

PSYCHOLOGY AND PSYCHIATRIC DISORDERS ASSOCIATED WITH PREGNANCY, PARTURITION AND LACTATION

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INTRODUCTIONS!

- Psychiatry
 - Psychology?

 - Pregnancy
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GAME TIME!

➤ YES

Raise your hand

➤ NO

Keep your hand down



WHAT DOES MENTAL ILLNESS LOOK LIKE?



IS THIS WHAT MENTAL ILLNESS LOOKS LIKE?



WHAT ABOUT THIS?



OR THIS?



IS THIS MENTAL ILLNESS?



HOW ABOUT THIS?



FINALLY...





HOW DO YOU DECIDE?





TOPIC AT HAND

TERMINOLOGIES

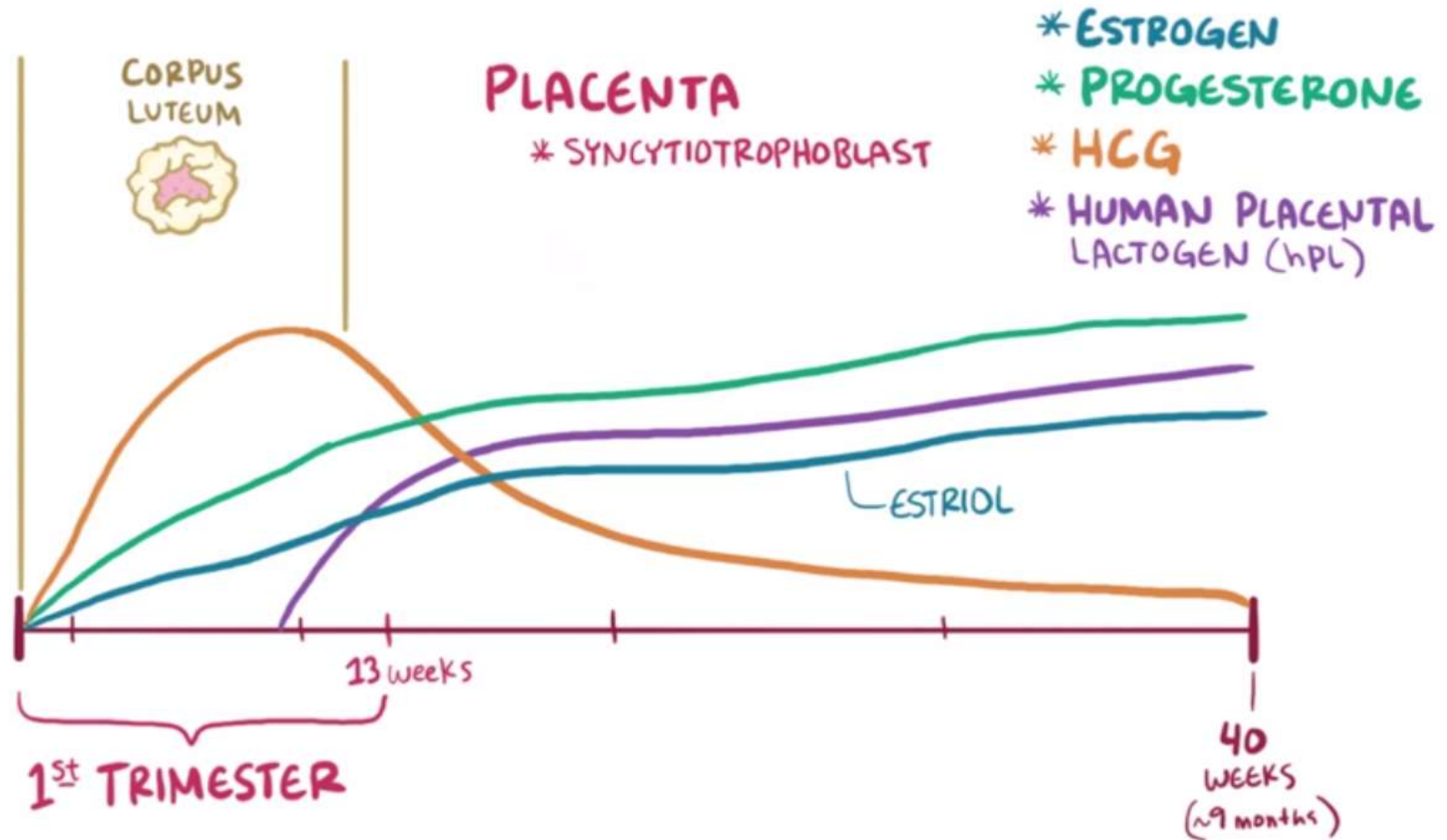
- **Pregnancy:** Pregnancy, also known as gestation, is the time during which one or more offspring develops inside a woman.
- **Parturition:** Childbirth, the process of delivering the baby and placenta from the uterus to the vagina to the external world. Also called labor and delivery. (Latin parturire: "to be ready to bear young"; parere, "to produce.")
- **Postpartum:** (Postnatal) Time starting after childbirth. (6weeks? 1year?)
- **Peripartum:** Last 1-2 months of gestation to after childbirth.
- **Prepartum:** ?





