N432 Focus Sheet 1- 2020

Ricci, Kyle & Carman Ch (3) 4,5, 10, 11, & 12

ATI Ch 1-6 & 8 (Infections)

R,K, & C Ch 3—While this Chapter is technically not on the Exam, you must know these topics as the basis for other processes about which you will learn.

1. Provide a brief description of the external female reproductive organs.

a. Mons pubis: The mons pubis is the elevated, rounded, fleshy prominence made up of fatty tissue that overlays the symphysis pubis. The skin of this fatty tissue is covered with coarse, curly public hair after puberty. The mons pubis protects the symphysis pubis during sexual intercourse.

b. Labia majora: The labia majora (large lips), which are relatively large and fleshy, are comparable to the scrotum in males. The labia majora contain sweat and sebaceous (oil-secreting) glands; after puberty, they are covered with hair. Their function is to protect the vaginal opening and provide cushioning during sexual activity.

c. Labia minora The labia minora (small lips) are the delicate hairless inner folds of skin; they can be very small or up to 2 in wide. They lie just inside the labia majora and surround the openings to the vagina and urethra. (Ricci et al., 2017, p.98).

d. Clitoris It is a small, cylindrical mass of erectile tissue and nerves. Highly sensitive analogous to the head of male's penis. Functions as an erogenous (sensitive to sexual stimulation). It is buried under skin and connective tissues found in the anterior junction of labia minora. (Ricci et al., 2017, p.98-99).

e. Perineum: The perineum is the most posterior part of the external female reproductive organs. This external region is located between the vulva and the anus. It is made up of skin, muscle, and fascia. The perineum can become lacerated or incised during childbirth and may need to be repaired with sutures. Incising the perineum area to provide more space for the presenting part is called an episiotomy.

2. Provide a brief description of the internal reproductive organs.

a. Ovary The development and the release of the ovum and the secretion of the hormones estrogen and progesterone are the two primary functions of the ovary. The ovaries link the reproductive system to the body's system of endocrine glands, as they produce the ova (eggs) and secrete, in cyclic fashion, the female sex hormones estrogen and progesterone

b. Fallopian tube The fallopian tubes convey the ovum from the ovary to the uterus and sperm from the uterus toward the ovary. This movement is accomplished via ciliary action and peristaltic contraction. If

sperm are present in the fallopian tube as a result of sexual intercourse or artificial insemination, fertilization of the ovum can occur in the distal portion of the tube.

c. Uterus is an inverted pear-shaped muscular organ at the top of the vagina. It lies behind the bladder and in front of the rectum and is anchored in position by eight ligaments.It is the site of menstruation, receiving a fertilized ovum, development of the fetus during pregnancy, and contracting to help in the expulsion of the fetus and placenta.

d. Fundus of uterus Anatomic subdivisions of the uterus include the convex portion above the uterine tubes (the fundus), the central portion (the corpus or body) between the fundus and the cervix, and the cervix, or neck, which opens into the vagina.

e. Cervix the lower part of the uterus, is sometimes called the neck of the uterus. It opens into the vagina and has a channel that allows sperm to enter the uterus and menstrual discharge to exit,. Like the vagina, this part of the cervix is covered by mucosa, which is smooth, firm, and doughnut shaped, with a visible central opening called the external os

f. Vagina: A muscular canal lined with nerves and mucus membranes. It connects the uterus and cervix to the outside of the body, allowing for menstruation, intercourse, and childbirth.

3. Menstrual Cycle hormones-The menstrual cycle involves a complex interaction of hormones. The predominant hormones include gonadotropin-releasing hormone (GnRH), FSH, LH, estrogen, progesterone, and prostaglandins.

Hormone	Purpose	
Estrogen	Estrogen is secreted by the ovaries and is crucial for the development and maturation of the follicle. Estrogen is predominant at the end of the proliferative phase, directly preceding ovulation. After ovulation, estrogen levels drop sharply as progesterone dominates	
Progesterone	During the luteal phase, progesterone induces swelling and increased secretion of the endometrium. This hormone is often called the hormone of pregnancy because of its calming effect (reduces uterine contractions) on the uterus, allowing pregnancy to be maintained.	
Prostaglandins	primary mediators of the body's inflammatory processes and are essential for the normal	

	physiologic function of the female reproductive system. Play a role in Ovulation	

R,K & C Ch 4; ATI Ch 1,2

1. Define infertility - is defined as the inability to conceive a child after 1 year of regular sexual intercourse unprotected by contraception

How can you as the nurse educate a couple on infertility causes and treatments?

