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- elevated, rounded fleshy prominence over the symphysis pubis, fatty tissue covered with pubic hair after puberty, protects the symphysis pubis during sexual intercourse (RKC pg 92)

   b. Labia majora- large and fleshy, contains sweat and sebaceous glands- after puberty they are covered with hair, function is to protect the vaginal opening. (RKC pg 92)

   c. Labia minora- delicate, hairless inner folds of skin, they can be very small or up to 2 inches wide, lie inside the labia majora and surround openings to the vagina and urethra. Grow down the anterior inner part of the majora on each side, highly vascular and abundant in nerve supply, lubricate the vulva, swell in response to stimulation and are highly sensitive. (RKC, pg 92)

   d. Clitoris- small cylindrical mass of erectile tissue and nerves, located at the anterior junction of the labia minora, very sensitive to touch, stimulation, and temperature and can become erect (RKC pg 93)

   e. Perineum- most posterior part of the external female reproductive organs. Located between the vulva and the anus, made up of skin, muscle, and fascia. Can become lacerated or incised during childbirth and may need to be repaired with sutures. (RKC pg 93)

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

   a. Ovary- set of paired glands resembling unshelled almonds that are set in the pelvic cavity below and to either side of the umbilicus, usually pearl colored and oblong (RKC pg 96)

b. Fallopian tube - hollow cylindrical structures that extend 2 to 3 inches from the upper edge of the uterus toward the ovaries. Large opening at the end for the egg to fall into when it is released from the ovary. Cilia line the fallopian tube and the muscles in the tube walls. (RKC pg 95)

c. Uterus- pear shaped muscular organ at the top of the vagina, lies behind the bladder and in front of the rectum and is anchored in position by eight ligaments. Position is altered by

gravity or with change of posture, and is the size and shape of an inverted pear, site of menstruation, implantation of a fertilized ovum, development of the fetus, and labor. Before pregnancy it is 3 inches long, 2 inches wide, and 1 inch thick, after pregnancy it remains larger than before pregnancy. (RKC pg 94)

d. Fundus of uterus- top portion opposite from the cervix, routinely measured in pregnancy to determine growth rates

e. Cervix- lower part of the uterus, opens into the vagina and has a channel that allows sperm to enter the uterus and menstrual discharge to exit, composed of fibrous connective tissue. (RKC pg 95)

f. Vagina- highly distensible canal situated in front of the rectum and behind the bladder. Tubular, fibromuscular organs lined with mucous membranes that lie in a series of transverse folds called rugae. (RKC pg 93)

3. Menstrual Cycle hormones

Hormone	Purpose	
Estrogen	Crucial for the development and maturation of the follicle. Causes the uterus to increase in size and weight. (RKC pg 101)	
Progesterone	Increase just before ovulation and peak 5 to 7 days after ovulation. Reduces uterine contractions on the uterus allowing pregnancy to be maintained. (RKC pg 101)	
Prostaglandins	Primary mediators of the body's inflammatory processes and are essential for the normal physiological function of the female reproductive system. Play a key role in ovulation by freezing the ovum inside the graafian follicle. (RKC pg 101)	

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

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

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

Education on causes and treatment- No absolute way to prevent infertility

Risk factors for females include:

- Overweight or underweight
- Hormonal imbalances leading to irregular ovulation
- Uterine fibroids
- Tubal blockages
- Cervical stenosis
- Reduced oocyte quality
- Chromosomal abnormalities
- congenital anomalies of the uterus
- Immune system disorder
- Chronic illnesses such as diabetes, thyroid diseases, asthma
- STIs
- Ectopic pregnancy
- Older than 27 yo
- Endometriosis
- Turner syndrome
- Eating disorders
- Hx of PID
- Smoking and alcohol consumption
- Multiple miscarriages
- Menstrual abnormalities
- Exposure to chemotherapeutic agents
- Psychosocial stress

Risk factors for men:

- Exposure to toxic substances (lead, mercury, x-ray, chemotherapy)
- Cigarette or marijuana smoke
- Heavy alcohol consumption
- Use of prescription drugs for ulcers or psoriasis
- Exposure of the genitals to high temperatures (hot tubs or sauna)
- Hernia repair
- Obesity is associated with decreased sperm quality
- Cushing syndrome
- Frequent long-distance cycling or running
- STIs
- Undescended testicles
- Mumps after puberty

Treatment options:

- Lifestyle chances (losing weight, smoking cessation)
- Taking clomiphene (promotes ovulation)
- Hormone injections (promote ovulation)
- Intrauterine insemination

- IVF

2. What is IVF? p132

Steps of IVF: Ovulation, capture of the ova, fertilization of ova and growth in culture medium, insertion of fertilized ova into uterus

Oocytes are fertilized in the lab and transferred to the uterus.

