

Essential Oil Use in Pregnancy, Labor and Beyond

Disclosure

I do not sell or work for any essential oil companies. I have nothing to disclose.

Objectives

- 1. Participants will be able to describe safe dilutions of essential oils when used in pregnancy, lactation and the newborn infant.
- 2. Participants will be able to list 3 essential oils which are contraindicated for use with infants under one year of age.
- 3. Participants will be able to select appropriate essential oils for the treatment of select vaginal infections.

Plant Medicine and Midwifery

- Long history of use of herbal medicine by midwives both for reproductive health but also general health concerns.
- In America early midwives learned much about herbalism from native American healers.
- Common 19th century herbs:
 - Blackberry, raspberry
 - Slippery elm
 - Chamomile
 - Mint



Definitions

- **Essential Oils** – volatile oils composed of secondary metabolites which protect the plant from disease and pests as well as help repair damage . The “essence” or life force of the plant.
- **Clinical Aromatherapy** – the use of volatile essential oils for a therapeutic effect.
- **Certified Aromatherapist**- Individual who has completed 200 hours of study in the theory and practice of aromatherapy and/or passed exam offered by the Aromatherapy Registration Council.

Applications

- **Inhalation:** Molecules enter bloodstream through nose, olfactory vessels and nerve. Influences survival mechanisms and scent memory.
- **Topical:** 5 – 10 % enters the bloodstream, some will evaporate, some remains on the skin. Amount absorbed depends on skin condition, carrier and size of molecule.
- **Oral ingestion:** 1st path detoxification through the liver. Metabolites are the active molecules delivered to the tissues and leave the body within 2 hours.

Tisserand R., 2014. Essential Oil Safety.

“ Essential oils do not act as weapons but as agents of interaction. ”

Kurt Schnaubelt, PhD

Basic Chemistry



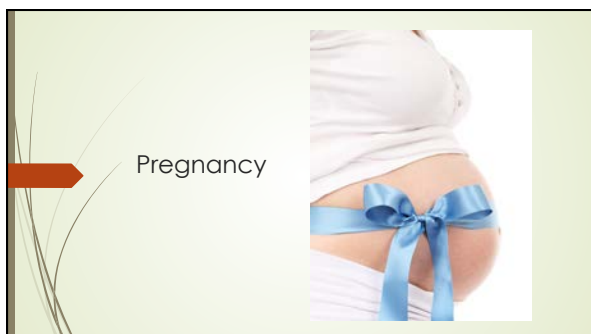
- Oil constituents are molecular compounds that give the oils their various properties – scent and action. Each species within a family will have slightly different actions based on constituent amounts.
- Proportions change with each growing season, soil condition, location.
- Plants share many constituents but each have an individual “fingerprint” that can be mapped.

Major groupings of constituents:

- Terpenes
- Phenols
- Aldehydes
- Alcohols
- Ketones
- Acids
- Esters
- Coumarins

General Safety

- Assess patient history: seizures, asthma, allergies, etc.
- Know the toxicities, contraindications of oils you use. i.e. skin irritants, phototoxicity, drug interactions
- Always dilute for age, skin condition and therapeutic application.
- Avoid recommending ingestion unless you have extensive training in this area.
- Avoid prolonged use of any oil.
- Store properly and out of reach of children.



- ### Essential oil benefits in Pregnancy
- Relief of tension and stress.
 - Muscle relaxation when combined with massage.
 - May decrease nausea.
 - Assist with sleep onset.
 - Aids in breathing practice for labor.

- ### Pregnancy Related Conditions
- **Abdominal discomfort:** Ginger, Mints, Citrus
 - **Heartburn:** Sandalwood, German chamomile, Petitgrain
 - **Hemorrhoids:** Cypress, Sandalwood, Peppermint
 - **Morning sickness:** Peppermint, Sweet orange, Ginger
 - **Stretch marks:** Lavender, Frankincense, Rose, Roman chamomile
 - **Varicose veins:** Cypress, Sandalwood,
 - **Water retention:** Petitgrain, geranium, Grapefruit

- ### Safety in Pregnancy
- There are no studies in pregnant persons.
 - Animal studies demonstrate fetal malformation and neurological damage at high doses.
 - There are no recorded cases of fetal malformation or abortion with the judicious use of essential oils.
- Tisserand, 2014, Buckle, 2014, Knapp-Hayes, 2015

- Recommendations are based on what we know about an oil's toxic properties i.e. irritation, sensitization, abortifacient, effect on developing fetus from animal studies.
- Hydrosols are a very safe form of essential oils.
- Peppermint may lower blood pressure.
- Rosemary may raise blood pressure.

General Guidelines in Pregnancy

- EOs do cross placental barrier – dilution to 1% and applied dermally may be safe in pregnancy. Total dose matters!
- No more than 4 drops of EO in a bath.
- Hyperosmia in pregnancy.
- Skin sensitivity may increase during pregnancy.
- Avoid use during 1st trimester.
- Oral ingestion should be avoided during pregnancy.

