Aroma Therapy- A branch of Ayurveda

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ABSTRACT

Aroma therapy is the art and science of utilizing naturally extracted aromatic essences from plants to balance, harmonize and promote the health of soul, mind and body. Basic concept lies in the Vedas- “Sugandhim pushti vardhanam”. It is a modern term for an ancient healing practice that is more than 5000 years-old; there are descriptions of the burning of fragrant herbs, flowers, barks and resins, to enhance healing and meditation in the Vedic texts. The aromatic plants are included in Agruvadi gana & Eladi gana of Caraka Samhita and Sushrut Samhita respectively. Modes of application in modern aroma therapy are aerial diffusion, direct inhalation and topical application while Ayurveda includes internal use of Aromatic herbs also. The aromatic herbs can be used as per the Dosha involved e.g. Choraka, Tagar in vitiation of Vaat, Lavanga, Chandan for Pitta and Tailparna, Karpur for Kapha Dosha. It is the time to explore the role of Ayurveda in Aroma therapy in present scenario.

KEYWORDS

Aroma therapy, Veda, Ayurveda, Aromatic herbs
INTRODUCTION
Aromatherapy has two words “Aroma” meaning fragrance and “therapy” meaning treatment. Thus, aromatherapy means treatment to help or cure a mental or physical illness by using aromatic oils. Aromatherapy is the use of concentrated essential oils extracted from herbs, flowers, and other plant parts to treat various diseases\(^1\). Aromatherapy is one of the fastest growing modalities in complementary and alternative medicine. It utilizes naturally extracted aromatic essences from plants to balance, harmonize and promote the health of spirit, mind and body. Rene- Maurice Gatetfosse coined the term “Aromatherapie” in 1937. However, the concept of use of aromatic herbs for wellbeing of human beings had its roots in Vedas. The famous Maha-Mritunjaya Mantra quotes that “Sugandhim pushti vardhanam” (Rudra-Astaddhyayi) which means that use of fragrant things helps in maintain good health. Aroma therapy is a modern term for an ancient healing practice that is more than 5000 years-old; there are descriptions of the burning of fragrant herbs, flowers, barks and resins, to enhance healing and meditation in the Vedic texts. The earliest holistic healers made incense, oils, salves and poultices from a variety of aromatic botanicals. Use of aromatic herbs was a common practice in ancient times. There are numerous evidences in texts of Ayurveda that shows that aromatic herbs were a part of daily routine. In the context of Dinacharaya (Day regime), the Acharyas had advocated the use of aromatic herbs in the form of Lepa (local application in the form of pack) or wear garland of fragrant flowers. It leads to good health, acts as aphrodisiac and increases body strength\(^2\). Also, the herbs for Lepa were used as per the season e.g. Agaru (Aquilaria agallocha) to be used in winter season while Chandana (Santalum album) should be used in summer season\(^3\). There are numerous evidences in Ayurveda texts that clarifies that use of aromatic drugs was a specialized field at that time. In Ayurveda texts of the medieval period like Sushen Nighantu there is a separate Varga on Anulepana Dravya having description of aromatic herbs. Aromatherapy was a well-developed sphere of Ayurveda. Now, it’s time to practice aromatherapy on the basis of principles of Ayurveda.

USE OF AROMATIC SUBSTANCES IN AYURVEDA-

The use of aromatic herbs in Ayurveda can be divided into three broad categories-

1. **External use of aromatic substances for prevention of diseases**- Acharyas have advised use of aromatic
herbs for prevention of diseases, which is the first and foremost aim of Ayurveda. Use of fragrance, aromatic garlands is said to increase libido, produce good odour in body, enhances longevity and charm. It gives corpulence and strength to the body. It is pleasing to the mind and it prevents inauspicious. It prevents exogenous diseases as well.

2. **Satiation of sense organs by aromatic food-** Intake of delicious food and wholesome food which have pleasant appearance and fragrance nourishes and satiates the sense organs like nose, eyes, skin, tongue and ears.

3. **Use of aromatic substances in medicine and procedure-** Aromatic drugs like *Jyotishmati* (*Celastrus panniculatus*), *Twak* (*Cinnamomum zeylanicum*) etc. are used in Ayurveda to expel *Dosha* from upper part of the body.

**AROMATIC HERBS IN AYURVEDA-**

There is plenty of description of aromatic herbs in Ayurveda. Aromatic herbs were used in Ayurveda in almost every sphere. Thus, Ayurveda has varied classifications of aromatic herbs.

**On the basis of Virya of drugs-**

The aromatic plants are included in *Chandanaadi gana*, *Agruvadi gana* of *Caraka Samhita* & *Eladi gana* of *Sushrut Samhita*. *Agruvadi gana* represents *Ushna virya* drugs while *Chandanaadi gana* is the group of *Sheeta virya* drugs. *Elaadi gana* has both *Ushna virya* and *Sheeta virya dravya*. *Shushrut* had called *Elaadi gana* for treatment of itching, rashes, boils and toxemia. These drugs are also used to improve complexion.

**On the basis of habitat-**

Commentators had also classified aromatic herbs on the basis of their place of origin. This includes two categories-

1. **Uttarapathaga-** this is the group of aromatic drugs of Himalayan origin. The drugs like *Kustha*, *Choraka*, *Chanda*, *Pushkaramoola*, *Jatamansi*, *Deodar* etc. belong to this category.

2. **Dakshinapathaga-** this is the group of aromatic drugs of southern region. The drugs like *Chandan*, *Lavanga*, *Ela*, *Kulanjana* etc. belong to this category.

Apart from these classifications, many other groups of aromatic drugs are found in the classics of Ayurveda e.g.

**Aromatic drugs for oral hygiene-**

*Acharyas* had described various aromatic drugs for oral hygiene. These drugs should be kept in mouth daily for maintaining good oral hygiene and to increase desire for food. This group includes drugs like *Jatiphala*, *Latakasturi*, *Pooga*, *Lavanga*, *Kankola*, *Tambula patra*, *Karpooar* and *Ela*.

**AROMATIC HERBS AS PER DOSHAS-**
Ayurveda has the concept of Tridosha which regulate all the activities of the body. The three Doshas namely Vaat, Pitta and Kapha maintains the health when they are in balanced state as well as these are the cause of disease when vitiated\textsuperscript{14}. The aromatic herbs should also be thus, used as per the Dosha involved in the pathology of disease.

**For Vaaat Dosha-** Vaat is considered as Ruksha (dry), Sheeta (cold), Laghu (light), Sukshma (subtle), Chal (moving), Vishad(clear) and Khara (rough)\textsuperscript{15}. All these qualities increase vaat while drugs having qualities opposite to these are helpful in treatment of Vaat disorders. Some aromatic herbs useful for alleviating Vaat are Ajmoda (Carum roxburghianum), Choraka (Angelica glauca), Brahmi (Bacopa monnieri), Brihat Ela (Amomum subulatum), Twak (Cinnamomum zeylanicum), Kumkum (Crocus sativus), Tagar (Valeriana wallichii) etc.

**For Pitta Dosha-** Pitta is considered as Sasneha (not very much dry), Ushna (hot), Teekshna (sharp), Drav (liquidity), Amla (sour), Sar (flowing tendency), Katu (pungent)\textsuperscript{16}. All these qualities increase Pitta while drugs having qualities opposite to these are helpful in treatment of Pitta disorders. Some aromatic herbs useful for alleviating Pitta are Aardra Dhanyaka (fresh leaves of Coriandrum sativum), Mishreya (Foeniculum vulgare), Nimba (Azadirachta indica), Taruni (Rosa centifolia), Madyantika (Lawsonia inermis), Ketaka (Pandanus odorotissimus) - although it is Ushna Virya but by virtue its rasa and prabhava it is potent Pitta shamak, Ushir (Vetiveria zizanoidis) etc.

**For Kapha Dosha-** Kapha is considered as Guru (heavy), Sheeta (cold), Mridu (soft), Snigdha (unctuous), Madhur (sweet), Sthira (stable) and Picchila (slimy)\textsuperscript{17}. All these qualities increase Kapha while drugs having qualities opposite to these are helpful in treatment of Kapha disorders. Some aromatic herbs useful for alleviating Kapha are Shunthi (Zingiber officinale), Hapusha (Juniperus communis), Karpoor (Cinnamomum camphora), Tulsi (Ocimum sanctum), Kankola (Piper cubeba), Jatiphala (Myristica fragrans), Sarshapa (Brassica campestris), Vacha (Acorus calamus) etc.

**MEDICINAL USES OF AROMATIC PLANTS IN AYURVEDA-**

Every aspect of treatment and therapy in Ayurveda is infused with aromas, which are emanating mostly from the essential oil content of the herbal ingredients that are being used. Modes of application in modern aroma therapy are aerial diffusion, direct inhalation and topical application while
Ayurveda includes internal use of Aromatic herbs also.

**Internal Use of Aromatic Herbs** - There are numerous evidences of internal use of aromatic herbs in the texts of Ayurveda. To list some here-

1. **Jwara chikitsa** - Acharya Charak had advised use of shatyaadi Varga for treatment of Sannipatika Jwar. Shatyaadi Varga includes aromatic drugs like Shaati, Pushkarmoola, Shunthi etc.\(^\text{18}\).

2. **Raktapitta Chikitsa** - there are numerous evidences of use of aromatic drugs like Padmaka (Prunus cerasoides), Kamal (Nelumbo nucifera), Naagkesar (Mesua ferrae), Ushira (Vetivera zizanoides) etc. in the form of decoction or cold infusion\(^\text{19}\).

3. **Unmaad- Apasmar Chikitsa** - In the context of Unmaad and Apasmar chikitsa, there is frequent use of aromatic drugs like Jatamansi (Nardostachys jatamansi), Vacha (Acorus calamus), Choraka (Angelica glauca), Ela (Elletaria cardamom), Tagar (Valeriana wallichii) etc. in the form of Ghrita preparations\(^\text{20}\).

4. **Kshat-Ksheena Chikitsa** - Acharya Charak had first described Elaadi gutika in the treatment of Kshat-ksheen having aromatic contents like Ela, Tejpatra and Twak\(^\text{21}\). Apart from this; there are numerous examples of use of aromatic drugs in the treatment of Kshat-ksheen in different classics. It establishes the concept of Sugandhim pushti vardhanam.

5. **Arsha-Atisaar-Grahni Chikitsa** - Arsha-Atisar and Grahni are three diseases that are interlinked and have Agnimandya as a common cause\(^\text{22}\). On exploring the treatment of these diseases in the texts of Ayurveda, it becomes evident that there is frequent internal use of aromatic herbs like Dhanyaka (Coriandrum sativum), Yavani (Trachyspermum ammi), Mustaka (Cyperus rotundus), Naagkesar (mesua ferrae) etc.

These are only few examples to enlist here. Otherwise, it is hard to find any treatment protocol in Ayurveda, where there is no internal use of aromatic herbs.

**Topical Application of Aromatic Herbs** - Apart from internal use, aromatic herbs were widely used for topical application in Ayurveda. Some of the examples are enlisted here-

1. **Shirahshool** - For headache, Acharya Charak had prescribed Prapaundrikaadi Lepa having Prapaundrika, Devdaru, Kushta, Ela, Kamal, Utpal like aromatic drugs as its contents\(^\text{23}\).

2. **Vaatvyadhi** - For Vaatvyadhi, Acharya Charak had prescribed Lepa of Kushta, Shatpushpa, Yavani and Vacha\(^\text{24}\).

3. **Jwar** - In Jwar Chikitsaadhyaya, Acharya Charak had prescribed topical
application of Agurvadi tail and Chandanaadi Tail25.

4. **Kustha-** in Kustha Chikitsa, aromatic herbs had been widely used in the classics of Ayurveda for local application in the form of Lepa or tail26.

5. **Rajyakshma-** aromatic herbs had been widely used in Rajyakshma treatment in the form of Pradeh. Padmaka, Ushira, Chandan, Shatpushpa, Vacha are some of those drugs27.

6. **Shotha-** Local application of aromatic drugs like Shunthi, Mustaka, Devdaru etc. is a frequent practice in Ayurveda.

**Nasya (Nasal administration) of Aromatic Herbs-** A number of aromatic plants are utilized in Nasya preparations. Nasya is a very important procedure in Ayurveda. Acharyas had called Nasa (nose) as the gateway of head28. In many diseases, Nasya of aromatic herbs is used as treatment modality e.g. Nasya of Phadinjjhak (Origanum majorana) for the treatment of Kustha29.

**Fumigation and Incense-** Fumigation with aromatic herbs has a wide role in Ayurveda. Acharyas used fumigation for treatment as well as for the purpose of disinfection. Some of the examples are-

1. Use of Bhurjapatra (Betula utilis) fumigation for facilitating delivery30.

2. