Lesson 27: Student to submit PDF to hmwcourse@avivaromm.com

Lesson 28: Self-reflection exercise – Do Not Submit

Short Answer

- **1. What simple home test can be done to help determine whether Andie is ovulating?** Basal Body Temperature
- 2. What result of the test in the preceding question will tell you that ovulation has occurred? Elevated BBT
- 3. Andie and Max have now been trying to conceive for 14 months without success. What is the recommended next step? Fertility work-up for each
- 4. In preconception nutritional counseling, what is the most important nutrient to be sure a woman is getting adequate amounts of in the three months prior to conception? Why? Folic Acid to prevent neural tube defects
- 5. After how many months can Andie expect to see her cycle begin to get regular after she begins the initial protocol you gave her for irregular menses? 2-3 months
- 6. What is the reason for the "infertility epidemic"? Delayed childbearing, elective postponement of childbearing, etc.
- 7. You are interviewing a woman using the list of questions to ask presented in this lesson and she tells you that she does, in fact, experience chronic pelvic pain. Based on what you've learned in this course, list three most likely gynecologic causes for this symptom? Answers may include: endometriosis, fibroids, adhesions.
- 8. Amongst couples with an identifiable cause for infertility, what percent will achieve pregnancy? 50%
- **9.** List 5 modifiable factors that can contribute to infertility. Answers may include: smoking, poor exercise, exposure to environmental toxins and endocrine disruptors, and pre-existing gynecologic problems, high or low BMI
- **10.** When checking BBT, when is it best to check temperature? Same time each day after at least 6 hours sleep/first thing in the morning before getting out of bed

Hands-On/Clinical

11. After 4 months of taking Vitex daily, Andie has not yet conceived but her cycle became regular—every 27 days, lasting 4 days. While you encourage her to be patient about conception for a couple of more months, she and Max would really like to start on a preconception program with some nutritive tonics and general fertility promoting herbs.

1. Come up with a nutritive herbal protocol to promote pelvic organ health, support gynecologic wellness, and promote fertility that would be safe to take should Andie conceive while taking it. Explain the rationale for all of the herbs in the formula(s), include dose, and any warnings or contraindications to use.

Example # 1: 60 ml shatavari 20 ml oats 10 ml ginger 100 ml

Take 1/2 tsp. twice daily. Shatavari is included as a nutritive female reproductive tonic. It is supported by milky oats as a nervine tonic and ginger as a pelvic circulatory stimulant. The queen here is clearly shatavari, and oats and ginger her maidservants.

While I have no expectation that this formula would be problematic should Andie become pregnant, I would certainly recommend discontinuing it once pregnancy is achieved.

Example # 2:

Vitex agnus-castus	40ml (for irregular menstruation and promotion of fertilit	y)
Asparagus racemosa	20ml (as a fertility and nutritive tonic and aphrodisiac)	
Avena sativa	20ml (as an adaptogen and stress reliever)	
Rosmarinus officinalis	10ml (as an antioxidant)	

Take 1 teaspoon three times daily (15ml total) in a small amount of water. May take 2-3 months to regulate cycle and become pregnant. If you have a positive pregnancy test, you should stop taking herbs at that time.

Do not take *Asparagus racemosa* if you have a history of gallbladder, gastrointestinal or liver issues.

Stop taking herbs and contact me if you experience gastrointestinal upset or headache.

Begin taking a high quality prenatal vitamin with methylfolate like Thorne Basic Prental. Eat omega 3 rich foods every day (salmon, walnuts/walnut oil, evening primrose oil, eggs. Limit caffeine and alcohol intake.

Relieve stress with meditation, mindfulness based practice, yoga practice.

Exercise regularly (at least 30minutes/5 days per week).

Example # 3:

Dong quai (*Angelica sinensis*) - a reproductive tonic for females. (stop if heavy bleeding and contraindicated to use with blood thinners like warfarin)

Shatavari (*Asparagus racemosa*) - excellent female tonic too for hormones and womb, also has an adaptogenic and immunological affect. Enhances fertility.

White Peony (Paeonia lactiflora) - has a positive affect on balancing female hormones

Licorice (Glycyrrhiza glabra) - goes well to enhance affect of fertility with White Peony - also an adaptogen and anti-inflammatory.

Saw Palmetto (Serenoa repens) as a uterine tonic and fertility agent

shatavari	25ml
white peony	25ml
dong quai	20ml
licorice	15ml
saw palmetto	15ml

5 ml 3x daily

Tribulus (*Tribulus terristris*) as a separate capsule for its high dose needed - 100mg tablets twice a day on day 5-14 of cycle, to stop immediately once pregnant.

I would discuss nutritional support too and optimizing. So excluding caffeine, processed foods and high inflammatory foods like large amounts of red meat or sugar. And encourage organic sources of vegetables, protein and fats. Including dietary supplements to optimize levels of:

- EFA's
- Magnesium
- Folic acid
- antioxidants (encourage perhaps green tea)

So a good mineral and vitamin supplement is helpful for her too - a food source one. As well as probiotics to support any immunological balance and absorption.

I would also encourage antioxidants and mineral supplements for Max.

2. Andie and Max go in for fertility testing and are told that everything is normal, but it is now 18 months since they began trying to conceive. What changes to the herbal protocol Andie was given in question 51 would you like to make, if any?

Sample answer:

Assuming that Andie and Max sought treatment at ten months of trying to conceive, then it has been eight months that they have been using herbal means to support conception. In addition to the vitex, I assume that they have also received dietary and lifestyle counseling, such that their approach has been holistic. We know that commitment to an herbal protocol must be 3-4 months at a minimum, which they have met. We also know that for couples with normal fertility, 90% will become pregnant within 12 months and an additional 15% will become pregnant within the following 12 months.

I would want to see Andie's cycle charts to get a picture of what is happening in each cycle, if I haven't received those already. I would also look to herbs such as false unicorn, shatavari, and tribulus to maximize fertility. I would keep her on the vitex. If another four months pass, I would suggest looking into medical options.

Optional

For one month, check your cervical texture, cervical mucus, and BBT. Record daily and notice any trends. You may do this in any phase of life - from fertile to pregnant to menopausal. You do not need to submit your results.

Lesson 29: Self-reflection exercise – Do Not Submit

- If you have been pregnant or have children: Reflect upon you own pregnancy and birth experiences, or if you have never been pregnant, your gynecology appointments. How did your experience influence your decision to practice as a woman's herbal health educator or herbalist, or other women's health professional if you are pursuing additional training in other fields? What did you experience, either positively or negatively, that will shape your work with women? Have you ever felt you were losing your power and confidence in a health care setting? What causes this? Has anyone ever created a health care setting that supported your power? What did this look like for you?
- If you have not been pregnant or do not have children, please reflect on the types of experiences you have had interfacing with the gynecologic system for exams, paps, or concerns you have had.
- For everyone:

You do not have to divulge any personal information about actual health care concerns or situations. Rather reflect on the type of treatment you received, whether positive or not, how this led you to feel, and what you learned that you might apply or do differently when interacting with women around their health concerns.

Lesson 30: Self-reflection exercise – Do Not Submit

Short Answer:

1. Is *Angelica sinensis* a good substitute for *Angelica archangelica* if there is uterine bleeding? Why or why not? (1-2 sentences only).

No. While they share the same Family and Genus, *Angelica archangelica* would be appropriate and *Angelica sinensis* would not. *Angelica sinensis* would promote blood circulation, especially in the uterus. This is contraindicated during pregnancy.

- 2. A first trimester miscarriage is one that occurs prior to how many weeks? 12 weeks (13 weeks acceptable as it's the new definition for early pregnancy loss)
- 3. A spontaneous miscarriage is one that occurs prior to how many weeks? 20 weeks
- 4. Which herb is an excellent uterine antispasmodic, but contrary to popular rumor, is not a progesterone supplement? Wild yam
- 5. Most first trimester pregnancy losses are due to what cause? Most first trimester pregnancy losses occur because of chromosomal abnormality or sometimes called chromosomal aberration. This is when there is an atypical number of chromosomes or a structural abnormality is in one or more of the chromosomes.

6. What is a "blighted ovum?"

A blighted ovum is a gestational sac without an embryo or yolk sac. As a pregnancy progresses the embryo does not develop and so does not show on an ultrasound as it eventually should around 6 weeks after the woman's last menstrual period

- 7. What lifestyle habit is the most risk for miscarriage? Smoking is the most risk for miscarriage as represented in a lifestyle habit.
- 8. Name 2 commonly used hemostatics for uterine bleeding during or after a miscarriage mentioned in this lesson? Witch hazel, yarrow
- **9.** If a woman is experiencing signs of uterine cramping, light vaginal bleeding, frequent urination, and burning upon urination, what should you suspect? Urinary tract infection.
- 10. **Repeated D&C can lead to what problems?** Repeated D&C's may lead to scar formation which is associated with increased rates of placenta previa and placental implantation problems.
- **11. Complications of D&C (though uncommon) include what?** Complications of D&C include bleeding, infection and uterine perforation.
- **12. What is expectant management? Pelvic rest?** Expectant management is watch and wait. Pelvic rest means nothing in the vagina.
- 13. In Jan's case, what three signs suggested she might have a thyroid disorder?
- Weight gain after the birth of twins
- Depression
- Miscarriages are a sign of an endocrine disorder which would include the thyroid gland
- 14. In Jan's case, what "boundary" was established that set a limit on whether herbs would be used indefinitely or she would have a D&C?? The "boundary" was a limit of 5 days using herbs
- **15. What percentage of women experiencing a threatened miscarriage maintain the pregnancy?** 50% or 94% (see page 350 in original textbook)

16. What physical changes follow a complete miscarriage?

The physical changes following a complete miscarriage are the cervix returns to an undilated state and the uterus begins to involute. In addition, other pregnancy symptoms disappear.

- 17. After how many weeks beyond fetal death is a missed abortion likely to lead to medical problems for the mother? 4 weeks
- 18. Of women who experience a first miscarriage, what percent will go on to miscarry in a subsequent pregnancy?
 1%
- 19. It is hot summer and your client has been out all day running errands. She comes home and notices she is contracting. Contractions persist for several hours and she phones you. She is having no bleeding or spotting and has no history of miscarriage. What is the most likely reason for her contractions?

She is likely dehydrated.