WHAT WE KNOW ALREADY

- Maternal physiological changes in pregnancy are the **adaptations** during pregnancy that the pregnant woman's body undergoes to accommodate the growing embryo or fetus.
- These physiologic changes are entirely **normal**, and include
 - behavioral (brain),
 - cardiovascular (heart and blood vessel),
 - hematologic (blood),
 - metabolic,
 - renal (kidney),
 - posture, and
 - respiratory (breathing) changes.
- The pregnant woman and the placenta also produce many other hormones that have a broad range of effects during the pregnancy.

HORMONES



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- ▶ Tightly orchestrated hormonal events- potential for unique psychological states.
 - ▶ Pregnancy: hormones rise, new hormones released.
 - ▶ Parturition: intense biological event! Ends in abrupt withdrawal of hormones
 - ▶ Lactation: large release of oxytocin- initiates neuroendocrine cascade.
 - ▶ Childcare: across circadian rhythm-activity cycle, hypoestrogenism
 - ▶ Ovulation: 6-12 weeks or 4-6 months

PERINATAL MENTAL ILLNESSES

POSTPARTUM BLUES

Baby blues

Most common (50-80%)

Transient, rapid shifts

- Tearfulness
- Irritability
- Anxiety
- Insomnia
- Lack of energy
- Loss of appetite
- Feeling overwhelmed

Day 3-10

POSTPARTUM DEPRESSION

Peripartum

20-25%

- Sadness of mood
- Anhedonia
- Easy fatiguability
- Intrusive thoughts
- Violent thoughts
- Anxiety
- Psychotic symptoms

