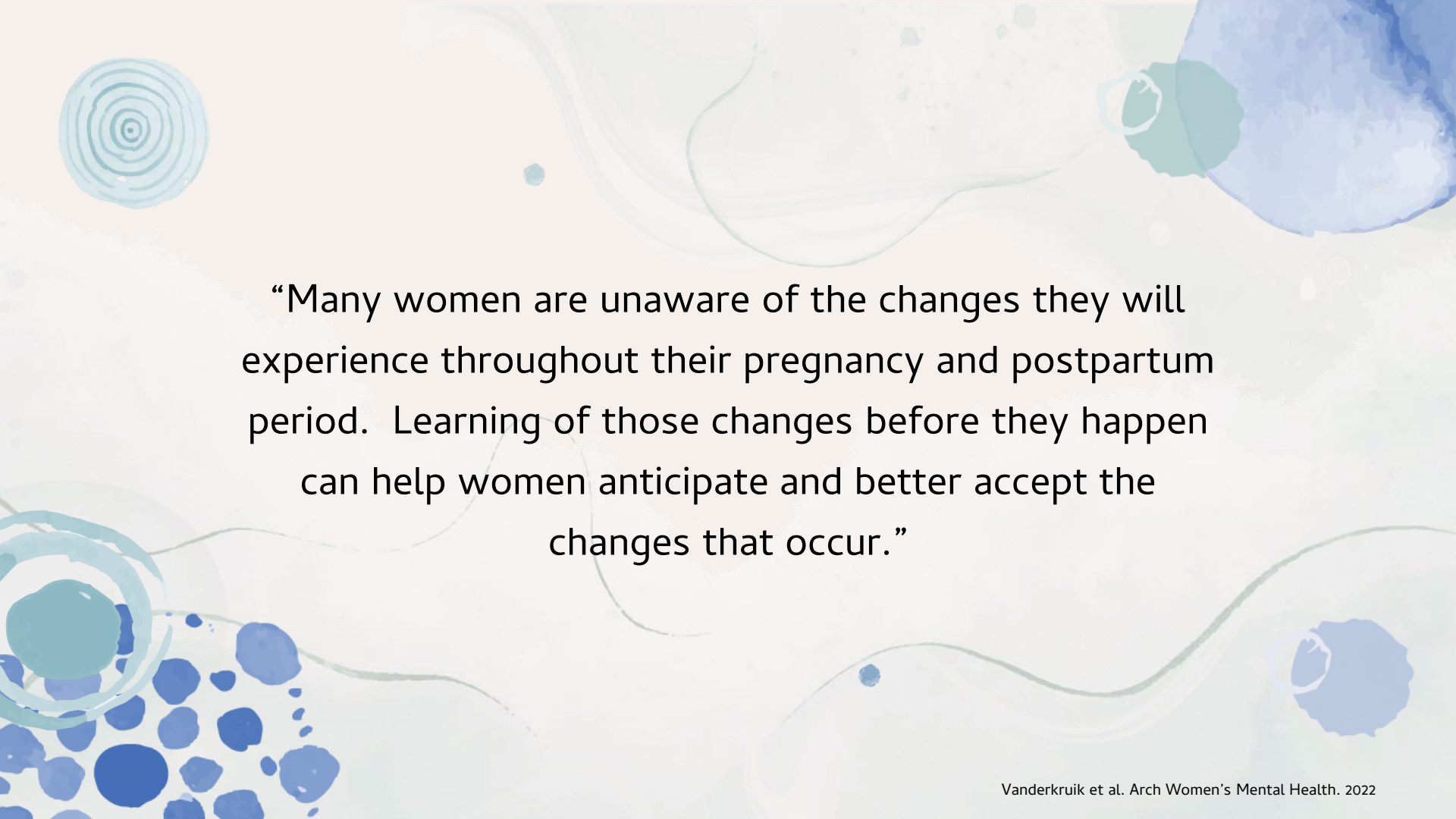
- Reveals manipulations used by media to produce flawless and thus, unrealistic images

Selective prevention for high-risk groups: **cognitive dissonance**

- Interactive group sessions exposing the thin-ideal
- Identifying costs of “buying into” or internalizing the thin-ideal
- Practicing thoughts/behaviors to resist thin-ideal such as affirmations and body acceptance

Proposed help with body dissatisfaction and disordered eating in the perinatal period


- normalizing body changes during pregnancy & postpartum
- providing education on what to expect regarding body changes in pregnancy & postpartum
- offering support for healthy eating behaviors
- connecting perinatal individuals with peers sharing similar concerns




“Many women are unaware of the changes they will experience throughout their pregnancy and postpartum period. Learning of those changes before they happen can help women anticipate and better accept the changes that occur.”




