Advances in Chemical Science: Exploring New Frontiers

e-ISBN: 978-93-6252-178-1

IIP Series

AROMATHERAPY: A SYNERGY THERAPY

AROMATHERAPY: A SYNERGY THERAPY

Author

Dr. Shaifali SrivastavaDepartment of Chemistry,
F. G. Degree College,
Rae bareli.

IIP Series

AROMATHERAPY: A SYNERGY THERAPY

Aromatherapy involves using essential oils extracted from plants to promote and improve both physical and psychological health¹. Plant part used flowers, barks, stem, leaves, roots. It is a type of complimentary and/or alternating medicine. Complimenting Aromatherapy synergies lthe standard treatment, alternating treatments offered like Ayurveda, Acupunture, Naturopathy etc². Sometimes, people use it together with massage and other therapeutic methods as a part of a comprehensive treatment approach. ³. Scientific evidences of its efficacy are increasing. In aromatherapy, the essential oils have a unique composition when compared to other herbal products. This is because the distillation process used in aromatherapy helps to extract the volatile phytochemical, as shown in Figure 1



Figure 1

Mode of Application (fig. 2): An aroma therapist uses pure or a combination of therapeutic essential oils to stimulate a desired response. These oils are applied topically, through massage, inhalation, or water immersion.. The processes of application are:

- **a. Aerial Diffusion:** On aerial diffusion, oil evaporate into the air. the principle target is to give the air a awesome aroma ex. Eucalyptus oil, tea tree oil, citronella oil, jasmine oil.
- **b. Direct Inhalation**: The individual breath the aroma of oils straight in. that is usually used for pulmonary disinfection, decongestion and expectorant in addition to mental results.
- **c. Topical Utility:** Carried out at the skin. commonly used rub down, bath, compresses and therapeutic pores and skin care4 ex. sweet almond, apricot, lavender, ginger, etc.

Substance: Substance that used include:

- **a. Vital Oil:** Aromatic oils extracted from flowers chiefly via steam distillation or expression or via any solvent extraction particularly non polar solvents like light petrol at 50°C.
- **b. Absolute:** Fragrant oils extracted from flowers or sensitive plant tissues through solvent or extremely good critical fluid extraction or via enfleurage approach.
- **c.** Carrier Oils: Normally oily plant base triglycerides that dilute critical oils to be used on the pores and skin.
- **d. Herbal distillates or Hydrosols:** The aqueous by means of product of the distillation method.
- **e. Infusion:** Aqueous extract of diverse plant materials.
- **f. Phytoncides:** Terpene primarily based aromatic risky natural compounds from flowers that killed microbes.

IIP Series

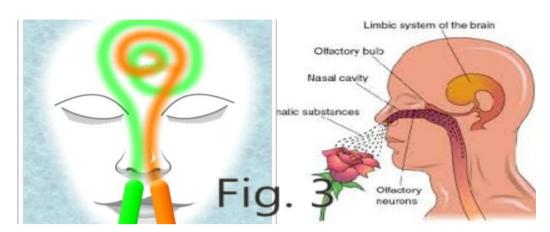
AROMATHERAPY: A SYNERGY THERAPY



Figure 2

Theory of Aromatherapy: Essential strategies are supplied to provide an explanation for the consequences. One is inhalation of essential oils that stimulate the a part of the brain linked to odor-the olfactory machine and neuron: a signal is despatched to the limbic device of the mind that manage feelings and regain discovered memories⁵. This lead to the discharge of the chemical compounds that make the person experience comfortable, calm or even inspired. (Fig. 3). The alternative is the direct pharmacological effects of the essential oils⁶. It is through rub down: that impact the individual to loosen up. In topical utility important oil spark off thermal receptors and ruin microbes and fungi. Internal and oral application can also stimulate the immune system⁷.

AROMATHERAPY: A SYNERGY THERAPY



Popular Uses ^{8,9}

Name	Medicinal Uses		
Bay laurel	Antiseptic, diuretic, sedative		
Basil	Depression, headache, migraine		
Bergamol	Urinary tract and digestive tract		
Black pepper	Stimulating circulation, muscular aches and pains		
Citronella	Insect repellant		
Clove oil	Topical analgesic, antispasmodic, antiemetic, carminative		
Clary sage	Relaxant, anticonvulsive, anti-inflammatory, antiseptic		
Chamomile	Sedative, anti-inflammatory, antiseptic, pain reliever.		
Eucalyptus	Antiseptic, antibacterial, astringent, expectorant, analgesic.		
Geranium	Diuretic		
Lavender ³	Analgesic, antiseptic, calming /soothing.		
Lemon oil ¹⁰	Mood lift, antistress, antidepressant		
Peppermint	Pain reliever		
Rosemary	Antiseptic, stimulant, diuretic.		
Sandalwood	Aphrodisiac		
Tarragon	Diuretic, laxative, antispasmodic, stimulant.		
Tea tree	Antimicrobial, antiseptic, disinfectant		
Thyme ¹¹	Stimulant, antiseptic antibacterial, antispasmodic.		
Yarrow	Cold, influenza, joint inflammation		

