

A review on: Aromatherapy

Author Name - Miss. Bankar Vaishnavi V.

Guide – prof. Jadhav Rushikesh.

Principal – Dr.Salve Megha T .

Department – Bachelor of pharmacy.

College Name –Shivajirao Pawar College of pharmacy, Pachegaon

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ABSTRACT -Aromatherapy is one of the most actively developed forms of alternative medicine. It uses essential oils and aromatic botanicals and combines massage with guidance and a pleasant scent. Aromatherapy is one of the complementary therapies in which essential oils are the main therapeutic agents in the treatment of many diseases. Essential or essential oils are extracted from flowers, bark, stems, leaves, roots, fruits and other parts of plants using various methods.

Essential oils are one of the important therapeutic ingredients used in the development of new therapeutics due to their anticancer, antiviral, antidiabetic, anticancer, antibacterial, antioxidant and aromatherapeutic properties. To examine the effects of aromatherapy on physical and mental health and stress reduction in older adults in the community, the Self-Administered Mental and Physical Health Scale for Elderly and the Measurement Health Scale Stress Index were used for data collection. Aromatherapy the therapeutic use of essential oils from plants (flowers, herbs or trees) to treat health problems and promote physical, emotional and spiritual well-being – is one of the most commonly used natural therapies by consumers in Western countries.

Keywords -Aromatherapy, therapeutic, counselling, fragrance, volatile oil.

I. INTRODUCTION –

The name aromatherapy comes from the words aroma, meaning scent or scent, and therapy,

meaning treatment. This therapy is a natural way to heal the human mind, body and soul. Aromatherapy is based on the use of aromatic materials, including essential oils and other aromatic compounds, with the aim of improving mental well-being. It is offered as a complementary therapy or as alternative medicine. Fragrances used in aromatherapy are not approved as prescription medications in the United States. It has been noted that numerous studies have been conducted to study the effects of this therapy on the human brain and its emotions. Its role in mood, alertness and psychological stress in healthy people has recently been the subject of heated debate in the scientific community.

Aromatherapy is a science and practice distinct from herbal medicine, but the study and use of essential oils in herbal medicine is not. Herbal medicine courses and programs teach essential oils as part of the botany curriculum. Stress can cause anxiety, tension and depression, which can lead to memory problems, reduced concentration and frequent mood swings. Aromatherapy practice of using essential oils for therapeutic purposes . Aromatherapy has been used for centuries. When inhaled, the scent molecules of essential oils travel from the olfactory nerves directly to the brain and have a targeted effect on the amygdala, the emotional center of the brain. Fragrant oils are extracted from various parts of trees, plants, herbs and flowers for therapeutic purposes.



History of Aromatherapy –

In 1937, René Gattefosse invented the term aromatherapy. He experiments with different oils and classifies them based on their “medicinal” properties: antitoxic, tonic, antiseptic, calming and stimulating. In 1950, Marguerite Maury introduced specialty oils tailored to individual health needs. Jean Valnet, a French doctor and scientist, treated psychological and medical patients with aromatic oils.

Classification of Aromatherapy –

1. Cosmetic Aromatherapy -The beauty industry is now harnessing the benefits of aromatherapy to revitalize and rejuvenate the body while providing the essential cleansing, toning, moisturizing and protective properties of essential oils for various skin and hair types. These products are used because of their different effects, e.g. B. cleansing, moisturizing, drying and toning. By using essential oils in facial products, you can achieve healthy skin.

2. Massage Aromatherapy -Aromatherapy massage is a form of Swedish massage that uses essential oils (highly concentrated plant oils). The focus is on relaxation and mindfulness. During an aromatherapy massage, you inhale essential oil molecules and absorb them through your skin. The focus is on relaxation and mindfulness.

3. Medicle Aromatherapy -The founder of modern aromatherapy, René-Maurice Gattefosse, used essential oils to massage patients during surgeries, leveraging aromatherapy’s medical knowledge of

the effects of essential oils in promoting and treating clinically diagnosed diseases.

4. olfactory Aromatherapy –Aromatherapy uses essential oils for therapeutic purposes. Aromatherapy has been used for centuries. When inhaled, the scent molecules of essential oils travel from the olfactory nerves directly to the brain and have a targeted effect on the amygdala, the emotional center of the brain.