Clinical Pearls




Anorexia nervosa is associated with perfectionism, OCD and OCPD and a pre-occupation with control




Binge-eating disorders are associated with impulsivity and mood regulation disorders



Illnesses associated with negative body image including eating disorders are often and predictably exacerbated by the bodily changes of pregnancy



Preventive measures by clinicians include screening for eating disorders in high-risk patients during pregnancy and providing general education to all patients about normal body changes during pregnancy and the postpartum period



Resources & Thank you



Eating Disorder Support for Moms and Birthing People (Pregnancy-4 Years Postpartum)

Perinatal Mental Health Support

This virtual peer-led support group is designed for moms and birthing people in the perinatal period (from pregnancy up to 4 years after birth) who are currently experiencing or have experienced eating disorders. No formal diagnosis is required to join.

[Learn More & Register](#)

Postpartum Support International support group:

- <https://postpartum.net/group/eating-disorder-support-for-moms-and-birthing-people-pregnancy-4-years-postpartum/>

Online Eating Disorder Resources:

- National Eating Disorders Association (NEDA): <https://www.nationaleatingdisorders.org/>
- Academy for Eating Disorders (AED): <https://www.aedweb.org/home>
- Comenzar de Nuevo: <https://comenzardenuevo.org/>
- The Body Project (by NEDA): <https://www.nationaleatingdisorders.org/the-body-project/>
- The Body Positive Project: link to homestudy program in English and Spanish: <https://thebodypositive.org/fundamentals/>

Screening tools:

- Screen for Disordered Eating (SDE): https://www.nyeatingdisorders.org/_assets/pdf/screen_for_disordered_eating.pdf
- Diabetes Eating Problem Survey – Revised (DEPS-R): <https://insideoutinstitute.org.au/assets/deps-r.pdf>
- Eating Disorders Examinations Questionnaire (EDEQ): <https://insideoutinstitute.org.au/resource-library/eating-disorder-examination-questionnaire-edeq>
- Binge Eating Scale: <https://psychology-tools.com/test/binge-eating-scale>

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Case presentation

Lauren: 28 yo female G1P0 at 25 weeks gestation

- Brought to ED by her family due to poor health
- Not gaining weight appropriately
- Pregnancy was not planned, but is welcome
- She has been getting prenatal care

MSE:

- Cognitive exam WNL
- Mood is depressed and anxious with constricted affect
- Insight and judgment are limited with superficial insight and poor judgment

Vital signs:

- BP 100/62
- Weight 105 lbs
- Height 5ft 1 in
- BMI 19.8
- Pulse 60 BPM
- Labs significant for phos of 1.5 and Mg of 2.0

Case presentation

Past social history:

- Eating disorder symptoms started in the context of emotional and physical abuse by mom and also parental marital strife when pt was 12 yo
- High achiever academically
- Menarche delayed to 16 yo
- In high school, she was diagnosed with AN, restrictive type, with compulsive exercising
- In college, AN shifted to binge-purge type and worsened after a sexual assault that led to PTSD symptoms
- Psychiatric co-morbidities: MDD w/ SI, a suicide attempt in college (O/D with ibuprofen), persistent depressive symptoms, PTSD

Recent social history:

- Lauren graduated from college and then started psychology graduate school aspiring to be a therapist who helps women with eating disorders
- She had to take an extended break in the 1st year of grad school due to worsening of both depression and her eating disorder
- When she returned to school, binge-purging returned
- She has been married x 1 y, relationship is supportive

Case presentation

Treatment history:

- Inpatient hospitalization x 2 weeks after suicide attempt freshman year of college, helpful
- Inpatient hospitalization x 2 weeks after sexual assault followed by IOP for worsening of AN, binge-purge type
- Several years of individual psychotherapy since age 16 y including CBT & EMDR, both helpful