Usually indicated for tubal obstruction, endometriosis, pelvic adhesions, and low sperm count.

Nurse advises the 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	Male pulls out before ejaculation	No side effects but higher risk of getting pregnant	Pro:involves no devices and is always available Con: requires considerable self-control by the man	None but it isn't as effective in preventing pregnancy. Does not protect against STI's	Places woman in trusting and dependent roe
Lactational amenorrhea method	Uses lactational infertility for protection from pregnancy	No side effect	Pro: no cost, not coitus linked Con: temporary method, effective	None	Mother must breastfeed infant on demand without supplementation for 6 mo

			for only 6 month after giving birth		
Condom (Male/Female)	Place over erect penis, blocking sperm Insert vaginally to block sperm	No side effect	Pro: protection against STIs Con: decreased sensation for the male, integers with secual spontaneity, breakage risk, expensive for frequent use, cumbersome, noisy during sex act, for single use only	Latex or polyurethane allergy	Couple must be instructed on proper use of condom
Diaphragm	Shallow latex cup with spring mechanism in its rim to hold in place in the vagina	Increase in UTI's	Pro:Does NOT use hormone, considered medically safe, provides some protection against cervical	Allergic to latex, rubber, polyurethane or spermicide. May become dislodged in female superior position	Women must be taught to insert and remove correctly

			cancer Con: Requires accurate fitting by healthcare professional, increase in UTIs		
Oral contraceptives (combination & progestin only)	Pill taken orally daily, preferably at the same time daily	Irregular bleeding, weight gain, nausea, mood changes, high bp, and blood clots	Combo Pro: easy to use, high effectiveness, projects against ovarian and endometrial cancer Con: user must remember to take daily, possible undesirable side effects, high cost for some women, prescription needed Mini Pro:no estrogen related	Combo: dizziness, nausea, mood changes, high BP,blood clots, HA, strokes Mini: irregular bleeding, weight gain, increased incidence of ectopic pregnancy	Combo: Assessed to make sure not a smoker and does not have a hx of thromboembolic disease Mini:Screened for hx of functional ovarian cysts, previous ectopic pregnancy and hyperlipidemia prior to giving prescription

			side effects, may be used dur lactation, may be used with hx of thrombophlebitis Con: must take with meticulous accuracy, cause irregular bleeding, less effective than combo pill		
Natural Family Planning (Fertility Awareness-based methods)	Refrain from intercourse during fertile period Based on assumption that a single ovum is released from the ovary 14 days before the next menstrual period	None	Pros: acceptable to most religions. Cons: high failure rate	None Can't predict exactly when ovulation will occur.	High level of couple commitment. Women must have regular cycles for this method to be effective. Sperm can live up to 5 days after intercourse so there needs to be a period of abstinence before and after ovulation.

	and lives approximately 24 hours.				
Intrauterine devices	T-shaped device inserted into the uterus that releases copper or progesterone or levonorgestrel	Cramps, bleeding, pelvic inflammatory disease, infertility, perforation of the uterus	Pro: Immediately and highly effective, allows for sexual spontaneity, can be used during lactation, return to fertility not impaired, requires no motivation by user after insertion Con: Requires skilled professional, menstrual irregularities, prolonged amenorrhea, can be unknowingly expelled, may increase risk of	PID or infertility	Instruct woman how to locate string to check for monthly placement

			pelvic infection, regularly check string to verify placement, no protecting against STIs, delay of fertility after discontinuing for 6-12 mo		
Methoxyprogesterone	Injectable progestin that prevents ovulation	Depression	Pros: Highly effective, 3 month duration, can be used by smokers and during lactation. Cons: Return every 12 week, weight gain, headaches, depression, delayed infertility after	Depression	Inform woman that infertility is delayed after stopping injections
Subdermal implant	Time release implant	Heavy bleeding	Pro: long duration of action,	If bleeding is heavy, anemia may occur	Before insertion, assess woman to make sure she's aware this method

	of levonorgestrel for 3 yrs	causing anemia	low dose of hormones, reversible, estrogen-free Con: Irregular bleeding, weight gain, breast tenderness, difficulty in removal		will produce 3yr of infertility

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.

(RKC pg 142)

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

Tubal Ligation- for women: a laparoscope is inserted through a small subumbilical incision to provide a view of the fallopian tubes. They are grasped and sealed with a cauterizing instrument or with rings, bands, clips, or cut and tied. New method inserts a coil in the fallopian tube and over a period of three months this growth blocks the tubes. (RKC pg 143 and 144)

Vasectomy- performed under local anesthesia in a urologists office and most men can return to work and normal activities in a day or two. Involves in making a small incision into the scrotum and cutting the vas deferens which carries sperm from the testes to the penis. Complications

from vasectomy are rare and minor. Immediate risk factors include infection, hematoma, and pain. Semen no longer contains sperm, this is not immediate and the man must submit semen specimens for analysis until two specimens show that no sperm is present. (RKC pg 144)

Essure- nonsurgical, non hormonal permanent birth control method that is 99% effective. A tiny coil 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. (RKC pg. 153)

7. Discuss the differences between surgical and medical abortion.

Surgical- three major types are vacuum aspiration, dilation, and evacuation and induction. It is an ambulatory procedure done under local anesthesia. The cervix is dilated prior to surgery and then products of contraceptive are removed by suction evacuation. Uterus is gently scraped by curettage to make sure that it is empty. Only lasts about 10 minutes. Major risks in the first trimester are infection, retained tissue, hemorrhage, or cervical tear. (RKC pg 149)

Medical- administration of medication either vaginally or orally. Medication occurs in the clinic or doctors office and may require two or four office visits and costs on average $400. There are currently only three drugs methotrexate, misoprostol, and mifepristone. (RKC pg 149 and 150)

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?

Chlamydia, Gonorrhea, Genital Herpes, Syphilis, Trichomoniasis, and Venereal Warts (RKC pg 163)

2. What is the treatment for Chlamydia?

Azithromycin (Zithromax), Doxycycline (Vibramycin), Erythromycin (EES), Ofloxacin (Floxin), sexual partners need evaluation, testing, and treatment, abstinence from sexual activity until therapy complete and symptoms no longer present, retesting in 3 to 4 months to rule out recurrence. (RKC pg 165)

3. What is the treatment for Gonorrhea?

Usually single dose of one of the following: Cefiximine (Suprax), Ciprofloxacin (Cipro), Ceftriaxone (Rocephin), Ofloxacin (Floxin), Levofloxin (Levaquin), No Floxin or Cipro if < 18 yrs or pregnant, Azithromycin (Zithromax), Doxycycline (Vibramycin), usually will be treated for co-infection with Chlamydia so a combination is given, sexual partners need evaluation, testing, and treatment also, abstinence from sexual activity until therapy complete and symptoms no longer present, Quinolone therapy is not recommended due to emergence of quinolone-resistant strain. (RKC pg 166)

4. Which pregnant women should be screened for Syphyllis?

All of them in their first prenatal visit (RKC pg 181)

When should they be screened?

In their first prenatal visit (RKC pg 181)

What are the names of the tests used for screening?

Nontreponemal tests and Treponemal tests (RKC pg 181)

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

Hormone fluctuations (RKC pg 171 and 172)

6. Which pregnant women should be screened for Syphyllis?

Same question above!

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

Includes a three part regimen of having the mother take an oral antiretroviral agent at 14 to 34 weeks of gestation; it is continued throughout pregnancy. During labor, an antiretroviral agent is administered intravenously until delivery. An antiretroviral syrup is administered to the infant within the first 12 hours after birth. (RKC pg 189)

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

It can be passed on to the baby during birth. The newborn may develop them on the skin or mouth. Can cause mental retardation, premature birth, low birthweight, blindness, and even death. (RKC pg 163) Treatment- antiviral used to treat first episode, recurrence, and suppression, Acyclovir (Zovirax), famciclovir, and valacyclovir, does not cure just controls symptoms, sexual partners benefit from from evaluation and counseling- if symptomatic need treatment, if asymptomatic offer testing and education. (RKC pg 167)

9. Discuss each of the following for cytomegalovirus:

Pathophysiology	Transmitted via bodily fluids, the most common congenital and perinatal viral infection. Pregnant women acquire it from sexual contact, blood transfusions, kissing, and contact with children in daycares.
Nursing Assessment	Nurses must educate women on the chance of contracting this disease.
Testing	No screening can be performed and no vaccinations available.

Management	Wash hands frequently, do not share cups, eating utensils, towels, do not put a child's pacifier in mouth, clean everything in the household.
Patient education needs	CMV during pregnancy can result in abortion, stillbirth, low birth weight, microcephaly, deafness, blindness, and so on.

