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.

“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.

Clinical Applications

Pregnancy

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.

• 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
- Thuya
- 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%.

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

Vaginosis

No studies exist for use of EOs in Gm + Beta Strept 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](http://www.tisserandinstitute.org)
- Jane Buckle *Clinical Aromatherapy: Essential Oils in Healthcare*, 2015
- Kurt Schnaubelt *Pacific Institute of Aromatherapy*
- Aromahead Institute
- Valerie Cookley [www.aroma-rn.com](http://www.aroma-rn.com)
- [www.aromaweb.com](http://www.aromaweb.com)
- National Association of Holistic Aromatherapists
- International Federation of International Aromatherapists

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