

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 elevated, rounded, fleshy prominence made up of fatty tissue that overlays the symphysis pubis
 - b. Labia majora: Large and fleshy, are comparable to the scrotum in males
 - c. Labia minora: The delicate hairless inner folds of skin; very small or up to 2 in wide
 - d. Clitoris: A small, cylindrical mass of erectile tissue and nerves
 - e. Perineum: Most posterior part of the external female reproductive organs

2. Provide a brief description of the internal reproductive organs.
 - a. Ovary: A set of paired glands resembling unshelled almonds that are the organs of gamete production in the female

 - b. Fallopian tube: Known as oviducts, are hollow, cylindrical structures that extend 2 to 3 in from upper edges of the uterus toward the ovaries

 - c. Uterus: An inverted, pear-shaped muscular organ at the top of the vagina

 - d. Fundus of uterus: The top part of the uterus that is across from the cervix

 - e. Cervix: The lower part of the uterus, is sometimes called the neck of the uterus

 - f. Vagina: Highly muscular and distensible canal situated in front of the rectum and behind the bladder

3. Menstrual Cycle hormones

Hormone	Purpose
Estrogen	Is secreted by the ovaries and is crucial for the development and maturation of the follicle. Is predominant at the end of the proliferative phase, directly preceding ovulation. During the luteal phase, progesterone induces swelling and increased secretion of the endometrium. Often called the hormone of pregnancy because of its calming effect on the uterus, allowing pregnancy to be maintained.

Progesterone	Progesterone is secreted by the corpus luteum. Levels increase just before ovulation and peak 5 to 7 days after ovulation. During the luteal phase, progesterone induces swelling and increased secretion of the endometrium. Often called the hormone of pregnancy because of its calming effect on the uterus, allowing pregnancy to be maintained.
Prostaglandins	Prostaglandins are primary mediators of the body's inflammatory processes and are essential for the normal physiologic function of the female reproductive system. They are not technically hormones because they are produced by all tissues rather than by special glands.

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?

The inability to conceive a child after 1 year of regular sexual intercourse unprotected by contraception.

Overweight or underweight, uterine fibroids, tubal blockages, anovulation, cervical stenosis, reduced oocyte quality, chromosomal abnormalities, ectopic pregnancy.

Medical therapy, lifestyle changes, and alternative measures.

2. What is IVF?

In vitro fertilization, is a process of fertilization where an egg is combined with sperm outside the body, in vitro. Involves monitoring and stimulating a woman's ovulatory process, removing an ovum or ova from the woman's ovaries and letting sperm fertilise them in a liquid in a laboratory.

4. Birth Control options

Type	action	Side effect	Pro/con	Contraindications	Important Patient Teaching
Coitus interruptus	Man withdraws before ejaculation	Failure rate 22%	Involves no devices and is always available/ requires considerable self-control by the man	None	Places woman in trusting and dependent role
Lactational amenorrhea method	Uses lactational infertility for	Failure rate 1-2% chance	No cost' not coitus-linked/ Temporary method; effective for only 6	None	Mother must breastfeed infant on demand

	protection from pregnancy	of pregnancy in first 6 month	month after giving birth		without supplementation for 6 month
Condom	Thin sheath placed over an erect penis, blocking sperm; polyurethane sheath inserted vaginally to block sperm	Failure rate 18% and 21%	Widely available; low cost; physiologically safe-use controlled by woman; eliminates postcoital drainage of semen/ decreased sensation for man; interferes with sexual spontaneity; breakage risk-expensive for frequent use; cumbersome; noisy during sex act	Latex allergy/ allergy to polyurethane	Couple must be instructed on proper use of condom
Diaphragm	Shallow latex cup with spring mechanism in its rim to hold it in place in the vagina	Failure rate 12%	Nonhormonal; considered medically safe; provides some protection against cervical cancer/ requires accurate fitting by health care professional; increase in UTIs	Allergy to latex, rubber, polyurethane, or spermicide Report symptoms of toxic shock syndrome May become dislodged in female superior position	Woman must be taught to insert and remove diaphragm correctly
Oral contraceptives (combination & progestin only)	A pill that suppresses ovulation by combined action of estrogen and progestin/ A pill containing only progestin	Failure rate 9%	Easy to use; high rate of effectiveness; protection against ovarian and endometrial cancer- No estrogen-related side effects; may be used by lactating women; may be used by women	Dizziness, nausea, mood changes, high blood pressure, blood clots, heart attacks, strokes, irregular bleeding, weight gain, increased	Each woman must be assessed thoroughly to make sure she is not a smoker and does not have a history of thromboembolic disease-Wom