Hands-On/Clinical:

1. Using Cara's case above, describe what you would do, including herbs, if the ultrasound showed that the baby was not alive but had died at 5 weeks pregnancy, that her cervix was already dilating and she really wanted to go ahead and facilitate the miscarriage rather than watch and wait?

Sample # 1:

I would give her the following formula, as an alcohol extract:

black cohosh 3 parts

blue cohosh 1 part

motherwort 1 part

Instructions: Take 1ml of the tincture in 1-2oz of water every hour, for 5 hours, starting early in the morning (ideally first thing upon waking). If red blood is not flowing by the second morning, repeat the protocol. Take a break from the herbs on day 3. If no red blood is flowing by the morning of day 4, repeat protocol and double the dose to 2ml every hour, for 5 hours. On day 5, if bleeding has not begun or isn't regular, repeat with the double dose. If there is no bright red blood flowing by the end of day 5, please contact your primary care provider for an evaluation.

The indication to stop herbs would be consistent red blood flow. If there are only little drops of blood, such as upon wiping, continue protocol and only stop when blood is actually flowing consistently, even if it is light at first.

I would also provide her with some shepherd's purse tincture, with instructions:

If bleeding begins to appear to be excessive, such as filling a pad every 30-45 minutes, to take 10 drops directly on her tongue, every half hour until bleeding has lightened. Stop the shepherd's purse once bleeding is more manageable, do not attempt to stop bleeding entirely. If excessive bleeding is not addressed within a few hours with the shepherd's purse, please seek medical care.

Sample # 2:

I would give the following protocol for not longer than 5 days:

EPO 500 mg up to 2000 mg /day

EPO vaginally inserted, 1500 mg/day

Tincture formula:

cotton root bark 40 ml

black cohosh 40 ml

blue cohosh 20 ml

2,5 ml to take every 4 hours. If no contractions start, repeat on day 2.

Stop on day 3 and resume on day 4 and 5 until labor onset. Otherwise, medical assistance and D&C.

Sample # 3:

Evening primrose oil, 500mg, twice daily for 2 days orally and 1500 mg evening primrose oil applied to the cervix. I usually recommend using a needle to open a capsule and inserting the capsule as far into vagina as possible.

After 24 hours, oral administration of the following tincture:

Gossypium herbaceum (cotton root bark)	40ml
Actaea racemosa (black cohosh)	40ml
Caulophyllum thalictoides (blue cohosh)	20ml

Total 100 ml

Take 2.5ml every hour times 4. Repeat the next day. If no contractions, on day 2, skip a day and resume on days 4 and 5.

Have angelica archangelica and hammamelis virginiania on hand in case of heavy bleeding.

2. Cara tells you that she is having mild uterine contractions, spotting, frequent urination, slightly burning urination, and a history of UTI. She does not want to take an antibiotic and her midwife and OB are holistic minded and supportive of her trying herbs for a few days as long as symptoms don't progress. Give a very specific herbal protocol based on what you have learned already in this course, modifying for the possibility of miscarriage, and also list the possible signs that cystitis is progressing. What would it progress to? What are the risks of this in pregnancy? Include not just herbs but adjunct and nutritional treatments you might consider.

Possible signs cystitis is progressing: Onset of high temperature, back aching, chills, nausea This may progress to pyelonephritis This increases the risk of premature birth

Sample # 1:

Cara may have a threatened miscarriage, or she may be suffering from cystitis. We don't want it progressing to pyelonephritis, which is an infection of the kidney. UTIs often progress to pyelonephritis in pregnancy because of anatomic changes in the urinary tract during pregnancy. Signs of pyelonephritis: Gradual onset of symptoms, with or without dysuria, fever, chills, nausea, CVAT. Diagnostic findings: bacteruria and elevated WBC. Risk of pyelonephritis include preterm labor.

I would encourage increased water intake, at least 8 ounces every hour for four hours. I would encourage her to avoid simple sugar until symptoms go away. Unsweetened cranberry juice or cranberry capsules are recommended. Probiotics and Vitamin C rich foods are encouraged.

To relieve her symptoms and treat a UTI, I would recommend the following infusion: uva ursi - Antimicrobial, Urinary Antiseptic, marshmallow Root - Demulcent, lavender - Pain relief, anxiolytic, antimicrobial (and smells great)

I would mix equal parts uva ursi and marshmallow with 1/2 part of lavender. Explain to Liz to steep 1/4 cup in 1 quart of cold water for 1 hour. Drain, then refrigerate for up to 24 hours. Take 1/2 to 1 cup every four hours for 2 days. I have left out the dandelion, because diuretics are not recommended for UTI treatment in pregnancy.

I would also recommend a tincture of equal parts wild yam and cramp bark, taken in 2-4 ml doses every 30 minutes as needed to relieve cramping.

If no relief in symptoms after 1 day, I would notify her health care provider. Also, if any sign of pyelonephritis (as defined above), if spotting increases to bleeding, contractions don't stop, or become more painful or persistent, I would tell her to notify her provider.

If her symptoms improve, cramping stops and she has no further spotting, I would encourage her to use 1/2 the volume of the above infusion for the next two days.

Sample # 2:

Eliminate all sugar and sweeteners from the diet, reduce fresh fruit consumption to a minimum. Avoid sexual activity until after all symptoms have been completely gone for 2 days. Take a daily high quality probiotic supplement, and be sure to include fermented foods in your daily diet (plain unsweetened yogurt and sauerkraut are great).

Drink 8oz of water and 6oz of unsweetened, organic cranberry juice every 2 hours throughout the day.

Every morning, make the following tea, which you will drink 8oz of every 4 hours. It should be refrigerated between use.

Bring a bit more than 1 1/2 quart of water (about 50oz) of water to a boil. Remove from heat, and add in the following herbs, then cover and let steep for 30 minutes.

- 8g of uva ursi
- 4g of marshmallow root
- 2g of cornsilk

If symptoms lessen after the first day of use, cut dosage in half on the second day. If not, continue full dosage. Continue herbs for a total of 5 days, or until all symptoms are gone. If symptoms have not significantly lessened by the end of the 5th day, please contact your primary care provider for evaluation. If at any point symptoms worsen, seek medical care immediately.

In addition, signs of progression of the condition that require medical attention are: fever, chills, nausea, flank or mid / low back pain, feeling very ill. If the infection moves to the kidneys, it can develop into pyelonephritis (kidney infection) which can be extremely dangerous. Please monitor symptoms carefully.

This protocol is safe to continue taking if there is uterine bleeding.

(The risks of an untreated UTI / pyelonephritis include miscarriage, septic shock and death.)

Sample # 3:

The uterine contractions, spotting, and urination issues are indicative that the cystitis is progressing, if left untreated, the bacteria could cause progression to pyelonephritis and also could increase the risk of prematurity and other serious complications. These complications can be quite serious (especially in pregnancy). It is associated with papillary necrosis, urethral obstruction, septic shock, and perinephric abscess. Pyelonephritis in a chronic state can cause scarring and diminished renal function.

I would start off with a topical treatment that is considered safe during pregnancy. I would then add a protocol that will address her UTI. Lastly, I added a threatened miscarriage formula for her to continue throughout her first trimester.

Topical Treatment (as found in Botanical Medicine for Women's Health).

7 g dried calendula blossoms4 g dried lavender blossoms3 g dried thyme leaf

Steep in 1 L of boiling water for 30 minutes. Cover while steeping. Strain and place in a peribottle to which has been added 1 tsp. sea salt. Rinse the peri-urethral area with the tea after each urination and bowel movement after wiping. Pat dry gently.

*This mix can also be prepared by adding 1 Tbsp. of calendula tincture and 5 drops each of thyme and lavender essential oils to 1 cup of warm water with 1 tsp. sea salt. Use in the same way as the previous peri-rinse.

UTI Treatment Protocol

Days 1 and 2

- 16-32 ounces of juice per day
- Take 500 mg Vitamin C every 8 hours
- Drink 8 oz. of water every 2 hours
- Take 3 ml of echinacea tincture every 4 hours
- Reduce intake of sugar
- Avoid sexual activity during treatment

Days 3 and 4

• If symptoms have lessened, cut all doses in half.

Days 5-7

- If seeing improvements, go to ¹/₄ of the original dosing of cranberry juice and echinacea tincture. Keep Vitamin C and water intake at ¹/₂ of the original dosing.
- If symptoms are not improving, please seek medical care.

Days 8-14

• Maintain the same dosing as was prescribed during days 5-7.

In the case of suspected reoccurrence, repeat the protocol for days 5-7 for several days.

For prevention sake, days 3-7 can be carried out occasionally (i.e. 1 week per month).

Herbal Formula for Threatened Miscarriage

Viburnum opulus	(cramp bark)	30 ml
Dioscorea villosa	(wild yam)	20 ml
Vitex agnus castus	(chaste berry)	50 ml
	Total	100 ml

Dose: 5 ml twice daily throughout first trimester of pregnancy

Cramp bark and wild yam are used as antispasmodic and will help to ease the spasms associated with her UTI as well as help with a potential threatened miscarriage. The chaste berry was added as a progesterogenic herb for the prevention of miscarriage.

Lesson 31: Self-reflection exercise – Do Not Submit

Short Answer:

1. Does Jenn (case in lesson) have *Hyperemesis gravidarum*? Explain your answer in 1-2 sentences.

Technically, she does not have hyperemesis. Even a few days of severe nausea and not eating can cause ketonuria.

2. A woman who is 16 weeks pregnant weighs 130 pounds. At the beginning of her pregnancy she weighed 140 pounds. She has been vomiting for 3 weeks. Does she have *hyperemesis gravidarum?* Explain.

Yes, she has lost more than 5% of her body weight along with persistence of vomiting.

- 3. Had the nutritive enema failed to rehydrate Jenn, what would have been the necessary next step in her care? IV nutrition
- 4. Jenn is worried that something is wrong with her baby because of her severe nausea and vomiting. What do you tell her (answer in 1-2 sentences)?

I would tell her that NVP has a protective function for the pregnancy. Also, her midwife did an ultrasound and all looked normal. Share with Jenn that that are many reasons for nausea and vomiting, such as her empty stomach, hunger, low blood sugar, fatigue, stress, cold beverages or food, lack of exercise, vitamin or mineral deficiencies, among other non-threatening triggers. And, there are many choices which can provide comfort such as P6 acupoint, salt packs, reduce oily foods, rest, eat small, frequent healthy snacks and sip an electrolyte drink with antispasmodic tinctures. However, it is best to call her midwife and OB for additional support anytime she feels the need to discuss her symptoms further.

5. What is Neiguan P6 and what is its application in pregnancy?

Neiguan P6 is an acupoint called pericardium 6 (P6). P6 is used for suppression and relief of nausea and vomiting, including for nausea and vomiting of pregnancy. It located on the underside of the wrist.

- 6. Where is Neiguan P6 located? Underside of the wrist, 3 fingers width from the crease between the tendons
- 7. Which herb is commonly used in Great Britain for the treatment of NVP, but is not wellknown in the U.S. for this purpose? black horehound
- 8. Aside from its illegality, which medicinal action of marijuana suggests that it should be used with caution in the first trimester? It has oxytocic action
- 9. Which herb is a bitter that might stimulate digestion and is sometimes used in the treatment of NVP? dandelion

- 10. What antispasmodic herb other than chamomile might you combine with ginger and dandelion to relieve dry heaving? wild yam
- 11. A Rastafarian woman from Jamaica tells you that she is smoking marijuana to control her NVP and it is really helping her. She is able to eat and it gives her an appetite, and it takes the edge off the nausea. She asks if this is safe or dangerous for the baby. What do you tell her regarding cannabis use during pregnancy? (Give a bulleted list of at least 5 points you will tell her.)
 - Safety studies are contradictory and its use is controversial (because of legality) If she is going to use cannabis it is important that she gets an unadulterated product.
 - I would advise safe use of small amounts, as this has not shown to be conclusively detrimental to the baby.
 - One of the medicinal actions of cannabis is oxytocic, which means it can stimulate contractions of the uterus.
 - Cannabis is a reliable herb for easing nausea, helping with appetite and pain relief, if this is helping her to stay well-nourished and well hydrated because it eases the above symptoms, then this will be beneficial for baby.
- 12. If a woman has normal weight gain by the end of the pregnancy, will a 10-pound weight loss form hyperemesis likely have had a negative consequence on her baby's health? It will not have a negative consequence.
- 13. If a woman is unable to obtain acupuncture, what alternatives can she access from home to stimulate P6?

Alternatives to stimulate P6 are, acupressure, manual pressure, Sea bands, TENS unit, Relief band

14. Why is it unclear whether ambivalence plays a role in the etiology of NVP? Inconclusive because not all women with NVP have ambivalence.

Hands on/Clinical:

Lara is 9 weeks pregnant and has been nauseated for the past week and has vomited 8 or 10 times in the past 24 hours. She has not been able to keep fluids down for the past 2 days. She is having irregular mild contractions.

- a. Come up with a list of at least 5 questions that might lead you to get to the bottom of what is going on with her
 - Does she have any other symptoms such as headache, abdominal pain, blurry vision, tingling in her extremities?
 - Does she have an elevated temperature?
 - Does she have diarrhea or constipation?
 - Has she lost any weight and if so how much and what was her pre-pregnancy weight?
 - Has she tried any remedies?
 - Is she taking any medications?
 - Has she been evaluated by her prenatal care provider?
 - Has she eaten anything that may have made her sick?
 - Is anyone else at home sick?

b. Come up with a list of 5 possible causes of her symptoms

- NVP
- Hyperemesis gravidarum
- intestinal infection
- hypoglycemia
- dehydration
- hydatiform mole
- •

c. Select one option from 41b and create an herbal formula and general protocol for that scenario.

Sample # 1:

Protocol for dehydration:

- Small sips of fluids every 15 minutes (1-2 tablespoons)
- Drink small amounts after vomiting
- Prepare and drink the following formula for dehydration and to restore electrolyte balance:
 - 1 quart water
 - 1-2 Tbsp. honey
 - 1/4 tsp. salt
 - 1/4 tsp. baking soda
- To ease nausea: Sips of ginger ale, or ginger tea with peppermint. Small frequent bites of crackers or other lightly salted carb. Stimulate P6.
- If dehydration worsens: Nutritive enema of pedialyte can be repeated several times daily to improve her status.

Sample # 2:

General advice would be to reduce the amount and frequency of liquids and food; try to consume a small bit of toast, yoghurt and/or fruit whenever possible; avoid drinking warm drinks and instead try to consume a small bit of water (even by the teaspoon full) at either room temperature or colder; cold soda water can be beneficial for some women.

Main mix:	
Peppermint	20 ml
Ginger	10 ml
Matricaria recuti	<i>ta</i> 20 ml
dandelion root	20 ml
wild yam	20 ml
	Total: 90 ml

Dose: Add 10 ml of blend along with 1-3 tsp. of honey to a cup and pour boiling water over it. Allow it to cool and take small and frequent sips of this throughout the day.

Sample # 3:

Herbal formula for no. 3 - ambivalence/stress

lemon balm 2 Tbsp. chamomile 1 Tbsp. nettle 1.5 Tbsp. cinnamon 1 inch stick ginger 1cm piece in small pieces or grated

In 500 ml water - boil, then add herbs and let infuse for minimal 10 minutes.

(I have chosen so little ginger as I would like the flavor to not intensify the other herbs. Alternatively advice for a separate ginger tea with a 1-inch piece in 2 cups water sipped throughout the day.)

I would also advise some kind of mindfulness like meditation, reflection, guided meditation, working with unborn baby connection work to gain a sense of peace about the pregnancy.

Other protocols - chew 12 almonds that have soaked over night (one at a time); minimize fats/oils; eat small meals often; have a snack on waking, don't get hungry.

Essay/Project:

Imagine you are creating a one-page handout for your pregnant clients on common and herbal treatments for NVP, and what to expect with this pregnancy complaint. Outline your main points in the space below, including at least 3 common sense tips and herbal approaches.

Example:

Main points for NVP:

- Avoid known triggers as much as possible

- Ensure adequate fluid intake by taking frequent small sips of water or other liquid, e.g. juice. This might even be as little as a tsp. full every 15-20 minutes. Adding lemon, lime and/or honey may be of benefit. Drinking sparkling water can also be of benefit.

- Eat frequent, small meals including carbohydrate rich foods such as crackers, baked potato, pasta and/or toast

- Ginger ale can be of benefit but it is important to ensure that it has real ginger in it (no just ginger flavoring) as otherwise it is unlikely to be of any benefit.

- If toothpaste triggers your NVP then you might have to try to change your toothpaste or avoid it for the next while or until the nausea settles

- If the pre-natal supplement is triggering your symptoms, it may be advisable to try to change the brand of supplements or even possibly stop them until the nausea settles.

- Avoid stuffy rooms, excess heat, visual and physical motion and excess odors (e.g. strong perfumes)

- It may be of benefit to get someone else to cook for you if the smell of cooking set the nausea off
- Acupuncture may be of benefit. Consult a qualified acupuncturist.
- Seabands may benefit. They can be purchased from a acupuncturist or from your local pharmacy.
- Hypnosis may be of benefit.

Some herbs that may be of benefit include:

- Drinking a tea made from chamomile and/or peppermint (1 tsp. of dried herb per cup of boiling water and take small frequent sips of this). Up to 3 cups per day.

- Boiling 1g of ginger in water (cover with a lid) and then strain it and allow it to cool. Take small sips of this throughout the day. It can be of benefit to add lemon and/or honey to this as well.

- Other herbs may be considered if the above suggestions do not help but those would only be suggested on individual basis following a consultation.

NB: It is important to note that triggers of the NVP can change quite rapidly so it is important to monitor what might be triggering your symptoms and avoid those triggers as much as you can.

Another example:

NVP (Nausea and vomiting in pregnancy) is common (50-80% of women) and can last from 6 - 18 weeks gestation peaking at 9 weeks and most diminishing at 12 weeks. Rarely it can continue to third trimester and even birth. There is a large range of experience - from mild discomfort to persistent vomiting and dry retching. It is rarely risky but dehydration and nutrient deficiencies need to be watched.

It has not been associated with negative outcomes if weight gain resumes later in pregnancy. However, danger signs and red flags should be watched for by health practitioners and appropriate tests done if necessary (hyperthyroid or endocrine blood tests or ultrasound for molar pregnancy.) Actually mostly it is noted that those with NVP have almost a preventative outcome towards miscarriage and stillbirth.

Hyperemesis gravidarum is noted when there is more than 5% of original pre-pregnancy weight and ketones in urine with persistent vomiting. If no fluids stay in it may be prudent to go to your doctor / health care provider and be evaluated if iv fluid is needed.

Various herbal approaches and basic lifestyle advice can help a lot and different ones may be used at different times:

Lifestyle

1. Eat when hungry or even better before hungry (noted that hunger can trigger it)

2. Have simple carb snacks (they prevent it) like crackers, especially next to your bed to eat on waking to prevent it

- 3. Do not drink too much fluid at once as this may trigger discomfort and vomiting
- 4. Avoid triggers like smells and rich foods

Herbs that help

- Ginger is a fantastic herb that has good research and safety evidence 1g per day as a tea, sugar snap, ginger ale.
- Vitamin B6 (pyridoxene at about 50mg twice a day can prevent vomiting and helps relieve nausea
- Chamomile can help with any abdominal cramps or pain as well as be a good nervine
- Peppermint can also help with dyspepsia and discomfort feeling

Lesson 32: Self-reflection exercise – Do Not Submit

Short Answer:

- **1. Why should caffeinated beverages be avoided specifically if a woman is constipated?** They are dehydrating.
- 2. A 42-year old pregnant woman with her first baby reports constipation now for 6 weeks, having small, narrow and hard stools every 5 days. She's always had a daily bowel movement prior to this. She noticed blood in her stool and on the toilet tissue with each bowel movement. What do you suggest she do? She should speak with her doctor and get things checked out.
- 3. You tell Sara that Yellow Dock and Dandelion (Iron Tonic) Syrup made with molasses might help her constipation and would be a better option than her current formula. She tries it but the taste makes her nauseated. What herb or herbs might you add to make the syrup more palatable? ginger or peppermint
- **4.** How can licorice we used safely during pregnancy? Licorice can be used in a modest dose short-term during pregnancy.
- 5. Why, other than from constipation, might hemorrhoids form in pregnancy? Hormonal changes that cause increased laxity of the blood vessel
- 6. What general dose is recommended by ESCOP for using senna? 1-2 g (as needed) for short-term use (or smallest possible dose that produces a soft, formed stool)
- 7. List 3 side effects of excessive laxative use. Cramping, gas, diarrhea, dependency

Clinical/Hands On

1. Sara (Case 1) comes to you and asks your opinion about the herbal formula she is taking for constipation, and tells you that her doctor told her the formula was completely safe to take during pregnancy. She has already been taking it for a week and is worried about harm to the baby. What do you tell her about the safety of these herbs during pregnancy? (brief answer up to 1 paragraph)

Sample:

While senna is generally considered safe in pregnancy, buckthorn and *cascara sagrada* are contraindicated. This is because they are stimulating laxatives that may cause uterine activity that could lead to a miscarriage or preterm labor. The most significant threat to the baby with these herbs is that they would cause uterine activity. I recommend discontinuing use of the herbs and she could consider taking a gentle spasmolytic like cramp bark. We can also discuss safer, more appropriate treatments for constipation during pregnancy.