. The nurse's focus must encompass the whole person, not just the results of the various infertility studies. Throughout the entire process, the nurse's role is to provide information, anticipatory guidance, stress management, and counseling. The couple's emotional distress is usually very high, and the nurse must be able to recognize that anxiety and provide emotional support.

2. What is IVF? - In vitro fertilization medication for infertility Nurse advises woman to take medication to stimulate ovulation so the mature ovum can be retrieved by needle aspiration

4. Birth Control options

Type	Action	Side effect	Pro/con	Contraindications	Important Patient Teaching
Coitus interruptus	The withdrawal of the penis from vagina prior to ejaculation	Risk of pregnancy, STIs	Pro: can be used when no other option is available --- always available Con: least effective method, no STI protection, may lead to pregnancy	Presence of STIs, non-monogamous interactions	Pre-ejaculatory fluid may leak from penis prior to ejaculation. This fluid may contain sperm and poses the chance to impregnate the female
Lactational amenorrhea method	Uses lactational infertility for	None	Pro - no cost; no coitus linked	pumping or manual expression of milk may reduce	Mother must breast feed infant on demand

	protection from pregnancy		Con-temporary method, effective for only 6 mo after giving birth	effectiveness Failure rate is 25%	without supplementation for 6 months
Condom	Cover penis with thin sheath during sexual intercourse as a contraceptive and to protect against STIs	May cause allergic reaction if made of latex	Pro: Protects against most STIs, involves male, no adverse effects, readily accessible Con: nonadherence, reduce spontaneity of intercourse, decreased sensation, one-time use	Should not be used in the presence of a latex allergy	Penis must be erect for application Hold rim of condom while withdrawing penis from vagina to avoid spillage Can use in conjunction with spermicide to increase effectiveness Check expiration date prior to use
Diaphragm	Insert into vagina to fit snugly over the cervix	STIs may occur Can increase risk of UTI	Pro: Client control, easy to insert Con: inconvenient, requires reapplication of spermicidal gels,	Not recommended with history of toxic shock syndrome Increased risk of acquiring toxic shock syndrome	Hand hygiene to avoid TSS, STIs Must be fitted by a provider (20% weight loss or weight gain must be fitted for new) Replace every 2 years Requires proper insertion and removal Do not leave in

					for more than 24 hours Empty bladder prior to insertion
Oral contraceptives (combination & progestin only)	Suppresses ovulation, thickens cervical mucus to block semen, alters uterus to prevent implantation	Combo: chest pain, shortness of breath, leg pain, headache, vision changes, hypertension, nausea, weight gain Prog: breakthrough/irregular bleeding, headache, nausea, breast tenderness	Combo Pro: highly effective when taken properly, therapeutic effects, protection from endometrial/ovarian /colon cancers Con: does not protect against STIs, can increase risk of thromboembolism Progestin Pro: fewer adverse effects, safe while breastfeeding Con: less effective, increased occurrence of ovarian cysts, no protection against STIs	Combo: Should not be taken with history of thromboembolic disorders, estrogen related cancers, during pregnancy/lactation Prog: Bariatric surgery, lupus, severe cirrhosis, liver tumors, current/past breast cancer	Take pill at same time daily Do not miss a pill, take missed pill as soon as you remember May be affected by other medications Routine pap smears/breast exams
Natural Family Planning (Fertility Awareness-based methods)	Calendar rhythm: determine fertile days to estimate ovulation Cycle beads:	CR: possible pregnancy CB: possible pregnancy	CR Pro: inexpensive, most useful in combination with other methods Con: not very	CR: Use with STIs present, inability to maintain accurate records CB: Do not use with short/irregular menstrual cycles	CR: maintain a diary accurately recording days in menstrual cycle, fertile period calculations CB: start first day