5. psycho Aromatherapy -Aromatherapy is a complementary therapy that uses essential oils from plant extracts for therapeutic purposes. It is based on the healing effects of essential oils. It can be used to relieve specific symptoms or as a decongestant. Aromatherapy is now used worldwide to treat mental disorders such as chronic pain, depression, anxiety and some cognitive disorders, bipolar disorder, stress-related disorders and sleep disorders.

Research on the physical and Mental Health and stress of middle aged and elderly people –

Good physical health is a prerequisite for aging and an objective indicator of quality of life. When assessing physical health, you must evaluate it both subjectively and objectively. Examined the impact of college participation among middle-aged and older adults on their physical and mental health. The results showed that the physical and mental health of older students was not influenced by gender, age or educational level

But by health status and economic situation. The different course types also had no

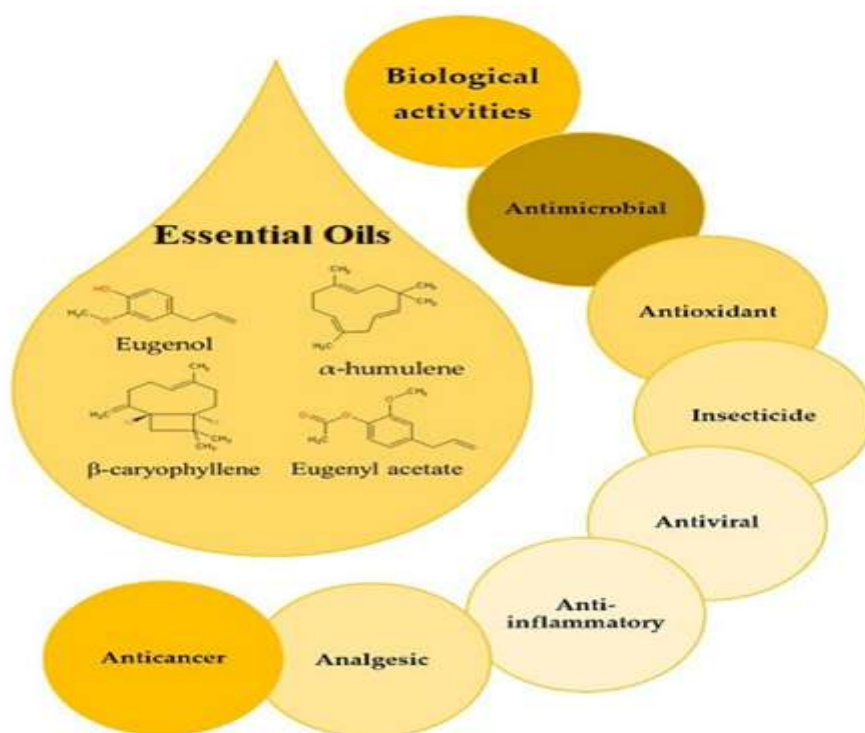
influence on the physical and mental health of older students. On the contrary, the more courses they attended and the longer the older people participated in educational activities, the better their physical and mental health outcomes were.

Aromatherapy has been used to relieve psychological stress. Aromatic substances (including essential oils, essential oil extracts, etc.) can calm emotions, improve mood, eliminate depression, increase self-confidence, and also reduce the patient's tension and negativity. Aromatic essential oils have a fragrant scent. Plant chemical molecules enter the human brain with aroma through the olfactory system, thereby regulating the nervous system, contributing to the correct secretion of human hormones and reducing physical discomfort. These aromas can also have strong relaxing effects and regulate emotions. Therefore, more and more people are willing to accept this technique for relieving various tensions and are researching the effects of aromatherapy on stress in middle-aged and elderly people.

Essential oils –

Plants have been found to contain a good type of secondary metabolites that serve to protect themselves from predators and attract the attention of pollinators. Plant oils and extracts have been used for various purposes for thousands of years. The word essential oil was first defined in the 16th century by Paracelsus von Hohenheim, who referred to it as quinta-essence. Essential oils/volatile oils are aromatic substances found in the special cells or glands of some plants that use them. To protect themselves from predators and parasites, but also to attract pollinators. In other words, essential oils are part of the plant's immune system.^{6,7} But it also has other uses for people and they use it to their advantage in different ways.