10. Discuss each of the following for Group B streptococcus: (RKC pg 704)

Pathophysiology	Naturally occurring bacterium found in approximately 50% of healthy adults. Approximately 25% of pregnant women carry GBS in the rectum and vagina introducing risk of colonization of the fetus during birth. Most common cause of sepsis and meningitis in newborns and frequent cause of newborn pneumonia.
Nursing Assessment	Ask prenatal history, previous infections, determine if the membranes have ruptured and the time of rupture, monitor vital signs, assess for other risk factors for prenatal transmission of GBS, document info to help prevent vertical transmission to the newborn
Testing	Screened at 35 to 37 weeks and treated with Penicillin based anti-infective agents immediately and during labor if they are positive
Management	Be sure pregnant women are screened between 35-37 weeks, notify if they are positive, begin treatment.
Patient education needs	Provide them with info on treatment, how to protect baby, what will need to be done for mother and baby

11. Discuss each of the following for Hepatitis B: p198 (RKC pg 701-702)

Pathophysiology	Most prevalent disease in the world. Life threatening liver disease occurs in 40% of people with hep B. Can be transmitted through blood, illicit drug use, and sexual contact. 100 times more infectious than HIV and can live outside of the body in dried blood for more than a week. Acutely infected can develop hepatitis with anorexia, nausea, vomiting, fever, abdominal pain, and jaundice.

Nursing Assessment	History of sexually transmitted infection, household contacts with HBV- infected persons, employment as a healthcare worker, abuse of intravenous drugs, sex worker, foreign birn, multiplpe sexual partners, Chinese, Southeast Asian, or African heritage, sexual partners who are HBV infected.
Testing	If positive, give HBIG, Hep-B Gammagee to adults, Recombivax-HB, Engerix-B to newborn within 12 hrs of birth, second and third doses given at 1 and 6 months.
Management	Give vaccines to mother and newborn, explain when they will be given, let them know preventative measures.
Patient education needs	Teach the woman about safer sex, good hand hygiene, use of standard precautions, hep B vaccine. Abstain from alcohol, avoid intravenous drug exposure or sharing needles, encourage vaccines, receive immediate treatment for any STI, know that newborns will receive vaccine shortly after birth, avoid contact with blood or body fluids, use condoms during sex, avoid sharing personal items.

R,K,& C Ch 10

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

Pre: fertilization through the second week

Embryonic: end of the 2nd-8th week

Fetal: end of 8th week until birth

2. List 5 functions of the placenta. See RKC Chapter 10 pp342-3

- Make hormones that support the fetus receiving nutrients
- Protect the fetus from immune attacks from the mother
- Removes waste products from the fetus.
- Induces the mother to bring more food in.
- Stimulates the hormones that prepare the fetal organs to function outside the mother's body

The placenta is not just a transfer organ but a hormone factory as well

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

1. What are:

Braxton hicks contractions- spontaneous, irregular, and painless contractions

Hegar's sign-softening of the lower uterine segment or isthmus

Goodell's sign- softening of the cervix

Chadwick's sign- bluish-purple coloration of the vaginal mucosa and cervix

Ballotment- examiner pushes against the woman's cervix during a pelvic exam and feels a rebound from the floating fetus

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

Preserves the corpus luteum and its progesterone production so that the endometrial lining of the uterus is maintained; this is the basis for pregnancy tests

It is released upon implantation and supports the corpus luteum -> supports endometrial lining -> maintains pregnancy.

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

The uterus falls back on the inferior vena cava when lying in supine position resulting in vena cava compression which reduces venous return and decreases cardiac output and blood pressure with increasing orthostatic stress. Tell the woman to rise slowly when getting up from supine position and encourage lying on the side to displace the uterus to the left and off the vena cava. (RKC pg 338)

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

Uterus- increase in size, weight, length, width, depth, volume, and overall capacity. More ovid shaped rather than pear shaped. (Unit 1 PP, 30)

Cervix- mucus plug forms, Goodell's sign positive- softens, Chadwick's sign- increased vascularization. (Unit 1 PP, 30)

Vagina- increased vascularity and thickening, vaginal vault lengthens, secretions- leukorrhea-acidic, thick, and white. (Unit PP, 30)

Ovaries- enlargement until about 12-14 weeks, stop ovulating (Unit 1 PP, 31)

Breasts- size increases, nipple size increase, nipples become more erect and pigmented, production of colostrum. (Unit 1 PP, 31)

Gastrointestinal system- heartburn, nausea, vomiting, prolong gallbladder emptying,

constipation, decreased peristalsis and smooth muscle relaxation, dental problems, gums become hyperemic, swollen, and bleed easily, hypersalivation. (Unit 1 PP, 32)

Cardiovascular system- blood volume increases, increased cardiac output, increased heart rate, increased venous return, increase in bp, increase in iron demands, fibrin, plasma fibrinogen levels and some clotting factors (Unit 1 PP, 33)

