

Aromatherapy: The Power of Scent

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ABSTRACT

An alternative (in medicine) is a substance that speeds up the renewal of the tissues so that they can carry out their functions more efficiently. Aromatherapy is one such method of healing, using volatile oils. This article was prepared to give the reader more information on the usage of essential oils.

Key Words: Aromatherapy, essential oils, therapeutic uses.

INTRODUCTION

Aromatherapy is one of the most ancient healing arts and traces its origin to 4500 B.C., an era when Egyptians used aromatic substances in medicines. Greeks also used plant essences for aromatic baths and scented massages. In ayurveda, there is mention of scented baths (bhyanga). Prof . Gantle Fosse, a French cosmetic chemist coined the term aromatherapy and described properties of essential oils.

Aromatherapy literally means a therapy using fragrances. It is the art of blending fragrances for a specific healing purpose. Aromatherapy uses the potent vital energy of the plant known as essential oils. Essential oils are extracted from a plant's flowers, leaves, needles, branches, berries, seeds, fruits, rind or roots.

As they evaporate when exposed to air at ordinary temperature, they have also been known as ethereal oils. They represent the essence or active constituent of plant, hence they are also known as essential oils. They are secreted in special structures such as ducts, cell schizogenous or lysigenous glands, trichomes etc. They are commonly found in species of labiatae, rutaceae, piperaceae, zingiberaceae, umbelliferae, myrtaceae and lauraceae.

They are extracted from plant by:

- * Steam distillation,
- * Solvent extraction
- * Maceration
- * Eucelle and Enfleurage

* Expression

* Supercritical CO₂ extraction

Terpenes and terpenoids are found in all volatile oils of plant or animal origin ^{1, 2}.

MATERIALS OF AROMATHERAPY

Some of the materials employed include:

- *Essential oils*: Fragrant oils extracted from plants chiefly through steam distillation (e.g. eucalyptus oil) or expression (grapefruit oil). However, the term is also occasionally used to describe fragrant oils extracted from plant material by any solvent extraction.
- *Absolutes*: Fragrant oils extracted primarily from flowers or delicate plant tissues through solvent or supercritical fluid extraction (e.g. rose absolute). The term is also used to describe oils extracted from fragrant butters, concretes, and enfleurage pommades using ethanol.
- *Phytoncides*: Various volatile organic compounds from plants that kill microbes. Many terpene-based fragrant oils and sulfuric compounds from plants in the genus "*Allium*" are phytoncides, though the latter are likely less commonly used in aromatherapy due to their disagreeable odors.
- *Herbal distillates* or hydrosols: The aqueous by-products of the distillation process (e.g. rosewater). There are many herbs that make herbal distillates and they have culinary uses, medicinal uses and skin care uses. Common herbal distillates are rose, lemon balm and chamomile.
- *Infusions*: Aqueous extracts of various plant material (e.g. infusion of chamomile)
- *Carrier oils*: Typically oily plant base triacylglycerides that dilute essential oils for use on the skin (e.g. sweet almond oil) ² .

BASIC METHODS OF AROMATHERAPY³

The name Aromatherapy is some what misleading as it suggests that essential oils must be inhaled in order to benefit from their healing powers. In fact, there are several techniques available, which are as follows:

(a) Effleurage - Gentle & firm massage stroke, always pushing towards heart. This promotes relaxation of muscular tissues and soothes nerve endings.

(b) Petrissage - Roll the flesh like kneading atta, on fatty areas. This stimulates circulation and accelerates lymphatic flow, thereby expelling the toxins.

(c) Bathing - Few drops of essence in hot water bathtub, to relieve colds, stress, headache, fatigue, flues and pains.

(d) Inhalation - Direct and rapid means of treating colds, aches, respiratory discomfort by inhaling the vapors from a bowl of steaming hot water.

(e) Compresses - For rheumatic pains, fever, and headache, bruises, abscesses, skin application. A piece of flannel is soaked in a bowl of water containing the oil, and pressed on the affected area.

BASE OILS AND BLENDING

Volatile oils are often mixed with milder carrier oil (usually vegetative oil) or are weakened (diluted) in alcohol. The essential oils should not be applied directly until diluted with base oils as they are in a concentrated form and can result in inflammation.

Essential oils are distilled from the leaves, bark, roots and other aromatic portions of a botanical. Essential oils evaporate and have a concentrated aroma. Carrier oils, on the other hand, are pressed from the fatty portions (seeds, nuts, kernels) and do not evaporate or impart their aroma as strongly as essential oils. Carrier oils can go rancid over time, but essential oils do not. Instead, essential oils "oxidize" and lose their therapeutic benefits, but they don't go rancid.