Terpenoids are produced via the mevalonate and mevalonate-independent (deoxyxylulose phosphate) pathway, while phenylpropanoids are produced via the shikimate pathway. To obtain aromatic and HE water, raw materials and plant products of excellent quality are required. Eos are widely distributed in various plant organs, but are most commonly found in flowers and leaves.



Aromatherapy Methods –

There are four ways to absorb the ingredients of essential oils:

TOPICAL: through massage, “M” technique, compress or bath on the skin.

INHALATION: by using diffusers, scents, fans, humidifiers, incense sticks, individual patches, individual sachets or nose clips, directly or indirectly, with or without steam.

INTERNAL: Mouthwashes, rinses, douches, hives or suppositories are applied to the internal skin.

ORAL: Gelatin or honey capsules, alcohol or diluted dispersant. Each application method has its own physiological mechanism as well as advantages and disadvantages.

Systematic Review –

Aromatherapy is one of the most commonly used natural therapies according to consumers in Western countries. A systematic review of 89 studies (97,222 participants) estimating the prevalence of complementary medicine (CM) use among UK consumers found that aromatherapy was the third most popular complementary medicine out of 28 different therapies. In Australia, a cross-sectional survey on consultation with complementary therapists and use of complementary medicine products found that around half of the total

Respondents (1016/2025 adults) used complementary medicine. Aromatherapy oils were used by 11% of respondents (N=224/2019) and 3.9% of respondents consulted an aroma therapist (N=79/2019).Based on the average spending on

complementary medicine reported in this study, the study authors estimated that total spending on aromatherapy oils in Australia in the last 12 months (2016-2017) was A\$250 million.

Aromatherapy: Common Misconceptions and Important Requirements –

The term “aromatherapy” is fraught with misunderstandings, even in the field of biochemistry (Singer and Schneider, 2016). It is commonly used as a general term to describe the use of essential oils on the skin, in massage, or in the ambient air. An even vaguer definition includes the use of essential oils added to cosmetic products. In some countries (e.g. In France, aromatherapy also involves consuming essential oils, making the concept more unclear. However, it should be noted that neither the scent nor the treatment is sufficient to support its use as an aromatherapeutic agent. A precise and narrow definition of the term defines aromatherapy as the use of scents to trigger psychological or physiological responses. A key element of aromatherapy is therefore the functional aspect of the scents used (Buchbauer, Jirovetz, Jager, Plank & Dietrich, 1993).In addition, any effect produced by a perfume must be due not only to the perfume itself, but also to the method of application, which is inevitably linked to the design of the system to achieve the concentration of the particles.

Benefits – Aromatherapy is a complementary therapy. It does not cure any disease, rash, or ailment, but it can support conventional treatments for various ailments.



A eucalyptus steam bath can relieve cold or flu symptoms.

Proven to reduce:

- Nausea
- Pain
- Anxiety, restlessness, stress and depression
- Fatigue and insomnia
- Muscle pain
- Headaches
- Circulatory problems
- Menstrual problems
- Menopausal symptoms
- Alopecia or hair loss

Some types of Psoriasis can be relieved with aromatherapy, but your doctor should advise you on its use and use. Peppermint oil can help with digestive problems, but should not be consumed. Clove oil can relieve toothache and mouth ulcers, but should only be used externally and not ingested.

Physiological Effects –

The physiological effects of aromas can be divided into two types: those that act by stimulating the nervous system and those that act directly on an organ or tissue through a receptor mechanism of action (Tisserand, 1977). All physiological parameters are controlled by the nervous system. In general, the nervous system of higher organisms can be divided into two main sections: the central nervous system “CNS”; and the peripheral nervous system. The central nervous system includes the brain and spinal cord. Two important functions of the central nervous system are receiving and processing sensory information and regulating body movements. The peripheral nervous system refers to the nerve tissue outside the brain and spinal cord, including the cranial and spinal nerves. The peripheral nervous system is divided into the somatic nervous system, which deals with muscle function, and the autonomic nervous system “ANS”. That controls the visceral structures (glands and organs of the body). In addition, the function of the autonomic nervous system is to regulate internal and relatively involuntary reactions related to emotions. Finally, the ANS is divided into the sympathetic nervous system – SNS. And the parasympathetic nervous system “PNS”. These two branches differ in their functions. The SNS dominates in situations requiring energy mobilization, while the PNS dominates in resting situations. Some organs are innervated by only a portion of the ANS (e.g.,