Respiratory system- breathing more diaphragmatic due to increased diaphragmatic excursion, chest circumference, and tidal volume, increase in oxygen consumption. (Unit 1 PP, 34)

Renal/urinary system-\musculoskeletal system- dilation of renal pelvis, elongation, widening, and increased in curve of ureters, increased in length and weight of kidneys, increased GFR, increased urine flow and volume, increased kidney activity with woman lying down. (Unit 1 PP, 35)

Integumentary system- softening and stretching of ligaments holding the sacroiliac joints and pubis symphysis, increased swayback and upper spine extension, forward shifting of center of gravity, increased in lumbosacral curve (lordosis), waddle gait, facial melasma, linea nigra, striae gravidarum, varicosities, vascular spiders, palmar erythema, decline in hair growth. (Unit 1 PP, 36)

Vascular related changes- Vascular changes during pregnancy manifested in the integumentary system include varicosities of the legs, vulva, and perineum. Another skin manifestation believed to be secondary to vascular changes and high estrogen levels, is the appearance of small blood vessels called vascular spiders. (RKC pg. 372)

Endocrine system-

Thyroid- enlarges slightly, more active, increased vascularity and hyperplasia, increased thyroid hormone secretion. (RKC pg 344)

Pituitary- FSH and LH secretion are inhibited, increased secretion of prolactin, TSH is reduced, decrease in growth hormone, melanocyte stimulating hormone increases, oxytocin increases (RKC pg 345)

Pancreas- insulin increases, glucose levels are low, hPL and other hormonal antagonists increase. (RKC pg 346)

Adrenal glands- increase in cortisol secretions, aldosterone is increased during pregnancy. (RKC pg 346)

Prostaglandin secretion- increased (RKC pg 346)

Placental secretion- produces hCG, hPL, relaxin, progesterone, and estrogen. (RKC pg 346)

Immune system- enhancement of innate immunity, suppression of adaptive immunity, increase risk of infection, influence the course of chronic disorders. (RKC pg 346)

5. Why are pregnant women often diagnosed with anemia?

Plasma increase exceeds the increase of RBC's normal hemoglobin and hematocrit values decrease- hemodilution causes anemia. (RKC pg 341)

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

hCG-preserves the corpus luteum and its progesterone production so that the endometrial lining of the uterus is maintained;this is the basis of pregnancy tests

hPL-modulates fetal and maternal metabolism, participates in the development of maternal breasts for lactation, and decreases maternal insulin sensitivity to increase its availability for fetal nutrition

Relaxin-acts synergistically with progesterone to maintain pregnancy, causes relaxation of the pelvic ligaments, softens the cervix in preparation for birth

Progesterone-maintains the endometrium, decreases contractility of the uterus, stimulates maternal metabolism and breast development, provides nourishment for the early conceptus

Estrogen-causes enlargement of a woman's breasts, uterus, and external genitalia; stimulates myometrial contractility

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

Prenatal vitamins are recommended as the standard of care. Folic acid and iron are important to help form new blood cells for the expanded maternal blood volume and to prevent anemia. Iron is essential for fetal growth and brain development and in the prevention of maternal anemia. An increase in folic acid is important before and in the early weeks of pregnancy to prevent neural tube defects in the fetus. (RKC pg. 378)

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

Iron and folic acid can be found in dark green leafy vegetables.

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
Low fat milk in non-artificially sweetened cereal	Carrots	Lean grilled chicken	1 cup strawberries	Spinach salad	1 cup of jello

Whole- grain toast	Broccoli	Cooked turkey sandwich on whole-wheat bread	Yogurt	1 oz poultry	½ cup of dried fruit
Oatmeal	String cheese	2 oz fish or tofu	Cooked dry beans	Baked sweet potato	1 cup of popcorn
Whole-wheat bagel with fat-free cream cheese	1 banana	Salad of deep leafy greens	½ cup of dried fruit	1 oz fish	Cup of peaches/mixed fruit
1 egg with spinach	Yogurt	Rice cake with peanut butter	Fat-free milk	Chicken taco with vegetables	Yogurt

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?