National Association of Holistic Aromatherapists



1 drop of essential oil = 30 mg
1 ml of essential oil = approximately 30 drops

Essential Oil Safety, R. Tisserand, R. Young 2014

Oils to avoid during pregnancy

* not an exhaustive list

- Anise
- Birch
- Buchu
- Carrot Seed
- Cinnamon bark and leaf
- Cypress (blue)
- Fennel
- Hyssop
- Lavender (Spanish)
- Mugwort
- Myrrh
- Oregano
- Parsley leaf and seed
- Pennyroyal
- Rue
- Sage
- Tansy
- Thuja
- Wintergreen
- Wormwood
- Yarrow

Labor

- Essential oils cause a release of endorphins which can help the laboring person to handle pain. Used most often by inhalation, massage and foot bath.
- Inhaled oils go directly to the limbic system where the amygdala manages fear.



- **Lavender** is most often studied oil during labor.
- 2007- Burns et al - a combination of **lavender, frankincense and rose** helped to relieve anxiety in labor. Applied as back or foot massage.
- Earlier study by Burns involved >8,000 women using a variety of oils.
- over 50% participants felt they were helpful to them
- there was a decreased need for additional pain relief
- appeared to enhance contractions in dysfunctional labor.

Cautions during labor

- Do not place oils in water for water birth as can irritate baby's eyes.
- Oils will damage plastic parts of equipment.
- Avoid same oils as with pregnancy.

Post Partum

- Episiotomy site** – Lavender promotes healing and decreases pain. Studies show mixed results. Sitz bath, oil blend, spray.
- Urinary retention** – a couple of drops of peppermint in toilet relaxes sphincter. Caution with low blood pressure.
- Edema** – massage with cypress, geranium, petitgrain 1-5%.

Lactation



- Less than 1% of maternal dose of essential oil enters the breast milk. Hausner H. et al 2008
- There is no evidence that EOs increase milk production but inhalation of oils may help letdown. Ex: Fennel better as tea.
- Oils should be washed off prior to nursing.
- Some concern for nipple aversion by infant.

Mastitis

- Blend of lavender and citrus oils for breast massage - decrease pain and antimicrobial.

Sore, cracked nipples

- Yeast – Tea Tree oil 1-4% 3 times per day
Lavender for tissue healing, pain.
* Must wash off oils prior to nursing.

Essential Oils and the Newborn



Guidelines

- Never use on premature infants and best to avoid in first 3 months.
- No longterm studies in infants.
- Never place oils in infant's face – risk of apnea. Especially with menthol and cineole constituents i.e. peppermint and eucalyptus.
- Topical application to feet or back is best. Avoid hands.

- **Patch test first.** Apply tiny amount of diluted oil in one area and cover. Wait 2 hours and assess site.
- **Dilution recommendations:** (Tisserand)
 - 0-3 months 0.1- 0.2%
 - 3- 12 months 0.25
 - 12-24 months 0.5%
- Lavender and chamomile may be helpful in colic and general calming. Massage into lower back for colic.

Essential oils to avoid in infants

- | | |
|---------------|---------------|
| ■ Anise | ■ Lemongrass |
| ■ Basil | ■ Melissa |
| ■ Birch | ■ Niaouli |
| ■ Cinnamon | ■ Oregano |
| ■ Clove | ■ Peppermint |
| ■ Eucalyptus | ■ Rosemary |
| ■ Fennel | ■ Sage |
| ■ Laurel leaf | ■ Wintergreen |

Vaginosis

No studies exist for use of EOs in Gm + Beta Strep prophylaxis prior to childbirth.

- We know that Tea Tree oil is effective against many gram + organisms.
- No safety data on vaginal application of TTO during pregnancy.
- Tisserand: Appears that adverse reactions are rare with 1-5% dilution. Again, not known in pregnancy.

Bacterial or candida vaginosis suppositories

- 1 cup cocoa butter
- 1/2 cup coconut oil
- 3 Tbs calendula oil
- 1/2 tsp thyme essential oil
- 1/2 tsp lavender essential oil
- 1/2 tsp tea tree essential oil
- 4 Tbs comfrey root powder finely ground
- 2 Tbs goldenseal root powder

Aviva Romm, MD states this formula is safe in pregnancy.

<http://avivaromm.com/vaginal-infection-remedy/>

Buyer Beware

"Pure and Therapeutic"

- Therapeutic is defined as, "of or pertaining to the treating or curing of disease," or "to treat medically." Another definition is "serving or performed to maintain health."
- There is no official certification for "pure therapeutic oils".
- All essential oils, by definition, are therapeutic grade!
- Pure – oil without additives, taken directly from the plant.

What to look for in a supplier

- Dedicated to supplying oils to aromatherapy practitioners.
- Smaller company vs. large corporation.
- Owned by an aromatherapy practitioner or EO specialist.
- Has relationships with distillers.
- Readily supply a batch-specific MS/GC report on each oil.
- In the field for several years with strong, noncontroversial reputation.

Good resources

- Tisserand Institute www.tisserandinstitute.org
- Jane Buckle *Clinical Aromatherapy: Essential Oils in Healthcare*, 2015
- Kurt Schnaubelt **Pacific Institute of Aromatherapy**
- Aromahead Institute
- Valerie Cooksley www.aroma-rn.com
- www.aromaweb.com
- National Association of Holistic Aromatherapists
- International Federation of International Aromatherapists



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