2. Sara tells you that she is unable to use the bathroom when she feels the need because she is uncomfortable "going" in the public bathroom at work. What advice do you have for her (1-3 sentences)?

Sample:

Ignoring the urge to have a BM can be one of the causes of constipation, so it is important that she go when she has the urge. If this occurs at work, what might she be able to do to increase her sense of comfort? Why is she uncomfortable? Matches/spray for odors, run the faucet for sounds, use reading material or relaxation techniques to relax. She could also try to make a routine of having a BM in the morning before work. Botanicals, like a bulk laxative taken before bed, can be taken to maximize this possibility as well as her intention in relaxing and being consistent with timing.

3. Imagine that you are going to create a comprehensive one-page handout for your clients on constipation in pregnancy. List the key points, including herbs, supplements, and lifestyle measures, below. Include important safety considerations of herbs and supplements.

Sample:

Constipation is a common and frustration complaint during pregnancy, especially in the 2nd and 3rd trimester. Hormonal changes slow down digestion, which enhances nutrient absorption but also causes more water to be absorbed from the bowels, hardening stools. However, diet and dehydration are factors, as in the use of iron supplements.

Basic suggestions for pregnancy constipation:

1. Drink more water (8 glasses a day) and avoid caffeine, which is dehydrating.

2. Add more fiber to your diet, such as fruits, vegetables, whole grains, and beans. Try prunes soaked in water, or prune juice.

3. Eat less constipating foods such as dairy, meat, and foods high in fats.

4. Go to the bathroom when you feel like it -- don't wait.

5. Use a stool to bring your knees up higher than your waist -- this can help take the pressure of your uterus off your colon, making way for a BM.

Two easy remedies for constipation

- Soaked psyllium or flax seeds fill up the intestines, signaling stretch receptors that tell the body it's ready for a BM. Take 1 Tbsp. 1-3 times daily, and be sure to take it with plenty of water. Discontinue if you feel any allergic reaction.

- Prepare a dandelion and yellow dock syrup. This is a great remedy for women with low iron levels. Simmer 14g each of dandelion root and yellow dock root in 4 cups of water until it reduces to 2 cups. Add 1/2 a cup of blackstrap molasses (which is also rich in iron), and mix. Take 1-2 Tbsp. up to twice daily. This syrup will keep for two weeks in the fridge.

Supplements:

- Magnesium citrate 240-720mg daily

Another example:

Increase:

- Your water/fluid intake to at least 8 glasses per day
- Fiber in your diet (including fruit, vegetables, beans and whole grains). This involves including at least 7 portions of fruit and vegetables per day and 20-35 grams of beans and/or whole grains.
- Exercise (any type can be of benefit, e.g. walking, swimming, dancing). Try to exercise for at least 20 minutes per day.
- Adding dried prunes, apricots and/or raisins that are boiled in water for 2-5 minutes may be of benefit. The water as well as the fruit are consumed when this method is used. It can also be of benefit to add the above dried fruit to your porridge whilst you are cooking it. It has similar effect.

Decrease/Avoid:

- Caffeinated beverages (including coffee, hot chocolate and black tea)
- Constipating foods (e.g. food high in fat (e.g. ice-cream, cheese, milk

Other factors that are important:

- Avoid delaying and/or ignoring the need to going to the toilet when you get the urge to go.
- Allow yourself time to go every day (preferably at the same time each day).
- It can be of benefit to put a small stool, bucket or basin under your feet when sitting on the toilet if passing a bowel movement proves difficult.

If you find that the above is not helping in 5-7 days then it may be worth considering these additional factors:

• Adding 1 tsp. of flaxseed or psyllium seeds to water and let it sit for 2-3 hrs. Drink one glass of this per day. It is important to drink plenty of additional water when using this drink.

Diet and lifestyle factors should always be considered before taking anything to help with constipation especially whilst pregnant.

If none of the above works for you, then a stronger herbal protocol can be used but this is not recommended unless specifically evaluating each person's circumstances and health.

Lesson 33: Self-reflection exercise - Do Not Submit

Short Answer:

- 1. In one sentence, explain hemodilution of pregnancy. The normal blood volume expansion of pregnancy occurs with plasma levels increasing faster than those of the red blood cells subsequently and temporarily diluting red blood cells and affecting hemoglobin and hematocrit levels.
- 2. In one sentence, define iron deficiency anemia. Iron deficiency anemia is when all the body's stores of iron have been depleted.
- 3. Iron supplements commonly cause what side-effect that is also a common pregnancy problem? Constipation
- 4. What herb appeared in a US herbal pharmacopoeia as early as 1918 for use as an iron tonic? Yellow dock
- 5. What serious medical problem that is more likely to occur in pregnancy must be ruled out if a woman complains of sudden onset of shortness of breath and tachycardia? Pulmonary Embolism
- 6. What is pyridoxine and what is one of its main therapeutic uses in pregnancy? Vitamin B6, relief of nausea and vomiting in pregnancy.
- 7. Does Floradix alone provide the recommended daily amount of iron needed by pregnant women compared to non-pregnant women? No, it only contains 56% of the recommended daily amount
- 8. What bulk herbal laxative could have been given to Celeste at the onset of her protocol to help with her constipation? Bulk laxatives such as flax and psyllium.
- 9. What is meant by the term refractory anemia? Anemia that doesn't respond to treatment.
- 10. Liz, a 16-year old girl has been experiencing menorrhagia for the past year. She is fatigued and her performance in math has been declining over the past month. She is unable to concentrate and feels "foggy" in school. Serious underlying illness has been ruled out by her pediatrician and a gynecologist who recommended oral contraceptives to regulate her period. Might her poor math grades, lack of concentration, and fatigue be due to low iron from excessive blood loss? Yes

Clinical/Hands-On:

1. Create an herbal formula for Liz whose basic case is presented in question 40. Assume no serious underlying medical condition. Address both her current symptoms and the menorrhagia.

Include:

- Diet
- Herbs to improve iron stores
- Herbs for the heavy bleeding

Sample # 1:

Herbal protocol for anemia caused by menorrhagia.

* Take 3 ml of vitex once a day upon waking starting on Day 5 of menses and continuing to the start of the next.

* Take 2.5 ml of the following tincture upon the start of menstruation during days 1 and 2.

Tincture Formula for Acute Bleeding:

Achillea millefolium	(yarrow)	30 ml
Capsella bursa-pastoris	(shepherd's purse)	30 ml
Alchemilla vulgaris	(lady's mantle)	30 ml
Cinnamomum zeylanicum	(cinnamon)	10 ml
-	To	tal 100 ml

* Start taking a fish oil and vitamin a supplement daily.

* Take 2 tsp. of Floradix daily

* Take 1 tablespoon of Dandelion-Yellow Dock Iron Tonic Syrup each morning.

Keep up this protocol for 3 months and then report back.

Sample # 2:

- Floradix 2 tsp. daily
- Herbal iron syrup (made from Aviva's recipe dandelion, yellow dock and molasses) 2 tsp. twice daily until she is feeling better and then to continue 1 tsp. twice daily or 2 tsp. once daily but 2 tsp. twice daily during menstruation.
- Alfalfa syrup or caps twice daily

Herbal tincture for menorrhagia (during and just before menses)

Achillea millefolium	(yarrow)	30 ml
Capsella bursa-pastor	is (shepherd's purse)	30 ml
Paeonia	(white peony)	20ml
Hamamelis	(witch hazel)	10ml
Cardiaca Leonorus	(motherwort)	10ml

Use during and a day prior to expecting menses to control acute bleeding. Take 15ml 2-3 times a day.

Vitex agnus castus 3 ml once a day to regulate cycles and hormones (as adolescent can help in this case)

Sample # 3:

Symptoms: fatigue, menorrhagia, decreased concentration, feeling of "fogginess"

Suggested herbal protocol could be as follows:

<u>Formula: Main mix</u> 20 stinging nettle leaf - nutritive (rich in iron), styptic 20 dandelion root- nutritive (rich in iron), bitter, cholagogue 20 yarrow - hemostatic, anti-inflammatory, astringent, anti-spasmodic, bitter 15 lady's Mantle - hemostatic, anti-inflammatory, astringent, uterine tonic 20 siberian ginseng - adaptogen, anti-inflammatory, nervine <u>20 oats - nutritive, NS trophorestorative, nervine</u> Total: 115 ml Dose: 5 ml twice daily

In addition: 3ml Chaste tree daily Floradix for 1 month

Re-evaluate herbal protocol after one month.

2. Preparing Iron Tonic Syrup

- a. Prepare Iron Tonic Syrup as described in *Botanical Medicine for Women's Health*, carefully documenting the process as you proceed, and describing any problems, mistakes, or questions you encountered in the process.
- b. Describe your finished product.
- c. Take 1-2 tablespoons each morning for 3 days and briefly describe your experience including taste and effects in the few hours after taking. (you may skip this part of the question if you are diabetic and unable to adjust for the sugar).

Lesson 34: Self-reflection exercise – Do Not Submit

Short Answer:

- 1. List 3 major concerns/risks regarding clients with severe IBD. Concerns/risks of IBD include: toxic megacolon, rapid weight loss and severe blood loss needing a transfusion.
- 2. How can a woman change her meal schedule/eating habits to reduce heartburn? A woman can eat 3 hours before bedtime, eat small frequent meals, and elevate the head of her bed as lifestyle changes to reduce heartburn.
- 3. Based on what you know about the herb (and information in this course and accompanying texts), is goldenseal an appropriate herb for treatment in a non-pregnant woman with IBD? Why or why not (1 sentence).