Artificial sweeteners are up for debate still. Avoid fish and other shellfish due to possible mercury consumption. Do not eat lunch meat, hotdogs or deli meats. Do not eat soft cheeses. Do not consume pate or other refrigerate meat spreads. Do not eat smoked seafood. Do not drink raw milk. Do not eat salads made in the store such as egg salad or tuna salad. (RKC pg. 381)

If a mother is underweight she should gain anywhere from 28 to 40 lbs. If she is normal weight she should gain anywhere from 25 to 35 lbs. If she is overweight she should gain anywhere from 15 to 25 lbs. If a mother is obese she should gain anywhere from 11 to 20 lbs. (RKC pg. 382)

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

Pica is the intense craving for and eating of non-food items. Pica is the compulsive ingestion of nonfood substances. Clinical manifestation of anemia often precede the identification of pica because the health care provider rarely addresses the behavior and the woman does not usually volunteer such information. (RKC pg. 385)

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

Ambivalence - having two or more conflicting feelings at once. For example, with an unplanned pregnancy, a mother may feel excited and scared at the same time. (RKC pg. 386)

Introversion - becoming more concerned with oneself. In pregnancy, the mother may become distant and only focus on herself and her baby.

Acceptance - coming to terms with the situation. For example, in pregnancy generally in the second trimester, the mother will begin to verbalize positive feelings and conceptualize her fetus.

Mood swings - Drastic changes in mood. Oftentimes in pregnancy women can go from happy to sad to frustrated rather quickly.

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

Self image can be positive or negative for pregnant women. Some pregnant women feel that they've never been more beautiful while others spend pregnancy feeling overweight and uncomfortable. Sexuality is pregnancy differs from woman to woman. Some are more confident while others want nothing to do with sexual activity. The relationship with the partner can become more complex. Some partners enjoy the role of the nurturer, while others experience alienation and may seek comfort or companionship elsewhere. (RKC pg. 387)

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

1. Why is preconception care important? It helps to identify and modify biomedical, behavioral, and social risks to a woman and her health before pregnancy through prevention and management.

2. What types of information should be obtained at the first prenatal appointment? Immunization status, vital signs, weight/height, medical history, reproductive health data, sexuality, sexual practices, nutritional history, lifestyle practices, psychosocial issues, medication/drug use, and discussion of support system including abuse history or risk.

3. What are the thresholds for diagnosis of overt diabetes during pregnancy? Having a fasting plasma glucose of 126 mg/dL, a hemoglobin A1c level of 6.5% or higher, or a random plasma glucose of 200 mg/dL or higher.

4. Calculate the following estimated due dates using Nagele's Rule:

a. Last menstrual period (LMP) 7/9/19- Add 7 days, 7/16/19, then subtract 3 months, 4/16/19 = due date

b. Last menstrual period (LMP) 12/24/16 Add 7 days, 12/31/16, then subtract 3 months 9/31/16= due date

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

G- Gravida, T- Term births, P- Preterm births, A- Abortions, L- Living children.

Gravida- total number of pregnancies, including the current one, no matter the outcome.

Term- births involve births delivering between 38-42 weeks gestation.

Preterm- births are the number of pregnancies ending after 20 weeks (viability) but before 37 weeks (from viability up to 37 weeks.)

Abortions- number of pregnancies ending before viability or 20 weeks.

Living- the number of children that are alive.

6. So what is meant by the term para? Para describes the number of pregnancies where a woman has given birth after 20 weeks, whether the fetus was viable or not.

7. What is linea nigra? How does fundal height correlate with gestation? Linea nigra is the brownish black pigmentation line running from the umbilicus to the symphysis pubis.

Fundal height- palpated at the symphysis pubis 12 weeks. At 16 weeks the fundus is midway between the umbilicus and symphysis pubis. At 20 weeks the fundus can be palpated at the umbilicus. By 36 weeks the fundus is right below the xiphoid process.

8. Fill in the following table:

Test	When are these done in the pregnancy?	Evaluation/meaning of results
CBC	First prenatal appointment. Later if the client shows signs	Evaluates Hgb, Hct, RBC to identify anemia, and WBC for infection, and

	and symptoms of anemia or if the patient has gestational hypertension that progresses to preeclampsia. On admission to labor and delivery	platelets to assess clotting.
Blood typing & Rh	First prenatal appointment. On admission to labor and delivery	Determines blood type and Rh factor to rule out any blood incompatibility or to determine if she will need RhoGAM.
Rubella titer	First prenatal appointment.	Detects antibodies for measles and will determine if she will need the immunization after birth.
Hepatitis B	First prenatal appointment.	Detects hepatitis antibody surface antigen to see if she has Hep B. HbsAg
HIV	First prenatal visit	Detects HIV antibodies to see if the fetus will need protection during birth and if mother will need antiretroviral meds.
STI screening	First prenatal visit	Detects STIs to determine if treatment needs to be done so that transmission to fetus will not occur.
Cervical smears-G/C	First prenatal visit-repeat during 3rd trimester	Detects abnormalities like cervical cancer, other STIs, and infections to start treatment
Cervical smears-group B strep	Sometimes tested in urine early in pregnancy. Usually tested at 35-37 weeks gestation via vaginal/anal swab.	Mother will receive antibiotics when she comes into labor. Preferably at least 2 doses prior to delivery.