IIP Series

AROMATHERAPY: A SYNERGY THERAPY

Concept of Synergist: Synergist provided whole, actual, unrefined, unaltered essential oil. Synergy idea is important and useful for Aromatherapy. Certain chemical substances have additive or adverse effect. An additive impact is found whilst the blended final results is equal to the sum of the character pars. An adverse effects found while the impact of one or each components is much less when they're carried out collectively then when for my part implemented^{8,9}. This synergy takes place in aromatherapy through numerous ways those are:

- **a. Synergy Within the Essential Oil Itself:** This idea manner that within a given vital oil, synergy happens between predominant and minor components or among fundamental factor that act collectively to seriously increase the entire oil activity¹².
- **b. Synergy Among Essential Oils in a Blend:** This idea suggests that when an aroma therapist combines two or more oils, they can create a blend or product that works better than using just one essential oil. There are two ways this can happen. One way is by combining oils that have complementary therapeutic properties. The other way is by combining oils that have chemical components that work well together ^{13,14}.
- **c. Synergy Between Vital Oils and Service Products:** Aromatherapy products designed to be applied to the pores and skin are mainly located with a provider of same kind. This carrier encompass creams, gels, lotions, vegetable oils, salt, milk, honey and many others ^{15,16,17}. The base or service used is as important as essential oils. Carrier used also play a synergistic function, researchers supported this idea.

AROMATHERAPY: A SYNERGY THERAPY

Blends	Activity
Geraniol+Nerol with Myrcene	Enhances antibacterial activity ¹² on gram negative & gram positive
Thymol + Eugenol rich	Highly effective antimicrobial 10
Peppermint + Caraway	Relief of irritable bowl and dyspepsia ¹⁰
Clove + Rosemary	Antimicrobial activity ¹³ against bacteria & fungi
Oregano + Basil or Thyme	Anti microbial against <i>E.coli</i> and <i>P.aureginosa</i> 14
Oregano + Marjoram	E.coli ¹⁴
Marjoram +Thyme +Rosemary	L.monocytogenes ¹⁴
Anise + Fennel + Caraway oil	Dyspeptic discomfort with mild spasms of the gastrointestinal region, flatulence 10

IIP Series

AROMATHERAPY: A SYNERGY THERAPY

Eucalyptus + Pine needle oil	Respiratory track (inhalation) ¹⁰ Illness caused by cold
Eucalyptus + Bergamot	Skin problems Skin affected by chicken pox
Lavender + Roman Chamomile	Sedative ¹⁰
Ocimum gratissimum +Aloe vera (carrier)	Acne vulgaris ¹⁵
German Chamomile + Aloe vera (carrier)	Moisture to the skin ¹⁶
Ocimum gratissium + honey (carrier)	Anti bacterial, antiseptic agent for wounds. 17

Precautions: Health care professionals should supervise the administration of highly toxic essential oils. Taking eucalyptus, warm wood, and sage internally is not recommended. It is advisable to wait at least four hours after applying citrus based essential oils before using them. Before applying topically, make sure to check the concentration as it can be irritating in high amounts. Black pepper, camphor, eucalyptus, and peppermint essential oils act as a remedy to counteract the effects of homeopathic treatment. Pregnant or nursing women, as well as individuals with certain illnesses or physical

IIP Series

AROMATHERAPY: A SYNERGY THERAPY

conditions, should avoid using certain essential oils. It is important for individuals with chronic or acute health conditions to inform their healthcare provider before incorporating any essential oils into their treatment plan. Individuals who have asthma, allergies, hay fever, skin conditions such as eczema or psoriasis, epilepsy, or deep vein thrombosis should exercise caution when using essential oils. Additionally, it is crucial to keep in mind that essential oils are flammable and should be stored away from sources of heat.