Yes due to its anti-inflammatory, astringent, and vulnerary properties.

Clinical/Hands-On:

1. Your client is 24 weeks pregnant with mild IBD symptoms of diarrhea, bloating, gas and cramping abdominal pain and she has a hematocrit of 30. Create an herbal protocol for her including formulas to address her symptoms and condition, and instructions for use.

Sample example #1: Floradix, 10 ml twice daily

Formula with the following tinctures: nettles 20 ml anise 20 ml chamomile 20 ml cramp bark 20 ml wild yam 20 ml Total 100 ml

Dose: 5 ml twice daily

Sample example #2:

For anemia:

* Begin Floradix iron and herbs as directed on package

* Begin Iron Tonic syrup: simmer 1/2 oz. each of yellow dock root and dandelion root in 4 cups water, uncovered, until only 1 cup of liquid remains. Strain thoroughly and stir in 1/2 cup blackstrap molasses until blended. Product will keep refrigerated up to 2 weeks. Take 2 Tbl each morning upon waking.

* Include more dietary sources of iron, such as dried apricots, raisins, dark green leafy veggies, red meat, poultry, fish, kidney beans, lentils, etc.

For IBD: * Soothing tea cramp bark 1 part wild yam 1 part chamomile 1 part cinnamon 1/2 part anise 1/2 part Mix dried herbs together and store in an airtight container. Steep 4 Tbsp. in 1 quart of boiling water for 2 hours. Strain and take 1-3 cups daily.

Sample example #3:

Herbal Infusion:

Chamomile, Ginger, Marshmallow root Combine 2g marshmallow root, 4g of chamomile chamomile and 1 g of ginger to 3 cups of boiling water. Steep for 30 to 60 minutes, drain herbs, and drink 3 cups of infusion per day.

Rationale:

Chamomile is an anti-inflammatory, nervine, and antispasmodic to aid with inflammation, stress, abdominal pain.

Marshallow root is a demulcent to aid with diarrhea Ginger is a carminative to aid with bloating and gas.

Nettles Tea:

1 tsp. of dried nettles per cup of boiling water once a day. Or you can eat the cooked leaves.

Rationale:

Her hematocrit is 30 so she is at the border for being anemic. The nettles are a nutritive tonic that she can drink to encourage iron absorption. With her mild IBD, she is at risk for IDA.

2. Your client is 32 weeks pregnant and has UC. She is experiencing moderate abdominal pain, nausea, cramping, and mild intestinal bleeding. Her doctor calls you and tells you that your client is allergic to all pain medications and because of unusual circumstances, must rely on herbal medicines alone. Her doctor is also concerned about premature labor with all of the abdominal cramping she is having. How would you modify your protocols from the previous question if you could only rely on herbs for this condition? Write down all modifications and further formulas/instructions for your client.

Sample example # 1: (as corresponds with sample example # 1 above)

A formula of teas instead of tinctures, to avoid damaging the GI mucosa. Also, instead of nettles, I would include marshmallow to soothe the damaged tissues. And instead of anise, a more astringent but still carminative herb like cinnamon would help.

Kudzu root could be added to the protocol, taken with apple juice or soy sauce.

Sample example #2: (as corresponds with sample example # 2 above)

I would give the same tea as described above. Additionally, I would also suggest she add 1 part ginger (anti-inflammatory, spasmolytic, carminative, anti-nauseant) to the tea. I looked for an herbal astringent to help with the mild intestinal bleeding, but it seems that most (yarrow, witch hazel, bayberry, shepherd's purse) are contraindicated in pregnancy. Perhaps she could try uva ursi, though many sources state that it is not to be used in pregnancy and not for greater than 7 days. In terms of lifestyle, I would suggest she try to reduce stress as much as possible and consume an anti-inflammatory diet (lots of fruits and veggies, omega 3 fatty acids, etc.)

Sample example # 3: as corresponds with sample example # 3 above)

Ginger/peppermint digestive tea to aid in abdominal cramping. Drink 1/2 cup twice a day.

If cramping does not abate, can add wild yam to protocol. Typically wild yam is taken as a tincture but this may aggravate IBD symptoms. She can take the dried herb (2 - 4 g) in capsule form.

If intestinal bleeding persists enough to cause IDA, she can take the Yellow Dock-Dandelion syrup, 1 to 2 TB up to twice a day depending on the severity of the anemia.

Lesson 35: Self-reflection exercise – Do Not Submit

Short Answer:

- 1. List 3 herbs discussed in this lesson that are also used as antitussives. licorice, viburnum, lobelia, black cohosh
- 2. Name 4 discrete factors that might trigger labor prematurely? domestic violence, dehydration, closely spaced pregnancies, vaginal infection, intrauterine infection, multiple pregnancies - uterine stretching
- **3.** List 3 organisms that can cause vaginal infections associated with PTL. n. gonorrhea c. trichomatis, u. urealyticum
- 4. List 4 factors that are likely to be increased with low SES that might lead to PTL. Factors include: stress, job standing for long hours, decreased frequency of eating, closely spaced pregnancy
- 5. What is the clinical difference between uterine irritability and preterm labor? (I sentence). There is no cervical change in uterine irritability.

Essay:

Using the resources you have available to you in this course, write a one-paragraph summary (approx. 400 words) of one of the uterine tocolytics, including other major uses for that herb. Sample example:

Black Haw has been listed in the US and British Herbal Phamacopoeias at times during its history of use for treatment of uterine conditions. Its uterine spasmolytic activity was tested and confirmed in animals in the 1990s.

Presently, black haw is considered one of the best herbs to use to calm the uterus. Its medicinal actions are as uterine tonic, uterine antispasmodic and musculoskeletal antispasmodic. These actions are shown in the treatment of prevention of miscarriage and preterm labor, dysmenorrhea, amenorrhea, pelvic pain, to help prepare the uterus for labor, pain relief during labor and postpartum after pains.

Black haw has also been commonly used for relaxing effects on such conditions as vomiting, headaches, migraines, restless leg/leg cramps, spasms related to urinary tract infection or irritable bladder and hypertension. It is also sometimes used in combination with motherwort (*Leonorus cardiaca*) for heart palpitations. This herb is often used interchangeably with cramp bark (*Virburnum opulus*). And although no clinical trials have been conducted with either herb, studies have shown that black haw may have hypotensive and hypertensive effects.

Black haw is not to be used in people taking anticoagulants (although the risk is theoretical) or who have kidney disease (because of oxalic acid content which has chelating and acidic actions). There are no specific contraindications for use during pregnancy or lactation, but as with most herbs, caution should be used during the first trimester.

The fresh or dried bark of the roots, stems or branches is used medicinally. Black haw may be prepared as a tincture and taken at the following dose: 5-10 ml three times daily, or an as infusion/decoction and taken as follows: 2.5-5mg three times daily.

Lesson 36: Self-reflection exercise – Do Not Submit

Short Answer:

- 1. List 3 things you know about the nature of PUPPP. Usually arises in the third trimester, no adverse feto-maternal outcomes expected, hive-like lesions that in the abdomen and thighs that usually spare the peri-umbilical area, breasts, palms, soles and face.
- 2. List 3 questions you might want to ask Katya before suggesting an herbal protocol? Examples include: How is her digestion? Any constipation? Does she have allergies or an autoimmune condition? Want to make sure she does not have pemphigus gestationis condition.
- 3. Based on what you know from the course so far, are they any dietary recommendations you might want to make? Name at least one. Prenatal DHA supplement from a reputable company that screens out heavy metals such as: Nordic Naturals

4. Create a topical botanical formula for the itching, irritated skin condition that cover Katya's concern about infection. Include 3 herbs and describe the form in which it will be used.

Sample example # 1: Herbal cream for PUPPP

1/4 cup organic apricot kernel oil
1/2 cup organic grapeseed oil
1/16 cup coconut oil
1/16 cup beeswax pastilles
1 cup tea made with chamomile and St. John's wort
½ cup organic aloe vera gel
¼ tsp. Vitamin E oil

Preparation

1. Cover 1/2 Tbsp. each of chamomile flowers and St. John's wort flowers with 1 cup boiling water and allow to steep for 5 minutes.

2. Blend oils together in a stainless steel saucepan. Place on low heat and leave on until thoroughly warm.

3. In another small saucepan, slowly melt beeswax just enough to liquefy.

4. In a separate bowl, blend tea with aloe gel.

5. Pre-warm on low heat a double boiler or a Pyrex bowl/measuring cup set in a medium stainless steel saucepan filled part way with water.

6. Have two 10oz clean glass jars and lids ready.

Directions

1. Pour half of your warmed oil blend into the top of the pre-warmed double boiler or pyrex bowl/measuring cup that is set in hot water. Add ¹/₄ oz of the melted beeswax. The combination of oil and wax should be liquid. If the wax begins to harden, the water under your bowl/measuring cup is not hot enough.

2. In a blender, combine 6oz of the tea and aloe vera gel blend with $\frac{1}{4}$ teaspoon of vitamin E oil,. With the lid on, blend for a few seconds to mix these first ingredients.

3. With the lid still on, take out the center piece, turn the blender on low and very slowly pour the warm oil and wax combination into the center of the liquid in the blender. It's important to pour in a very thin, slow stream. The cream will take several minutes to emulsify and thicken and the sound will change as your cream thickens up. Once it's a creamy consistency, use a spatula to scrape down the inside of the blender and around the blades and finish mixing the cream. Turn on the blender again and pulse for a final mixing.

4. Immediately pour your cream into jars. The spatula is helpful for getting all the cream out of the blender. Refrigerate your creams for 2 to 3 hours and label them before use.

For a more simple cream, start with 3 ounces of a premade hypoallergenic cream such as Vanicream or Cerave.

Add 10 ml each of the following herbal tinctures: St. John's wort (*Hypericum perforatum*) witch hazel (*Hammamelis virginiana*) gotu kola (*Centella asiatica*) (Patch test on skin prior to addition in cream to rule out allergic dermatits reaction)

Mix together in blender or by hand while still in tub of lotion. Apply 2-3 times daily or as needed to itchy spots.

Bathe in an oatmeal bath once or twice daily as needed.