	Calendar method using a bead necklace and standard number of fertile days Basal body temp: take temperature each day while body is at rest Cervical mucus detection: Monitor cervical mucus	BBT: possible pregnancy CMD: possible pregnancy	reliable, does not protect against STIs, requires accurate tracking CB Pro: increased adherence with visual aid, mobile app available, easy to understand Con: less effective with hormonal birth control/IUD/breastfeeding BBT Pro: inexpensive, convenient, no adverse effects Con: reliability influenced by many variables, does not protect against STIs CMD Pro: knowledgeable in own body Con: may be uncomfortable touching their own genitals, self-analysis can be difficult, does not protect against STIs	BBT: do not use if unable to perform task reliably each day CMD: characteristics can be inaccurate when mixed with anything other than cervical mucus, sexual arousal/intercourse or use of deodorants/douches/medication/lubricants can affect accuracy	of menstrual cycle, advance rubber ring one day, red bead first day of cycle, brown beads are non fertile days, white beads are fertile days BBT: temperature of body slightly drops before ovulation and rises during, record temps each day, use with calendar method to increase effectiveness CMD: use with calendar method to increase effectiveness, hand hygiene, begin examining the last day of the menstrual cycle, know different consistency/colors of mucus

Intrauterine devices	Inserted into uterus by provider, releases chemicals that damage sperm	Irregular menses, abdominal pain, fever, chills, headache, nausea, depression, breast tenderness	Pro: maintain effectiveness for 3-10 years, insertion at clients request, can be reversed with immediate return to fertility, decrease menstrual pain Con: can increase risk of pelvic inflammatory disease, can be expelled, does not protect against STIs, copper IUD may cause increase in menstrual pain/bleeding	Active pelvic infection, abnormal uterine bleeding, severe uterine distortion	Monitor monthly by identifying string Sign consent form prior to insertion Pregnancy test/pap smear/cervical cultures must be negative before insertion Signs of ectopic pregnancy
Medroxyprogesterone	Injection given every 11-13 weeks, inhibits ovulation and thickens cervical mucus	Impair glucose tolerance Decreased bone density, weight gain, increased depression, amenorrhea, headache, irregular spotting/bleeding	Pro: only requires four injections a year, does not impair lactation, decreases risk of uterine cancer Con: does not protect against STIs, delay in return to fertility, depression, weight loss, only used as long-term method if other methods are inadequate	Breast cancer, current cardiovascular disease, abnormal liver function, liver tumors, unexplained vaginal bleeding	Keep follow up appointments to maintain proper timing in cycle maintain adequate calcium intake do not massage after injection
Subdermal implant	Suppresses ovulation cycle and thickens	Infection Irregular	Pro: effective for 3 continuous years, can be inserted at	Unexplained vaginal bleeding	Risk of ectopic pregnancy

	cervical mucus	menstruation, mood changes, headache, acne, depression, decreased bone density, weight gain	clients request, reversible Con: does not protect against STIs, scarring at insertion site		Avoid trauma to area of implantation Wear condoms to prevent STIs

5. **What does PAINS stand for?**

P = Period late, pregnancy, abnormal spotting or bleeding

A = Abdominal pain, pain with intercourse

I = Infection exposure, abnormal vaginal discharge

N = Not feeling well, fever, chills

S = String length shorter or longer or missing

6. Name the three forms of sterilization and provide a description for each.

- Tubal ligation, the sterilization procedure for women, can be performed postpartum, after an abortion, or as an interval procedure unrelated to pregnancy
- A tiny coil (Essure) is introduced and released into the fallopian tubes through the cervix. The coil promotes tissue growth in the fallopian tubes, and over a period of 3 months, this growth blocks the tubes. The buildup of tissue creates a barrier that keeps sperm from the reaching the ovum, thus preventing conception
- vasectomy-The procedure involves making a small incision into the scrotum and cutting the vas deferens, which carries sperm from the testes to the penis

7. Discuss the differences between surgical and medical abortion

Medical abortions are achieved through administration of medication either vaginally or orally.

Two types of surgical abortion are available: vacuum aspiration or dilation, and evacuation. Method selection is based on gestational age. It is an ambulatory procedure done under local anesthesia. The cervix is dilated prior to surgery and then the products of conception are removed by suction evacuation

Infections

RKC Ch 5 & Ch 20 pp 760 -771 ; ATI Ch 8

1. What are the TORCH infections which negatively affect a woman who is pregnant?

    Toxoplasmosis, Hepatitis, Rubella virus, Cytomegalovirus, Herpes Simplex virus

2. What is the treatment for Chlamydia?

    Doxycycline- contraindicated during pregnancy

    Azithromycin or amoxicillin- safe for use during pregnancy

    Erythromycin- administered to all infants following delivery

3. What is the treatment for Gonorrhea?

    Doxycycline- contraindicated during pregnancy

    Azithromycin PO and Ceftriaxone IM- during pregnancy

    Erythromycin- administered to all infants following delivery

4. Which pregnant women should be screened for Syphilis?

        Ethnic minorities, those living in high risk areas, not previously tested or previous positive test

    When should they be screened?