>2 weeks

Causing dysfunction

POSTPARTUM PSYCHOSIS

Most severe

0.1-0.2%

- Hallucinations
- Delusions
- Deficits in judgment
- Impulsivity

Escalates rapidly

within days- 3 weeks at presentation

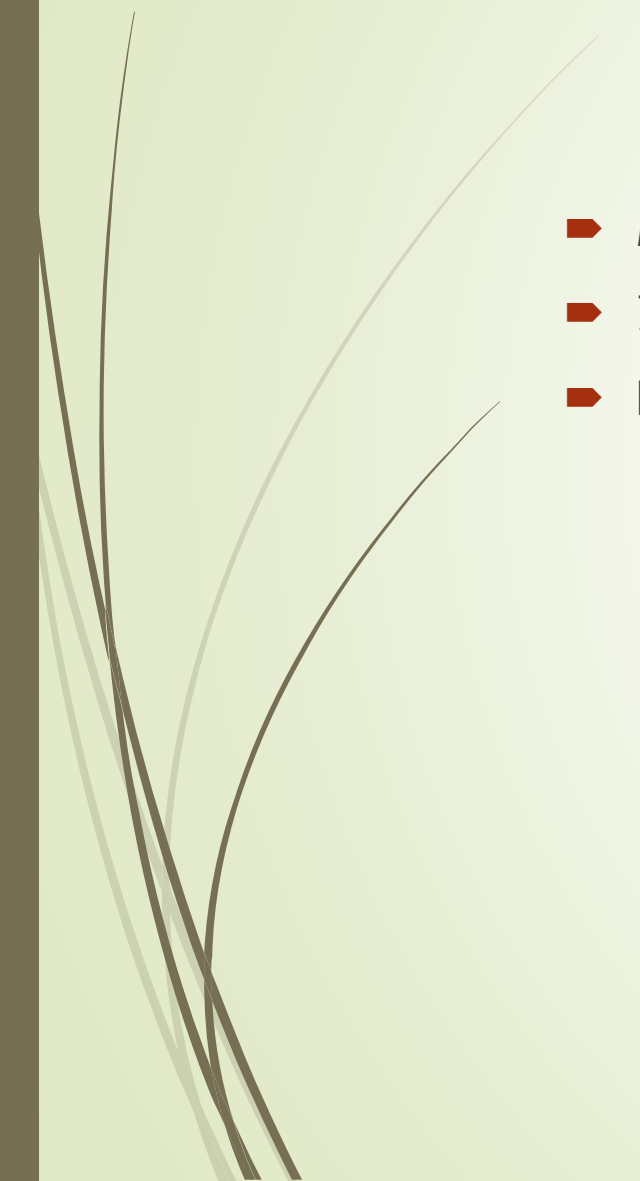


PERINATAL DEPRESSION: DATA

- ▶ Pregnancy: mental wellness (?)
- ▶ 20-25% - same as non-pregnant women
- ▶ Outcomes?
 - ▶ Suicide
 - ▶ Infanticide
 - ▶ Relapse (68% vs 16%)
- ▶ Family studies, genetic studies
- ▶ More in primi
- ▶ Multiple psychosocial problems, trauma, chronic interpersonal difficulties.
- ▶ Childhood sexual abuse (50%)




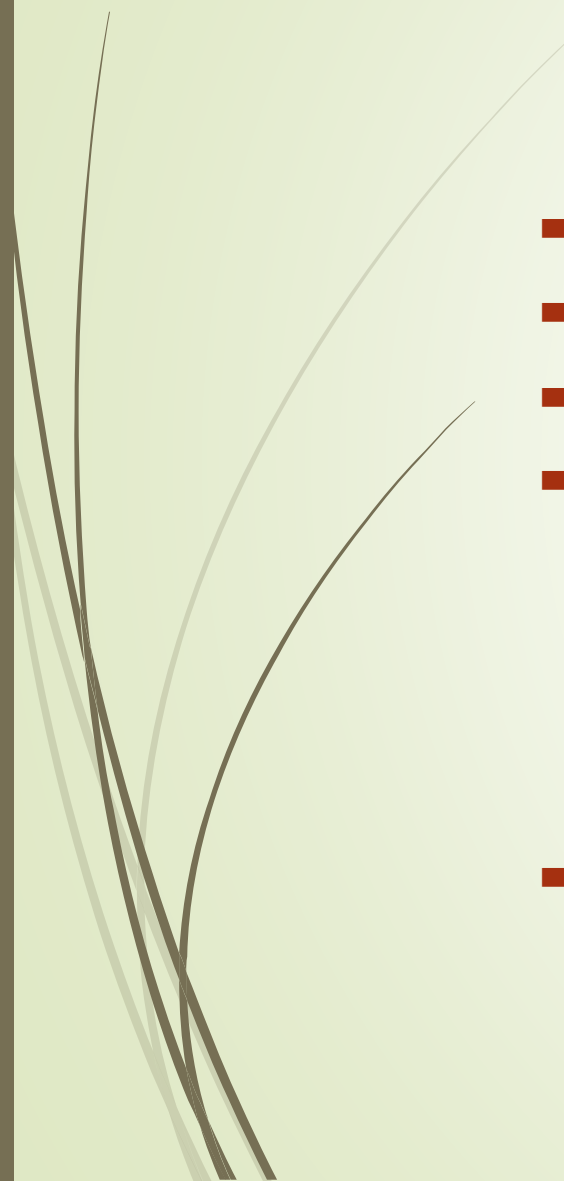
POSTPARTUM PSYCHOSIS: DATA

- ▶ Medical emergency
 - ▶ 70x increased risk of suicide (mother-suicide relationship)
 - ▶ Infanticide: 24%- psychosis, 56% altruistic
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WHY?