1) Start by putting 1/2 cup rolled oats in a tub sock or nylon stocking.

2) Tie sock onto faucet of tub with a rubber band

3) Allow tub to fill with water running through oats.

4) Bathe in tub for 20-30 minutes.

5) Optional: Apply creamy oats to itchy spots while in bath or when showering afterward and rinse off.

6) Apply cream to lightly toweled skin after bath/shower.

Sample example # 2:

Equal parts milky oat tops, chamomile and gotu kola. Blend together and make a strong tea. Use this tea as a wash or compress on affected areas.

Follow up with a botanical cream. Based on Rosemary Gladstar's perfect cream:

1 cup St John's wort infused grapeseed oil

1 table spoon aloe vera gel 1/3 cup witch hazel

2/3 cup distilled water

Sample example # 3:

5 oz aloe vera gel base to which is added chamomile and St. John's wort in the form of a liquid tincture (10ml). Applied topically to skin 3-4 times daily.

-aloe vera: anti-inflammatory, cooling, vulnerary and immunostimulant -chamomile: anti-inflammatory, vulnerary -St. John's wort: vulnerary, anti-inflammatory, antimicrobial

5. Create an internal botanical formula for PUPPP. Include a minimum of 3 herbs.

Sample example # 1:

Tincture for PUPPP relief:

Passiflora incarnat	a (passionflower)	30ml (nervine)
Rumex crispus	(yellow dock root)	30ml (alterative)
Urtica dioica	(nettle leaf)	30ml (anti-inflammatory)
<u>Mahonia aquifoliur</u>	n (Oregon grape root)	10ml (anti-inflammatory, anti-microbial)

Combine tinctures and take 4ml (1 teaspoon) up to 4 times daily as needed.

Sample example # 2:

dandelion root 20ml

milky oat tops 40ml

nettle leaf 40ml

Take 1 teaspoon two times daily.

Sample example # 3:

Tincture: *Urtica dioica* 35ml *Avena sativa* 35ml *Passiflora incarnata* 30ml

Take 3-4 ml up to 4 times daily.

Urtica dioica: nutritive, anti-inflammatory, antihistaminic *Avena sativa*: vulnerary, antipruritic *Passiflora incarnata*: nervine, sedative, antioxidant, anodyne

6. Describe the form in which it will be used and any contraindications or special considerations during pregnancy.

Sample example # 1: (as corresponds with sample example # 1 above):

It will be used in tincture form, contraindications include loose stools (yellow dock is stool softener and is sometimes considered a uterine stimulant, although this action has not been shown with clinical use), nettles is sometimes considered a uterotonic, but this action has not been borne out in use clinically. In high doses (beyond what is recommended here), Passionflower may cause uterine contractions or sedation. Oregon grape root should not be used in large doses for extended periods of time during pregnancy due to theoretical risk of uterine stimulation and increase in neonatal jaundice. It is to be used with caution in those with high blood pressure and in those with arrythmias due berberine content.

Sample example # 2: (as corresponds with sample example #2 above):

Can be diluted with water or juice. There are no special considerations for this during pregnancy. I chose well-known herbs as I don't know this woman's complete history, especially blood pressure.

Sample example # 3: (as corresponds with sample example # 3 above):

Tincture form. Urtica dioica: safe in pregnancy as per long history of use by midwives. No other CI Avena sativa: Safe in pregnancy. No known CI Passiflora incarnata: Safe in pregnancy. No known CI

7. Create a botanical formula for the irritability and sleep problems Katya is experiencing. Describe the form in which it will be used and any contraindications or special considerations during pregnancy.

Sample example # 1:

Sleep support tea:		
Melissa officinalis	(lemon balm)	3 parts
Matricaria retutica	(chamomile)	3 parts
Sculletaria laterfloria	(skullcap)	2 parts
Lavendula officinalis	(lavender)	2 parts

Cover one tablespoon of combined herbs with one cup boiling water and allow to steep for 5-10 minutes. Drink 1-2 cups in the 2 hours before bedtime.

Avoid all but occasional use of lavender during the first trimester due to potential for effects on fetal central nervous system, Lemon balm may stimulate TSH or thyroxine actions in the body, to evaluate thyroid hormones in pregnancy with use. Obtain skullcap from a reliable source to avoid adulteration.

Sample example #2:

California poppy 50ml chamomile 50ml

Take 2.5ml one hour before bedtime. Another 2.5ml at bedtime.

Sample example #3:

Nervine tea: -chamomile 1 part (no special considerations or CI) -lemon balm 1 part (CI: should not be taken if there are existing thyroid disorder or if on thyroid medications and pregnant) -milky oats 1 part (no special considerations or CI)

- 8. Instead of Katya's rash appearing on her lower abdomen stretch marks and on her thighs, it is mostly close to her belly button. What would you do differently? (1 sentence) Refer her to an OB/midwife to rule out other more concerning skin conditions of pregnancy,
- 9. Katya also has varicosities on her lower legs and wants to know if she can take gota kolu tincture or apply it topically. What do you tell her? (1 sentence) Example: She can apply this topically diluted in witch hazel or arnica oil, but try a "test patch" first on her inner wrist, as there have been many reports of contact dermatitis. Gotu kola is not recommended for internal use during pregnancy.
- 10. Elaine is a 26-year old woman with varicosities on her legs. She wants to know if she can drink yarrow tea or use it topically. What do you tell her? If you do not endorse its use, suggest an alternative.

Example: Elaine can use a strong infusion of yarrow tea as a compress directly on her varicosities. The thuja content in yarrow contraindicates its use during pregnancy as thuja may be teratogenic. She can also try supplementing with rutin and bilberry.

Lesson 37: Self-reflection exercise – Do Not Submit

Short Answer:

- 1. Herb Trivia: The botanical name for which sedating nervine has a "u" after every consonant in both the genus and species name? *Humulus Lupulus*
- 2. A pregnant client reports that she has been having difficulty sleeping due to irritable uterine contractions. List 3 herbs that you would include in a formula that, combined, might be helpful for sleep and uterine irritability. Examples include: cramp bark, passion flower, and chamomile

- **3.** List 3 relaxing herbs that can be taken as pleasant tasting teas. Chamomile, lavender, lemon balm
- 4. List 3 conditions for which blue vervain might be used. Anxiety, emotional lability related to PMS or baby blues, decreased milk supply/galactagogue
- List 2 actions of feverfew that make it inappropriate for use during pregnancy for the treatment of migraine. abortifacient, emmenagogue
- Chamomile is found in Beatrix Potter's *Peter Rabbit* when Peter's mom gives it to him to promote_____. Sleep

Hands-on/Clinical:

1. Create a nervine tonic formula using at least 3 herbs that can be used daily for a client who has anxiety and insomnia. Give the common and botanical names for each of the herbs, form of use, dose, indications, and contraindications, if any, for each herb.

Sample example #1:

Matricaria recutita (Chamomile) 1 part

Melissa officinalis (lemon balm) 1 part

Lavendula officinalis (lavender) 1/4 part

Prepare an infusion by steeping 4 tablespoons of the herb mixture in 1 L of boiling water, for 10-15 minutes in a closed vessel. Enjoy 2-3 cups daily.

Sample example # 2:

Tincture for anxiety and insomnia:

Melissa officinalis	(lemon balm)	30ml
Passiflora incarnata	(passionflower)	30ml
Matricaria recutita	(chamomile)	30ml
Lavandula officinalis	(lavender)	10ml

Total: 100 ml

Dose: Take 2.5ml twice daily: one dose 2 hours before bed and another an hour before bed. No contraindications. Check progress after 1 month.

Sample example # 3:

I suggest a formula of the combined tinctures:

Lavandula officinalis	(lavender)	20ml
Melissa officinalis	(lemon balm)	30 ml
Matricaria recutita	(chamomile)	30 ml

2 ml every 20 minutes for 2 hours before bedtime

2. Create an herbal formula for a client with RLS and insomnia. Give the common and botanical names for each of the herbs, form of use, indications, and contraindications, if any, for each herb. Include at least one important dietary recommendation for leg/muscle cramps that might be beneficial.

Sample example # 1:

Matricaria recutita	(chamomile)	1 part
Viburnum opulus	(cramp bark)	1 part
Lavandula officinalis	(lavender)	1/4 part

Prepare an infusion by steeping 4 tablespoons of the herb mixture in 1 L of boiling water, for 10-15 minutes in a closed vessel. Enjoy 2-3 cups daily.

Additionally, it is important to ensure a sufficient nutritional intake of magnesium in the nutrition as a deficiency in magnesium has been linked to RLS, which in turns can cause insomnia.

Sample example # 2:

Tincture for RLS and insomr	nia:	
Viburnum opulus	(cramp bark)	40 ml
Eschscholzia californica	(California poppy)	20 ml
Scutellaria lateriflora	(skullcap)	20 ml
Passiflora incarnata	(passionflower)	20 ml
	Total	: 100 ml

Dose: Take 2.5ml twice daily: one dose 2 hours before bed and another an hour before bed. Be sure to use a reliable source for skullcap. Tincture not intended for long-term use. Check back after 3 weeks.

Additionally, take a daily multivitamin containing iron, folate, B vitamins, calcium, and magnesium. Eat plenty of iron rich foods.

Sample example #3:

I'd suggest to check iron levels and supplement if needed. Also, I'd suggest to take a calcium and magnesium supplement (1000 and 350mg respectively) and have a lot of potassium-rich foods (i.e. bananas). Serotonin promoters like garbanzo beans and pasta might also be good choices for dinner.

Also, the same herbs than in previous answer, plus cramp bark.

Melissa officinalis	(lemon balm)	30 ml	
Matricaria recutita	(chamomile)	20 ml	
Viburnum opulus	(cramp bark)	30 ml	
Lavandula officinalis	(lavender)	20 ml	
to be taken 2 ml every 20 minutes for 2 hours before bedtime.			

LESSON 38: Self-reflection exercise – Do Not Submit

Short Answer:

- List and define the 4 types of breech presentations. There are three types: Frank- most common, fetal legs are extended with feet up near head Complete- fetal knees are flexed, with feet toward fetal hips Incomplete/footling wherein one or both of the fetal feet present
- 2. What is perhaps the greatest risk associated with vaginal breech birth? Cord prolapse; provider inexperience due to primary c/s rates with breech; difficult to birth head in a proper position
- **3.** Why might a woman want to attempt to rotate a breech baby using moxabustion? Considered a safe and effective way to rotate baby that carries fewer risks than ECV (external cephalic version) or c-section
- 4. Starting at what gestational age is moxabustion best performed and why is attempting to turn a breech baby prior to this not advisable? 33 weeks, babies are likely to turn on their own between 33-37 and may "turn back" during this period.