        First prenatal visit and again in the third trimester

    What are the names of the tests used for screening?

        Serology tests- Nontreponema (VDRL and rapid plasma reagin), treponemal (enzyme immunoassay, immunoassays)

5. Why are pregnant women at higher risk for Candidiasis infection?

Factors that increase risk of perinatal transmission include high maternal viral load; maternal immune depletion (low CD4 T cell counts); maternal genital tract infections; nutritional deficiencies; drug abuse;

cigarette smoking; unprotected sexual intercourse; other opportunistic and coexisting infections (TB, malaria); prolonged ruptured membranes; and breast-feeding

6. Which pregnant women should be screened for Syphilis?

Ethnic minorities, those living in high risk areas, not previously tested or previous positive test

7. If a pregnant woman is diagnosed with an HIV infection, what treatment would you anticipate for the mother and the infant?

Antepartum- antiretroviral therapy

Intrapartum- Highly active antiretroviral therapy

IV zidovudine 3 hours prior to scheduled c-section

Infant- zidovudine at delivery and for 6 weeks following birth

8. Why are genital herpes a problem for a pregnant woman? What is the treatment?

Can be passed to infant during childbirth

Acyclovir, valacyclovir

9. Discuss each of the following for cytomegalovirus:

Pathophysiology	Transmitted by droplet through semen, cervical/vaginal secretions, breast milk/placental tissue, urine, feces, blood. Latent virus is capable of reactivating and can cause disease to fetus in utero or when passing through the birth canal
Nursing Assessment	May have no manifestations Manifestations when present may mimic mononucleosis
Testing	No screening, no vaccinations
Management	No treatment; Cesarean section recommended
Patient education needs	Prevent exposure with frequent hand hygiene before/after eating, changing diapers, or cleaning any surface with body fluids

10. Discuss each of the following for Group B streptococcus:

Pathophysiology	Bacterial infection that can be passed to a fetus during labor/delivery. Normal part of vaginal flora in non-pregnant patients.
Nursing Assessment	Preterm labor/delivery, chorioamnionitis, infections in urinary tract, maternal sepsis, endometritis post-delivery
Testing	GBS culture from vagina and rectum are performed between 35 and 38 weeks gestation
Management	Penicillin G or ampicillin
Patient education needs	Notify nurse of status of GBS, have screening done between 35-38 weeks gestation, can cause pneumonia, respiratory distress syndrome, sepsis, meningitis if transferred to neonate

11. Discuss each of the following for Hepatitis B: p198

Pathophysiology	As the hepatocytes are attacked and infiltrated by the HBV, the virus is constantly being shed into the blood which contributes to chronic infection.
Nursing Assessment	Flu-like symptoms, fatigue, anorexia, nausea
Testing	Blood culture- diagnosed by the presence of hepatitis B surface antibody (HBsAb)
Management	No specific treatment for acute HBV infection exists. Encourage pre-exposure immunizations.
Patient education needs	Transmitted through saliva, blood serum, semen, menstrual blood, and vaginal secretions. HBV can result in serious, permanent liver damage.

R,K,& C Ch 10

1. **Briefly** define the difference between preembryonic, embryonic, and fetal stages of development.

   a. **Preembryonic begins** with fertilization (conception) in the ovum and sperm occurs 2 weeks after the last menstrual in the 28-day cycle. 46 chromosomes cell division continue form morula 16 cells blastocyst form embryo and amnion outer cell is trophoblast forms placenta 7 to 10 days after conception in the endometrium

   b. **Embryonic** begins day 15 after conception continues through week 8 this is where organs and main external features are completed during this time period.

   c. **Fetal Stage** The fetal stage is the time from the end of the eighth week until birth. It is the longest period of prenatal development. During this stage, the conceptus is mature enough to be called a fetus

2. List 5 functions of the placenta. See RKC Chapter 10 pp 342-3

   1. Placenta supplies the fetus with the nutrients and oxygen needed for growth.
   2. The placenta also protects the fetus from immune attack by the mother
   3. removes waste products from the fetus
   4. induces the mother to bring more food to the placenta and,] near the time of childbirth.
   5. produces hormones that ready fetal organs for life outside the uterus

R,K,& C Ch 11; ATI Ch 3, 4, 5

1. What are:

   Braxton hicks contractions- Irregular, usually mild uterine contractions that occur throughout pregnancy and become stronger in the last trimester.

