

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.

**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 pubic hair after puberty. The mons pubis protects the symphysis pubis during sexual intercourse.

**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.

**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).

**Clitoris:** The clitoris 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).

**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.

**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 and secrete, in cyclic fashion, the female sex hormones estrogen and progesterone

**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 because of sexual intercourse or artificial insemination, fertilization of the ovum can occur in the distal portion of the tube.

**Uterus:** The 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.

**Fundus of uterus:** The 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.

**Cervix:** The cervix is the lower part of the uterus, sometimes referred to as the neck. 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 sphincter.

**Vagina:** The 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.

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. The nurse advises women 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  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	Assumption you cannot get pregnant when breast feeding	None	Pro: can be affective, controlled by mom  Con: only affective for 6 months post birth if woman is exclusively breast feeding every few hours	None	pumping or manual expression of milk may reduce effectiveness  no supplementing
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	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  Replace every 2 years  Requires proper insertion and removal

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

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

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

	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, 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 reaching the ovum, thus preventing conception.

Vasectomy is a procedure which 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/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	Immunologic survey and prenatal screenings
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.

**Preembryonic stage:** This stage begins with fertilization 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

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

**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. Supplies the fetus with the nutrients and oxygen needed for growth.
2. Protection of the fetus from immune attack by the mother.
3. Removal of waste products from the fetus.
4. Induces the mother to bring more food to the placenta near the time of childbirth.
5. Production of hormones that prepare fetal organs for life outside the uterus

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

1. What are Braxton hick's contractions, Hegar's sign, Goodells sign, Chadwick's sign, and Ballotment?

**Braxton hick's 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 resulting from 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?

Human Chorionic Gonadotropin

Why is it so important to watch during pregnancy?

It is a glycoprotein produced in the placenta and fetal tissues. It can detect pregnancy when 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?

When women lie supine, or on their backs, the uterus can cause increased pressure on the inferior vena cava. This lowers blood pressure.

How can we educate her to prevent this?

We can educate the client that the syndrome 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:** enlarges in healthy women during pregnancy

**Pituitary:** weight increases by 1/3, increase in levels of binding proteins, production of hormones

**Pancreas:** acute pancreatitis is a rare complication of pregnancy from hyperstimulation

**Adrenal glands:** rate of clearance is decreased

**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
Oatmeal	Orange	Grilled chicken salad with avocado	Pear	Salmon with brown rice	Banana with peanut butter
Whole-wheat bread toast and grapes	Orange	Grilled chicken salad with avocado	Pear	Chicken stirfry	Banana with peanut butter
Oatmeal	Orange	Grilled chicken salad with avocado	Pear	Tuna Casserole	Banana with peanut butter

Whole-wheat bread toast and grapes	Orange	Grilled chicken salad with avocado	Pear	Trout with brown rice	Banana with peanut butter
Oatmeal	Orange	Grilled chicken salad with avocado	Pear	Pizza	Banana with peanut butter

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), 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. What is 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.

What often precedes the identification of pica?

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, fetal movement, hearing the heartbeat, etc. The mother accepts her new role and talks about the life she is growing.

**Mood swings:** 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.

## **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

Last menstrual period (LMP) 7/9/19

7/9/19- 3 months → 4/9/19

4/9/19 +7 days → 4/16/19

4/16/19 + 1 year = **4/16/20**

Last menstrual period (LMP) 12/24/16

12/24/16 – 3 months → 9/24/16

9/24/16 +7 days → 10/01/16

10/01/16 + 1 year = **10/01/17**

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

**G:** Gravida- total number of pregnancies, including the current

**T:** Term births- the number of term gestations delivering between 38 and 42 weeks

**P:** Preterm births- the number of preterm pregnancies ending >20 weeks or viability but before completion of 37 weeks

**A:** Abortions- the number of pregnancies ending before 20 weeks or viability

**L:** Living children- the number of children currently living

6. What is meant by the term para?

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

7. What is linea nigra?

A brownish-black hyperpigmentation line that appears across the abdomen during pregnancy

How does fundal height correlate with gestation?

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	Initial prenatal visit, repeated as needed	Detects infection, anemia
Blood typing & Rh	Initial prenatal visit, again between 24 and 28 weeks if Rh-negative and non-sensitized	Determines the risk for maternal-fetal blood incompatibility
Rubella titer	Initial prenatal visit	Determine immunity to rubella
Hepatitis B	Initial prenatal visit	Identify if patient is a carrier
HIV	Initial prenatal visit	Detect HIV infection
STI screening	Initial prenatal visit, repeated after treatment	Detect STIs that may be transmitted to baby through placenta, birth, or breast milk
Cervical smears- G/C	Initial prenatal visit, repeated after treatment	Detect STIs that can transfer to baby through the birth canal during birth
Cervical smears- group B strep	35 to 37 week appointment	Determine if GBS infection is present before birth
Blood Glucose Tolerance test	Initial prenatal visit, 24 to 28 week gestation appointment	Determine risk for gestational diabetes and need for follow-up
MSAFP-Maternal Serum Alpha Feto-protein	Between 15 to 22 week appointments	Rule out Down Syndrome and neural tube defects

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

Initial prenatal visit (within first 12 weeks)

Determine estimation of due date, obtain complete history, physical assessment to establish baseline, initial lab tests, rubella titer, UA, renal function test, pap smear, cervical cultures, HIV antibody, Hep B surface antigen, toxoplasmosis, and RPR/VRDL

Monthly visits from 16-28 weeks, visits every 2 weeks from 29-36 weeks, weekly visits from 36-40 weeks

Weight and blood pressure, urine testing (protein, glucose, ketones, nitrates), fundal height measurement to assess fetal growth (starting in second trimester), fetal movement/well-being, fetal heart rate (110-160)

10. What danger signs are associated with the first trimester?

Spotting/bleeding (indicative of possible miscarriage), painful urination (indicative of infection), severe persistent vomiting (indicative of hyperemesis gravidarum), fever over 100F (indicative of infection), lower abdominal pain with dizziness accompanied by shoulder pain (indicative of ruptured ectopic pregnancy)

Second?