Hands-On:

 Give a moxabustion treatment, following the instructions found in Lesson 14. DO NOT use on a pregnant woman or a child under 7 years old. Take care to avoid burns, excessive smoke inhalation, and be certain that the moxa is completely extinguished when you are done to avoid fires. Use fire prevention precautions at all times while using moxabustion. Describe your experience in a few sentences. Reflective.

Lesson 39: Self-reflection exercise – Do Not Submit

Short Answer:

- 1. List the two general herbal strategies for approaching a dysfunctional labor.
 - 1) use of herbs to promote uterine contractions and stimulate labor
 - 2) herbs to promote maternal relaxation and rest
- 2. List 3 non-herbal, non-pharmacologic methods for labor stimulation. Nipple stimulation, sexual intercourse, walking
- 3. List 3 labor-related uses for acupuncture. Decreases pain, effects cervical ripening, stimulates labor

Hands-On/Clinical:

1. Which of the three factors that can cause labor dystocia, "powers", passenger, or passage, can be addressed with herbs. Briefly explain your answer.

Abnormal or inadequate progress in labor, also known as failure to progress, prolonged labor, failure of cervical dilation, failure of descent of the fetal head can be caused by inadequate "powers" or uterine contractions which can be addressed by herbs. Inadequate "Passage" is the bony pelvis and abnormalities of the "passenger" has to do with the baby both of which little can be done with herbs.

2. A midwife contacts you about a 34-year old woman who is 6 days past her due date. Her pregnancy has been normal, her baby appears to be in a good left-occipital anterior position, her cervix was ripe and 70% effaced and 2 cm dilated at the prenatal two days prior, and her membranes ruptured 10 hours ago. She has no history of GBS and no current signs of infection. What herbs, if any, might you suggest to this midwife and explain your rationale.

One example:

Since most women, about 70%, go into spontaneous labor 24 hours after PROM I would probably suggest a watchful wait approach unless there are state laws that say that she has to deliver within a certain number of hours.

Another example:

Since it is only 10 hours past ROM, no sign of infection or fetal distress, there is no need to stimulate contractions which will usually start on their own soon. I would suggest herbs to help bring relaxation to mom if she is having trouble relaxing. Motherwort would be a good option in this case. If it is night and she should be sleeping to gain strength for the labor that is to come, perhaps a stronger nervine/sedative such as California poppy or passionflower.

3. This same woman has now had PROM for 16 hours, with no signs of infection and also no signs of labor commencing. The midwife feels she must encourage labor to begin or she'll have to transport the mom to the hospital, and the mother is also quite anxious to "get the show on the road." Please suggest an herbal protocol as well as adjunct approaches that might be appropriate. Are there any precautions you should mention?

Sample example # 1: 8 hour PROM Herbal Protocol

Combine 20 ml blue cohosh (or cotton root) and 8 ml black cohosh in a 1 oz. dropper bottle. Give 3 ml of the combination every hour for four hours. Give 2 ml of the combination every 30 minutes for 4 hours.

During this time nipple stimulation is applied for 30 minutes during the second hour. Take a long walk. If contractions have not commenced after 8 hours, discontinue.

Hot castor oil massage can be done on the abdomen twice during the protocol. It can also be ingested (2 oz dose repeated 2-3 times, mixed into orange juice in a blender). Drink lots of water and electrolytes after treatment as copious diarrhea is the result.

Sample example #2:

An herbal protocol for stimulating contractions can be initiated.

- Blue cohosh 20ml and black cohosh 8 ml. Take 3ml every hour for 4 hours, then 2ml every 30 minutes for 4 hours. Do not use the blue cohosh for more than 8 hours.
- Castor oil, 2 oz every hour x 3 hours may be added, or an abdominal massage with hot castor oil (carefully) may be performed q4 hours.
- At the same time, nipple stimulation (breast pump) is applied for 20-30 minutes during the second hour of the protocol. Long walks or rest can be encouraged, depending on the time of the day and moms energy level. I find that "high energy" moms require rest to stimulate labor.
- Encourage water intake or red raspberry leaf tea (hot or cold) for hydration. Continue nutritious foods as tolerated. Major precaution is nothing per vagina with ROM. Also, checking temperature every 2 hours. Once contractions begin, monitoring of fetal well being by fetoscope or doppler should be initiated. Of course, if you are not the birth provider, close communication with the midwife or physician is important.

Sample example # 3:

I would suggest a tincture of 20ml cotton root and 8ml of black cohosh. Mom takes 3ml of the combination every 4 hours and then give 2ml of the combination every 30 minutes for 4 hours.

Make sure during this time that nothing enters the vaginal canal, that mom is staying hydrated as well. As mentioned above, she can try nipple stimulation during the second hour and she can also go for a long walk. She can also do the castor oil abdominal massage but to know that if she ingests the castor oil, diarrhea is often a side effect so she needs to be sure to stay adequately hydrated and replace any lost electrolytes.

Instead of cotton root, blue cohosh can be used instead but be sure to substitute cotton root for the blue cohosh if contractions have not started after 8 hours.

4. A 41-week pregnant woman has been in active labor for 22 hours, with contractions every 3-4 minutes. She is healthy with no signs of a medical problem, but is becoming discouraged, exhausted, and her contractions have become short, irregular, ineffective, and are "crampy." What herbs might you suggest to her? Why? Be specific with dosing strategies and precautions.

Sample example # 1:		
Actaea racemosa	(black cohosh)	20 ml
Leonaoras cardiaca	(motherwort)	20 ml
Viburnum opulus	(cramp bark)	20 ml
Passiflora incarnata	(passionflower)	20 ml
Lavandula officinalis	(lavender)	20 ml

Dosage: Take 5 ml every 15 mintues until relaxation is achieved.

These herbs are uterine spasmolytics and nervines to promote smooth muscle relaxation, anxiety and tension so that the mother can rest. Once rest is achieved I would promote uterine activity with herbs like blue cohosh, cotton root, red raspberry.

Sample example # 2:

If fetal well being is ensured, and there is not rush, it is important to let mom rest and relax before initiating herbs that stimulate contractions. The following formula will promote rest and strengthen her for the labor to follow:

Viburnum opulus	(cramp bark)	20ml
Leonaoras cardiaca	(motherwort)	20ml
Passiflora incarnata	(passion flower)	15ml
Lavendula officinalis	(lavender)	5ml

2.5 - 5ml every 15 minutes until relaxation is achieved.

Simultaneously, ensure adequate hydration. This isn't an herbal suggestion, but as a CNM, I can't help myself: If mom is in the hospital, this is when I suggest IV fluids to help replenish mom. 500cc is often all is needed. A dehydrated uterus cannot function efficiently. Of course, if not in the hospital and able to drink, plenty of fluids can be encouraged. When mom wakes from her relaxation, if she is not having adequate, stronger, more coordinated contractions, a stimulating formula can be given.

Blue cohosh 20ml and black cohosh 8 ml. Take 3ml every hour for 4 hours, then 2ml every 30 minutes for 4 hours. Do not use the blue cohosh for more than 8 hours.

Sample example # 3:

First, fetal malpresentation must be ruled out before beginning an herbal protocol. In this case herbs that promote maternal relaxation will be helpful to allow her to rest, to allow the pelvic muscles to relax so that the fetal head can rotate and position optimally, and/or to allow the uterine muscles to relax so that the contractions can become coordinated. Herbs that promote relaxation (nervine sedatives) and uterine relaxants/antispasmodics are suggested.

Herbs such as motherwort, cramp bark, chamomile or passionflower can be effective in this situation. Motherwort and cramp bark should be in equal parts (20ml) and the chamomile or

passionflower should be dosed at 15ml. Mom can take 1/2 to 1 tsp. every 15 minutes until she is relaxed enough to feel relief (this may require 4 to 6 doses).

5. A 34 week pregnant client comes into your office and tells you that the clerk in the herb department of the local health food store has recommended that she take a product marketed as *partus preparatory* to ensure a smoother, easier birth. The product contains blue cohosh, black cohost, Scotch broom, and partridge berry. She wants to know what you think about this product and partus preparators. What do you tell her?

Would not recommend this formula. Partridge berry is an endangered herb so it should only be taken from cultivated sources. Scotch broom has been associated with potential cardiac toxicity and should only be used under medical supervision. Blue Cohosh is has risks of fetotoxicity and cardiotoxicity and shouldn't be used in the form a partus preparator. Red Raspberry is probably the safest herb used as partus preparators. It is safely used during pregnancy to strengthen the uterus, improve labor outcome, and prevent excess bleeding after birth. It is recommended to be taken in the form of an infusion, 1 to 3 cups daily.

Lesson 40: Self-reflection exercise – Do Not Submit

Short Answer:

- **1.** Which 3 analgesic herbs mentioned in this lesson require dosing caution to avoid toxicity? kava, pulsatilla, Gelsemium, lobelia
- 2. List 3 possible positions the mother might assume for facilitating labor. hands and knees, squatting, left lateral recumbent, standing position with massage
- 3. List 6 factors that have been shown to reduce analgesic requirements in labor.
 - 1. doulas-continuous labor support
 - 2. hydrotherapy
 - 3. various positions
 - 4. massage
 - 5 sterile water injections
 - 6. acupuncture

4. List 4 actions of kava kava.

analgesic, anxiolytic, antispasmodic, sedative

- 5. List at least 4 general indications for the use of hops. anxiety, tension, insomnia, chronic pain, relief of hot flashes/night sweats in menopause
- 6. List 3 herbs that could be included in a massage oil blend for labor and their action in the preparation. Think medicinally and asthetically. Examples: lavender, chamomile, and peppermint (one's with essential oil content-or just use the essential oils from these plants)
- 7. Your sister is in labor and you are her doula. She is feeling nauseated and has vomited a few times. In addition to giving her an electrolyte drink, you give her a tea. List 3 herbs that you might include in a tea for nausea that would also be palatable to sip during labor. ginger, chamomile and peppermint or spearmint

8. Your local doula asks you for a couple of suggestions on some herbs that can be used for aromatherapy in the hospital. She would like one herb whose scent is relaxing and pleasant, and another that is a little more stimulating, but also pleasant. Name these 2 herbs. lavender, peppermint

Hands-On/Clinical:

1. Create an herbal formula that you might have given to Ingrid to help relieve her anxiety and pain. Include at least 3 herbs, give their indications, dose, form of administration, and any precautions associated with those herbs.