   Hegars sign- Softening of the lower part of the uterus that allows it to be compressed by the sixth week of pregnancy.

   Goodells sign- Softening of the cervix during pregnancy.

   Chadwicks sign- Bluish-purple discoloration of the cervix, vagina, and labia during pregnancy as a result of increased vascular congestion.

   Ballotment- An examiner taps the cervix to see if a fetus floats up and back down and rebounds back to “tap” the examiner’s finger.

2. What is hCG? Why is it so important to watch during pregnancy?

hCG is the Human Chorionic Gonadotropin. It is a glycoprotein produced in the placenta and fetal tissues. It can detect pregnancy if found in urine tests. It should double every 2-3 days in a normal pregnancy until week 11. Larger jumps may indicate a multifetal pregnancy. Higher hCG levels mid-pregnancy can also be used to screen for Down Syndrome.

3. What causes supine hypotensive syndrome in a pregnant woman? How can we educate her to prevent this?

When women lie supine, or on their backs, the uterus can cause increased pressure on the interior vena cava. This lowers blood pressure. It can be relieved by lying on the left side or in semi-fowler's position while relaxing and sleeping.

4. In your own words, ***BRIEFLY*** summarize the expected changes a woman will see in each of the following:

Uterus- increases in size, changes shape and position

Cervix- softening of the cervical tip (Goodell's sign)

Vagina- deepened violet-blue color of vaginal mucosa

Ovaries- amenorrhea

Breasts- darkened areola, enlarged Montgomery's glands

Gastrointestinal system- nausea, vomiting, increase of pressure in abdominal cavity, constipation

Cardiovascular system- cardiac output increases by 30-50%, blood volume increases 30-45% at term, heart rate increase

Respiratory system- oxygen needs increase, size of chest may increase in last trimester, respiratory rate increases, total lung capacity decreases

Renal/urinary system- filtration rate increases (due to hormonal changes causing increase in blood volume and metabolic demands), urine production remains equal, urinary frequency is common

Musculoskeletal system- pelvic joints relax, weight gain, body alterations make a posture adjustment necessary

Integumentary system- chloasma (increase of pigmentation on face), linea nigra (dark line of pigmentation from umbilicus to pubic area), striae gravidarum (stretch marks on abdomen and thighs)

Vascular related changes- possibility for hypotensive syndrome

Endocrine system-

Thyroid- slightly enlarges and becomes more active during pregnancy as a result of increased vascularity and hyperplasia

Pituitary- enlarges, returns to normal size after birth

Pancreas-maternal glucose levels decrease because of the heavy fetal demand for glucose, decrease in maternal insulin production and insulin levels

Adrenal glands- Not much change, however there is a marked increase in cortisol secretion, which regulates carbohydrate and protein metabolism

Prostaglandin secretion- occurs in placenta

Placental secretion- produces large amounts of hCG, progesterone, estrogen, human placental lactogen

Immune system- Enhancement of innate immunity and suppression of adaptive immunity. Increased risk of developing certain infections and autoimmune diseases.

5. Why are pregnant women often diagnosed with anemia?

Inadequate maternal iron stores in combination with consuming insufficient amounts of dietary iron

6. What important roles do each of the following placental hormones play in pregnancy?

hCG- Produces fetal trophoblast cells until the placenta is developed sufficiently to take over that function.

hPL- Helps create glucose available for fetal growth by altering maternal carbohydrate, fat, and protein metabolism.

Relaxin- Acts with progesterone to maintain pregnancy, allows pelvis to expand during delivery, and dilated the cervix.

Progesterone- Supports endometrium of of uterus, inhibits uterine contractility

Estrogen- Relaxation of pelvic muscles and joints, promotes enlargement of the genitals, uterus, and breasts, prepares breasts for lactation.

7. Why are folic acid, iron and prenatal vitamins important for pregnant women?

Folic acid- crucial for development of neurologic system and preventing fetal neural tube defects

Iron- aid in increase of maternal RBCs

Prenatal vitamins- Prenatal vitamins consist of a variety of vitamins and minerals that help your baby get the nutrients that are essential for healthy development.