Regular uterine contractions (indicative of preterm labor), pain in calf increased with foot flexion (indicative of deep vein thrombosis), sudden gush/leakage of fluid from vagina (possible premature rupture of membranes), absence of fetal movement for more than 12 hours (indicative of possible fetal distress/demise)

Third?

Sudden weight gain, periorbital/facial edema, severe upper abdominal pain, headache with changes in vision, decrease in fetal daily movement for more than 24 hours (indicative of possible fetal distress/demise)

11. How is fetal well being assessed?

Biophysical profile (BPP)

Nonstress test

Contraction stress test

Amniocentesis

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

**Color:**

Findings: signs of a mature fetus include clear fluid with white flecks of vernix caseosa

Implications: Blood of maternal origin is usually harmless; “port wine” may indicate abruptio placentae; fetal blood may indicate damage to the fetal/placenta/umbilical cord vessels

**Bilirubin:**

Findings: should be absent at term

Implications: High levels are indicative of hemolytic disease in the neonate in isoimmunized pregnancies

**Meconium:**

Findings: absent at term unless in breech presentation

Implications: Presence indicates fetal hypotension or distress

**Lecithin to sphingomyelin ratio (L/S ration):**

Findings: Greater than 2 possibly indicative of fetal pulmonary maturity

Implications: Less than 2 is indicative of fetal pulmonary immaturity and subsequent respiratory distress syndrome

**Alpha-fetoprotein:**

Findings: Vary depending on gestational age and laboratory collection/analysis technique. The highest concentration should occur between 13 and 14 weeks.

Implications: Inappropriate increases may be indicative of neural tube defects (spina bifida, anencephaly), impending fetal death, congenital nephrosis, or contamination of the fetal blood.

**Bacteria:**

Findings: Should be absent

Implications: Indicative of chorioamnionitis when present

**Acetylcholinesterase:**

Findings: Should be absent

Implications: May be indicative of neural tube defects, exomphalos, or other serious malformations when present

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

Procedure: Seat client in a reclining chair or in semi-fowlers position, apply conduction gel to clients abdomen, apply two belts (fetal heart rate monitor, doppler transducer/tocotransducer) to clients abdomen to obtain tracing strips, have client press button on handheld event marker when they feel the fetus move, activate vibroacoustic stimulation for 3 seconds if no movement is felt

Expected Results: Considered reactive if fetal heart rate increases 15bpm for at least 15 seconds after 32 weeks and occurs two or more times during a 20 minute time frame

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

Procedure: explain procedure, advise client to drink 1 quart of water prior to aid in uterus positioning, assist client into supine position with pillows under head and knees, apply transducer gel to clients abdomen at room temperature, use ultrasound to visualize physical/physiological characteristics of the fetus for responses to stimuli

Expected Results: FHR (reactive to nonstress test), fetal breathing movements (1 episode of greater than 30 seconds in 30 minutes), gross body movements (at least 3 body or limb extensions with return to flexion in 30 minutes), fetal tone (at least 1 episode of extension with return to flexion), qualitative amniotic fluid volume (at least 1 pocket of fluid measuring at least 2 cm in 2 perpendicular planes); results should be between 8 and 10 points

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.)

Discomfort: Heartburn

Education for Mom: "During the second and third trimesters of your pregnancy, you may begin to notice heartburn. This is because your stomach is being moved from its regular position because of your growing baby. There are a few techniques to alleviate this discomfort. Try to eat small, frequent meals so your stomach does not get too empty or full. Also try not to lay down too soon after eating as this can exacerbate the problem. Make sure you call the office and talk to the provider about an over-the-counter antacid before you begin taking anything new. Do you have any questions?"

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

Urinary frequency (empty bladder frequently, decrease fluid intake before bedtime, use perineal pads), UTI (wipe front to back, avoid bubble baths), fatigue (encourage frequent rest periods), heartburn (stomach displaced by enlarging uterus, eat small/frequent meals), constipation (drink

plenty of water, high fiber diet, regular exercise), hemorrhoids (warm sitz bath, with hazel pads, topical ointments), backaches (exercise regularly, pelvic tilt exercises), shortness of breath (maintain good posture, sleep with extra pillows)

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

Flu immunization: made with an inactivated virus, will protect mom and baby from the flu variant used if pregnant during flu season

Tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccine: protect the newborn from pertussis, should be given between 27 and 36 weeks of pregnancy

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: inform clients about how to best take care of themselves to ensure proper fetal development, maintain health of client and fetus, what changes to expect in maternal body

Childbirth: inform client of different options for birth, what to expect during labor and delivery, what to expect following delivery, information on breast feeding/formula, information on immunizations

Providing this information to expectant parents is essential in minimizing anxiety during pregnancy, ensuring healthy moms and babies, as well as providing all possible options for parents to choose from for their unborn child.