sweat glands, peripheral blood vessels, and adrenal glands are innervated exclusively by the SNS). Most organs are innervated by both the SNS and the PNS. In these cases, the SNS and PNS branches typically produce opposite responses. The main body reactions caused by the SNS include: dilation of the pupils, inhibition of saliva flow (leading to dry mouth), sweating (leading to sticky hands), constriction of blood vessels around the body (leading to cold hands and feet), Expansion of blood vessels. In muscles and brain, increased heart rate, increased blood pressure, increased breathing and inhibition of digestive processes. The body’s responses triggered by the PNS include constriction of the pupils, increased salivation, decreased heart rate, decreased blood pressure, decreased respiratory rate, and increased digestion and peristalsis.

Applications of Aromatherapy –

1. Anxiety –

Ramsay and colleagues found in their study that preoperative anxiety was caused by patients’ worries about the disease, hospitalization, anesthesia, surgery, and unknown uncertainties. Considered a potential and avoidable risk factor for postoperative complications. A randomized controlled trial (RCT) of 80 breast cancer patients found that inhaling a gauze dressing with 3-4 drops of lavender oil for 20 minutes on the morning of surgery reduced preoperative anxiety levels. Huang et al. analyzed 10 clinical trials of aromatherapy for the treatment of preoperative anxiety, including 750 patients. The results showed that patients who used aromatherapy before surgery had lower levels of anxiety than those who received a placebo or no intervention, and no study reported side effects of aromatherapy.

2. Nausea and Vomiting –

Nausea, an unpleasant feeling in the upper abdomen, often accompanied by vomiting, is one of the most common side effects of surgery and all types of anesthesia. This not only causes discomfort to the patient, but can also lead to dehydration, electrolyte imbalances, increased tension at the suture site, tears in the esophagus, hypotension, and a prolonged stay in the postoperative recovery room.

3. Pain

In the study by Warfield and Kahn, 75% of patients reported postoperative pain and 80% rated it as moderate to severe. Of course, it is not

enough for medical staff to focus only on pain intensity, but also on the patient’s overall quality of life.

Some plants used in Aromatherapy –

Many plants are said to be used in aromatherapy due to the presence of essential or volatile oils in various plants.

Plant that produces essential oils.

Materials such as flowers, bark, stems, leaves, roots, fruits, etc. Some of the plants used in aromatherapy are summarized in Table 1.

Essential oils	Parts of the plant
Bergamot, lemon, lime, sweet orange, tangerine, mandarin	Fruit peel
Cinnamon	Bark
Citronella, lemongrass, petitgrain, palmarosa, patchouli	Leaves
Geranium, lavender, rosemary, spike lavender	Entire plant
Ginger, vetiver	Roots
Jasmine, neroli (orange blossom), rose, ylang ylang	Flowers

1.Basil-

Basil (*Ocimum basilicum*) is an annual herbaceous plant in the mint family Lamiaceae. It has square stems with leaves that grow on opposite sides, and the leaves are rounded, slightly cupped, and curve to form a point at the tip. The leaves are generally light green, although some varieties have reddish or purplish leaves. Basil essential oil is used to sharpen concentration and alleviate some of the symptoms of depression. It may relieve headaches and migraines. It should be avoided during pregnancy.



oil is often used in aromatherapy as well as to flavor foods and some medications. Madagascar and Indonesia are the main producers of clove oil. Some countries, such as the United Kingdom, recognize its use for temporary relief of toothache, although there is insufficient medical evidence to support its use as an analgesic.

Clove oil is a topical analgesic or pain reliever often used to treat toothache. It is also used as an antispasmodic and antiemetic agent to prevent vomiting and nausea, and as a carminative to prevent the formation of gases in the intestines. It has antibacterial, antioxidant and antifungal properties.



2.clove-

Cloves are the aromatic buds of a tree in the Myrtaceae family, *Syzygium Spiceum*. Clove

3.peppermint -

Peppermint [*Mentha piperita* Linn. (*M. piperita*)] belongs to the Lamiaceae family (Fig. 6).