What are some good sources for folic acid and iron that you can educate pregnant women to consume?

Folic acid- leafy vegetables, dried peas and beans, seeds, orange juice (natural); bread, cereal, grains (fortified)

Iron- beef liver, red meat, fish, poultry, dried peas and beans, fortified cereals and breads

8. After reading over the general guidelines on RKC p 378 and the MyPlate guidelines on p 379 ; ATI ch 5, please write out a daily food plan in the table below:

Breakfast	snack	Lunch	snack	Supper	snack
Cereal with Fruit 1 hard-cooked egg Beverage: Water and tea	Carrot Sticks with Dip 6 whole-grain crackers	Tuna-Cucumber Wrap Beverage: 1 glass milk	Yogurt Beverage: Water	Pan-fried Pork Chop 1 baked potato Beverage: Water	Pretzels and Hummus Beverage: Water
Scrambled Eggs Beverage: 1 cup apple juice	Pretzels and Dip 1 banana	One Pan Spaghetti 1 slice whole-wheat bread Beverage: Water	2 graham crackers 1 glass milk	Tuna Casserole Beverage: Water	2 Oatmeal Cookies Beverage: Water
Banana walnut oatmeal Beverage: 1	Peanut Butter on Banana Beverage: 1	Chicken Salad 1 apple Beverage:	1 orange 2 graham crackers 1 glass milk	Oven-Fried Fish Couscous with Peas and Onions	Peanut Butter on Celery Beverage:

glass milk	glass milk	Water		Beverage: Water	Water
Pancakes Beverage: 1 glass milk	Apple Cinnamon Bar Beverage: 1 glass milk	Green Salad with Salmon 6 whole grain crackers Beverage: Water	Banana Bread Beverage: 1 glass milk	Chicken Alfredo Pasta Beverage: Water	Almonds and Cheese Beverage: Glass of Wine
Sausage Omelet Beverage: Milk	Yogurt Beverage: Water	Roast Beef Sandwich Carrot Sticks Beverage: Water	Yogurt Beverage: Water	Lamb Chops Baked Potato Beverage: 1 glass Wine	2 Chocolate Chip Cookies Beverage: Milk

9. What would you tell a pregnant woman who asks you what she should avoid eating during her pregnancy? What if she asks how much weight she should gain?

Foods to avoid during pregnancy include caffeine (due to contribution to spontaneous abortion), fish (especially tuna, as it contains high levels of mercury), poultry, cold lunch meat, eggs, nuts, and dairy products (due to their high protein content), aspartame (due to phenylalanine content), and any foods that do not agree with the neonate.

The general rule for healthy weight gain is 2.2 to 4.4 pounds during the first trimester and 1 pound per week for the second and third trimester. An expectant mother who is underweight should gain 28 to 40 pounds during pregnancy. A client who is overweight should gain 15-25 pounds during pregnancy.

10. Why is pica? What often precedes the identification of pica?

Pica is a term used to describe the intense craving for and eating of non-food items. Sometimes, these substances can be dangerous to the mother as well as the fetus. The three main substances consumed by women with pica are soil, clay, and laundry starch. **Clinical manifestations of anemia often precede the identification of pica.**

11. In your own words explain what each of the following mean in reference to a pregnant woman.

Ambivalence: To have conflicting feelings when preparing for a lifestyle change and a new role.

Introversion: The woman may focus more on herself, resulting in less participation with the outside world and may appear passive to family and friends.

Acceptance: Bringing reality and validity to the pregnancy- physical changes (enlarging abdomen), fetal movement, hearing the heartbeat, etc. At this stage the mother is able to accept her new body image and talk about the new life within.

Mood swings: Frequently, pregnant women feel as though they are riding an "emotional rollercoaster." Emotional lability is a normal characteristic throughout pregnancies.

12. How can pregnancy change the mother's image of herself? Her sexuality? Her relationship with her partner?

Some women look forward to the looks of pregnancy while others become self-conscious of both the physical and mobility changes that occur. Many women feel back and/or leg discomfort during the later stages of pregnancy and notice stretch marks in their skin causing them to have a more negative body image. Some women also express resentment of being pregnant and anxious feelings waiting for the pregnancy to be over.

Some women become self-conscious during this time and may be less interested in sex. Partners may have to deal with these issues. Other relationships are strengthened throughout the pregnancy experience.

