Pregnancy and Childbirth Notes F2022 Acknowledgements to Lisa Kane Low, CNM PhD, FACNM, FAAN

Pregnancy Facts:

Length of gestation: 9 months? 40 weeks Significance of the "due date" Pregnancy Development

Pregnancy is divided into three trimesters

0-12 weeks 13-27 weeks 28-40 weeks

Pregnancy Hormones

Pregnancy starts at implantation

Pregnancy changes in the body

Cardiac output
Blood volume
Red blood cells
Kidneys
Lungs

Within each trimester significant changes occur and some "landmark" events happen First Trimester

No Menstruation Frequent urination Nausea and vomiting Dizziness Breast tenderness Fatigue

Second Trimester

Hear Heart Tones by 12 weeks
Increased weight gain, increased abdominal size
Lessening of some first trimester symptoms
Decreased fatigue
Continued increased urination
Beginning to feel movement
Physiological Changes:
Resp., Heart Rate, GI slow down

Third Trimester

Increased growth of the baby Backaches Shortness of breath Continued increased frequency of urination Less stomach capacity but continued hunger Continued movement with increasing intensity Return of increased fatigue

Early pregnancy losses

Spontaneous abortion

10-20% of all known pregnancies (30% of all pregnancies)
Often due to genetic anomalies in embryo/early pregnancy development
About 50% require medical treatment (medication or surgery to empty the uterus)
Risks of too much bleeding and infection

Ectopic pregnancy

2% of all pregnancies

Never able to continue pregnancy

Requires urgent medical treatment

Delayed treatment can affect future fertility

Can be life-threatening

Fetal anomalies

2-3% of all pregnancies
Usually diagnosed by 20 weeks gestation at ultrasound
Some life limiting/incompatible with life
50% terminations, 30% intrauterine death, 20% continued pregnancy

Labor and Birth

Are you in Labor?

Frequency of Contractions Intensity of Contractions

Cervical Change in Response to Contractions

Effacement Dilation

Descent of the Baby

Station

Progress in labor

Cervical Change Effacement: 0-100% Dilation: 0-10 centimeters

Descent

Station: measured in relation to the ischial spines and the top of the baby's head

−3 to +3 The Labor Process

Stages of Labor

First Stage

The labor process
Dilation and descent

0-10 centimeters

6 cm for active labor

Average length 12-14 hours for a first baby and 6-8 for a second or greater baby

Second Stage

The pushing stage or birth of the baby Completely dilated until the baby is born Lasts 1-2 hours for a first baby and 20-30 minutes for second or greater baby

Third Stage

Following birth of the baby to the completion of the birth of the placenta or "afterbirth" Lasts 10-30 minutes regardless of number of prior births

Fourth Stage

Initiation and stabilization physiologically following birth Emotional/Social aspects: Bonding phase

Cesarean Birth

1 in 3 pregnant people Humanizing surgical birth

Childbirth Practices

An individual's cultural beliefs about health risks, as well as provider culture, including technological advances, obstetric training, and fear of litigation, all impact the experience of birth

Birth is commonly treated as an illness in the United States and has gradually become more intervention-intensive

The range of birth possibilities runs from home to the surgical suite, from physiologic birth to elective cesarean or induction

How are we doing?

The United States has experienced increasing maternal mortality ratio over the last 25 years.

This is the highest maternal mortality rate among developed nations

Maternal Mortality Data

African American women are 3 to 4 times more likely to die of pregnancy complications than white women.

Women aged 35 to 39 are almost twice as likely to die of pregnancy complications as women aged 20 to 24.

The risk becomes even higher for women aged 40 or older.

Maternal Morbidity – for every 1 death- there are 100 cases of severe maternal morbidity The Impact of Paradigms on Women's Experience of Birth From "High Technology" to "Perfectly Natural"

Paradigms:

A basic set of beliefs that make up a world view or way of seeing the world Based on beliefs not necessarily facts

Is not right or wrong

We try to see the things in a way that is in agreement with our world view. We explain things so that they are consistent with our paradigms or beliefs.

"As a woman lives so does she birth" Gayle Petersen Paradigms of Birth: Definitions Biomedical Paradigm

Birth as Illness needing medical attention, monitoring and often surgery. The outcome is focused on the health of the baby and the use of surgery or interventions are often viewed as better for the health of both the mother and the baby.

Technocratic Paradigm

Similar to biomedical but with greater focus on the role of technology in the belief that it is superior to women's bodies. The outcomes are primarily focused on the use of technology to assure the health of the baby.

Holistic Paradigm

Birth as a natural, healthy process that can be fullfilling both in terms of the process of labor and birth. The outcomes are focused on both the mother and the baby.

The manner in which the health care provider deals with the varied aspects of childbirth is related to their world view or paradigm

You see what you know....you know what you see

But what is Natural?

Expectations are driven by the paradigm women have about birth.

What women say they want is affected both by what they believe and what they think they should say.

Competing Paradigms
Davis-Floyd
"Many pregnant women consciously espouse
one (paradigm) while at the same time
unconsciously believing in the other. When this
is the case, a woman may only find out what
she really believes in the act of giving birth."

What women believe Internalization of the Dominant Paradigm

Results in the "Just in Case" Ideology

Examples of birth paradigms

Biomedical paradigm- routine episiotomy
One of most common OB procedures- 60% in 1979, 24.5% in 2004

Initial rationale- shorter second stage, less pelvic floor trauma Actually: No benefits and increased harm

Technocratic paradigm: routine continuous fetal monitoring
Continuous electronic fetal monitoring (EFM)
Started in 1960
Goal- identify fetuses as risk for morbidity or mortality
Routine in most US hospitals (>90% of women report use)
In Cochrane study (13 RCTs, n>37,000) increase cesareans/forceps/vacuums, NO improvement for fetal/baby well being

Holistic paradigm: continuous labor support doula work

Partners and families banned from birth until 1970s and 1980s Cochrane review (22 RTC with n>15,000) More spontaneous birth, shorter labor, less use of pain medications, increased satisfaction "If doulas were a drug it would be unethical not to use them" BH Kennel

Changes in Working Together: Weaving Models of Birth

While value is there for responses to emergency and addressing maternal mortality the role of "low tech, high touch " care is seen as the key to improving success in accomplishing a vaginal birth Models of Childbirth

What becomes "perfectly natural" is a combination of the paradigms and the medical story of labor and birth depending on the paradigm the woman believes.

Natural/Holistic---Medical/Technical Continuum Middle Ground Approach "Best of Both Worlds"