	that thickens cervical mucus to prevent sperm from penetrating		with history of thrombophlebitis/ user must remember to take pill daily; possible undesirable side effects; high cost for some women; prescription needed- Must be taken with meticulous accuracy; may cause irregular bleeding; less effective than combination pills	incidence of ectopic pregnancy	en should be screened for history of functional ovarian cysts, previous ectopic pregnancy, and hyperlipidemia prior to giving prescription
Natural Family Planning (Fertility Awareness-based methods)	Refrain from sex during fertile period	Failure rate 25%	No side effects; acceptable to most religious groups/ high failure rate with incorrect use	None	Requires high level of couple commitment
Intrauterine devices	A T-shaped device inserted into the uterus that releases copper, progesterone, or levonorgestrel	Failure rate 0.2%	It is immediately and highly effective; allows for sexual spontaneity; can be used during lactation; return to fertility no impaired; requires no active compliance by the user after insertion/ Insertion requires a skilled professional; menstrual irregularities; prolonged amenorrhea; can be unknowingly expelled; may increase the risk of pelvic infection; user must regularly check string for placement; no protection against STIs; delay of	Cramps, bleeding, pelvic inflammatory disease; infertility; perforation of the uterus	Instruct woman how to locate string to check monthly for placement

			fertility after discontinuing for possibly 6-12 month		
Methoxyprogesterone	A pill containing only progestin that thickens cervical mucus to prevent sperm from penetrating	Failure rate 9%	No estrogen-related side effects; may be used by lactating women; may be used by women with history of thrombophlebitis/ must be taken with meticulous accuracy; may cause irregular bleeding; less effective than combination pills	Irregular bleeding, weight gain, increased incidence of ectopic pregnancy	Women should be screened for history of functional ovarian cysts, previous ectopic pregnancy, and hyperlipidemia prior to giving prescription
Subdermal implant	A time-release implant of levonorgestrel for 3 years	Failure 0.05%	Long duration of action; low dose of hormones; reversible; estrogen-free/ irregular bleeding; weight gain; breast tenderness; headaches; difficulty in removal	If bleeding is heavy, anemia may occur	Before insertion, assess woman to make sure she is aware that this method will produce about 3 years 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 missing

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

Tubal ligation: Fallopian tubes are grasped and sealed with a cauterizing instrument, rings, bands, clips, or is cut and tied

Essure: Non surgical and non hormonal form of permanent birth control. A tiny coil is released into the Fallopian tubes through the cervix. The coil promotes tissue growth that blocks the tubes creating a barrier for sperm to get through.

Vasectomy: Male sterilization done through a surgical procedure where there is a small incision in the scrotum in order to cut the vas deferens and prohibit sperm from traveling through.

7. Discuss the differences between surgical and medical abortion.

Surgical abortion: An ambulatory procedure done under local anesthesia, cervix is dilated prior to surgery and then the products of conception are removed by suction evacuation. The uterus may gently be scraped by curettage to make sure that it is empty. The procedure lasts about 10 minutes.

Medical abortion: achieved through administration of medication either vaginally or orally. The administration of medication occurs in the clinic or doctor's office, may require more than one office visit, and costs between \$500 and \$800. The most common regimen in the United States involves the use of two different medications, mifepristone and misoprostol.