R, K, & C CH 12; ATI Ch 4,5, & 6

1. Why is preconception care important?

Preconception care is just as important as prenatal care to reduce adverse pregnancy outcomes such as maternal and infant mortality, preterm births, and low-birthweight infants

2. What types of information should be obtained at the first prenatal appointment?

At the first prenatal visit, measure fasting plasma glucose, HbA1c, or random plasma glucose of all women or all high-risk women based on her risk factors, weight status, and family history

3. What are the thresholds for diagnosis of overt diabetes during pregnancy?

Fasting plasma glucose: 126 mg/dL

Hemoglobin A1c level: at least 6.5%

Random plasma glucose: 200 mg/dL

4. Calculate the following estimated due dates using Nagele's Rule: CH 12 box 12.4 p. 404

a. Last menstrual period (LMP) 7/9/19

-3months =4/9/19 +7 days= 4/16/19 +1 year or - 2 weeks)= estimated due date =4/16/20

b. Last menstrual period (LMP) 12/24/16=10/01/17

5. State what words GTPAL stand for and what each means.

G=gravida, T=term births, P=preterm births, A= abortions, L=livingchildren

- G —the current pregnancy to be included in count
- T—the number of term gestations delivering between 38 and 42 weeks
- P—the number of preterm pregnancies ending >20 weeks or viability but before completion of 37 weeks
- A—the number of pregnancies ending before 20 weeks or viability
- L—the number of children currently living

6. So what is meant by the term para?

The number of births a woman has had after 20 weeks gestation

7. What is linea nigra? How does fundal height correlate with gestation?

A brownish-black hyperpigmentation line that appears across the abdomen during pregnancy. Fundal height by 24 weeks gestation should be within 2cm of gestational age for a normally growing baby.

8. Fill in the following table:

Test	When are these done in the pregnancy?	Evaluation/meaning of results
CBC	First prenatal	Checks RBC, hct and hbg to detect anemia. Checks WBC for infection and platelet count to assess clotting ability.
Blood typing & Rh	First prenatal	In case of need of blood transfusion and to identify a need for RhoGAM if the mother is Rh-negative (checks for compatibility issues with baby).
Rubella titer	First prenatal	Checks for German measles-- if result is 1:8 or less, the mother gets immunization after birth and needs to avoid people with rashes.
Hepatitis B	First prenatal	Checks for Hep-B antibody surface antigen in the blood (see if mom is Hep-B positive).
HIV	First prenatal	Checks for HIV antibody surface antigen in the blood (if mom is HIV positive, she will require testing, counseling, and treatment to prevent transmission to fetus.
STI screening	First prenatal	Detects STI's like syphilis, herpes, HPV, and gonorrhea so treatment can be initiated to prevent

		transmission to fetus
Cervical smears-G/C	First prenatal and 3rd trimester	Detects abnormalities gonorrhea and chlamydia so treatment can be initiated if positive to prevent transmission to the fetus
Cervical smears-group B strep	35-37 weeks	Detects group B strep so treatment can be initiated if positive to prevent transmission to the fetus
Blood Glucose Tolerance test	24-28 weeks (1 hour test at initial-only if at risk)	Identify hyperglycemia, results above 140 require a follow-up
MSAFP-Maternal Serum Alpha Feto-protein	16-18 weeks	Blood test measuring levels of serum alpha feto-protein that corresponds with fetal neural tube defects

9. How often are follow up visits and what things are assessed?

Follow up visits:

- Every 4 weeks up to 28 weeks (7 months)
- Every 2 weeks from 29-36 weeks
- Every week from 37 weeks to birth

Assessed:

- Weight and BP
- Urine testing for protein, glucose, ketones, and nitrates
- Fundal height measurement to assess fetal growth
- Assessment for quickening/fetal movement to determine fetal well-being
- Assessment of fetal heart rate (should be 110-160 bpm)

10. What danger signs are associated with the first, second, and third trimester?

- First trimester: spotting or bleeding (miscarriage), painful urination (infection), severe persistent vomiting (hyperemisis gravidarum), fever >100F (37.7C; infection), and lower

abdominal pain with dizziness and accompanied by shoulder pain (ruptured ectopic pregnancy)

- Second trimester: regular uterine contractions (preterm labor); pain in calf, often increased with foot flexion (blood clot in deep vein); sudden gush or leakage of fluid from vagina (premature rupture of membranes); and absence of fetal movement for more than 12 hours (possible fetal distress or demise)
- Third trimester: sudden weight gain; periorbital or facial edema, severe upper abdominal pain, or headache with visual changes; and a decrease in fetal daily movement for more than 24 hours.