To date, the 600 types of mint come from 25 well-defined species. The two most important are peppermint (*M. Piperita*) and spearmint (*Mentha spicata*). Spearmint has a strong, sweet aroma with a pronounced minty accent. The oil's ingredients include carvacrol, menthol, carvone, methyl acetate, limonene and menthone. Its pharmacological action is based on menthol, the main component of peppermint oil. Peppermint oil contains at least 44% free menthol. The ingredients react sensitively to climate, latitude and plant maturity. Inhaling and applying menthol to the skin causes a skin reaction. It is used in many dosage forms of liniments to relieve painful cramps and arthritis problems. Peppermint oil has been studied and documented for its anti-inflammatory, analgesic, anti-infectious, antibacterial, antiseptic, antispasmodic, astringent, carminative, digestive, fungicidal, neurostimulatory, vasoconstrictor, decongestant, and gastric properties.



4. Rosemary

Rosemary (*Rosmarinus officinalis* Linn.), which belongs to the rosemary family, blooms in late spring/early summer with small blue flowers and reaches a height of 90 cm. There are three variants (silver, gold and green striped); It is a green variety used for its medicinal properties. This plant is rich in bitter substances, resin, tannic acid and essential oil. The active ingredients are borneol acetate, borneol and other esters as well as a special camphor similar to Myrtle, cineole, pinene and camphene. Its oil has a pronounced effect on the digestive system, relieving the symptoms of indigestion, constipation and colitis. It has a tonic effect on the liver and gallbladder. The oil also has good effects on the cardiovascular system. Regulates blood pressure and delays hardening of the arteries. In winter it was used to relieve rheumatic pains aggravated by cold. Its stimulating Properties on the nervous system have found to be

beneficial in Hysteria and paralysis. In latest human trials, aromatherapy is an Efficacious non-pharmacological therapy for dementia and may Have some potential for improving cognitive function, especially In Alzheimer's disease patients, due to its free radical scavenging. Excellent skin tonic properties, a soothing, Positive effect on menstrual cramps, for hair growth are some Of the other important properties of this oil.

The other benefits Of rosemary include includee a stimulant for the scalp encouraging hair Growth and providing treatment for dandruff and greasy hair.

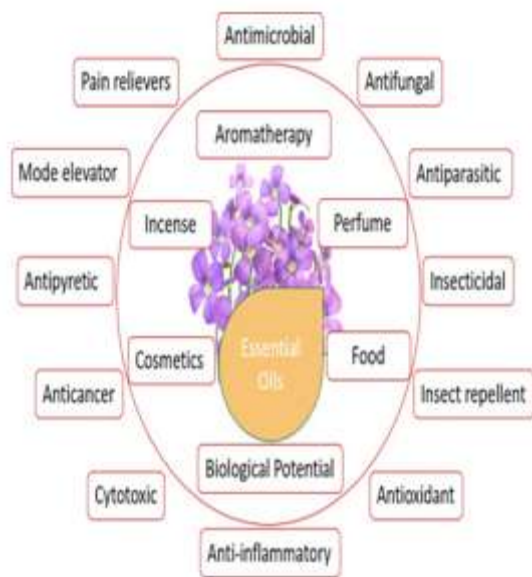


5 Amla-

Amla (*Phyllanthus Emblica*) is a deciduous tree in the family Phyllanthaceae. It has edible fruits that share the same name. The Indian gooseberry is a tree that grows in India, the Middle East and some Southeast Asian countries. Indian gooseberries have been used in Ayurvedic medicine for thousands of years. Amla oil is used in massage and aromatherapy. It has a calming and relaxing effect on the muscles. Mixing it with regular massage oil can relieve muscle tension and stress. Amla hair oil is also a remedy for stubborn dandruff.



Pharmacological Action-



II. CONCLUSION –

Essential oils can be a useful addition to cancer treatment, Helping to control side symptoms including sleeplessness And nausea. When employing essential oils for clinical Purposes, healthcare professionals should be aware of their Quality and safety. Using low-quality essential oils and Failing to follow safety rules can have a negative impact on Clinical outcomes. The literature review does not provide Enough evidence that aromatherapy is an effective therapy For any ailment, hence more research on the subject is Needed and more awareness should be done between the People.

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