

A BRIEF REVIEW ON ESSENTIAL OIL

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Article Received on 28/09/2019

Article Revised on 18/10/2019

Article Accepted on 08/11/2019

ABSTRACT

Aromatherapy is a form of complementary and alternative medicine (CAM) which is mainly based on essential oils. Essential oil means which contains essence of the plant fragrance. There are various types of essential oil as per their properties and action. The concept of Aromatherapy was being used since historical time. According to Ayurveda amongs *Panchamahabhuta Prithvi* (Earth) *Mahabhoota* has *Gandha* (smell) *tanmatra* and that is the base of aromatherapy. The pleasant smells have a positive effect on the physical and mental well-being, eg. Sandal paste, rose water, Jasmine flowers, perfumes, eucalyptus oil, clove oil, spices etc. Pharmacological studies showed that most of essential oils are decongestant, anti microbial, anti aging and anti spasmodic effects. Massage with essential oil improves blood circulation and increases the level of endorphins which relieves the pain naturally. According to body constitutions essential oils should be used with precaution. Improper use of essential oil may cause harmful effects on mind and body. This review work is humble effort to provide the basic information about use of essential oils according to *Deha Prakruti* with their properties as well as enlighten the brief review of essential oil through Ayurveda and modern science.

KEYWORDS: Essential oil, Lavender oil, Aroma therapy, Sandal oil, tea tree oil.**INTRODUCTION**

An Essential oil is a concentrated hydrophobic liquid containing volatile chemical compound from plants. The word "Volatile" means which could be easily evaporated at normal temperature. So they are also called as "Volatile oils", "Ethereal oils" and "Aetherolea". Essential oils evaporate completely without leaving a stain or residue. Essential oil means which contains essence of the plant fragrance. Essential oils are generally extracted by distillation, resin tapping, wax embedding, and cold pressing. They are commonly used in perfumes, cosmetics, soaps, skin products, creams, shampoos, drinks, flavoring food products, and household cleaning products.

Essential oils are often used in aromatherapy a form of alternative medicine, in which healing effect is obtained by aromatic compounds. Aromatherapy is useful to induce relaxation. These oils should be used carefully otherwise improper use of essential oil may cause skin irritation; rash, allergic reaction, itching etc. so detail knowledge of essential oils and their properties should be taken before its application.^[1]

The concept of Aromatherapy was being used since historical time. According to Ayurveda amongs *panchamahabhuta Prithvi* (Earth) *Mahabhoota* has

Gandha (smell) *tanmatra* and that is the base of aromatherapy. The pleasant smells have a positive effect on the physical and mental well-being, eg. Sandal paste, rose water, jasmine flowers, perfumes, floral decoration, eucalyptus oil, clove oil, spices etc. From all these aromatics, we experiences pleasant feeling in our day to day life. So this work is planned to take the brief review of essential oil through Ayurveda and modern science.^[2]

MATERIAL AND METHODOLOGY

A normal human nose can recognize up to 4000 different odours. Memory and smell works together hand in hand so particular smell reminds us of places, incidence, emotions and loved ones. Some smells excites us, some gives us peace of mind, some are religious, and some downright irritating. Thus Aromatherapy affects the mind and emotions, using this sense of smell to fulfill the individual emotionally and physically. The whole principle of aromatherapy is creating a pleasurable experience.

As Ayurveda looks at life holistically, sensory satisfaction is essential for the true experience of physical well being. The classical texts of Ayurveda mentioned some effective remedies of essential oil for common illness such as an infusion of jasmine flower for inflamed eyes, essential oil of screw pine for headaches

and rheumatic pains, camphor for calming hysteria, clove oil for tooth aches etc. Vetiver extract for heatstroke and many more.^[2]

Different Ways to Use Essential Oils

Generally essential oils are being used for massage as an external application but rarely it is being used as internal consumption but in very low dose or in drops.

Blending essential oils

Essential oils should be prescribed according to body constitution. It is recommended that when blending oils, a minimum of 2 to 5 oils at a time should be mixed. The resultant blend has its own unique and medicinal properties.^[2]

- **Massage (Ayurvedic snehan procedure)**

Essential oils are very popularly being used for massage. Physical effects of massage are known to improve blood circulation and also change level of 'endorphins' which are our natural pain killers. It gives relief from muscle spasm, stiffness, joint pains etc. Steam bath is also used along with massage so that the essential oil gets quickly absorbed into circulation.^[2]

- **Shirodhara**

Pouring of luke warm medicated oil mixed with essential oil on forehead is very effective treatment for insomnia, headache, hairloss, graying of hairs, anxiety, Cerebral palsy, mental retardation etc.

While reviewing the literature regarding essential oil and its efficacy, lots of research works done found on efficacy of essential oils.

Some References From Previous Research Work Is Given Below

Essential oils such as Aniseed, Acorus Calamus, Camphor, Cedarwood, Cinnamon, Citronella, Clove, Eucalyptus, Geranium, Lavender, Lemon, Lemongrass, Lime, Mint, Nutmeg, Orange, Palmarosa, Rosemary, Basil, Vetiver and Wintergreen have been traditionally used by people for various purposes in different parts of the world. Cinnamon, Clove and Rosemary oils had shown antibacterial and antifungal activity^[8]; cinnamon

oil also possesses antidiabetic property.^[9] Anti-inflammatory activity has been found in basil.^[9,10] Lemon and rosemary oils possess antioxidant property.^[11,12] Peppermint and orange oils have shown anticancer activity.^[13,14] Citronella oil has shown inhibitory effect on biodegrading and storage-contaminating fungi.^[15] Lime oil has shown immunomodulatory effect in humans.^[14] Lavender oil has shown antibacterial and antifungal activity; it was also found to be effective to treat burns and insect bites.^[16]

A number of essential oils are currently being in use as aromatherapy agents to relieve anxiety, stress, and depression. Popular anxiolytic oils include Lavender (*Lavandula angustifolia*), Rose (*Rosa damascena*), Orange (*Citrus sinensis*), Bergamot (*Citrus aurantium*), Lemon (*Citrus limon*), Sandalwood (*Santalum album*), Clary sage (*Salvia sclarea*), Roman chamomile (*Anthemis nobilis*), and Rose-scented geranium (*Pelargonium spp.*) etc.^[3]

The rhizomes of *Acorus calamus* L., commonly known as "sweet flag", have been used in Indian Ayurvedic and Chinese traditional medicine for antispasmodic as well as other CNS effects, and the oil from the rhizomes is reported to possess antidepressant and anxiolytic activities.^[5,6] *Santalum album* L. heartwood essential oil (sandalwood oil) is reputed to be beneficial for depression, anxiety, and stress-related problems.^[4]

The anxiety disorders include obsessive-compulsive disorder (OCD), posttraumatic stress disorder (PTSD), social anxiety disorder (social phobia), specific phobias, and generalized anxiety disorder (GAD). Anxiety disorders are generally treated with medication and/or psychotherapy. Currently prescribed anti-anxiety medications include antidepressants such as serotonin reuptake inhibitors (e.g., fluoxetine and sertraline), tricyclics (e.g., imipramine and clomipramine), monoamine oxidase inhibitors (e.g., phenelzine and isocarboxazid); and benzodiazepine anti-anxiety drugs (e.g., clonazepam, lorazepam, and alprazolam). Many of these drugs have undesirable side effects, many of which are serious or life threatening.^[3] So use of essential oil for such psychosomatic disorders is at safer side.

OBSERVATIONS AND RESULTS

Table no. I: Some Aromatic Oils With Their Uses.^[2]

Eucalyptus oil	Prevents asthma and respiratory tract infections, relieves flu and bronchitis
Citron oil	Improves memory
Rosemary oil	Invigorating
Peppermint oil	Soothing and peaceful
Basil oil	Soothes the mucus membrane
Lemon grass oil	Relieves tension
Orange seed oil	Relieves insomnia and headaches
Bulgarian rose oil	Improves blood circulation
Musk oil	Relaxes and increases concentration
Indian Musk oil	Brings good luck, promotes a state of Zen (relaxation)
Clove oil	Repels insects and sterilizes the air

FIR oil	Alleviates bronchitis, and takes one back to nature, cheers the body and mind.
Agastache Rugosa oil	Helps to overcome anxiety
Indian peppermint oil	Relieves depression
Chypre oil	Contracts blood vessels and relieves cough
Lavender oil	Relieves the hypertension and soothes
Orange oil	Reduces stress and calms the nerves
Peppermint	Relieves migraine & sinusitis, invigorates & improves memory

Table no. II: Ten commonly used oils along with their observed therapeutic properties.^[2]

Sr no	Name of essential oil	Observed therapeutic properties
1.	Lavender oil (<i>Lavandula angustifolia</i>)	Boosts immunity, overall first aid oil, antiviral and antibacterial, antidepressant, anti-inflammatory, antispasmodic
2.	Chamomile oil (<i>Matricaria recutita</i>)	Anti-inflammatory, anti-allergenic, digestive, relaxant, antidepressant.
3.	Marjoram oil (<i>Origanum marjorona</i>)	Antiseptic, Antispasmodic, anti-inflammatory
4.	Rosemary oil (<i>Rosmarinus officinalis</i>)	Relieves pain, decongestant, improves circulation
5.	Tea tree oil (<i>Melaleuca alternifolia</i>)	Antifungal, antiyeast, antibacterial.
6.	Cypress oil (<i>Cupress sempervirens</i>)	Astringent, stimulating to circulation, antiseptic, astringent
7.	Peppermint (<i>Mentha piperita</i>)	Digestive, clear sinuses, antiseptic, decongestant, stimulant.
8.	Eucalyptus oil (<i>Eucalyptud globulus</i>)	Decongestant, antiviral, antibacterial stimulant.
9.	Bergamot (<i>Citrus bergamia</i>)	Antidepressant, antiparasitic, anti-inflammatory.
10.	Geranium (<i>Pelargonium graveolens</i>)	Balancing mind and body, anti-fungal, anti-inflammatory.

Carrier oils for *Prakrutivise Dosha* balancing^[2]

According to body constitution there are three types of skin conditions as per Prakruti i.e. *Vata* dosha predominance, *Pitta* dosha predominance, and *Kapha* dosha predominance.

Each vegetable oil has its own individual characteristic which is important in determining the choice of base oils for blending the oils for balancing doshas.

Carrier oils for all types of skin

Jjoba oil, Hazelnut oil, Primrose oil, Aloe oil & wheat germ oil.

Essential oils for *Vata* imbalance: *Vata* is light, unstable, cool and dry in nature. It is best treated by essential oil which has heaviness, stability, relaxing and warming qualities. Most *Vata* conditions are related to dry skin therefore all vegetable oils are potentially good. But according to ancient Indian Ayurved tradition Sesame oil (*Tila tail*) is considered excellent for dry skin, emollient, nourishing and protective against UV rays of the sun, it also contains mineral and vitamins. Other oils that can be used are Avocado, *Ashwagandha* and Walnut as carrier oil.^[2]

Table No. III: Essential oils for *Vata* imbalance.^[2]

Sr no	Oils	Reduce	Increase	Neutral	Balance
1.	Bergamot oil	<i>Vata-Kapha</i>	<i>Pitta</i>	-	-
2.	Camphor oil	<i>Vata- Kapha</i>	<i>Pitta</i>	-	-
3.	Cubeb oil	<i>Vata- Kapha</i>	<i>Pitta</i>	-	-
4.	Orange oil	<i>Vata -Kapha</i>	<i>Pitta</i>	-	-
5.	Frankincense oil	<i>Vata -Kapha</i>	<i>Pitta</i>	-	-
6.	Sandalwood oil	<i>Vata- Kapha</i>	-	<i>Kapha</i>	-
7.	Turmeric oil	<i>Vata- Kapha</i>	<i>Pitta</i>	-	-
8.	Vetiver oil	<i>Vata</i>	<i>Kapha-Pitta</i>	-	-

Essential oils for *Pitta* imbalance: *Pitta* is considered hot and wet and is treated with essential oils which have cooling effects, heat dispelling and calming properties. The skin conditions are generally dull, congested, oily, acne prone and inflamed, therefore light textured oils work wonders for this type of skin. In *Pitta* imbalance, carrier oil such as Grape seed oil, Coconut oil, *Brahmi oil*, Sunflower oil, & Olive oil can be used with good results. The essential oils that help in treating *Pitta* imbalances are as follows.^[2]

Table No. IV: Essential oils for *Pitta* imbalance.^[2]

Sr no	Oils	Reduce	Increase	Neutral	Balance
1.	Sandalwood oil	Vatta-Pitta	-	Kapha	-
2.	Tea Tree oil	-	-	-	Vatta – Pitta-Kapha
3.	Jasmine	Pitta-Kapha	-	-	-
4.	Rose	-	-	-	Vatta – Pitta-Kapha
5.	Neroli	Vatta-Pitta	Kapha	-	-
6.	Lavender	Pitta-Kapha	-	Vata	-
7.	Kewada	Pitta-Kapha	Vata	-	-
8.	Gulheena	Pitta-Kapha	Vata	-	-

Essential Oils for *Kapha* imbalance

Kapha is combination of water and earth and is predominantly cold, moist and heavy in nature. *Kapha* conditions are generally related to thick, puffiness, cool type of skin. It can be treated with essential oil which have warming, drying, and stimulating qualities, and are pungent, bitter and astringent. All essential oils are good

for *kapha* type skin but best results are achieved by warming and drying oils. The carrier oil that works best for such type of skin conditions are Sweet Almond, Corn oil, Flex seed oil, Soya oil, can be used with good results. The essential oils that are used to treat *Kapha* type of skins are as follows.^[2]

Table No. V: Essential Oils for *Kapha* Imbalance.^[2]

Sr no	Oils	Reduce	Increase	Neutral	Balance
1.	Saffron oil	Kapha-Vata	Vata	-	-
2.	Davana oil	Kapha-Vata	Vata	-	-
3.	Jatamansi oil	Kapha-Vata	Vata	-	-
4.	Camphor oil	Kapha-Vata	Pitta	-	-
5.	Basil oil	Kapha-Vata	Pitta	-	-
6.	Juniper berry oil	Kapha-Vata	Pitta	-	-
7.	Chamomile Roman	Kapha-Vata	Vata	-	-
8.	Cardamon oil	Kapha-Vata	Pitta	-	-

Essential oils with their uses and caution

Aromatherapy is useful to induce relaxation. These oils should be used carefully otherwise improper use of essential oil may cause skin irritation, rash, allergic

reaction, itching etc. so detail knowledge of essential oils should be taken before its application.^[1] Properties of commonly using essential oil with indications and precaution are described in following table.

Table No. VI: Essential Oils with Their Uses and Caution.^[2]

Sr no.	Essential oils	Porperties	Indications	Caution
1.	Eucalyptus oil	Balancing & calming effect with camphorous, woody scent	Asthama, Bronchitis, Flu, Muscle pain, Rheumatism, sinusitis, throat infection, Pulmonary conditions.	Eucalyptus oil can be fatal, so do not ingest more than few drops. Caution should be taken while using in epilepsy and hypertension patients.
2	Geranium oil	Comferting and healing effect with sweet floweral scent	Neuralgia, Tonsilitis, inflammation, burns, eczema, rheumatism, por blood circulations.	It may irritates sensitive skin. Do not use it in pregnancy.
3	Grapefruit oil	Refreshing effect	Depression, anxiety, digestive issues, water retention.	It is phototoxic so should not be used prior to sun exposure
4	Lavender oil	Calming and healing effect with floral,woody, mild scent. It is very effective oil.	Respiratory disorders, headaches, insomania, anxiety, burns, oily skin, acne, rheumatism.	Caution should be taken when using in pregnancy and hypotension.
5	Lemongrass oil	Fresh, calming effect, lemon scent	Acne, oily skin, muscle aches, stress, excess perspiration	Caution should be taken in Sensitive skin
6	Patchouli oil	Soothing effect, sweet and woody scent. Very safe and non toxic non irritant. It is approved by FDA as a fruit flavor.	Anxiety, acen, chapped skin, water retension and cellulitis	Mild sedative effect so use with caution.
7	Peppermint oil	Stimulating effect, strong, minty aroma,	Asthama, bronchitis, sinusitis, migraine, joint pain, indigestion and colic pain.	Caution should be taken in sensitive skin

8	Rosemary oil	Restorative effect, refreshing, woody scent,	Respiratory disorders, cold flu, digestive disorders, fatigue, gout, burns, wounds.	It has stimulating effect caution should be taken in epilepsy, pregnancy, and high blood pressure.
9	Tangerine oil	Calming, fruity and sweet scent	Anxiety, insomnia, muscle pain, skin aging, digestive disorders.	It is phototoxic so should not be used prior to sun exposure
10	Ylang Ylang oil	Calming effect on mind and body, powerful floral scent.	Anxiety, intestinal infection, stress, Balancing hormonal level	Strong scent can cause headaches, irritation, sensitivity, inflammatory skin condition

DISCUSSION

Aromatherapy mainly deals with essential oils. There are different types of essential oil as per their properties and uses. According to body constitutions essential oils should be used with precaution. Improper use of essential oil may cause harmful effects on mind and body. Blending of essential oil is important step before use of essential oil for massage.

Three types of *Deha Prakruti* mentioned in Ayurveda i.e. *Vataj*, *Pittaj* and *Kaphaj*. So in this review work essential oils according to *Deha Prakruti* is mentioned as per properties of essential oils. According to ancient Indian Ayurved tradition Sesame oil (*Tila tail*) is considered excellent for *Vata* type dry skin. *Til oil* is emollient, nourishing and protective against UV rays of the sun, it also contains mineral and vitamins. For *Vata* dosha Other oils that can be used are Avocado, *Ashwagandha* and Walnut as carrier oil. In *Pitta* imbalance, carrier oil such as Grape seed oil, Coconut oil, *Brahmi oil*, Sunflower oil, & Olive oil can be used with good results. In *Kapha* dosha imbalance recommended essential oils are Cardamon oil, saffron oil, *Jatamansi* oil and Basil oil. The carrier oil that works best for *Kapha dosha*, skin conditions are Sweet Almond, Corn oil, Flex seed oil, Soya oil, can be used with good results.

Previous research work review shows different pharmacological studies done on efficacy of essential oils. Some results from previous works are noted as below. Cinnamon, Clove and Rosemary oils had shown antibacterial and antifungal activity^[8]; cinnamon oil also possesses antidiabetic property.^[9] Anti-inflammatory activity has been found in basil.^[9,10] Lemon and rosemary oils possess antioxidant property.^[11,12] Peppermint and orange oils have shown anticancer activity.^[13,14] Citronella oil has shown inhibitory effect on biodegrading and storage-contaminating fungi.^[15] Lime oil has shown immune-modulatory effect in humans.^[14] Lavender oil has shown antibacterial and antifungal activity; it was also found to be effective to treat burns and insect bites.^[16]

Tea tree oil has antibacterial, antifungal and anti aging properties so it is commonly used in skin conditions. Lavender oil is very popular essential oil commonly used for insomnia and respiratory disorders. Eucalyptus oil

has a property of balancing & calming effect with camphorous, woody scent. It is useful in Asthama, Bronchitis, Flu, Muscle pain, Rheumatism, sinusitis, throat infection, & pulmonary conditions. Eucalyptus oil can be fatal, so do not ingest more than few drops. Caution should be taken while using in epilepsy and hypertension patients. Patchouli oil has Soothing effect, sweet and woody scent. It is Very safe, non toxic and non irritant. It is approved by FDA as a fruit flavor. Tangerine oil & Grapefruit oil are phototoxic so should not be used prior to sun exposure. Such phototoxic oils should be used at night time.

CONCLUSION

Essential oils are aromatic and highly volatile plant extracts.

Massage with essential oil improves blood circulation and increases the level of endorphins which relieves the pain naturally.

Pharmacological studies showed that most of essential oils are decongestant, anti microbial, anti aging and anti spasmodic effects.

Essential oils have dual effect one by pharmacological action and another psychosomatic levels.

Essential oils should be used with caution.

For *Vata dosha* imbalance recommended essential oils are Bergamot oil, Orange oil, Camphor oil, & Turmeric oil. Avocado, *Ashwagandha* and Walnut oils can be used as carrier oil in *Vata* imbalance.

For *Pitta dosha* imbalance recommended essential oils are Sandal oil, Tea tree oil, Lavender oil and Rose oil. In *Pitta* imbalance, carrier oil such as Grape seed oil, Coconut oil, *Brahmi* oil, Sunflower oil, & Olive oil can be used with good results.

For *Kapha* dosha imbalance recommended essential oils are Cardamon oil, saffron oil, *Jatamansi* oil and Basil oil. The carrier oil that works best for *Kapha dosha*, skin conditions are Sweet Almond, Corn oil, Flex seed oil, Soya oil, can be used with good results. This brief review of essential oil can provide the basic information regarding properties and uses of essential oil as per

prakruti and *doshas*, one can elaborate this research work by reviewing an individual essential oil's pharmacological action, uses and precautions in details.

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