The only exception is lavender, which can be used directly on the skin for insect bites and stings. However, it is good to use any cold-pressed and micro filtered vegetable oil. Viscous and mineral oils do not permeate through skin, so as unfiltered oils as they block pores. Wheat germ oil or Vitamin - E may be added slightly to enhance the skin-care properties. Normally, 20 to 60 drops of essential oils is blended with 100 ml of the base oil, just prior to application. Blended oils are mixtures working in harmony, and they are known as synergistic blends. By rule, oils of the same botanical family will usually work efficiently. Blended and diluted oils cannot be stored for more than a month. The list of carrier oils in aromatherapy is listed in table 1.

Table 1. List of carrier oils used in aromatherapy

[Macadamia Nut Oil](#)

[Meadowfoam Oil](#)

[Olive Oil](#)

[Peanut Oil](#)

[Pecan Oil](#)

[Pomegranate Seed Oil](#)

[Rose Hip Oil](#)

[Seabuckthorn Berry Oil](#)

[Sesame Oil](#)

[Sunflower Oil](#)

[Watermelon Seed Oil](#)

[Apricot Kernel Oil](#)

[Avocado Oil](#)

[Borage Seed Oil](#)

[Camellia Seed Oil \(Tea Oil\)](#)

[Cranberry Seed Oil](#)

[Evening Primrose Oil](#)

[Fractionated Coconut Oil](#)

[Grapeseed Oil](#)

[Hazelnut Oil](#)

[Hemp Seed Oil](#)

[Jojoba](#)

MODE OF ACTION ³

In on inhalation, the useful volatile principles are transported by the lining of the nose and transmit signals to the brain, which is stimulated to release powerful neurochemicals in the blood stream. On topical use, these molecules permeate through the microscopic pores and hair follicles, which enter bloodstream of the capillaries. They act in harmony with the natural defenses of the human body. Massage on the body tissues and the healing properties of the essential oils can combine to produce wonderful results. During massage, the blood circulation is stimulated and the toxic waste substances of tissue are carried to the - lymphatic system. Along with useful molecules, some oils contain powerful ketones, phenols and aldehydes also, and it should be carefully avoided by dilution.

CLINICAL EVIDENCES ⁴

Scientists have studied aromatherapy for the following health problems:

Psoriasis

According to unani system, aromatherapy plays a very important role in psoriasis providing quick relief from the symptoms of dryness, itching, irritation and flaking. Some essential aroma oils used in unani for treatment of psoriasis are rich in natural essential fatty acids especially gamma linolenic acid which reduces inflammation and alleviates dryness and itching. These oils are also rich in other nutritional lipids such as phospholipids, sterols and other active phyto compounds. These compounds are immune system and cell builders and are therefore very vital in treating psoriasis. Besides being lipo solvents these essential oil molecules are very minute and have an incredible ability to quickly penetrate the skin and are therefore able to provide immediate relief with the symptoms of itching and irritation. These essential aroma oils are anti-septic and anti-bacterial in nature. These prevent super-added infection in the existing psoriatic lesions. Their Cicatricant property enables faster healing of the psoriatic eruptions.

Acne

Aromatherapy is also very effective in the treatment of acne. Some essential oils used in the treatment of acne have great anti-bacterial properties. These oils are composed of liquid wax esters, which closely resemble the skin oil called sebum. Thereafter after applications of these oils to the skin, they mimic sebum and thereby trick the skin into stopping its own production of sebum. This in turn helps reduce oiliness of the skin; breakdown the sebum in the acne pores and is therefore very therapeutic in treating oily and acne prone skin. Aroma oils do not block pores or cause blackheads. They control the inflammation of the skin, regulate oiliness and slough off dead skin cells leading to faster healing of acne. These oils are rapidly absorbed and thus the pores and hair follicles on the skin remain open and can function freely.

Pre-menstrual & Meno pausal syndrome

For pre-menstrual and Menopausal syndrome, oils that are rich in an essential omega – 6 fatty acid are used. The body is often able to extract sufficient amounts of Omega- 6fatty acid from foods like corn, sunflower, safflower, soy, peanuts and plants like flaxseed. However in this syndrome, this process may be reduced. That's where these oils are most helpful.

Clinical studies on these oils suggest that they improve circulation and alleviate hormonal stress. Apart from this, gamma linolenic acid in these oils plays an important role in the body's first step in converting Omega-6 to series one prostaglandin (PG1) . PGI helps to keep the blood thin and move smoothly. When healthy blood flows through the body, inflammation, high blood pressure and symptoms of menopausal syndrome are reduced. Apart from the essential fatty acids, these oils also contain some phytochemicals, which make them an attractive source of hormone builders.