11. How is fetal well being assessed?

Biophysical profile (BPP)

12. Discuss the following amniotic fluid findings and their implications to the fetus.

a. Color

- Findings: Clear with white flecks of vernix caseosa in a mature fetus
- Implications: Blood of maternal origin (usually harmless). “Port wine” fluid may indicate abruptio placentae. Fetal blood may indicate damage to the fetal, placental, or umbilical cord vessels.

b. Bilirubin

- Findings: Absent at term.
- Implications: High levels indicate hemolytic disease of the neonate in isoimmunized pregnancy

c. Meconium

- Findings: Absent (except in breech presentation)
- Implications: Presence indicates fetal hypotension or distress.

d. Lecithin to sphingomyelin ratio (L/S ration)

- Findings: More than 2 generally indicates fetal pulmonary maturity.
- Implications: A ratio less than 2 indicates pulmonary immaturity and subsequent respiratory distress syndrome.

e. Alpha-fetoprotein

- Findings: Variable, depending on gestation age & laboratory technique; highest concentration occurs at 13-14 wks.
- Implications: Inappropriate increases indicate neural tube defects such as spina bifida or anencephaly, impending fetal death, congenital nephrosis, or contamination of fetal blood.

f. Bacteria

- Findings: Absent
- Implications: Presence indicates chorioamnionitis

g. Acetylcholinesterase

- Findings: Absent
- Implications: Presence may indicate neural tube defects, exomphalos, or other serious malformations.

13. Describe the procedure and expected results for a non stress test.

Measures uteroplacental function. Belt with sensors is placed around mother's abdomen. Sensors monitor fetal movement and heart rate. Mother is asked to press a button that makes a mark on a strip when she senses fetal movement. Fetal heart rate should increase during fetal activity.

14. Describe the procedure and expected results for a biophysical profile (BPP).

A BPP includes ultrasound monitoring of fetal movements, fetal tone, and fetal breathing, along with amniotic sac fluid volume assessment. A BPP is performed in efforts to identify infants who may be at risk of poor pregnancy outcome. Expected results: 3 or more limb or trunk movements, one or more instances of full extension/flexion of a limb or trunk, one or more fetal breathing movements of more than 30 seconds, one or more pockets of amniotic fluid measuring 2 cm.

15. Choose one of the ten discomforts of pregnancy listed in RKC on p 420 and ATI Ch 4 pp 21-22. Write out a teaching plan that you could use for a mother who is experiencing this discomfort. (While you are only choosing one to write about you will be responsible for knowing education for each of the discomforts.)

16. What are the common discomforts experienced in the third trimester? How can you as the nurse educate women to successfully handle these discomforts?

- **SOB & Dyspnea**: Adjust body position for maximum expansion of the chest; avoid large meals; raise head of bed; take slow, deep breaths; and periodically stand up and stretch with arms above head and take a deep breath

- **Heartburn & Indigestion**: Maintain proper posture & remain in sitting position for 1-3 hrs after eating; consume small, frequent meals, avoid foods that act as triggers, avoid late-night cravings, and elevate head of bed by 10-30 degrees
- **Dependent Edema**: Elevate feet & legs above heart level; wear support hose when standing; change position frequently; lie on left side; avoid foods high in sodium; drink 6-8 glasses of water daily; and avoid intake of sugars & fats
- **Braxton Hicks Contractions**: stay well hydrated and to rest in a left-side-lying position to help relieve the discomfort; and use breathing techniques to ease discomfort

17. Should pregnant women receive vaccines, if so, which ones & why?

Vaccines that should be considered if otherwise indicated are hepatitis B, Influenza (inactivated) injection, Tetanus/dptheria (Tdap), Meningococcal, and Rabies. These vaccines are to keep women and the baby healthy.

18. *Do not spend time on looking at the information on drug classifications, we will discuss this in class.*

19. Briefly explain in your own words the value of prenatal/childbirth education classes.

Prenatal/childbirth education classes can help reduce the anxiety women may feel about labor and deliver and can also help new parents adapt more easily to life with a newborn.