



Future of Aromatherapy

Professional Compendium

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Introduction

It was in 2019 that I recognized I had been using aromatherapy for over twenty-five years. In that time, I have witnessed tremendous world growth and interest in aromatherapy for personal and professional use. After decades of observing nature's ways, it inspired me to incorporate my insights and principles into these natural cycles. The variety of plant medicine applications has supported me to decrease stress levels, increasing my overall vitality, health, radiance, and immunity.

Aromatherapy has become an integral part of my daily life, including being a founder and director of an aromatherapy school and a published author.

With interest in what the future of aromatherapy held, I formally requested other long-time aromatherapy professionals, teachers, authors, and mentors from around the world to share their perspectives and insights with others on this journey.

It is with deep appreciation and gratitude to all the professionals that contributed their views to the benefit of all who read this. May the future of aromatherapy be up-leveled and sustained for future generations to utilize this amazing healing modality.

Shanti Dechen, CCAP, CAI, LMT

Chapter 1

Brief History of Aromatics

by KG Stiles, BA, LMT, CBP, CBT

Taking a quick look at our past as aromatherapists, and the historical use of plant aromatics can help us gain valuable perspective towards the future. It's extraordinary how far we have come, yet the foundational methods of plant aromatics have remained the same throughout human history.

Brief History of Aromatherapy

The use of aromatic plants has been around since Neolithic times. There is a belief that "smudging" was the earliest form of aromatic treatment, and shamans and priests were likely the first aromatherapists and perfumers. Medicinal plants have been found inside graves dating back eighty thousand years ago.

However, the use of pure essential oils, as we know them today, has only been available since the creation of distillation. The earliest devices for distilling oils were found in the ancient Indus Valley dating back to 3000 BC, where terra cotta distillation devices and perfume containers were discovered.

Since that time, plant aromatics have been used in every aspect of Indian culture, including beauty treatments, perfuming, medicinal practices, cleansing and ritual bathing, and religious ceremonies. Traditionally Indian tantric practices have been used to anoint the body with oils to seduce and arouse the passions.

The Vedas, the most ancient sacred texts known, contained formulas for plant aromatics. The Rigveda included instructions for how to use over 700 aromatic plants, including spikenard (*Nardostachys grandiflora*), myrrh (*Commiphora myrrha*), sandalwood (*Santalum album*), ginger (*Zingiber officinale*), cinnamon (*Cinnamomum zeylanicum*), and coriander (*Coriandrum sativum*).

In ancient times, humans were perceived as part of nature, and the preparation of plant medicinal treatments was considered a sacred art, and practice. Ayurvedic medicine is one of the oldest forms of medicine practiced continuously since ancient times.

Fast Forward in Time

Let's take a leap forward in time and witness a remarkable change that takes place for humankind.

In 1868, the first synthetic fragrance oils were produced. These synthetic fragrances were considered unsuitable for medicinal use. Chemists began to isolate the active ingredients within aromatic plants and manufacture them synthetically.

Manufactured chemical drugs acted more powerfully and were cheaper to produce. Because of this, pharmaceutical drugs were considered superior and more desirable for the prevention and treatment of illnesses. Since then, pharmaceutical drugs have enjoyed ever-increasing popularity. Over time, as science became more sophisticated, herbs and essential oils were replaced by synthetic drugs.

By the 1900's medical doctors became accustomed to using synthetic chemicals, and by the early 20th century, aromatic oils had almost wholly disappeared from frequent use.

However, by the mid-twentieth century, there was a renewed interest in essential oils. They began to be used extensively as flavoring agents, perfumes, cosmetics, and household cleaning supplies. Essential oils were also used in a wide range of pharmaceutical products to mask the strong odor of the chemicals.

Several publications surfaced during this time that helped spur this resurgence of interest in essential oils. In 1964, Jean Valnet was a French ex-army surgeon who used essential oils to treat wounded soldiers and found them to be highly effective for healing wounds and burns. He published *The Practice of Aromatherapy*, written for laypeople, as well as medical professionals.

During this same time, Madame Maury, an English biochemist who was influenced by Valnet's research, wrote, *The Secret of Life and Youth*, a holistic self-help approach to beauty using aromatherapy.

In 1977, Robert Tisserand's book, *The Art of Aromatherapy*, was published in England. It was the first book to combine both medical and esoteric approaches to aromatherapy.

Since then, there's been an expanding interest by the general public in aromatic oils and aromatherapy. More and more controlled research studies are being conducted on the efficacy of using essential oils for therapeutic results, including evidence-based research by health professionals, hospitals, and medical centers for use with patients. According to global trends analysis, the renaissance of utilizing aromatic oils is poised to continue in the coming millennia.

Global Trends and Species Extinction

Though no one can predict the future, we can look at developing trends as a window on how things are shaping up for the future of aromatherapy. For instance, a 2017 report of the Business and Sustainable Development Commission reported that nature-based solutions to environmental problems are a growing \$12 trillion market.¹

And, according to Business Wire, essential oils have dominated the Complementary and Alternative Medicine Global Market since 2016, and this trend is projected to continue through 2025.²

These statistics show us that there is an incredibly fast-growing interest in medicinal and aromatic plants worldwide. For example, over 286 studies on Rosemary (*Rosmarinus officinalis*) and its pharmacological activities have been done since 1990. A vast re-discovery of the beneficial effects of medicinal plants is now fueling the development of new mainstream pharmaceutical drugs.³

According to PubMed, current research indicates about 200,000 botanical plants have been identified of interest to study for the possible development of botanically-based medicine.

Shockingly, it's estimated that 60,000 of these plant species will become extinct by 2050. So, there's great urgency to proceed quickly with research. In light of the fast extinction of species on planet earth, the role of botanical plants in scientific research and conservation is widely discussed. Botanical gardens may be a way to avert possible loss of plant species for use in medical research and development.⁴

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Chapter 2

History of Clinical Aromatherapy

by Penny Price, MEd, BA Hons, Cert Ed, DCA

Aromatherapy came to be a therapy in its own right when Dr. Maurice Gattefosse investigated the use of lavender essential oil after burning his hand. He noted the healing effects and began to investigate the healing powers of other oils and so began French aromatherapy, using undiluted essential oils directly on the skin.

It was Marguerite Maury, a French herbalist and massage therapist, who then brought the art of aromatherapy to England in the 1950s; however, the therapy that started in France, became very different when it reached England, it was introduced through the beauty salon as an aromatic massage.

All massage blends were pre-blended by Madame Maury and later, her followers. Her famous book was first published in France in 1961 under the title, *Le Capital "Jeunesse,"* and was translated into English in 1964.

Clinical aromatherapy did not start until the 1970s with Shirley Price and Robert Tisserand (to mention two teachers at the time), and Shirley Price was the first teacher to show students how to blend for their clients to treat common ailments. Which means that in the UK, we have the best of both worlds, with massage alongside clinical use of essential oils, English style aromatherapy is being taught all over the world.

Clinical aromatherapists still need to attend specialized schools to achieve their clinical status rather than a beauty college. Aromatherapy is now common in hospitals, nursing homes, and hospices.

Clinical aromatherapy looks for:

- Wholeness and Health, where therapeutic and whole essential oils are used in the treatment to enable wellness.
- A thorough assessment in the clinic, including body analysis.
- Good working knowledge of the chemical components and pharmacological properties of each essential oil.
- An integral service, working alongside orthodox medication and integrating with the client's lifestyle.
- The offering of holism through correct choices of essential oils and complete attention to detail in offering home treatments.



Penny Price, MEd, BA Hons, Cert Ed, DCA, has been an aromatherapist since 1983, and founded her company Penny Price Aromatherapy and the Penny Price Academy in 2003. The company now has distributorships and Academies teaching clinical aromatherapy across the world, and the company also formulates and manufactures bespoke skin and health care solutions. Penny is a sought-after speaker for professional conferences and has contributed substantially to peer-reviewed journals and academic texts on the medical use of aromatherapy and essential oils. Penny is the best-selling author of, *Aromatherapy for Babies and Children* and a contributing author of *Aromatherapy for Health Professionals*

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Chapter 3

Clinical Uses

by Gabriel Mojay, LicAc, CertEd, FIFPA

A diverse range of clinical applications of essential oils show particular promise for the future. This is reflected in the growing number of clinical trials and research studies into the therapeutic efficacy of essential oils in recent years.

Looking at their neuropharmacological properties, essential oils have become increasingly investigated and employed for symptoms of dementia and Alzheimer's disease, and will, no doubt, be used more and more in these clinical contexts. Essential oils, such as Spanish sage (*Salvia lavandulaefolia*) and (*Eucalyptus globulus*), have demonstrated an ability to improve memory and cognition through inhibiting the cholinesterase enzyme (Porres-Martínez et al, 2013; Aazza et al, 2011), while others, including (*Melissa officinalis*) and (*Lavandula angustifolia*) not only enhance cognition, but reduce agitation and improve quality of life indices – and without the occurrence of side effects (Ballard et al, 2002; Lin et al, 2007).

Compounds such as thymol and carvacrol, found in the essential oils of thyme (*Thymus vulgaris*) and mountain savory (*Satureja montana*), have further shown evidence of an anti-amyloid activity: one which, together with their cholinesterase inhibitory, anti-inflammatory and antioxidant properties, point to their effectiveness in the treatment of Alzheimer's disease and dementia (Azizi et al, 2012). The ingestion of hydrosols, too, specifically of rosemary water (*Salvia rosmarinus*), have demonstrated an ability to enhance long term and working memory, most likely through facilitating oxygen extraction at times of cognitive demand (Moss et al, 2018).

Further clinical applications with great potential for the future include:

- The use of essential oils in mouth rinses for oral hygiene, where they can play a valuable role in reducing plaque and gingivitis (Lynch et al, 2018);
- The application of aromatherapy, via inhalation, and massage, for easing the pain of primary dysmenorrhea (Lee et al, 2018);
- The dermal and respiratory administration of essential oils such as rose (*Rosa damascena*) for managing the symptoms of premenstrual syndrome (PMS) (Heydari et al, 2018);
- The inhalation of essential oils including true lavender (*Lavandula angustifolia*) as an effective intervention to reduce fatigue, anxiety and insomnia of patients undergoing medical procedure such as hemodialysis (Karadag & Samancioglu, 2019);
- The aromatherapy massage of essential oils such as ginger (*Zingiber officinalis*) and rosemary (*Salvia Rosmarinus*) for osteoarthritis, to relieve pain and improve quality of life (Pehlivan & Karadakovan, 2019);
- The inhalation of essential oils such as *Lavandula angustifolia* and ylang ylang (*Cananga odorata*) as an effective method of lowering systolic and diastolic blood pressure (Cha et al, 2010; Awaad et al, 2018);
- The application of essential oils such as *Eucalyptus globulus* and lemon-scented tea tree (*Leptospermum petersonii*) for treating head lice infestation in children (Greive & Barnes, 2017);

- Their use as mosquito repellents in malaria prevention, where the synergistic activities of essential oil components can overcome the problem of pyrethroid resistance in *Anopheles* populations (Gnankiné & Bassolé, 2017).

What these uses and the clinical trials that support them underscore is the ever-increasing range of clinical applications for which essential oils are proving effective — reflecting activities that encompass antibacterial, analgesic, anti-inflammatory, anti-arthritic, anti-acetylcholinesterase, soporific, anxiolytic, hypotensive, insecticidal, and mosquito repellent properties. While many research studies highlighting these activities are based in clinical settings, they point to therapeutic uses that can be applied in a holistic treatment context and as complementary self-care. In this way, clinical aromatherapy has a leading role to play in the future growth and development of integrated healthcare as a whole.

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Gabriel Mojay, LicAc, CertEd, FIFPA, Principal of the London-based Institute of Traditional Herbal Medicine and Aromatherapy. Gabriel first studied natural medicine in 1978, initially training in shiatsu therapy, followed in the 1980s by acupuncture and herbal medicine. In 1987 he undertook a course in Scientific Aromatherapy with Pierre Franchomme and Dr. Daniel Pénœl. In 1990 he founded the Register of Qualified Aromatherapists, which in 2002 amalgamated to form the International Federation of Professional Aromatherapists and served as one of its founding Co-Chairs. Gabriel has given lecture presentations at conferences hosted by the Tisserand Institute (UK), the National Association for Holistic Aromatherapy (USA), the Alliance of International Aromatherapists (USA), the Pacific Institute of Aromatherapy (USA), the Canadian Federation of Aromatherapists, the British Columbia Association of Practicing Aromatherapists, and the Czech Association of Aromatherapists. He has also given seminars in Japan, China, Hong Kong, Korea, Australia, Ireland, Brazil and Mexico.

He is author of *Aromatherapy for Healing the Spirit*. <http://www.aromatherapy-studies.com/index.html>

Chapter 4

Education

by Shanti Dechen, CCAP, CAI, LMT

If you want to learn something, you study it. Aromatherapy is no exception! To be considered competent and respected as a professional, take the steps with a professionally recognized school. The more you study aromatherapy, the more you will realize that educating yourself is a continual process. Since my first introduction to aromatherapy in 1994, it has taken me on extensive study and exploration. As the years have progressed, I am amazed at the continual updates and research available. Over the years, the practice of aromatherapy has significantly advanced. It has adopted more research and a holistic approach encompassing the integration of a person's health, both mentally and physically, using various application and healing methods.

Basic Components of Quality Aromatherapy Education

- **History-** Since ancient times, herbal medicine has been used throughout the world by many cultures to treat illnesses and to assist bodily functions. The connection between humans and their search for botanical medicine dates from the very distant past. There is a vast amount of evidence, from various sources, pointing to this relationship: written documents, preserved monuments, and even original plant medicines.

Indigenous cultures, such as African and American Indians, have always used herbs in their healing rituals. Other cultures developed traditional medical systems, such as Ayurveda from India and traditional Chinese medicine, where herbal therapies were integrated into their daily lives.

Medicinal plants, which humans have used throughout history to assist or lessen symptoms from an illness, have similar chemical properties as conventional pharmaceutical drugs. We have evolved for thousands of years using plants, and our bodies are better suited to digest, absorb, and metabolize these plant-based foods and medicines.

It is imperative to recognize the natural symbiotic relationship that we have with plants, and their healing nature, to restore balance beyond a cause and effect perspective. Herbal remedies, including infusions and plant extractions, assist the body to stimulate, regulate, adapt, and promote self-healing as nature intended. Traditional and modern researchers believe that aromatic herbs, when used correctly, encourage the body to heal itself.

- **Extraction Methods-** Civilizations have embraced the use of aromatic plant extracts for thousands of years. Through crude extraction methods, ancient cultures derived aromatic oils from seeds, roots, bark, leaves, wood, flowers, and resins. They used them in religious ceremonies, perfumery, funerary services, and many other aspects of life.

Today, there are several methods of aromatic plant extraction; steam distillation, hydro distillation, cold-pressing, absolutes, CO2 extraction, and hydrosols. Each extraction method offers different benefits.

Steam distillation is the most widely used process for extraction on a large scale and is the standard method for producing essential oils. CO2 extracts are oils similar to distilled essential oils, yet they contain more plant constituents and have a more full-bodied aroma, closely resembling the aromatic plant.

Solvent extraction methods produce absolutes that are different from essential oils because they can contain both aromatic and non-aromatic chemical constituents.

Hydrolate, also known as hydrosol, is the aromatic water created as a by-product during the steam distillation of essential oils or as a stand-alone product. The resulting product contains the water-soluble chemical components of the aromatic plants. Hydrolates are similar to essential oils but are very different in chemical properties, shelf life, precautions, usage, and storage. Unlike essential oils, hydrolates are much safer when added to water, other beverages, salad dressings, and food. They are an excellent addition to facial spritzers, compresses, and are safer to use directly on the skin, especially with children and elders than essential oils.

- **Essential Oil Profiles-** Being knowledgeable in botany, chemical components, safety, uses, applications, and body systems of an individual essential oil makes a significant difference in the result of a blend. Every aromatic plant, seed, tree, flower, and bush has its unique qualities.

When we can find a particular attraction or connection with a plant, we create a plant ally, a bond of feeling nurtured and soothed in our physical, mental, emotional, and spiritual selves. It is encouraged to build relationships with the herbs and essential oils used in creating aromatherapy and herbal formulations.

- **Essential Oil Safety-** Essential oils are the most concentrated herbal substance we have available. Safety issues have become a big concern in the professional aromatherapy industry. Incorrect ingesting of essential oils and applying them neat on the skin continue to pose serious health risks. Not one essential oil or application fits all people, and over time, some can even be dangerous. Education is the key to achieving industry-wide safe usage guidelines. It is vital that schools and aromatherapy teachers update their essential oil safety precautions as new research and evidence becomes available.
- **Uses and Applications-** One of the most sensational aromatherapy attributes, as a natural healing modality, is the variety of applications. Application methods of aromatherapy can include; topical, inhalation, diffusing, bathing, compress, massage, scrubs, and other personal care products. These options allow you to choose the optimum application method(s) that are best suited to you or your client's lifestyle and the intended effect of the blend.
- **Carrier Oils-** The carrier oils used in therapeutic aromatherapy blending are extracted from vegetables, seeds, and nuts. They are rich in nutrients and vitamins and are soothing, nourishing, and restorative to the skin and are the most common foundation for topical aromatherapy blends.

Using the highest quality carrier oils that are organic, cold-pressed, and unfiltered, makes a significant difference in the therapeutic quality and absorption. Thus, no animal, mineral, or synthetic oils are used to formulate therapeutic essential oil blends. These are the optimum environments to blend essential oils because of their “fixed nature,” meaning they are stable and have a slow evaporation rate. Organic and unrefined carrier oils also have the added benefit of many vitamins and minerals that are not present in essential oils.

In my experience, carrier oils resemble a beautiful cut glass crystal vase used to hold a flower arrangement. Using a variety of carrier oils in a blend enhances the overall effect and results of the topical application.

Case Studies- Professional aromatherapy encompasses clinical trials and case histories, which are the “heart” of professional aromatherapy training. Learning how to blend for an individual is an art and science. This comprehensive process takes many steps. First, completing a health history form and then honing client observational skills. Finally, it is also imperative to be aware of the client’s chronic issues, any precautions, medications, and dilution factors before choosing the essential oils, carrier oils, and applications.

For an aromatic remedy to be entirely successful, it must include recognition and communication with the whole self. The full embodiment of healing always integrates the body, mind, emotions, and spirit.

- **Anatomy and Physiology-** There is no substitute for gaining knowledge of the physical body and all of its extraordinary components. This study needs to include a comprehensive study of the structure, function, and pathologies of the human anatomy and physiology, including the study of cell structures and the systems of the cardiovascular, central nervous system, digestive, endocrine, integumentary, lymphatic and immune system, muscular, skeletal, reproductive, and urinary systems. Advanced study of anatomy and physiology includes the mechanisms of diseases and pathophysiological conditions for all the major systems.

The more knowledge and study I have acquired in anatomy and physiology, the deeper the awareness I have gained with my own body and the innate ability of self-healing.

- **Essential Oil Chemistry-** Aromatic plants create volatile oils as secondary metabolites in protecting and promoting plant health. Learning these complex functions is a unique feature of aromatherapy. These account for the biological activity and synergistic effects of the essential oil constituents beneficial in healing as an antioxidant, antibacterial, antifungal, antiviral, anti-inflammatory, and more.
- **Plant Allies-** We are deeply connected with plants in our existence on earth. They can heal us, protect us, and be our food and medicine. They inform us of both the harmony and imbalances within ourselves. They can open us up to the microcosmic expansion, which expresses the essential features, in miniature, of the characteristic qualities or features of something much more significant.

There are many effective ways to connect with nature. It starts with deepening a connection with ourselves.

- **Integrative Therapies-** I have recognized the utmost importance of including integrative therapies and self-care maintenance. These include aromatherapy, herbs, healthy organic nutrition, vitamin supplements, exercise, time in nature, supportive friends and family, and mental/emotional rebalancing with meditation, prayer, and alternative healing methods. Complementary and alternative therapies can also include herbology, acupressure, acupuncture, chiropractic, naturopathy, homeopathy, massage therapy, reflexology, yoga, tai chi, qigong, and energy medicine, to name a few modalities.
- **Viable Research-** In the last few decades, there has been a significant increase in scientific research and evidence of essential oils and their chemical components, which has substantiated their healing benefits. The rise in the worldwide popularity of aromatherapy in recent years is extraordinary. However, it has become evident for aromatherapy professionals and enthusiasts to have resources that are credible and researched-based. Unfortunately, not all sources have adequate, viable, or correct information.
- **Sustainably-** Essential oils are the most concentrated herbal medicine available. It takes a tremendous amount of plant matter to produce essential oils. In recent years, there has been an enormous increase in the production and sales of essential oils, as more and more people realize the benefits of aromatherapy. With this growing consumption, some aromatic plants are in grave danger of ceasing to exist. Over wild harvesting and natural habitat destruction have contributed to certain species becoming threatened or endangered. It is our professional responsibility to consider that using more and more essential oils daily does not create long term sustainability issues of these sacred plants.

The subjects addressed above are the foundations of educational study for professional aromatherapist. There is also advanced, specialized training available for those who will be administering aromatherapy in hospitals, nursing homes, hospices, trauma centers, integrative medicine, specific treatments to animals or children, product formulating, research, business, professional ethics, writing, and teaching.

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Chapter 5

Essential Oil Safety

by KG Stiles, BA, LMT, CBP, CBT

Safety issues remain a big concern in the aromatherapy community. Ingesting essential oils and applying them neat on the skin continue to pose serious health risks. Education is vital for achieving industry-wide safe usage guidelines. There are so many contributors to the field of aromatherapy education now. For instance, chiropractors and medical doctors are conducting training, who themselves have had no formal education from a qualified aromatherapy practitioner who can instruct them in best safety practices.

Suppose you are using essential oils for your personal use and that of your family. In that case, it is advised that you get your information, especially about safety, usage, and education from trained professionals and reputable resources, from formally trained and qualified in the field of aromatherapy. If you choose to be an expert in the field of aromatherapy that offers training to the public, or for use in your clinical practice with clients. In that case, you are strongly encouraged to have formalized training from qualified professional schools and aromatherapist. Most importantly, look to learn from professionals with years of practical training, clinical experience, and practice results. You will shorten your learning curve and gain the confidence needed to practice aromatherapy safely and effectively.

Essential Oil Safety During Pregnancy and Children

by Penny Price, MEd, BA Hons, Cert Ed, DCA

Safety in Pregnancy

Often pregnancy carries the stigma of a no-go zone for massage and aromatherapy treatments. On the contrary, a pregnant client can significantly benefit from regular massages throughout the pregnancy period, and essential oils can also help during labor and postnatal care. The critical point to remember is that the pregnant client is still a human being, and the body is still able to metabolize and excrete the essential oils.

Furthermore, pregnant women develop a thicker layer of fat underneath the skin, which acts as a safety area between the baby and the essential oil. Essential oils dissolve in fat and will be more likely to rest in the fat layers, giving a slow-release treatment rather than an immediate one as they are released more slowly into the tissues.

The fundamental changes between treating a pregnant woman from a non-pregnant woman are the dose you use and the oils you avoid. For a pregnant woman 1% is my recommended total amount of essential oils in a blend for massage, with four drops in baths, vaporizers, and tissues. The essential oils to avoid can be controversial. I don't use oils from the Apiaceae family, as they can be hormone-like, but apart from those, a proper consultation will usually give you the blend of oils the client needs.

Safety for Children

Using aromatherapy with babies and children should always be with the full written consent of a parent. The parent should be present during the entire process (from consultation to choosing the oils and the treatment given). Also, to massage babies or children under the age of consent, you will need to apply for and successfully be granted a CRB (Criminal Records Bureau check) in the UK. Insurance is dependent on this. The rules of safety for pregnancy apply to treat young children, so a lower dose of essential oils (0.5%) in any massage or treatment and use oils you know are absolutely safe. These are usually the florals, woods, and citrus oils. Good quality whole and therapeutic oils from a trusted supplier will considerably reduce any incidences of allergies or contra-indications.

Research – Why it is Important

Essential oils have been used for medicinal purposes for centuries; however, much of the reported benefits of essential oils are based on these traditional uses and from observations. How do we know that the essential oil is affective? How do we know improvement is not spontaneous or the placebo effective? We need scientific evidence to make any claims about the benefits of aromatherapy to state that the essential oil itself has a significant, measurable pharmacological effect, just like any therapeutic or medicinal product.

There are perhaps three ways in which the word ‘research’ has been understood:

1. Sharing Information from Experience: this is a very valid and worthwhile exercise. It is a pooling of information gleaned through experience, and for this to develop into research, there must be precision in setting the context and evaluating the results.
2. Writing in Peer-reviewed Journals: in this, an idea is pursued through an exploration that will invariably involve a significant amount of background reading. An idea or hypothesis will be examined against the literature and then will be weighed by a group experienced in that area.
3. Pursuing Formal Research (often, but not always, for an academic award): the scrutiny of a supervisor (or publishing editor) ensures the quality of this work. In preparation for this, decisions will have been made on the best approach (e.g., qualitative or quantitative) with the necessary power calculations for demonstrating significance having been done.

It is the third option that is considered valid research, but I believe sharing knowledge on every level is both enlightening and valid. A vast amount of formal research has been completed after Gattefosse did his research into lavender (*Lavandula angustifolia*) before the year 2000. Since that time, there has been a fair amount of research from Japan and also from universities in the UK and the US.

Chapter 6

Integrative Medicine

by Salvatore Battaglia, B. Eng, Dip Ac, Dip Ar, Dip. N.

Integrative Medicine

I am always excited to learn about the latest research into complementary medicine and aromatherapy. I am thrilled to hear of the progress made in integrative medicine. Many definitions of integrative medicine embrace a holistic approach that seeks to restore health and wellness and address the full range of physical, emotional, mental, social, spiritual, and environmental influences that affect health. However, the reality is very different. In my experience, complementary therapy can be assessed within the framework of biomedicine, which is based on the pharmacological model.

I believe aromatherapy is in a unique position to act as the bridge between biomedicine and complementary therapies. No other therapy is able to influence the psyche like essential oils. Studies in olfaction and neurobiology are now only beginning to understand the complex relationship between essential oil constituents, hormones, and neurotransmitters. Evidence suggests there may be a vibrational basis for olfaction. The challenge is that the effect of essential oils is often subtle, and we do not have the science or tools to measure these subtle influences at our disposal.

In preparing *The Complete Guide to Aromatherapy – Volume III: Subtle and Psyche*, I was pleased to learn about the research linking wellbeing and health to spirituality. However, integrating concepts of spirituality into mainstream healthcare practices can be, and is, challenging. I have addressed many of these challenges in my upcoming book, which I hope will create a roadmap for integrating aromatic spiritual elements into your practice.

New sciences are emerging to uncover the many mysteries of aromatherapy. Some of these mysteries include understanding the true mechanisms of olfaction, understanding the effect of essential oils on our psyche, and the energetic interactions of essential oils on our health and wellbeing. The latest research in neurobiology and neurotheology is helping us to make sense of many traditional practices involving essential oils and scent.

The Spiritual Dimension of Scent

In the chapter entitled, *Spiritual dimensions of scent*, I investigate the mechanisms by which essential oils work at a spiritual level. I suggest there are six principal factors that contribute to the spiritual dimension of scent. They are:

- biophilia
- awe
- sacred space
- rituals
- myths
- neurobiology

Understanding these factors helps us gain more spiritual clarity, but they also provide us with a better understanding of the therapeutic role of essential oils. *The Complete Guide to Aromatherapy – Volume III: Subtle and Psyche* will examine each of these factors in detail.

Throughout the ages, scent has played such an important role in creating a sacred space. Many essential oils can elicit a sense of awe when inhaled. Research has found feelings of awe can elicit many beneficial psychological and physiological responses. The use of scent and the practice of aromatherapy often involves rituals. It is not surprising research is confirming rituals can also elicit a therapeutic outcome. I believe rituals may enhance the therapeutic result of an aromatherapy treatment.

The latest research into *Shinrin-yoku*, the Japanese practice of forest bathing and biophilia, helps us understand why exposure to nature can have so many beneficial psychological and physiological benefits. What is most exciting about the research into *Shinrin-yoku* is that the volatile oils emitted by trees are responsible for much of the therapeutic efficacy of forest bathing. What is even more exciting is that inhalation of only trace amounts of the volatile essential oil molecules in the air from the conifer trees can have so many pronounced physiological and psychological effects, such as boosting immunity, reducing stress-producing hormones and improving sleep.

Researchers have spoken about the impact of the lack of nature in our lives on our health. *Shinrin-yoku* researchers suggest diffusing essential oils may supplement this nature deficit and provide the same benefits as forest bathing. Even more interesting is that the compounds found to be responsible are essential oil compounds previously not considered significantly therapeutically active, such as monoterpene hydrocarbons.

Neurotheology

Researchers have always struggled to understand the complex role of scent. In 1999, Schnaubelt stated that the scientific method runs into huge problems when dealing with interconnected phenomena such as fragrance, feeling, and culture. It is not surprising that Schnaubelt expresses the need for new sciences which allow us to understand the psychosomatic networks.¹ I am pleased that research into neurobiology and neurotheology is beginning to provide us with a framework to understanding the complex interaction of essential oil constituents and the psychosomatic networks Schnaubelt spoke of.

In Volume III, we examine how neurotheology helps us understand the benefits of essential oils within a spiritual context. Neurotheology integrates anthropology, cognitive neuroscience, neurology, psychology, and sociology, as well as beliefs, myths, religion, rituals, spiritual practices, spirituality and theology.²

Systems biology and precision medicine

Before I discovered aromatherapy, I studied and practiced acupuncture and TCM (Traditional Chinese Medicine). The holistic framework of TCM excited me. I loved the idea of promoting balance and harmony of *Qi* to support health and wellbeing. I soon discovered essential oils and realized essential oils have energetic qualities, which can also promote balance and harmony of *Qi*. TCM can integrate concepts to enhance our aromatherapy treatment. I was excited to learn that research into systems biology and precision medicine is turning to TCM to help develop a functional model for systems biology and precision medicine. It is not unreasonable to suggest that if aromatherapy is practiced within the framework of TCM, it also embodies the notions of systems biology and precision medicine.

Marguerite Maury understood the importance of disease prevention and improving conditions associated with sub-health. She integrated concepts of Chinese medicine into the way she practiced aromatherapy. She refers to a concept of the ‘individual mixture,’ which she explains:

“... is designed to reflect the weaknesses and violence of an individual; it has to compensate for the deficiencies and reduce the excesses. It serves above all to normalize the rhythm of the functions.”³

She states in order to create the individual mixture, which she also refers to as the ‘Individual Prescription’ (IP), we need as much information as possible about the patient.³

Traditional holistic naturopathic practices that focus on treating the terrain rather than the disease reflect the principles of personalized medicine. The treatment of the terrain is an important characteristic of the vitalistic system of medicine. The ‘terrain’ is a term traditionally used by French medical aromatherapists and traditionally trained naturopaths for referring to the individual’s internal environment and the way one responds to physical and psychological stressors. The terrain is also influenced by factors such as lifestyle, dietary habits, and emotional expression.

Biofields or Subtle?

I refer to subtle aromatherapy as renamed *Biofield Therapies*. Even though I am comfortable with the term ‘subtle’ in reference to the effect of essential oils on our psyche and subtle aromatherapy practices, the term is often considered problematic because of the close association with the work and teachings of the Theosophical Society.⁴

In 2014, the *National Center for Complementary and Alternative Medicine* (NCCAM), the United States government agency who deals with complementary and alternative therapies, underwent a name change to the *National Center for Complementary and Integrative Health* (NCCIH) to avoid the term ‘alternative,’ and to distance itself from funding questionable research.⁵

It is interesting that the categories to classify complementary and alternative medicines (CAM) also changed. Most notable was the exclusion of the term ‘energy medicine’, which had included therapies such as qi gong, chakras, therapeutic touch, and the use of electromagnetic fields.

Research reveals the presence of ultra-weak biophoton emission (UPE) indicates the presence of excess free radicals and excess cellular oxidation. Excess oxidative activity is linked to metabolic disorders, inflammation, and aging.⁶ How interesting. We know many essential oils have antioxidant and anti-inflammatory activities. Could it be that using essential oils re-establishes balance and harmony to the terrain, which in turn facilitates the healing process?

Researchers are now suggesting that measuring the natural biophoton emission of the human body may allow us to identify the functional state of an individual in real-time. In my upcoming *Aromatherapy and Chakras* book, I describe a study in which we examine the effect of essential oils on our UPEs.⁷

Spirituality

It has been said the sesquiterpene compounds in essential oils may be responsible for the spiritual effects of essential oils. Is it possible some essential oils may act as ‘entheogenics’ allowing us, as Kennedy states, “to experience the god within” and communicate with the spirits?⁸

It is disappointing that the NCCIH categories used to classify CAM avoid any reference to spirituality. I have reviewed the works of Tanyi, Swinton, and Koenig and many other researchers who provide high-quality research and clinical studies examining the impact of spirituality on our physical and mental health. I examine why the New Age movement came to embrace spirituality, as well as the work of David Tacey, reader in literature and depth psychology at La Trobe University in Melbourne. Tacey states that while the New Age seeks to recover the lost connection between time and eternity, humanity and nature, and the individual and the group, he warns us of the perils often associated with New Age ideologies. Conversely, Tacey warns us that ignoring our spirit can trigger diseases of the body to the extent that conventional medicine is unable to recognize.⁹

I love the term Tacey uses when he explains the need to ‘*re-shamanize*’ medicine. Tacey explains if we are to move towards a more holistic model of health, religion, and medicine, then we must find their common roots in the ancient understanding of disease and healing. In order to do this, Tacey states that the way of the future is to return to the past and explore what has been lost. He is concerned that because we live in a scientific era, we will have a temptation to define the spiritual healing process in scientific terms (we see this in research into mindfulness practices). However, Tacey believes some re-appropriation of the non-rational side of experience will need to take place.⁹

As science continues to unravel many of the mysteries of aromatherapy, I do believe the future of aromatherapy will involve the re-shamanizing of healing and using science to integrate concepts such as neurotheology, subtle, spirituality, biofields, and biophilia.

‘The third millennium will be spiritual, or there will be no third millennium.’
Andre Malraux

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Salvatore Battaglia, B. Eng, Dip Ac, Dip Ar, Dip. N. has been passionate about natural therapies for most of his life. He holds qualifications in natural therapies, herbal medicine, acupuncture and aromatherapy. Salvatore has been an advisor to hospital boards and nursing homes to establish aromatherapy clinical trials for pain management, intensive care and depression and for the management of dementia and aged care. He is the author of *The Complete Guide to Aromatherapy*, which was first published in 1994. To date, more than 130,000 copies of this have been sold. The book is internationally acclaimed as a textbook and has now been translated into Japanese and Korean. In 1991, Salvatore created Perfect Potion, a manufacturer of certified organic aromatherapy products, natural skin care and essential oils, whose purpose is to naturally enhance people's lives. Perfect Potion has been regarded by government and industry regulators as having established the benchmark for aromatherapy products in Australia. In 2016, he was made an honorary member of the International Federation of Aromatherapists (IFA).

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Chapter 7

Research

by Dr E. Joy Bowles, Ph.D., BSc Hons

Since 1991, when I started teaching the chemistry of essential oils in Australia, aromatherapy has come a long way. Then, most aromatherapy practitioners came from beauty therapy or emotional well-being perspectives. The potential of pharmacological actions of essential oils was little-known, apart from herbal medicine. The wide-spread use of essential oils by the general public was just starting to get a foot-hold, and in the 1990s, aromatherapy ‘went viral.’ Aromatherapy became a marketing buzz-word, leading many to discount its potential for health-care.

Despite this, aromatherapy has expanded into patient support in hospitals, palliative, and dementia care, and has been used by volunteers to alleviate suffering in humanitarian disasters. The demand for evidence-based practice in health care has also expanded over this time, and this demand is one of the greatest threats to the continued practice of aromatherapy in health-care. We do need an excellent evidence-base for the safety and efficacy of aromatherapy. First of all, we need to get clear on our scope of practice and the potential resulting evidence.

Do we need to have a detailed mechanistic understanding of how essential oils work? Is it even possible, given the complexity of most essential oils, and the multiple actions they can have on human physiology? Or perhaps, like the early herbalists, do we just need to know **what works**, and **what doesn’t**, how much to use for how long, and for which conditions?

Future Directions for Aromatherapy

From a research perspective, essential oils are challenging materials to investigate. They are complex mixtures of compounds, each with multiple actions, a pharmacology researcher’s nightmare. What can other pharmaceutical class be sniffed, inhaled into your lungs, rubbed on the skin, added to a suppository, or encapsulated and swallowed? Other variables of aromatherapy treatments, such as “practitioner-client interaction,” “treatment environment,” “length and manner of clinical history taking,” “additional modalities included by the practitioner,” and “application method,” are likely to affect outcomes, in addition to the placebo effect (Kaptchuk, 2002).

To me, aromatherapy practice seems to be at a crossroad, with one way pointing “non-pharmacological” and the other pointing “pharmacological.” Let’s take a look at both of these directions and consider what our research priorities need to be to establish a niche for aromatherapy in the future of health care.

The Non-Pharmacological (yet still therapeutic) Uses of Essential Oils

The non-pharmacological applications are the uses of the aroma of the essential oils, and the topical application of essential oils, either in a massage lotion or in the form of small spot applications for first-aid purposes. Let’s consider aroma first.

Aroma

The aromas of essential oils can influence human moods, emotions, and memory, by triggering electrical impulses in the olfactory neurons that then connect through to the limbic system. At present, this interaction is considered to be ‘non-pharmacological’ because the doses are so small that even if absorbed into the bloodstream, they would not cause an observable pharmacological effect. Some recent research suggests that aroma molecules can penetrate directly into the brain by intraneuronal transport, but we are far from being able to map the pharmacological impacts in humans (Bourganis, Kammona, Alexopoulos, & Kiparissides, 2018; Illum, 2004; Modi, Patel, Daslaniya, Patel, & Bhimani, 2013). We need aroma research on whether any human responses to aromas are universal, or if aroma perception is only culturally conditioned. The extent to which expectation, suggestion, and previous experience of an aroma impact on people’s responses is also an under-researched area. It is possible that aromatherapy research can be flawed by the expectation’s patients have about the trial or the aromas, especially if they have prior experience of the aroma in their lives (Chamine & Oken, 2015; Chamine & Oken, 2016).

The door is wide open for us to show that sniffing and inhalation of essential oils to modify emotional states is valid, safe, and effective. Trial design should eliminate the bias of belief and capture more aromatherapy treatment variables.

Topical Application

Apart from their aroma, essential oils are used topically to alleviate the suffering caused by disturbances of the external membranes of the body, the skin, and linings of the orifices. The activity of topically applied essential oils is presumed to be localized, thus alleviating any concerns about systemic pharmacological effects ‘if used as directed,’ i.e., in small doses, applied infrequently.

Tea Tree oil (*Melaleuca alternifolia*) has often been called a ‘first-aid kit in a bottle,’ due to its broad-spectrum antimicrobial, mild anti-inflammatory and analgesic properties. These activities are shared by many essential oils when applied topically, either to epidermis or endodermis. Essential oil molecules are small and lipophilic enough to absorb into and through cell membranes, once they cross the outer *stratum corneum* layer of the skin. In those cells, they have pharmacological-type interactions, but usually, the dosages are so low that systemic pharmacological interactions from topical applications are unlikely. Even though constituents can be detected in the bloodstream after inhalation or application of essential oils to the skin, the peak quantities are usually in the nanogram/ml range. Most constituents are not likely to have apparent physiological activity at that low dosage, given that most laboratory and animal trial results on essential oil trials show activity only in the microgram/ml range (a thousand times larger dose than nanogram/ml).

Given the WHO Burdens of Disease statistics (Blyth, Briggs, Schneider, Hoy, & March 2019), I feel the topical application research areas we should prioritize are: relief of psycho-emotional issues via massage; relief of musculoskeletal pain; relief of symptoms of respiratory infections; and remedy of *in vivo* microbial infections. We most need to establish the active dose range for the different essential oils and compare them to existing over-the-counter pharmaceutical preparations. We also will need to demonstrate how much essential oil does get into the bloodstream and document any adverse events, commonly called ‘side-effects’ by the pharmaceutical industry. In the next section, I offer some suggestions on research design for aromatherapy trials.

Pharmacological uses of essential oils

I am defining the pharmacological applications as those where essential oils affect the body systemically, usually after ingestion of essential oils in capsules.

Certain essential oils or their major chemical constituents are already being used as internal medicines, taken orally in capsules, either with a lipophilic solvent, or undiluted. These include lavender essential oil (*Lavandula angustifolia*) for generalized anxiety disorder (GAD) (Kasper et al., 2010; Kasper, Moller, Volz, Schlafke, & Dienel, 2017; Kasper et al., 2018; Manayi, Nabavi, Daglia, & Jafari, 2016; Woelk & Schläfke, 2010), 1,8-cineole (the major component of several *Eucalyptus* and *Melaleuca* species) for relief of congestion and inflammation in respiratory disorders (Juergens, 2014; Poole, Sathananthan, & Fortescue, 2019; Sadlon & Lamson, 2010; Worth, Schacher, & Dethlefsen, 2009), and peppermint essential oil (*Mentha piperita*) for symptoms of irritable bowel syndrome (Alammar et al., 2019; Chumpitazi, Kearns, & Shulman, 2018). The modes of action of these essential oil medicines are more likely to be due to a pharmacological interaction than due to a person's belief about them. However, expectations about the treatment should not be discounted.