- ▶ Hormonal trigger?
- ▶ Scientific curiosity!
- ▶ EXPERIMENTS:
 - ▶ Postpartum withdrawal of estradiol and progesterone in day 2-7, does it induce depressive relapse?
 - ▶ What if we did an fMRI?
 - ▶ Any biomarkers? Gestationally elevated CRH, reduced oxytocin, prolonged blunting of HPA axis, subclinical hyperthyroidism

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- fMRI
 - Mothers
 - Attending to cues of baby
 - Activation in
 - Reward. (striatum, midbrain, OFC)
 - Empathy. (superior temporal sulcus)
 - Emotional appraisal. (insula, amygdala)
 - Emotion-cognition integration centers. (ant. Cingulate gyrus)
 - What happened in depressed mothers?

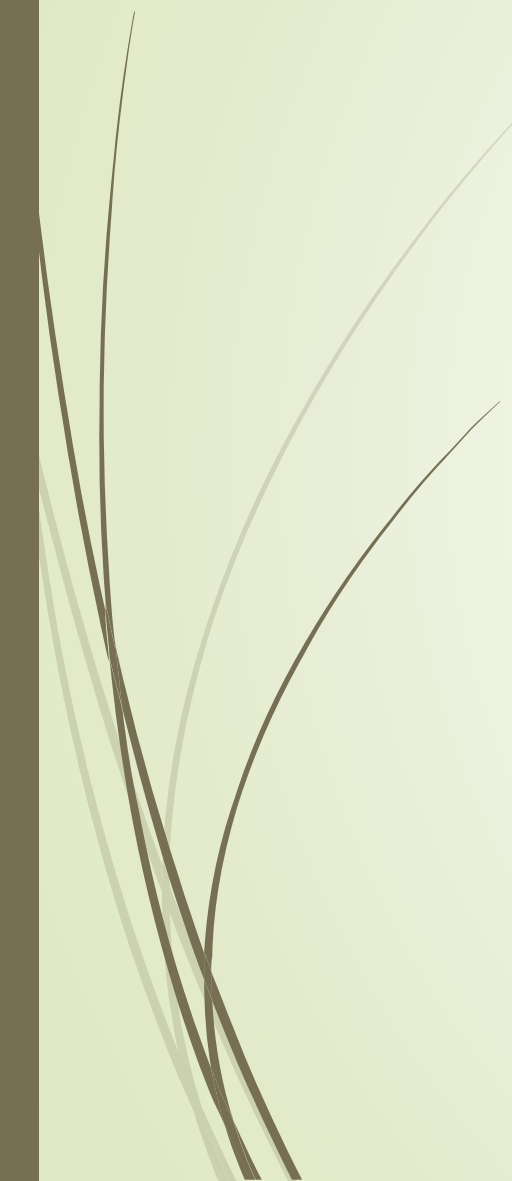



WHY?