Blood Glucose Tolerance test	Identifies hyperglycemia	1 hour GTT: done at initial visit for at-risk clients and then at 24 to 28 weeks for all. Results greater than 140 mg/dl requires follow up. 3 hour GTT: use in clients who have elevated 1 hr GTT as a screening tool for diabetes mellitus. A diagnosis of gestational diabetes require 2 elevated blood glucose readings.
MSAFP-Maternal Serum Alpha Feto-protein	Blood test done between 16-18 weeks gestation so requires accurate dating of the pregnancy.	Measures the elevated levels of maternal serum alpha-fetoprotein which is linked to the occurrence of fetal neural tube defects

9. How often are follow up visits and what things are assessed? Up to 28 weeks, BP weight, and urine (for proteins and glucose) are assed. Fundal height and fetal HR are done as well. Between 29 and 36 weeks, all previous assessments are done, as well as an assessment for edema. Between 36 and 40 weeks, all of the same assessments are done, as well as screening for Group B strep, gonorrhea, and chlamydia. Fetal positioning is also looked at. Review breast-feeding versus bottle feeding.

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

First – spotting or bleeding, painful urination, persistent vomiting, fever over 100F, lowered abdominal pain with dizziness and shoulder pain.

Second – regular uterine contractions, pain in calf, sudden leakage of fluid from vagina, and absence of fetal movement for 12 hours.

Third – sudden weight gain, facial edema, sever upper abdominal pain, headache, visual changes, and a decrease in fetal movement for 24 hours.

11. How is fetal well being assessed?

Ultrasounds: Can measure congenital malformations, multi fetal pregnancies, fetal size, fetal growth, fetal position, fetal heart rate, placenta location,

Doppler Flow studies: Not commonly done but rather for structural abnormalities, rhythm abnormalities, and altered fetal circulation

Maternal serum Alpha-Fetoprotein Analysis (MSAFP): Optimally done between 16-18 weeks. Screening for fetal neural tube defects **spina bifida**

Marker Screening Tests: Maternal serum, QUAD screen- MSAFP, hCG, unconjugated estriol, inhibin A (increases identification of Down syndrome).

Amniocentesis: can assess fetal heart rate (EFR), length, can't be done until 14-16 weeks at least.

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

a. Color- should be clear with white flecks of vernix caseosa in a mature fetus. Fetal blood may indicate damage to vessels.

b. Bilirubin- should be absent at term. A high level would indicate hemolytic disease.

c. Meconium- should be absent except in breech position. If present, it indicates hypotension or distress in fetus.

d. Lecithin to sphingomyelin ratio (L/S ration)- more than 2 generally indicates fetal pulmonary maturity. If less than 2, it indicate immaturity and a risk for the infant to have subsequent respiratory distress.

e. Alpha-fetoprotein- this can be measured in the amniotic fluid from an amniocentesis but it is most commonly done as a blood test around 14-26 weeks. Can vary. Highest concentration occurs around 13-14 weeks and is around 18.5 ng.ml. Inappropriate increases indicate neural tube defects, impending death, congenital nephrosis, or contamination of fetal blood.

f. Bacteria- should be absent. Presence indicates chorioamnionitis

g. Acetylcholinesterase- should be absent, presence indicates neural tube defects, omphalos, or other malformations

13. Describe the procedure and expected results for a non stress test. Non-stress test – provides an indirect measurement of uteroplacental function. Before procedure, mother eats a meal to stimulate fetal activity. She is then placed in the left later recumbent position. A fetal monitoring device is placed on her to record uterine activity and heart rate. The mother is given a button to press when she detects fetal movement, and the marks are tracked.

14. Describe the procedure and expected results for a biophysical profile (BPP). A biophysical profile uses a real-time ultrasound to allow assessment of fetal well-being. It includes fetal tone, movements, and breathing. It also discovers the ultrasound assessment of amniotic fluid volume with or without assessment of the fetal heart rate. It will identify fetus' that may be at risk for poor pregnancy outcomes. A total of 10 points is allowed with all 5 components being worth 2 points each. (Some places use 4 markers of fetal tone, movements, breathing & amniotic fluid volume with 2 points each-8)

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.)