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, other agents (HIV, syphilis, varicella, and fifth disease), Rubella, Cytomegalovirus, Herpes simplex

2. What is the treatment for Chlamydia?

Azithromycin, Doxycycline, Erythromycin, Levofloxacin

3. What is the treatment for Gonorrhea?

Ceftriaxone and Azithromycin

4. Which pregnant women should be screened for Syphilis?

All pregnant clients should be screened at the first prenatal visit and rescreened in the third trimester if at high risk.

When should they be screened?

At the first prenatal visit and in the third trimester if at high risk

What are the names of the tests used for screening?

Serology tests and Microscopic

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

Resistant to treatment during pregnancy

6. Which pregnant women should be screened for Syphilis?

All pregnant women

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

Antiretroviral therapy and Highly active antiretroviral therapy

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

The lesions can expand and obscure the birth canal. Bichloroacetic acid, trichloroacetic acid, and podophyllin.

9. Discuss each of the following for cytomegalovirus:

Pathophysiology	A member of the herpesvirus family, infects more than 60% of the human population. Which is transmitted through bodily fluids.
Nursing Assessment	Most women are asymptomatic and do not know that they have been exposed to CMV. Newborns, CMV inclusion disease.
Testing	Prenatal screening for CMV infection is not routinely performed.
Management	Supporting childbearing-age women at risk for CMV infection.
Patient education needs	Wash hands frequently with soap and water and wear gloves, especially after diaper changes, feeding, wiping nose or drool, and handling children's toys, do not share towels or washcloths

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

Pathophysiology	A naturally occurring bacterium found in approximately 50% of healthy adults
Nursing Assessment	Reviewing the woman's prenatal history, and ask about any previous infection. Woman's membranes have ruptured and the time of rupture.
Testing	A group b strep screening between weeks 35 and 37 of pregnancy.
Management	To make sure pregnant women between 36 and 37 weeks' gestation are universally screened for GBS infection during a prenatal visit and if positive receive appropriate intrapartum antibiotic prophylaxis.
Patient education needs	Notify the labor and delivery nurse of GBS status. Decrease the neonatal risks by being screened for GBS at 35 and 38 weeks of gestation.

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

Pathophysiology	The virus is 100 times more infectious than HIV and, unlike HIV, it can live outside the body in dried blood for more than a week.
Nursing Assessment	History of STIs, household contacts with HBV-infected persons, employment as a health care provider, abuse of IV drugs, prostitution, foreign born, multiple sexual partners, sexual partners who are HBV-infected
Testing	Blood tests
Management	Prevention of HBV is essential. Teach the woman about safer sex practices, good hand hygiene techniques, and the use of standard precautions.
Patient education needs	Protection can be afforded with the highly effective hepatitis B vaccine.

R,K,& C Ch 10

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

Preembryonic Stage: first two weeks from fertilization

Embryonic Stage: Development begins at day 15 after conception and continues through week 8. Basic structures of all major body organs and the main external features are completed during this time period.

Fetal Stages: The time from the end of the eighth week until birth. The longest period of prenatal development. The conceptus is mature enough to be called a fetus. All major systems are present in their basic form, dramatic growth and refinement of all organ systems take place during the fetal period.

2. List 5 functions of the placenta. See RKC Chapter 10 pp342-3
 - Provides nutrients to the fetus

- Gas Exchange
- Metabolic Transfer
- Hormone Secretion
- Fetal Protection

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

1. What are:

Braxton hicks contractions- False contractions that are painless, irregular, and usually relieved by walking

Hegars sign- Softening and compressibility of lower uterus

Goodells sign- Softening of cervical tip

Chadwicks sign- Deepened violet-bluish color of cervix and vaginal mucosa

Ballotment- Rebound of unengaged fetus

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

Human Chorionic gonadotropin is a hormone normally produced by the placenta. It can check how well the pregnancy is going and the development of the baby.