- Genetics
 - Genetic vulnerability with hormonal sensitivity
 - Personal or family history of depression
 - GWAS
 - Monoamine and steroid hormone gene polymorphisms described



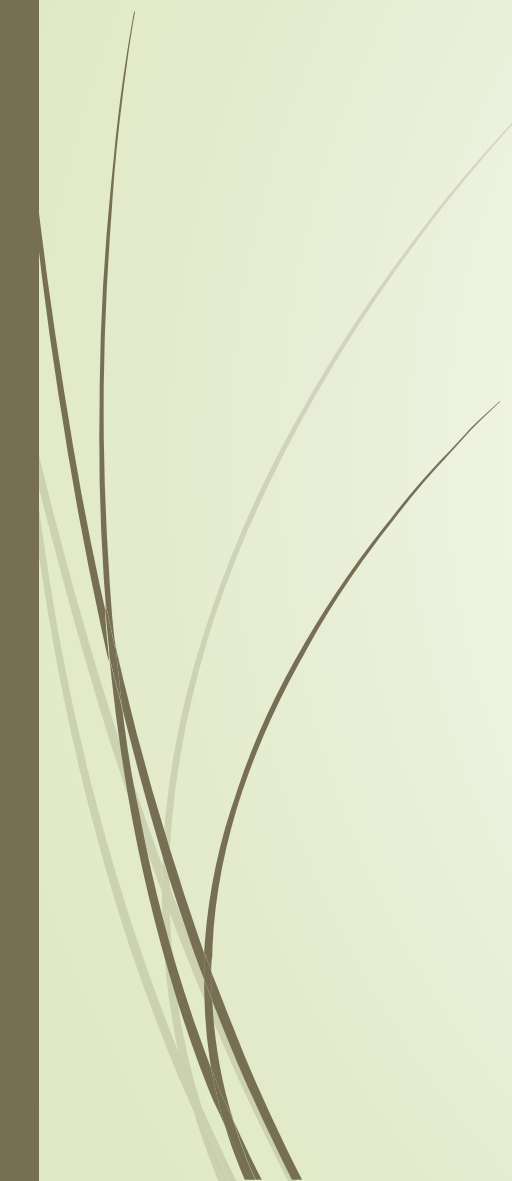
WHY?

- What else can there be?
 - What do patients come and tell us?
 - How do families explain?
 - Is there evidence?
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- Psychological and Sleep-related mechanisms
 - Maternal sleep deprivation – sleep therapy?
 - Identity transition (relationships, work, sleep, exercise, nutrition, finances)
 - Other problems?
 - High social stress
 - Marital discord
 - Minorities
 - Adolescence
 - Neuroticism
 - History of trauma: protect



WHAT ABOUT PREGNANCY IN PEOPLE LIVING WITH MENTAL ILLNESS?

- Schizophrenia
 - Bipolar Affective Disorder
 - Anxiety Disorders
 - OCD
 - Personality Disorders
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WHAT DO WE DO NEXT?



AFTER DIAGNOSIS?






TREAT!

- Options?
- Safety?
- Public understanding?
- Whose decisions?
- And whose risk?

- Non-somatic treatment?



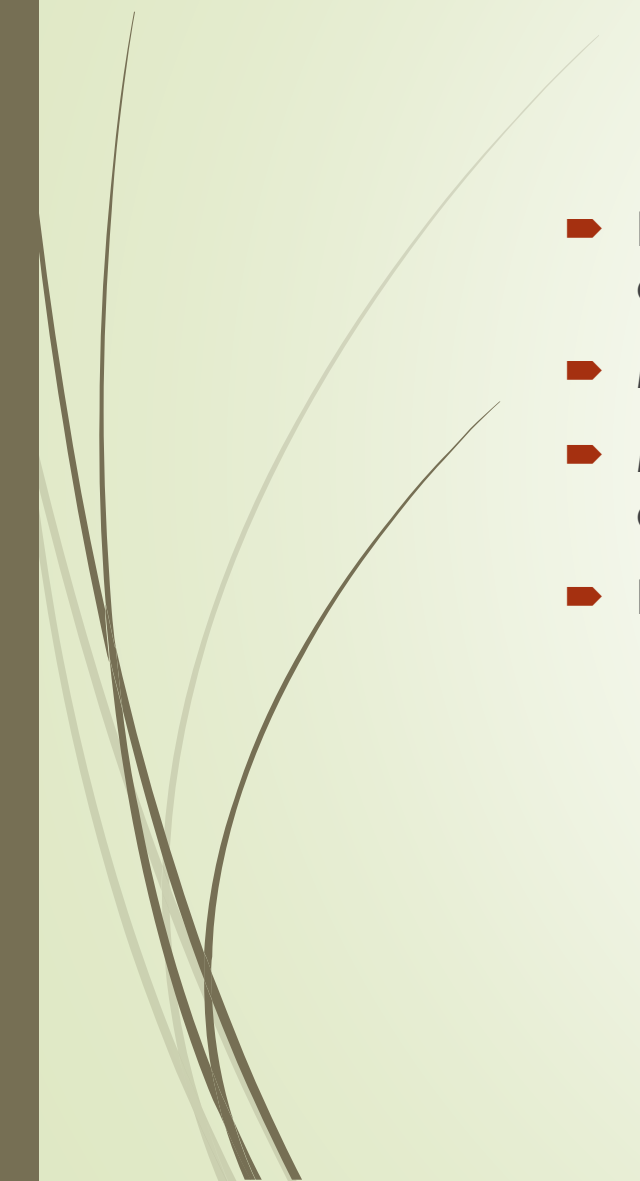
THINGS TO CONSIDER...