Medication history:

- Escitalopram 20 mg for many years, helpful
- Transitioned to sertraline with first leave from graduate school due to active ED and depression
- Transitioned to fluoxetine 20 mg just before referral to you due to worsening depression during pregnancy

Case presentation

There is a lack of research on treatment intervention efficacy for anorexia nervosa during pregnancy and the postpartum period. Treatment options with risks/benefits are:

	Inpatient psychiatric hospitalization	IOP/PHP	outpatient
Risks	<ul style="list-style-type: none">• Disruption of graduate school• Limitation of patient autonomy	<ul style="list-style-type: none">• High risk of refeeding syndrome (low Phos/Mg)• Potential for inadequate weight gain, malnutrition and adverse pregnancy and fetal effects	<ul style="list-style-type: none">• High risk of refeeding syndrome• Potential for inadequate weight gain, malnutrition and adverse pregnancy and fetal effects
Benefits	<ul style="list-style-type: none">• Monitor for refeeding syndrome• Daily calorie counts/ I's&O's• Nutrition consultation	<ul style="list-style-type: none">• Maintain graduate school	<ul style="list-style-type: none">• Maintain graduate school

Case presentation

Your recommendation:

- You recommend inpatient psychiatric hospitalization due to risks for refeeding syndrome
- Lauren expresses an understanding of refeeding syndrome, but says no to an inpatient stay. She wants to pursue outpatient treatment and return to school

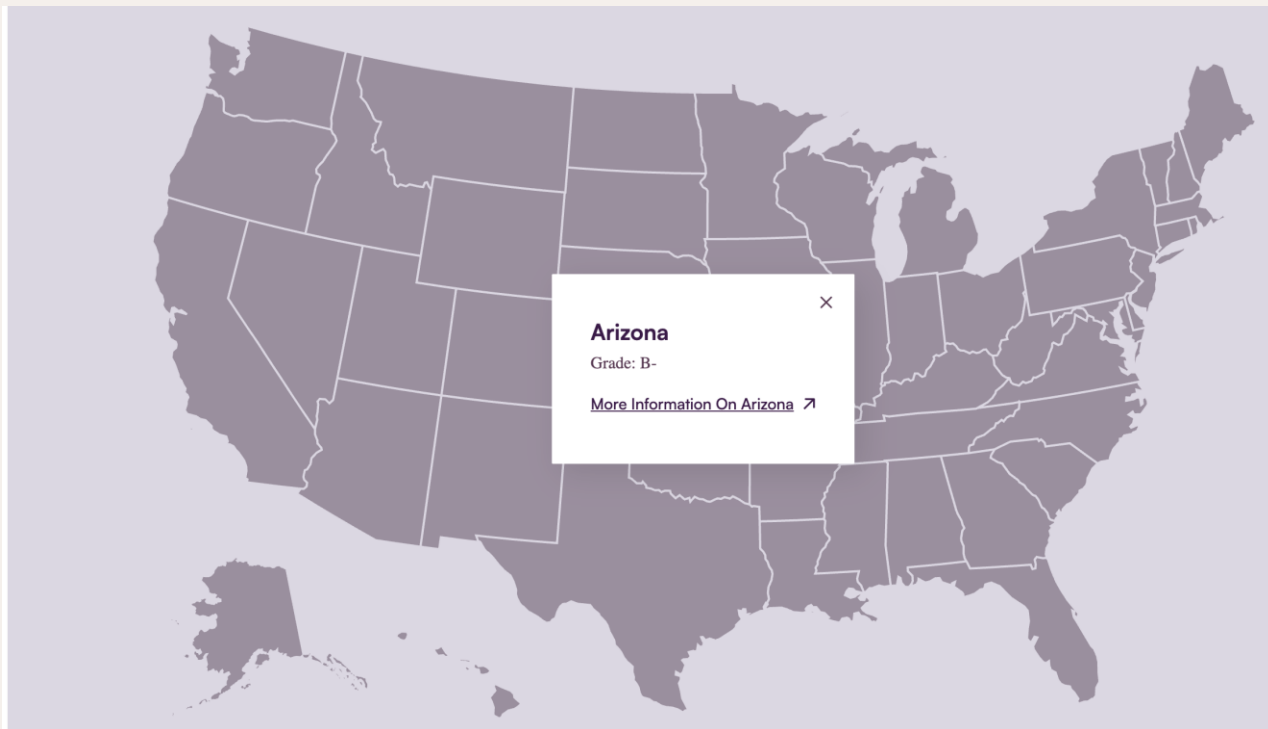
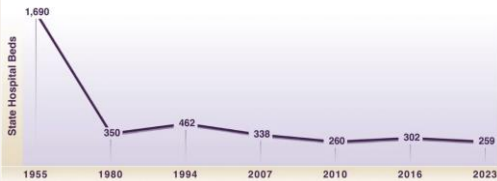
Assessment of decision-making capacity