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

When the gravid uterus compresses the inferior vena cava when a pregnant woman is in a supine position. Left lateral tilt to 15 to 30 degrees is used by placing a wedge under the right hip and is used in a practice for labor and delivery.

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

Uterus- Grows at a steady and predictable rate during pregnancy, normally pear-shaped, the uterus expands more in length than width and exits the pelvis by 12 weeks' gestation.

Cervix- The cervix goes from a soften to a thick mucus plug formed to block and protect the opening from bacterial invasion, cyanosis or bluish purple discoloration, the cervical ripening begins about 4 weeks before birth.

Vagina- Vascularity increases because of the influences of estrogen, resulting in pelvic congestion and hypertrophy of the vagina in preparation for the distention needed for birth.

Ovaries- Ovulation ceases during pregnancy because of the elevated levels of estrogen and progesterone.

Breasts- The breasts increase in fullness, becoming more tender, and grow larger throughout pregnancy under the influence of estrogen and progesterone.

Gastrointestinal system- The increase production of vitamins, along with slowing of the gastric emptying combined with relaxation of the cardiac sphincter allows reflux, which causes heartburn.

Cardiovascular system- More blood and more oxygen

Respiratory system- Oxygen consumption reflects the uptick of maternal metabolism by increasing between 290-30%. The space available to house the lungs decreases as the uterus puts pressure on the diaphragm and causes it to shift upward. Deeper breathing is more common as pregnancy progresses. This increases results in maternal hyperventilation and hypocapnia. Also there is more diaphragmatic breathing then abdominal.

Renal/urinary system-\musculoskeletal system- During pregnancy the urinary tract changes by increased water retention which causes reduction of plasma osmolality. The renal pelvis and ureter become relaxed and dilated. The kidneys increase in size with an increased urine volume. the musculoskeletal system will change in pregnancy because with womens weight gain and as the baby grows the mothers weight will no longer be in the center of her body it will be more anteroposterior which means the mother will have to lean backward to maintain balance.

Integumentary system- A number of changes happen women's integumentary system changes during pregnancy due to shifts in their hormones and blood flow. Their area around their nipples, inner thighs, genitals and neck may be darker than normal.

Vascular related changes- pregnancy may cause vascular related changes such as spider angioma and palmar erythema. This can be in areas such as legs, vulva, and perineum.

Endocrine system:

Thyroid- Becomes slightly enlarged and more active during pregnancy. Increase is TSH during pregnancy and basal metabolic rate increases by 25% and same with the heart rate and cardiac output

Pituitary- Enlarges greatly, increases by 33% and is one of the most affected organs in which major changes in anatomy and physiology take place.

Pancreas- secretes more insulin because the baby puts more demands on insulin causing the pancreas to make more insulin

Adrenal glands- increase in cortisol secretion and the rate of clearance of cortisol is decreased. increase in aldosterone.

Prostaglandin secretion- this is what is secreted and helps cause the cervix to dilate and contractions to occur

Placental secretion- secretes the four main hormones into the blood to support pregnancy and fetal growth. The four main hormones are hCG, hPL, estrogens, and progesterone.

Immune system- Changes so it can protect the baby and the mother from disease. Some parts are enhanced while others are decreased which creates a balance that protects the baby from sickness without harming the mother.

5. Why are pregnant women often diagnosed with anemia?

- a. This is likely because many women lack the sufficient amount of iron that the mother and baby need for the second and third trimesters. IT could also be because of hormonal changes that cause an increase in sodium and water retention which does not increase in RBC production which may cause hgb and hct levels to decrease.

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

hCG- Responsible for maintaining the maternal corpus luteum, which secretes progesterone and estrogens, with synthesis occurring before implantation. Production for fetal trophoblasts cells until the placenta is developed sufficient to take over that function. Used for early pregnancy tests.

hPL- Responsible for giving nutrition to the fetus and it stimulates milk glands in the breasts for breastfeeding.