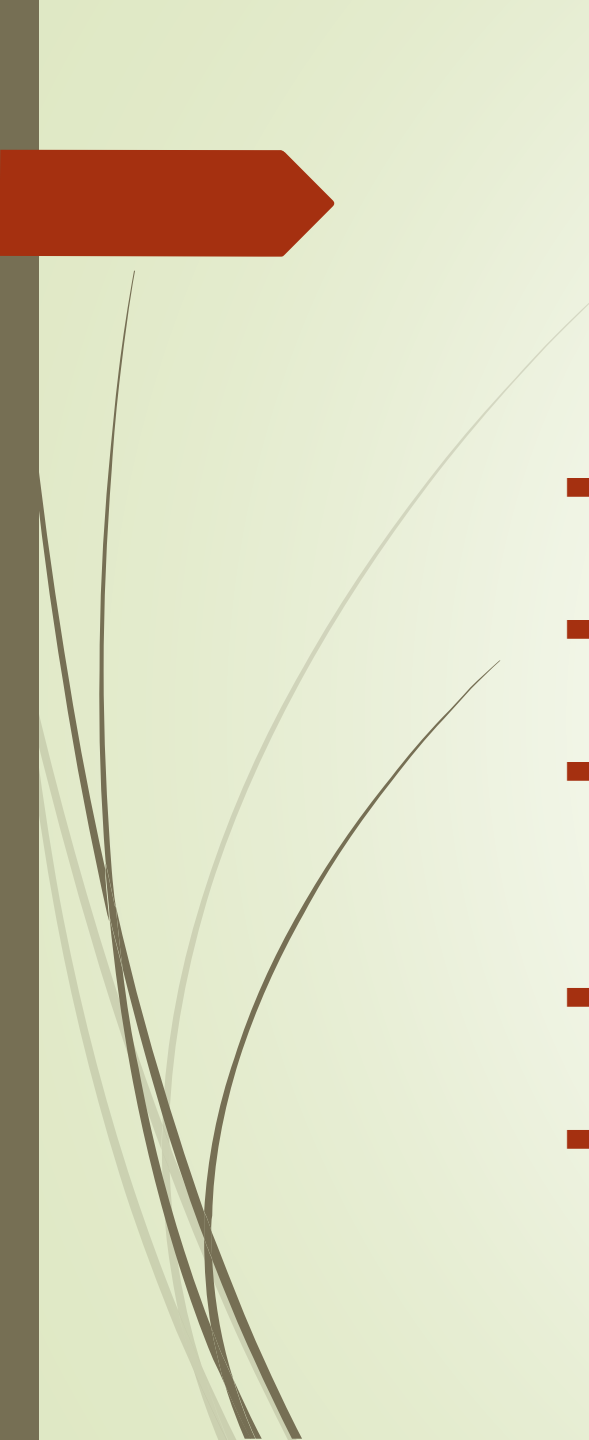
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- ▶ Pseudocyesis
 - ▶ Tocophobia
 - ▶ Pregnancy loss
 - ▶ Contraception
 - ▶ Infertility
 - ▶ Pre-menstrual dysphoric disorders
 - ▶ Menopause

 - ▶ Bonding and attachment disorders
 - ▶ Paternal mental illnesses?