Side Effects ^{18,19}: Aromatherapy can sometimes have mild side effects, but they usually don't last long. These side effects may include feelings of nausea, headaches, and occasional allergic reactions. Additionally, certain citrus-based essential oils have the potential to increase the skin's sensitivity to sunlight, which can make a person more prone to sunburn.

I. CONCLUSION

The idea of synergy holds immense importance for aroma therapists as it helps them determine which essential oils to combine and why, for a shared purpose. There are numerous imaginative ways to apply this concept of synergy by experimenting with different combinations of essential oils, making observations, and seeking feedback.

II. TIPS FOR BLENDING

Focus: One formulation must be utilize for one remedy.

Selection: Essential oils complement each other therapeutically, chemically, energetically, and/or aromatically selected.

Dosage: When treating acute conditions, it is recommended to use higher dosages. To avoid diluting the intended effect, it is best to use a combination of 3-5 essential oils in a formulation. When creating a blend from a clinical perspective, it is important to either focus on

IIP Series

AROMATHERAPY: A SYNERGY THERAPY

families or components and ensure that the essential oils chosen complement the desired outcome. The base used in the formulation is also crucial as it should be selected to enhance the therapeutic goals of the essential oils working together.

REFERENCES

- [1] "Aromatherapy", Better Health Channel. Retrieved (2014).
- [2] http://www.hindawi.com/journals/ecam/2005/270901/abs/.
- [3] "Aromatherapy" medical-dictionary.thefreedictionary.com/.
- [4] "Organic Bath Oil' Plaisirs. Retrieved (2011).
- [5] "Nostrums: Aromathersapy Rarely Stands up to testing" Kingston J.A., The New York Times Retrieved (2010).
- [6] Prabuseenivasan S., jayakumar M., Ignacimuthu S., "In vitro antibacterial activity of some plant essential oils". BMC Complimentary and Alternative Medicine 6:39 (2006).
- [7] Medicalnewstoday.com/articles/10884.php. "what is Aromatherapy?" Christian Nordqvist 92014).
- [8] Theida.com/. "Synergism in essential oils and aromatherapy". Jade Shutes.
- [9] Harris R., "Synergism in the essential oil world". The International J. of Aromatherapy 12(4):179-85 (2002).
- [10] Kiecott-Glaser J.K., Graham J.E., Malarkey W.B., Porter K., Lemeshow S., Glaser R., "Olfactory influences on mood and autonomic, endocrine and immune function" Psychoneuroendocrinology 33(3):328-39 (2008).
- [11] Schelz Z., Molmar J., Hohmann J., "Antimicrobial and antiplasmid activities of essential oils" Fitoterapia 77(4):279-85 (2006).
- [12] Onawunmi G.O., Yisak W.A., Ogunlana E.O., "Antibacterial constituents in the essential oils of *C. citratus*" J. Ethnopharmacol. Dec 12(3):279-86 (1984).
- [13] Fu Y., Zu Y., Chen L. *et al* "Antimicrobial activity of Clove and Rosemary essential oils alone and in combination" Wiley Inter Science DOI:10:1002 (2007).
- [14] Gutierres J., and Barry Ryan, Catherine and Bourke P.,"The anti-microbial efficacy of plant essential oil combinations and interactions with food ingredients" Int. J. of Food Microbiology 124:91-97 (2008).
- [15] Orafidiya L.O., Agbani E.O. *et al* "The effect of aloe vera gel on the anti-acne properties of the essential oil of *Ocimum gratissium* Linn leaf-a preliminary clinical investigation" The Int. J. of Aromatherapy 14:15-21 (2004).
- [16] Monger P. *et al* "Comparative in vivo study of the moisturizing properties of three gels containing essential oils Mandarin, German Chamomile and Orange" Nouv. Dermatol 13:470-75 (1994).
- [17] Orafidiya L.O., Oyedele A.O., Shittu A.O. *et al* "The formulation of an effective topical antibacterial product containing *Ocimum gratissimum* leaf essential oil" Int. J. Aromatherapy 12(1):16-21 (2002).
- [18] Posadzki P., Alotaibi A., Ernst E., "Adverse effects of Aromatherapy: a systematic review of case reports and case series" Int. J. Risk saf Med (Systematic Review) 24(3):147-61 (2012).

Advances in Chemical Science: Exploring New Frontiers

e-ISBN: 978-93-6252-178-1

IIP Series

AROMATHERAPY: A SYNERGY THERAPY

[19] Cather J.C., Mackner M.R., Menter M.A. "Hyperpigmented macules and streake" Proceedings 9Baylor University Medical Centre) 1394):405-6 (2000).