Alopecia areata

Alopecia areata is a condition in which the body's immune system attacks hair follicles, causing hair loss. A well designed study using a mixture of oils (cedar wood ,lavender, rosemary and thyme in carrier oils of grape seed and jojoba) reported improvement in patients compared with patients using carrier oils alone.

SOME USEFUL TIPS FOR THE AROMATHERAPIST

There is no required training or licensing for aroma therapists. Many types of practitioners, including massage therapists, chiropractors and nurses offer aromatherapy. So, here we

listed some useful tips for them⁴ .

- * Avoid using essential oils during pregnancy.
- * Use citrus oil (lime, orange oils) only after exposure to sunlight
- * Do not use sage, thyme & cypress oils on subjects suffering hypertension.
- * Wait for a minimum of the hour after meal for the treatment.
- * Your clothing should not obstruct the movements and ensure clean warm hands and nails short.
- * The subject is comfortably positioned, partly dressed or covered with towels.
- * Unless you are a qualified physiotherapist, do not use deep pressure. Use whole palm with gentle & firm movement always pushing towards the direction of the heart.
- * The room should be warm with subdued lighting. Avoid disturbances except, optionally, a soft musical background.
- * Chenopodium oil is contraindicated in pregnancy and in patients with impaired kidney or liver.
- * Aromatherapy administered during radiotherapy was not beneficial.
- * Avoid use of clove bud, clove leaf, nutmeg and cinnamon oils unless expert professional treatment is required
- * Two common oils, lavender and tea tree, have been implicated in causing gynaecomastia, an abnormal breast tissue growth, in prepubescent boys.
- * Some very common oils like Eucalyptus are extremely toxic when taken internally. Doses as low as one teaspoon has been reported to cause clinically significant symptoms and severe poisoning can occur after ingestion of 4 to 5 ml.
- * Toxic reactions like liver damage and seizures have occurred after ingestion of sage, hyssop, thuja, and cedar.
- * The topical use of methyl salicylate heavy oils like sweet birch and wintergreen may cause hemorrhaging in users taking the anticoagulant warfarin.
- * Keep all essential oils out of the reach of children.
- * Keep flammable oils away from fire.
- * Use small quantities for babies, children and the elderly. The list of some essential oils used in aromatherapy was shown in Table 2.

Table 2: Therapeutic uses of essential oils ^{7, 8&9}

Name Of Essential Oils	Uses
Rosemary, clove ,lime, cinnamon, Tea tree oil	Antibacterial
Tea tree oil, lemongrass, sandalwood, peppermint, thyme, hyssop, and ginger	Antiviral
Leavender, juniper,	Antifungal

teatreeoil, thyme and clove	
Clove, cinnamon,sage, eucalyptus, black cumin,and bay leaf	Antiinflammatory
Lavender, rose and angelica	Anxiolytic
Basil oil	Antidepressant and to relieve <u>headaches and migraines</u> .
bergamot	Insect repellent , urinary tract and digestive tract function
Citronella oil	Insect repellent
Clove oil	Analgesic,antispasmodic, carminative and antiemetic
Eucalyptus oil and peppermint oil	To relief the airway in cold and flu
Geranium oil	Diuretic ,astringent and antiseptic
Lavender oil	Used as an antiseptic, to soothe minor cuts and burns, to calm and relax, and to soothe headaches and migraines.
Lemon oil	Antistress and antidepressant
Jasmine, rose and sandal wood oil, ylang ylang oil	Aphrodisiac
Thyme oil and yarrow oil	Reduce <u>joint inflammation</u> and relieve cold and <u>influenza</u> symptoms.
Black pepper	Stimulating the circulation and for muscular aches and pains. Skin application is useful for bruises, since it stimulates the circulation.

If you have ever had a discomfort with the healing properties of essential oils, any of the following factors could be the reason⁵.

Purity of the oil with respect to foreign materials, (a) method of extraction & type of storage, (b) Duration and method of storage, (c) Ratio of dilution with base oil at the time of usage, (d) Method of usage, like – massage, room spray, inhalation, etc. and (e) Cautions about the toxicity or contra indications of the substance.

STORAGE OF VOLATILE OILS

Volatile oils are liable to deteriorate on keeping. The deterioration is accompanied by change in colour, or increase in viscosity of the oil, or change in odour of the oil. Therefore, volatile oils should be preserved properly in well closed, well filled containers away from light and in cool place⁶.

CONCLUSION

Because of the gentle nature of aromatherapy, it can be used safely in home treatment. Thoroughly educate yourself before trying it. If you have allergies, it is a good idea to perform a skin patch test to determine any possible negative reaction.

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