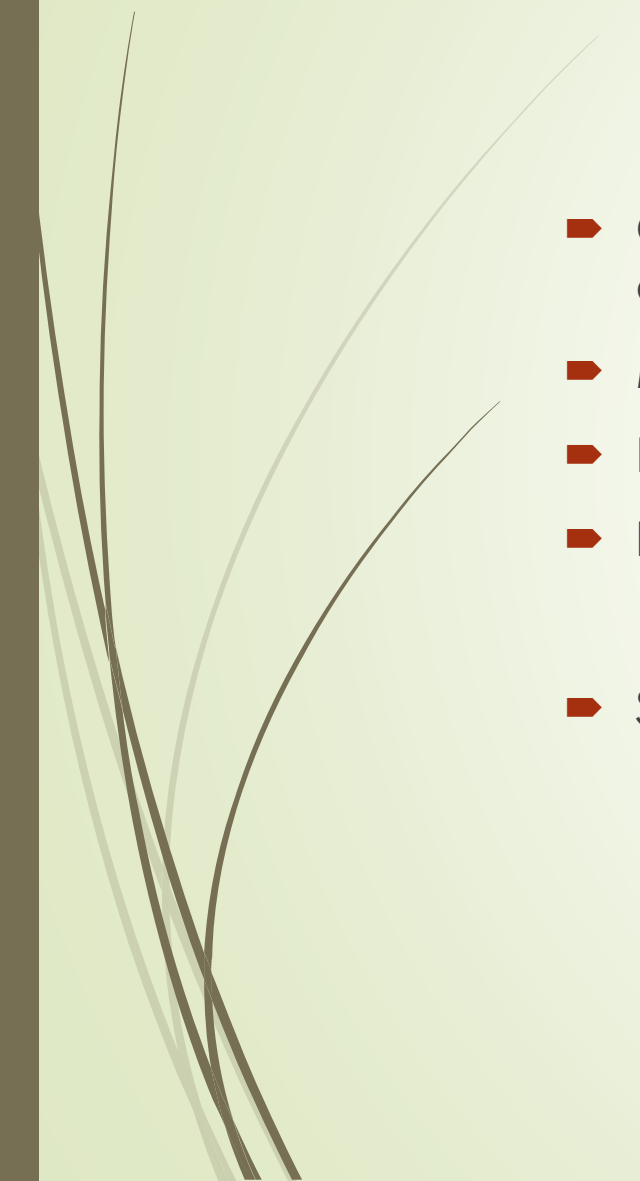


COMING BACK...

- Bidirectional relationship between reproductive events and psychological concomitants.
 - Mind-body dichotomy -> psyche and soma interact
 - Medicine has traditionally separated the treatment of that of reproductive events from that of psychological functioning.
 - False dichotomy!
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- ▶ Importance of reproduction to the sense of mortality and immortality-
greater anxiety aroused
 - ▶ Sex steroids imprint the brain in a fundamental way – how will we think
about gender, families, ageing?
 - ▶ The psyche, individual and collective, will continue to be ever more
troubled by the implications for society and self.

 - ▶ Reproductive behavior is extremely personal – but governments and
religion continue to interfere
 - ▶ Sense of invasion is unavoidable.

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- Offsprings may not applaud their biological and social parent's choices and actions.
 - More and more choices are available and offered.
 - People will turn to authority for guidance – YOU.
 - Increased knowledge and scientific expertise needed now more than ever.
 - Science literacy will continue to be critically necessary.



SO PLEASE STUDY



THANK YOU!

- QUESTIONS?
 - COMMENTS?
 - ANSWERS??
 - ANY DOUBTS?

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