Despite not knowing the mechanistic details, research has been conducted on the effects of essential oil aromas in managing pain, discomfort, nausea, and insomnia in various patient populations and settings. There is evidence that the aroma of the oils can increase patients' resilience, comfort, and ability to endure their illness or health circumstance, with improvements in perceived quality of life being one of the key outcome measures. Unfortunately, many aromatherapy trials only meet a few of the quality criteria used to evaluate clinical trials, as shown by a recent Cochrane review on the use of aromatherapy and massage for the management of symptoms in patients with cancer (Shin et al., 2016).

There is a big gap in our knowledge of how most of the chemical constituents are metabolized. It is presumed, based on a few pharmacokinetic studies of alpha-pinene, thymol, menthol, 1,8-cineole that the constituents are primarily excreted within 4-6 hours (Bhattaram, Graefe, Kohlert, Veit, & Derendorf, 2002; Kohlert et al., 2000; Schindler et al., 2001). The gaps in our pharmacokinetic understanding include:

- How much of each ingested dose is shunted through the lymphatic system (if any)?
- What happens to the blood levels and excretion rates of constituents if essential oil doses are given every 3-4 hours?
- When does the body store constituents in adipose tissue?
- At what point does the level of essential oil in the body start to decrease glutathione-S-transferase significantly, and which essential oils impact most?
- At what doses do essential oils either induce or inhibit liver enzyme activity.

As for the systemic pharmacological activities of essential oils, I would say we don't have enough clinical evidence of efficacy to make claims for systemic pharmacological effects of essential oils. There are claims that people have been able to amend their diabetes, reduce cholesterol levels, lower blood pressure, alleviate chronic pain, and even reduce cancer tumor size using essential oils. Still, we just don't have sufficient clinical evidence to make claims like this. The fact that essential oils and their constituents have activity against cell lines, or even against disease and pain in animal models does not mean that they will have the same effects in the human body.

Two major barriers face the aromatherapy community as we consider systemic pharmacological research: firstly, our lack of expertise in systemic pharmacological research; secondly, the high cost of getting a novel

pharmaceutical through laboratory trials and up to the level of human clinical trials. If you think that the average researcher would be paid between \$50,000-\$100,000 a year and that one clinical trial can take up to three years to conduct, you can see how with two or three researchers), a clinical trial of just one essential oil for one condition (or even only one constituent!) could cost upward of a million dollars. And one clinical trial is usually not enough to provide an evidence-base.

Conclusion - Aromatherapy Research Priorities

Given where aromatherapy is at present, I suggest we prioritize establishing the evidence base for aromatherapy's 'non-pharmacological' effects first. Aromatherapy is already finding a 'non-pharmacological' niche in mainstream health-care, and I think we should build on the research that has already been done in this area. Here are some of my thoughts about aromatherapy research design that hopefully will inspire people who are ready and able to contribute to this effort to establish an aromatherapy evidence-base.

I believe we should focus on well-designed mixed-method randomized controlled clinical trials that use objective measures (like rating scales, physiological parameters) and qualitative assessment of participants' experiences of the aroma and the treatment itself. These should have enough patients (preferably 100 or more in each arm of the study, not just 30 in each arm). It would also be useful to include a positive control group in the form of a mainstream medical treatment usually used for that condition. In that way, we can show the efficacy of aromatherapy compared to mainstream medicine, as well as comparison with a no-treatment control group.

We also need to be clear in our research design and reporting about what effect size we expect – for example, how many points improvement would be considered a clinically significant change on the outcome scales we use. We also should report on both statistical and clinical significance. Even though a result may be *statistically* significant, if it is not *clinically* significant, then the results are not useful as evidence for the clinical efficacy of the treatment.

The issue of blinding participants to which treatment they are getting is always going to be problematic due to the aroma of the oils. To minimize this bias, we need to be careful about assessing participants' prior experience and expectations of the oils we are using and be careful not to influence their expectations by the way we present the treatment. We need to ensure the script (and application techniques) used by the practitioners giving the treatment in the trial are kept the same for each treatment arm.

In any aromatherapy research report, we should always include a detailed description of the chemical constituents in the oils used, any methods in formulating essential oil treatments, preferably using volume or weight, not drops, and details of the application method(s). We also should always include an organoleptic assessment of the oil/blend by the patients to eliminate bias from like or dislike of the aroma.

The other thing we can do is to upskill experienced practitioners in writing case-studies and publishing them in peer-reviewed journals that get abstracted by PubMed and other respected abstracting services like Scopus.

The good news is that there are several groups of researchers around the world interested in establishing a robust evidence-base for the non-pharmacological effects of aromatherapy. The next step will be for a global research team to come together and create a list of research priorities so that we can use our resources wisely and not duplicate efforts.

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Chapter 8

Future of Aromatherapy Education: Protecting Threatened Plant Species

by Kelly Ablard, PhD, RA, EOT

Earth is currently in the midst of the Anthropocene extinction. Unlike preceding mass extinctions, the reason for this extinction lies in the prefix of its name *Anthropo*, meaning human. The Anthropocene Extinction is driven by excessive and ceaseless human activity that negatively impacts biodiversity on a global scale.

An international cohort of scientists conducted a comprehensive review of the decline of biodiversity reported in May 2019 that approximately one million species are now facing extinction (Kolbert, 2019). This figure includes around 7% of threatened essential oil-bearing plant species commonly traded on the global market (Ablard, 2020a).

The massive demand for extracts, essential oils, and hydrosols of threatened essential oil-bearing plants for use and trade is estimated to account for 15 billion USD of the global market by 2026 (Ahuja and Singh, 2019). The overbearing pressure on ecologically sensitive and threatened aromatic plant species calls for a much-needed change if we want to prevent extinction.

According to Kolbert (2014), “to argue that the current extinction event could be averted if people just cared more and were willing to make more sacrifices is not wrong, exactly; still, it misses the point. It does not matter much whether people care or don’t care; what matters is that people change the world.”

And how do we begin to change the world? Let us take heed of the resonant words spoken by one of the great leaders and philanthropists of our time, Nelson Mandela, who said, “Education is the most powerful weapon which you can use to change the world.”

I propose we start with the world of aromatherapy. Although essential oils are utilized throughout numerous industries - cosmetic, flavor, fragrance, and pharmaceutical to name but a few - aromatherapy accounts for at least 10% of their use, which is not a number to dismiss. Imagine for a moment the level of protection we could afford threatened plants if the educational requirements recognized by professional aromatherapy associations worldwide were to include sustainability, conservation, and ethical sourcing of threatened essential oil-bearing plant species as compulsory components. These associations could impact hundreds of recognized aromatherapy schools and could influence thousands of certified aromatherapists. These aromatherapists would then be equipped to confidently spread awareness of threatened aromatic plant species while actively participating in ethical sourcing and sustainable practices. Simply put, the change required on a larger scale lies with consistent and effective educational standards introduced on a smaller scale.

Educators, like professional associations, have the power and responsibility to equip their schools and students with the tools of knowledge to protect, heal, and sustain the plants that the aromatherapy profession relies upon.

According to a recent survey conducted through four international aromatherapy associations based in the USA, Canada, and the UK, approximately 7% ($n=357$) of respondents self-identified as active educators

(Ablard 2020b). Although representative of a small sample of educators within the world of aromatherapy, 7% translates to a fraction of educators who could positively influence hundreds if not thousands of certified practitioners. This is another example of a small scale, significant impact pathway towards change that could be overseen by professional aromatherapy associations.

One could argue that the introduction of the proposed curriculum is not needed; however, the same survey further revealed that only 14% ($n=416$) of respondents consider themselves ‘very knowledgeable’ about the conservation and sustainability of essential and carrier oil-bearing plants. This leaves nearly 86% of respondents reported to be ‘somewhat knowledgeable’ to ‘very unknowledgeable’ (Ablard, 2020b).

If, as a profession, we are to make a much-needed change, we require consistent educational standards designed to address issues that affect the very future of our planet, as well as our profession.

Of course, there are educators within the world of aromatherapy who are currently teaching about sustainability and conservation of threatened essential and carrier oil-bearing plant species and deserve to be recognized as such. However, there is a need for a unified, consistent, and comprehensive curriculum which incorporates theoretical as well as practical tools.

Even though 89% ($n=413$) of respondents reported that they purchase essential oils only from sustainably-managed sources, 61% ($n=252$) do not ask for proof of Eco certificates or CITES permits (Ablard, 2020b) — and 24% ($n=54$) are active student members. As a consumer, ensuring that companies meet the required standards is where a crucial difference can be made, this could also be applied to certified aromatherapists who also act as retailers — which in this survey represented 5% ($n=357$) of the respondents.

The Airmid Institute provides schools and professional associations with guidelines for developing a consistent and comprehensive curriculum focused on the sustainability and conservation of essential and carrier oil-bearing plants as well as the ethical sourcing of their extracts and hydrosols. Schools and professional associations who have demonstrated the implementation of curriculum that meet our guidelines are recognized on the Airmid Institute website as Plant Protector Partners. And to further support continuing education, educators, students, and members of Plant Protector Partner schools and professional associations receive a reduced general membership rate.

The natural resources of our fragile planet are finite. As we know, aromatic plants are among a threatened and diminishing inheritance. What is called for is concerted action. Join me in raising awareness through education of the practical steps that we can take as aromatherapists and plant medicine practitioners to protect our precious essential and carrier oil-bearing plants.

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Kelly Ablard, PhD,RA,EOT, Founder and Director of the Airmid Institute has initiated and contributed to educational and research projects focused on the conservation of threatened and CITES-protected IUCN Red Listed fauna and flora species such as the Bornean orangutan, the red slender loris, the Javan slow loris and Peruvian rosewood. Her passion for essential oils, sustainability and working with communities comes through as a global speaker, author, researcher, community scientist, and as an educator in her role as Co-partner and Co-owner of Essence of Thyme College of Holistic Studies. She has enjoyed establishing a community aromatic medicinal plant garden for at-risk youth, multicultural, disabled and First Nations students, and developing a college program in urban sustainable agriculture. She also provides expertise on threatened essential oil-bearing plants in her role as a Co-chair of the International Committee on Sustainability of Aromatic Plants and Essential Oils used in Aromatherapy and Natural Perfumery, and as a Board member of the United Plant Savers. <https://www.kellyablard.com/the-airmid-institute/>

Conclusion

Let's Take a Deep Breath

By Robert and Hana Tisserand

Essential oils have taken the world by storm, it seems. Millions of people own at least some, and use them in a more or less informed way. Essential oils are now an integral part of the broader wellness landscape. Global sales to consumers are currently in the billions of dollars, and the coronavirus pandemic has only increased interest. In short, the essential oil community seems to be abundant, and indeed, passionate.

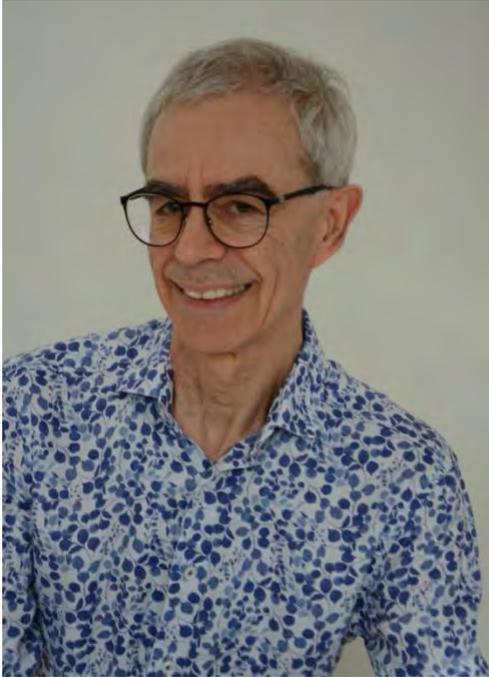
Many advances have been made in the healthcare environment. Essential oils are used in hospitals, hospices, and clinics in many countries, often for applications such as nausea, pain, pre- or post-intervention anxiety, or sleep disturbances. Most of this comes under the banner of palliative care, and so is perhaps less “threatening” to conventional medicine than, say, a cure for cancer.

Yet this should not be a case for blind optimism or complacency. With greater use comes an increased strain on precious natural resources, and such rapid growth threatens the still relatively fragile knowledge base and education infrastructure. These are very positive developments!

Aromatherapy is a relatively young modality, and it does not have the benefit of a solid clinical history, where ethnobotanical use has evolved over centuries. The word “aromatherapy” did not appear in print until 1937, and this very definition is often the subject of debate. And while there is no shame in being young, it feels like we tend to jump to conclusions, grasp at thinnest of evidence or borrow knowledge from other, older traditions - herbal or energetic - to justify uses for hundreds of essential oils.

Perhaps like the world at large, the aromatherapy community could take the opportunity now to take a deep breath. Let's revise what we know, based on evidence - any evidence. Meaning we need to be ready to correct ourselves where we were wrong, or admit that sometimes an essential oil “just smells nice,” That's enough.

Such an honest revision will determine whether aromatherapy will go down in history as a short-lived shooting star or become a permanent fixture in the universe of complementary health modalities.



Robert Tisserand is an international speaker, educator, and industry consultant who has helped to bring widespread professional and public recognition to aromatherapy. His 1977 text, *The Art of Aromatherapy*, has been translated into 11 languages, and his 2013 co-authored book, *Essential Oil Safety*, is regarded by aromatherapists as the industry standard for safety guidelines. In 1974, he established The Aromatic Oil Company (a predecessor of Tisserand Aromatherapy, currently part of First Natural Brands), and in 1988 he founded The Tisserand Institute in London, setting new standards for vocational aromatherapy education. That same year he launched The International Journal of Aromatherapy, which he published and edited until 2000. He tracks all the published research on essential oils and continues to provide education about essential oils through live seminars and online teaching.



Hana Tisserand is a Czech citizen with seven years of experience in translation and interpreting, her other languages being French and English. Working as an interpreter for politicians, authors, educators, and medical professionals has given her a valuable perspective on how to communicate information and avoid disputes effectively. Hana has been working with Robert Tisserand since 2016 and has a unique perspective on how information about essential oils is sourced, processed, and communicated. Hana supervises the Tisserand Institute team, manages and organizes courses, hosts webinars, commissions blog posts, oversees the creation of social media content, writes our newsletters, and is our go-to IT technician. Somehow, she finds time to write her blog posts too.