# CONSIDERATIONS ON ESSENTIAL OILS

**Crinela Mihaela ȘERBAN,** Faculty of Nursing in Târgu Jiu, "Titu Maiorescu" University in Bucharest, Tg-Jiu, Romania, crinelaus@yahoo.com

**Abstract:** *Pain is an increasingly present symptom in today's society. Treating pain is a major challenge, because the manifestation of painful symptoms affects both the physical and intellectual performance, as well as the emotional states of the affected patients. Current treatment methods confront two different types of medicine, each using its own methods, but seeking the same final result - the patient's well-being.*

**Keywords:** essential oil, aromatherapy, pain, inflammation.

## 1. INTRODUCTION

Aromatherapy, i.e. the use of essential oils, is a branch of alternative therapies, which holistically approaches the patient's health and considers it to be a permanent state of balance between the physical-psychic-spiritual levels and even in the social plane. Essential oils are natural active compounds, synthesized by plants in order to protect them against attacking agents and which have multiple therapeutic effects on human organisms.

They also intervene in calming and alleviating pain due to their properties: analgesic, sedative, anti-inflammatory, antispasmodic, decongestant, decontracting and relaxing. Aromatherapy , figure 1.

Figure1. Aromatherapy: validated complementary therapy

Pain is an increasingly common symptom in today's society. Pain therapy is a major challenge, as the manifestation of painful symptoms affects both the physical and intellectual performance and the emotional states of the affected patients. Rheumatic pain includes a wide range of conditions that affect the joints, muscles and connective tissues. They can be inflammatory (such as arthritis) or degenerative (such as joint wear and tear). Common symptoms include pain, stiffness, inflammation and limited mobility.

Joint pain can occur for various reasons:

- aging and wear of cartilage
- chronic inflammation
- trauma or overuse

• autoimmune diseases

The management of these conditions often involves drug treatments, physiotherapy and lifestyle changes. Current treatment methods pit two different types of medicine against each other, each using its own methods, but seeking the same end result – the patient's well-being.

Classical medicine uses clinical studies, scientific research and evidence, and standardized synthetic treatments. It emphasizes the pharmacology of the substances used and resorts to treating the disease already installed in the patient's physical plane.Complementary or alternative medicine is based on methods and practices from ancient times, some of which have not yet been scientifically elucidated. It considers the patient's health as a permanent state of balance between the physical-psychic-spiritual levels and even in the social plane.

In this context, aromatherapy, that is, the use of essential oils, is a branch of alternative therapies, which has proven very effective in the treatment of mild and moderate pain, either individually or in combination with synthetic drug treatments.

## 2. TECHNICAL DATES

The extraction of volatile oils is done by chemical methods of steam distillation, solvent extraction or cold pressing. Most plant products are processed fresh, because prior drying causes a decrease in the concentration of volatile oil. The use of distillation and cold pressing methods ensures the obtaining of volatile oils with a high therapeutic grade, preferred and recommended in therapy, in order to avoid unwanted side effects (allergies, local burns). Therefore, the extraction method of volatile oils directly influences their quality and composition. Volatile oils have a characteristic, pleasant smell, similar to the plant from which they were extracted and have an aromatic, spicy-burning taste.The therapeutic properties of volatile oils are multiple and it has been observed that each oil simultaneously manifests several effects. The main properties relevant to joint pain are:

- anti-inflammatory effect
- analgesic effect (pain relief)
- muscle relaxant effect
- blood circulation stimulation
- calming effect on the nervous system

How to use essential oils, essential oils can be used as is or, those that present a higher risk of side effects, are used diluted in vegetable oils: coconut oil, jojoba oil, sweet almond oil, olive oil.

According to current EU legislation, essential oils are no longer administered internally, with the exception of citrus fruits and those that come from edible aromatic plants.But there are multiple external methods of applying volatile oils. Thus, we can enjoy the beneficial effects of essential oils in various forms:

- local massages on painful areas
- external baths and showers, for relaxation and for anti-inflammatory and decontracting effects.
- local hot/cold poultices and compresses for rheumatic pain, muscle pain, joint pain, sprains, bruises.
- gargles and mouthwashes for gum diseases, sore throats, vocal cord diseases, bad breath.

- inhalations, for the purpose of mental relaxation and reducing anxiety, decongesting the respiratory tract.

The effects and properties of volatile oils in rheumatic pain are multiple, manifesting simultaneously and in several ways:

- Reducing inflammation: Many essential oils contain compounds with strong anti-inflammatory properties, which can help reduce inflammation of joints and tissues affected by rheumatism.
- Pain relief: Certain compounds, such as menthol and eugenol, have analgesic properties and act as cooling or warming agents, soothing joint and muscle pain.
- Circulation improvement: Oils that stimulate blood circulation can help relax tense muscles and improve joint mobility.
- Muscle relaxation: The antispasmodic properties of some essential oils help relax muscles and reduce tension around inflamed joints.
- Anxiolytic and relaxing: The ability of essential oils to produce calming and relaxing effects on the central nervous system, which leads to an increase in the pain threshold.

Recommended volatile oils for rheumatic pain: Clinical aromatherapy involves the application of essential oils, renowned for their anxiolytic, analgesic, antiseptic, and other beneficial properties, to alleviate patients' symptoms. This method is often utilized as an adjunct to pharmacological treatments and recommended by healthcare professionals trained in aromatherapy techniques .

Although the positive effects of aromatherapy can be acknowledged by both patients and healthcare providers, a singular anecdote does not suffice to establish credibility among peers, regulatory authorities, and the broader community. Adhering to the principles of evidence-based medicine (EBM) could significantly enhance the credibility and acceptance of aromatherapy.

In recent years, there has been a noticeable increase in the number of healthcare practitioners incorporating clinical aromatherapy into their practice. This trend is evidenced by the growing number of grant applications submitted for incorporating such protocols in healthcare settings, indicating a growing interest in integrating aromatherapy within the realm of integrative medicine. Despite the observed benefits to patients, some policymakers remain hesitant to endorse this complementary therapy due to insufficient familiarity with it and a scarcity of robust clinical evidence. This hesitancy is largely attributed to the methodological shortcomings observed in existing clinical studies on aromatherapy:

1. Eucalyptus oil (Eucalyptus globulus) contains eucalyptol, with strong anti-inflammatory and analgesic effects, being effective in reducing inflammation and pain. It is used as a local massage with eucalyptus oil diluted in a carrier oil (coconut oil, sweet almond oil) to soothe painful joints.
2. Peppermint oil (Mentha piperita), contains menthol, which provides a cooling sensation and relieves muscle and joint pain. Menthol also acts as a mild anesthetic.
3. Ginger oil (Zingiber officinale) is known for its anti-inflammatory and analgesic properties, due to gingerol. It is effective by warming the affected area and stimulating circulation. Local massage with diluted ginger oil, especially for stiff and painful joints.
4. Frankincense oil (Boswellia serrata), contains boswellic acids, which have significant anti-inflammatory effects, being used to reduce chronic inflammation

from arthritis and rheumatism. Massage locally on affected joints or diffuse to reduce general tension and discomfort.

5. Lavender oil (Lavandula angustifolia), known for its calming and relaxing effects, but also for its anti-inflammatory and analgesic properties that help relieve muscle and joint pain. Applications on the skin as a massage or added to the bath for relaxation and pain relief.
6. Rosemary oil (Rosmarinus officinalis), stimulates blood circulation, having a warming and pain-reducing effect.

## 3.CONCLUSIONS

Essential oils are a valuable natural alternative in relieving rheumatic and joint pain. Due to their anti-inflammatory, analgesic and relaxing properties, they can significantly contribute to improving the well-being of affected individuals. However, they should not be considered a stand-alone treatment, but rather a complementary method that supports classical medical therapies. Used correctly and responsibly, essential oils can become an effective ally in managing pain and maintaining joint mobility.

The growing interest in integrating essential oils with conventional medicine highlights the value of collaborative healthcare approaches. As complementary therapies gain recognition, this review encourages further research and clinical investigations to harness the full potential of essential oils in conjunction with established medical practices.

## 4. REFERENCES


[1]. **Worwood VA.** *Aromatherapy for the healthy child: more than 300 natural, non-toxic, and fragrant essential oil blends*. Novato: New World Library; 2000

[2]. **Krishna A, Tiwari R, Kumar S.** *Aromatherapy-an alternative health care through essential oils.* J Med Aromat Plant Sci 2000; 22: 798-804.

[3]. **Manniche L.** *Sacred luxuries: fragrance, aromatherapy and cosmetics in ancient Egypt*. New York: Cornell University Press; 1999.

[4]. **Esposito ER, Bystrek MV, Klein JS.** *An elective course in aromatherapy science.* Am J Pharm Educ 2014; 78(4): 79.

[5]. **Evans WC.** *Trease and Evans pharmacognosy*. 4th ed. London: WB Saunders Co; 2000.

[6]. **Svoboda KP, Deans SG.** *Biological activities of essential oils from selected aromatic plants.* Acta Hort 1995; 390: 203-9.

[7]. **Schiller C, Schiller D.** *500 formulas for aromatherapy: mixing essential oils for every use.* USA: Sterling Publications; 1994. Bojor, Ovidiu. Medicinal plants and natural therapies. Fiat Lux Publishing House, 2003.