1. Urinary Frequency or incontinence
    a. Try pelvic floor exercises to increase control over leakage
    b. Empty bladder when you first feel the urge
    c. Avoid caffeinated beverages, which stimulate voiding.
    d. Reduce your fluid intake after dinner to reduce nighttime urination
2. Fatigue
    a. Attempt to get a full night's sleep w/out interruptions
    b. Eat a healthy balanced diet
    c. Schedule a nap in the early afternoon daily
    d. When you are tired, rest
3. Nausea and vomiting
    a. Avoid an empty stomach at all times
    b. Eat dry crackers/toast in bed before rising
    c. Eat several small meals throughout the day
    d. Avoid brushing your teeth immediately after eating to avoid gag reflex
    e. Acupressure wristbands can be worn daily
    f. Drink fluids between meals rather than with meals
    g. Avoid greasy, fried foods or ones with a strong odor, such as cabbage or brussel sprouts
4. Backache

    a. Avoid standing or sitting in one position for long periods
    b. Apply heating pad on low setting to the small of your back
    c. Support your lower back with pillows when sitting
    d. Use proper body mechanics for lifting anything
    e. Avoid excessive bending, lifting, or walking without rest periods
    f. Wear supportive low-heeled shoes; avoid high heels
    g. Stand with shoulders back to maintain correct posture
5. Leg cramps
    a. Elevate legs above heart level frequently throughout the day
    b. If you get a cramp, straighten both legs and flex feet toward body
    c. Ask health care provider about taking additional calcium supplements which may reduce leg spasms
6. Varicosities
    a. Walk daily to improve circulation to extremities
    b. Elevate both legs above heart level while resting
    c. Avoid standing in one position for long periods of time
    d. Don’t wear constricting stockings and socks
    e. Don't cross legs when sitting for long periods
    f. Wear support stockings to promote better circulation
7. Hemorrhoids
    a. Establish a regular time for daily bowel elimination
    b. Avoid constipation and straining during defecation
    c. Prevent straining by drinking plenty of fluids and eating fiber rich foods and exercising daily
    d. Use warm sitz baths and cool witch hazel compresses for comfort
8. Constipation
    a. Increase your intake of foods high in fiber and drink at least 8oz glasses of fluid daily
    b. Ingest prunes or prune juice which are natural laxatives
    c. Consume warm liquids (tea) on rising, to stimulate peristalsis
    d. Exercise each day (brisk walking) to promote movement through the intestine
    e. Reduce the amount of cheese consumed
9. Heartburn/INdigestion
    a. Avoid spicy or greasy foods and eat small frequent meals
    b. Sleep on several pillows so that your head is elevated 30 degrees
    c. Stop smoking and avoid caffeinated drinks to reduce stimulation
    d. Avoid lying down for at least 3 hr after meals
    e. Try drinking sips of water to reduce burning sensation
    f. Avoid foods that trigger symptoms-fried foods, citrus, soda, chocolate
    g. Take antacids sparingly if burning is severe
10. Braxton Hicks Contractions
    a. Keep in mind that these contractions are a normal sensation. Try changing position or engaging in mild exercise to help reduce sensation

b. Drink more fluids if possible

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

-- Shortness of breath and dyspnea – explain that this is normal and will resolve once the fetus drops lower. Try moving body positions to allow for maximum expansion of chest and diaphragm. Lay with head elevated if needed.

-- Heartburn and Indigestion – suggest patient limit/avoid gas-producing or fatty foods. Encourage her to remain in a sitting position for 1-3 hours after consumption of food. Tell her to eat small, frequent meals instead of large meals.

--Dependent edema – Elevate feet and legs lots throughout the day, change positions frequently, lie on the left side to keep pressure off of the vena cava. Avoid knee-high stockings that compress at the knee, and avoid high intake of fats and sugars.

--Braxton Hicks contractions – Reassure woman that her contractions are normal and not of concern, walking may reduce Braxton Hicks contractions, stay well-hydrated, and lay on left side to help relieve the discomfort.

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

Hepatitis B, an inactivated influenza injection, Tdap, meningococcal, and rabies are all okay for women to have. Women **should not receive live, attenuated vaccines during pregnancy** i.e. live Measles, mumps, rubella (MMR), or for 1 month before pregnancy or varicella

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.

Childbirth classes help build the confidence in the body's ability to give birth. It is an opportunity for the parents to discuss any fears they may have about birth and labor. The instructor will discuss the different pain relief options available, breathing techniques, how to relax your body, and medications. Taking a tour of the birthing facility during the class will also help the mother be more at ease knowing what the facility looks like and become familiar with the environment.

Lamaze is a contemporary curriculum that supports a normal, natural, and healthy birth. The class focuses on breathing, relaxation, and massage techniques to alleviate pain.