Relaxin- hormone produced by the ovary and the placenta with important effects in the female reproductive system during pregnancy. In preparation for childbirth, it relaxes the ligaments in preparation for childbirth.

Progesterone- helps to fertilize an egg to be implanted in the uterus to establish pregnancy and help maintain a healthy pregnancy. Women naturally produce this in the ovaries, the placenta, and the adrenal glands.

Estrogen- Promotes enlargements of genitals, uterus, and breasts and increases vascularity causing vasodilation. Relaxation of pelvic ligaments and joints. Also associated with hyperpigmentation, vascular changes in skin, increased activity of salivary glands and hyperemia of gums and mucus membranes. Also aids in developing the ductal system of the breasts in preparing for lactation.

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

- a. Folic acid, iron, and prenatal vitamins are important for pregnant women to take during pregnancy because the mother's body is requiring more than what the body can make on its own. Iron and folic acid are needed for new blood cells for the increased maternal blood volume to prevent anemia.

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

- a. folic acid: leafy green vegetables, dried peas and beans, seeds, and orange juice, breads, cereals and other grains fortified w/ folic acid
- b. Iron: organ meats, red meats, fish, poultry, dried beans and peas, fortified cereals and bread

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
Omelet with spinach and cheese	Orange	Liver and Onions	Beef Jerky	Grilled Cheese	Hummus
Banana	Carrots	Fruit Cocktail	Raisins	Mixed Berries	Apple
V-8 Juice	Turkey Slices	Green Beans	Garden Salad	Tomato Soup	Celery Sticks
Yogurt	Cheese Slices	Milk	String Cheese	Milk	Yogurt
Oatmeal	Crackers	Bread	Mixed Nuts	*Bread in grilled cheese	Pita Bread

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?

- a. Pregnant women should avoid artificial sweeteners, fish and shellfish because of traces of mercury found in them, food that contains the bacteria *Listeria*, and hotdogs, deli meats, soft cheese, meat spreads, and unpasteurized milk or products that include unpasteurized milk. Women should also avoid alcohol, caffeine, and fried fatty, and spicy foods as it can increase their nausea and vomiting.

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

- a. This is when you are craving items that are not nutritious food items, such as ice. This is often associated with anemia.

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

Ambivalence: When pregnant women are unsure if they want to have a child at that particular moment. Mixed emotions if you will.

Introversion: When the mother is feeling lots of tiredness and tends to stay home and away from the public

Acceptance: When the mother is satisfied with her pregnancy and the ups and downs that come with the process of making a child. The mother adapts to each change and makes the best out of it.

Mood swings: This happens when the pregnancy hormones take over during the early days of gestation when estrogen and progesterone take over and cause a lot of emotional distress.

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

- a. Pregnancy takes a huge toll on the body and when the mother forms a human child in her belly she may begin to gain weight, form stretch marks, or even have surgical scars from the delivery. The mother can go from being her perfect body type to a totally different perspective after the child is born. This big of a change can be detrimental to some mothers. She may not see herself as attractive or beautiful anymore. Her sexuality may change because she feels ashamed of her body so she may not want to engage in sexual activity. The mothers relationship with the partner may also change because she feels ashamed of her changed body and may not want to show herself to her partner.

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

1. Why is preconception care important?
Preconception care is important because it helps to prevent and manage any medical, behavioral, or social risks towards her health or pregnancy. It is used to improve perinatal outcomes and focus on maternal health.
2. What types of information should be obtained at the first prenatal appointment?
The first prenatal appointment is used to screen for anything that places the woman and baby at risk for problems. Fasting plasma glucose, HbA1c, or random plasma glucose of all high risk women should be obtained. Comprehensive health history, including menstrual history, obstetric history, past medical and surgical history, psychological screening, family history, genetic screening, dietary habits, lifestyle and health practices, medication or drugs use, and history of exposure to STIs should be obtained as well.
3. What are the thresholds for diagnosis of overt diabetes during pregnancy?
Fasting plasma glucose: 126 mg/dL
Hemoglobin A1c: at least 6.5%
Random plasma glucose: 200 mg/dL
4. Calculate the following estimated due dates using Nagele's Rule:
 - a. Last menstrual period (LMP) 7/9/19 → 4/16/20
 - b. Last menstrual period (LMP) 12/24/16 → 10/1/17