Sample example # 1:

Tincture:		
Piscidia piscipula	(Jamaican dogwood)	8ml
Kava kava	(kava)	8ml
Viburnum opulus	(cramp bark)	15ml
Passiflora incarnata	(passion flower)	15ml
Lavendula officinalis	(lavender)	4ml

DOSE: 1- 2.5 ml every 15-30 min up to 8 doses in one day, if not helping discontinue. Use no more than 2 days.

All these herbs are indicated for tension, anxiety, and pain. Cramp Bark is particularly indicated where there is muscular spasm.

Precautions: Jamaican Dogwood doses should not be exceeded due to it's content of rotenone, a known nervous system toxin. Caution must be taken in cases of bradycardia, hypotension, cardiac insufficiency. It has been shown to be a potent depressant of uterine muscle both in vivo and in vitro. Safety data is not available regarding it's use in pregnancy. It may be used for short periods of time for cases such as this one, and with the appropriate professional care and assessment. Kava can have accumulative effects after several doses and may cause a floaty sensation which may be disconcerting for some.

Sample example # 2:

Tincture:		
Leonaoras cardiaca	(motherwort)	40ml
Passiflora incarnata	(passion flower)	30ml
Viburnum opulus	(cramp bark)	30 ml

Dose: 5 ml every 30 minutes, up to 6 doses in 24 hours; not to be used for more than 2 consecutive days.

Indications: Motherwort is to relieve spastic uterine contractions and to relieve anxiety. Passionflower is to relieve anxiety and promote rest, cramp bark is to relieve spastic uterine contractions and as a general musculoskeletal relaxant. no expected adverse effects with these herbs.

Sample example # 3:

Tincture: Passion flower (Passiflora incarnata): 20ml (anxiety relief) - If >12ml daily exceeded, may intensify contractions or act as a sedative Black haw (Virburnum prunifolium): 40ml (analgesic, spasmolytic) - Can decrease blood pressure <u>Motherwort (Leonorus cardiaca): 40ml (uterotonic, spasmolytic)</u> Combine tinctures, take 3ml/ 0.5 dropperful every 15 minutes until anxiety and pain reduced or for up to 1 1/2 hours (4-6 doses).

2. Briefly explain the statement "Knowledge is the most powerful thing as far as pain." Reflective.

Lesson 41: Self-reflection exercise – Do Not Submit

Short Answer:

- Why might the use of *Capsella* be avoided when there is heavy uterine bleeding along with the presence of large uterine clots? May cause large clots that would prevent the uterus from clamping down and stopping bleeding.
- 2. List 5 health advantages of breastfeeding for the child. lower incidences of allergies, GI infections, ear infections, respiratory infections, and higher IQ scores.
- **3.** What is the "puerperium" and *technically* how long does it last? The puerperium is the time immediately following the delivery of the baby lasting for 6 weeks.
- 4. What are the sign/symptoms of endometritis? Is it reasonable to try to treat endometritis botanically?

Signs/symptoms: fever, uterine tenderness, foul smelling discharge, increased bleeding.

No. Life threatening. It requires use of antibiotics.

- 5. What is "postpartum blues" or "baby blues" and with what frequency does it occur? Postpartum blues" or "baby blues" is characterized by periods of weepiness, anxiety and irritability and generally these periods occur with in 3 and 10 days after birth. It can last for several hours up to several days. It is indicated to occur between 30 and 80% of all women, according to studies, and is attributed to a significant drop in hormones that occurs after birth.
- 6. What is the upper limit to the duration of breastfeeding that is physically and psychologically safe for a child? There is no upper limit for duration. There is no harm as long as both mutually desire.
- 7. List 5 basic needs of a new mother. adequate rest, ample healthy food, respect for emotions, reassurance that they are doing a good job, praise and encouragement

- 8. List four herbs that were cited in this lesson as being common ingredients in "Mother's Milk" tea blends. chamomile, catnip, anise fennel, lavender, etc
- 9. What category or herbs might you include in a formula for a woman who is 3 months postpartum, is fatigued and overwrought, and has had 3 reported bouts of mastitis? Give 2 examples of herbs in this category that would be reasonable to use while breastfeeding and that would not be overstimulating to the baby the way ginseng might. Adaptogens: such as ashwaganda, reishi mushroom

Hands-On/Clincal:

1. Create a topical nipple salve formula using at least 4 ingredients. List the ingredients, the indications for its use, actions of each herb in the salve, and any cautions with using it while breastfeeding. (Optional: actually make the salve!)

Sample example # 1:

- calendula: vulnerary herb for inflamed irritated sore or cracked nipples. Great for treatment of infection.
- St. John's wort: antiviral, vulnerary herb for cracked dry nipples. Reduces staph colonization. Healing for skin injuries.
- chamomile: anti inflammatory, antibacterial. Used for skin inflammation, thrush, soothing.
- myrrh: anesthetic, antibacterial and anti fungal herb used for inflammation. Treats thrush.
- coconut oil: emollient. To moisten dry cracked tissue.
- beeswax: antimicrobial, emollient: To moisten dry cracked tissue.

Sample example # 2:

calendula (vulnerary, anti-inflammatory) to sooth and heal cracked and inflamed skin hypericum (vulnerary, anti-inflammatory) to heal cracked, dry nipples and candida goldenseal (anti-microbial) to prevent/heal infections and candida tea tree oil (anti-microbial) also for any fungus or bacteria Rinse well before breastfeeding, and keep nipples dry and uncovered if possible.

Sample example # 3:

St. John's wort - vulnerary, antiviral - 2 parts calendula - vulnerary, antimicrobial, anti-inflammatory - 2 parts golden seal - antimicrobial $- \frac{1}{2}$ part

All of these should soak in food grade almond oil or olive oil for a few weeks. Then strain the herbs out, and use the oil to make a salve with beeswax. Can be applied several times per day as needed. Might stain clothes.

 List the actions for each of the herbs you might find in a perineal healing formula for postpartum mothers. Comfrey leaf Yarrow blossoms Sage Leaf Garlic Witch Hazel Calendula Lavender

Comfrey ~ vulnerary, demulcent Yarrow ~ astringent, antimicrobial, vulnerary Sage ~ astringent, antiseptic Garlic ~ antimicrobial Witch hazel ~ astringent, anti-inflammatory Calendula ~ vulnerary, anti-inflammatory Lavender ~ anti-inflammatory

3. List the actions for each of the herbs found in this formula for depression and anxiety. Kava kava Ashwagandha St. John's Wort Motherwort

Kava Kava ~ anxiolytic, antidepressant Ashwagandha ~ adaptogen

Ashwagandha ~ adaptogen St. John's Wort ~ nervine, anxiolytic, antidepressant Motherwort ~ nervine, anxiolytic

4. Describe your general and botanical approach for a mother with postpartum depression including botanicals and adjunct approaches. List any concerns or cautions you might have for her, and any tests that might need to be considered to identify the underlying causes.

Sample example # 1:

My general approach for a mother with postpartum depression would primarily include making sure the mother had adequate support and ensuring proper parental nutrition. Adequate social support could include a doula, a hotline or support group, and properly educating family and friends on how to support the new mother. Adequate nutrition includes ample fluids, ample complex carbohydrate intake, and possibly essential fatty acid supplementation. I would suggest proper self-care such as adequate rest, baths, and journaling. Botanical therapies may include adaptogens, nervine tonics, antidepressants, nervine relaxants, and sedatives. Additional therapies such as maternal and infant massage, and aromatherapy could be used as well. I would be sure that the mother was not experiencing psychosis or suicidal thoughts and possibly her hormones and vitamin levels could be tested to ensure there are no major underlying causes to be addressed, such as anemia or thyroid imbalances.

Sample example # 2:

I would screen her with the Edinburgh scale, discuss with her ways to get more sleep, ask if anything is preventing her from sleeping, ask about the amount of support she is receiving at home and suggest ways for increasing the support (Postpartum doula, family, friends to come and

help clean the home, cook, do laundry, hold baby while she showers), I would suggest testing her iron levels and her thyroid levels, discuss counseling with her and suggest she see someone recommended who is familiar with PPMD support, advise a massage twice monthly, discuss ways that she can connect positively with her baby and her partner.

I would discuss use of herbs to help with sleep, if this is an issue (passionflower, skullcap, lavender), for anxiety, if this is an issue (motherwort, blue vervain, lemon balm), low mood, if this is an issue (St. John's wort, eleuthero, ginseng), combining these with adaptogens to help support the adrenal system which has been effected by the change in sleep pattern and increased stress. I would advise caution with use of St. John's wort if mood worsens, with ginseng if she feels wired or amped up, to make sure she obtains all herbs from a safe source and to check in regularly (once every 1-2 weeks) with use of herbs.

I would advise 1-3g O3s daily or 12 oz. of low mercury fish like salmon weekly, Vitamin D supplementation of 6400IU daily (to supplement her and baby).

Sample example # 3:

Assuming it is a mild depression:

- Encourage professional psychological support
- Provide empathic support
- Encourage social activities like meeting other mothers
- Encourage appropriate rest
- Encourage appropriate nutrition (adequate protein, complex carbs, iron-rich foods, fiber and water intake), avoiding coffee and sugar.
- Encourage massage and outdoor activities (light exercise)

Botanical strategy of:

Hypericum perforatum	(St. John's wort)	25ml
Withania somnifera	(ashwagandha)	25ml
Urtica dioica	(nettle leaf)	10ml
Cardiaca Leonorus	(motherwort)	20ml
Melissa officinalis	(lemon balm)	20 ml
T 1 5 10 ° 1 ° 1		

Take 5 ml 3 times daily.

- Team work (husband, family, psycho-therapist, physician and us)
- Blood test to rule out anemia
- B-complex and DHA supplements
- Aromatherapy: Lavender essential oil

Cautions, watch out for more serious symptoms like suicidal thoughts, or fear of harming herself or the baby, etc.