- **Preference:** Lauren clearly and consistently prefers an outpatient level of care.
- **Understanding:** She is able to state that she has an eating disorder and can summarize the risks of refeeding syndrome.
- **Manipulation of risks/benefits:** Lauren is able to state that if she does not get adequate treatment for her condition, she could die.
- **Appreciation:** Lauren does not seem to appreciate the gravity and extent of the risks of managing her condition as an outpatient. Further, she has tried to gain weight as an outpatient with no improvement.
- **Summary:** She does not have decision-making capacity to refuse hospitalization

Meeting involuntary hospitalization standards



TOTAL NUMBER OF STATE HOSPITAL BEDS IN
ARIZONA: 1955-2023



Case presentation - postpartum

Delivery:

- Term vaginal delivery of small but healthy baby girl
- Delivery was not traumatic for patient
- Mood is “good” and eating “is not an issue”
- Maintained on fluoxetine 30 mg daily
- Discharged home on PPD #2
- Intends to breastfeed

Treatment considerations for the postpartum:

- Psychoeducation on normal postpartum blues mood pattern for first 2 weeks postpartum, strategies for getting ~4-5h of uninterrupted sleep
- Continued outpatient psychotherapy
- Consider free PSI group for postpartum moms with h/o eating disorder
- Behavioral psychotherapy with self-monitoring with daily log of intake and ED behaviors
- Involvement of family and social supports

Case presentation - 6 weeks postpartum

Lauren reports:

- She feels “everything is out of control” and “the only thing I can control is what I eat.”
- She has lost all her baby weight.
- She describes the baby as “fussy and difficult”
- She reports breastfeeding is not going well but she wants to continue because she has “heard it can help with weight loss.”
- She worries that her body “will never be normal again.”
- She is not in psychotherapy but is open to it. She does not want to go inpatient again due to not wanting separation from her daughter.

Case presentation - 6 weeks postpartum

You respond by considering risks/benefits for various levels of care (inpatient/IOP/outpatient).

	Inpatient psychiatric hospitalization	IOP/PHP	outpatient
Risks	<ul style="list-style-type: none">• Delay in returning to graduate school• Separation from infant	<ul style="list-style-type: none">• Possibility of inadequate weight gain and further health complications• Potential for continued breastfeeding issues and adverse effects for the infant	<ul style="list-style-type: none">• Possibility of inadequate weight gain and further health complications• Potential for continued breastfeeding issues and adverse effects for the infant
Benefits	<ul style="list-style-type: none">• Close monitoring of health complications and co-morbid anxiety/depression• Daily calorie counts/ I's&O's• Nutrition consultation	<ul style="list-style-type: none">• Maintain graduate school• No separation from infant	<ul style="list-style-type: none">• Maintain graduate school• No separation from infant

Case presentation - 6 weeks postpartum

You respond by:

- Taking a motivational interviewing approach: what are Lauren's goals and preferences?
- This approach leads to a collaborative discussion with Lauren exploring her social supports, relationships, plans for school, parenting and work.
- Get her permission to coordinate care with her pediatrician to ensure infant growth and development is on track.
- Meet with Lauren's family members to discuss the treatment plan, enlisting their support and also surveillance of Lauren at home.
- You insist that Lauren begins working with eating disorders specialists in nutrition and psychotherapy.
- You insist that Lauren either work individually with a perinatal maternal health specialist or join the PSI postpartum support group for moms with EDs.