5. State what words GTPAL stand for and what each means.
 Gravida: the number of times a woman has been pregnant, This included current pregnancies
 Term: number of pregnancies that have reached term
 Preterm: number of deliveries before term but after 20 weeks of gestation
 Living: number of living, live births

6. So what is meant by the term para?
 The number of times a woman has given birth to a fetus of at least 20 weeks viable or not. Multiple births (twin, triplet, etc.) is counted as 1 birth

7. What is linea nigra? How does fundal height correlate with gestation?
 It is the thin brownish black pigmented line running from the umbilicus to the symphysis pubis.
 Fundal height increases as gestational age increases. It reflects fetal growth and provides an estimation for the duration of pregnancy.

8. Fill in the following table:

Test	When are these done in the pregnancy?	Evaluation/meaning of results
CBC	initial visit	looks at WBC, HCT, and HGB to help diagnose infections or anemia
Blood typing & Rh	initial visit	Determined to see if the client will require Rhogam or if the baby will need a type and screen at delivery
Rubella titer	initial visit	determines if the mother is immune or not immune. If not immune, MMR will be given postpartum
Hepatitis B	initial visit	Look to see if the patient has an active Hepatitis B infection. Results will either be positive or negative.
HIV	initial visit and 3rd trimester	positive or negative results
STI screening	initial visit	blood tests that look for Syphilis

Cervical smears-G/C	initial visit	looks for chlamydia and gonorrhea. If positive the patient will undergo treatment
Cervical smears- group B strep	between 35-37 weeks gestation	Tests for group B streptococcus. If positive the patient will need antibiotics while in labor
Blood Glucose Tolerance test	between 24-28 weeks	For the 3 hr test a normal fast blood glucose level is lower than 95mg/dL. After 1 hr of drinking the glucose solution the normal glucose level is lower than 180 mg/dL.
MSAFP-Maternal Serum Alpha Feto-protein	14 and 22nd week: more accurate than 16 and 18 week	10ng/mL- 150 ng/mL

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

- Every 4 weeks until 28 weeks
- Every 2 weeks until 36 weeks
- Every week until delivery

Each visit should assess fundal height, UA for glucose and protein, fetal heart tones, and maternal vital signs and well being.

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

Burning in urination (infection), severe vomiting (hyperemesis gravidarum), diarrhea (infection), fever or chills (infection), abdominal cramping and/or vaginal bleeding (miscarriage, ectopic pregnancy).

Second & Third trimesters- gush of fluid from the vagina (rupture of amniotic fluid prior to 37 weeks of gestation) vaginal bleeding (placental problems such as abruption or previa), abdominal pain (premature labor, abruptio placentae, or ectopic pregnancy), changes in fetal activity (decreased fetal movement might indicate fetal distress), persistent vomiting (hyperemesis gravidarum), severe headaches, (gestational hypertension), elevated temperature (infection), dysuria (urinary tract infection), blurred vision (gestational hypertension), edema of the face and hands (gestational hypertension), epigastric pain, (gestational hypertension), concurrent occurrences of flushed dry skin, fruity breath, rapid breathing, increased thirst and urination, and headache (hyperglycemia), concurrent occurrence of clammy pale skin, weakness, tremors, irritability, and lightheadedness (hypoglycemia).

11. How is fetal well being assessed?

Ultrasonography, Doppler flow studies, MSAFP, marker screening tests, Nuchal translucency screening, amniocentesis, chorionic villus sampling, percutaneous umbilical blood sampling, non stress tests, contraction stress test, and biophysical profile

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

- a. Color: normal is clear to colorless. Blood from the mother is usually harmless, however, blood from the fetus indicates damage to the fetal, placental, or umbilical cord vessels.
- b. Bilirubin: Fluid would be bright yellow. High levels indicate hemolytic disease of the baby.
- c. Meconium: Dark green color. Presence indicates fetal hypotension or distress
- d. Lecithin to sphingomyelin ratio (L/S ratio): Major lung surfactant. A ratio of 2.0 or greater shows lung maturity. Ratio less than 2.0 indicates pulmonary immaturity
- e. Alpha-fetoprotein: Variable depending on gestational age and lab technique. The highest concentration is around 13-14 weeks gestation. It detects neural tube defects and abdominal wall defects
- f. Bacteria: Absent is normal. Presence of bacteria indicates chorioamnionitis.
- g. Acetylcholinesterase: Absent is normal. Presence indicates neural tube defects, exomphalos, or other malformations

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

During a non stress test, the patient is on the contraction monitor and the EFHM for at least 20 minutes. Expected results are a reactive baby with a baseline of 110-160 bpm with no decelerations and more than two accelerations of fetal heart rate.

14. Describe the procedure and expected results for a biophysical profile (BPP) (page 419)

- a. The BPP is a method of evaluating antepartal fetal status on the basis of five variables: fetal heart rate, fetal breathing movement, fetal muscle tone, and amniotic fluid volume. fetal heart rate reactivity is measured with the nonstress test; the other four parameters are measured with ultrasonography. Each variable is scored as either a 2 or 0. therefore 10 is a perfect score and 0 is the lowest score.
- b. A score of 8 or 10 with an acceptable amount of amniotic fluid is normal. A score of 8 with oligohydramnios or a score of 4 to 6 is equivocal and is interpreted as possibly abnormal. a score of 2 or 0 is abnormal and indicates the need for assessment of immediate delivery.

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.)

- a. Urinary frequency is one of the ten discomforts of pregnancy. For clients who are struggling with this, a teaching plan would be the following.
 - i. empty the bladder frequently
 - ii. decrease fluid intake before bedtime
 - iii. use perineal pads
 - iv. perform kegel exercises to reduce stress incontinence

16. What are the common discomforts experienced in the third trimester?
Shortness of breath and dyspnea, heartburn and indigestion, dependent edema, and Braxton hicks contractions

How can you as the nurse educate women to successfully handle these discomforts?
Assure the mother that many of these discomforts are normal. Shortness of breath and difficulty breathing should improve after the baby drops down into the pelvis. Heartburn and indigestion can be improved by eliminating fatty foods and eating smaller meals. Swelling in the hands and feet is usually normal and can be relieved by lying down. However, generalized edema is a sign of preeclampsia if it is accompanied with dizziness, blurred vision, headaches, or nausea. It should be reported to the doctor immediately. Braxton hicks contractions are normal and should not grow longer, stronger and closer together. Staying hydrated and lying on the left side can help relieve some of the discomfort from Braxton hicks contractions.

17. Should pregnant women receive vaccines, if so, which ones & why?
There are some vaccines that are indicated for pregnancy if needed. Those include hepatitis B, influenza, Tdap, meningitis, and rabies vaccines.

Vaccines not indicated for pregnancy are influenza (nasal spray), MMR, varicella, BCG, and typhoid.

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.

- a. Prenatal and childbirth education is extremely important because although pregnancy is a frequently talked about topic, there are many things that go unnoticed. For example, the amount of changes that the woman's body goes through is breathtaking. Literally

and figuratively. Mothers undergo many discomforts from nausea and vomiting to things such as gingivitis. There are also many health promoting acts for the mother and baby that are frequently just assumed that everyone should know. Childbirth can be overwhelming and going through classes help to prepare the mother and father with what to expect during the real thing. These classes are important to shaping the mother and father for the new experience that they are about to endure.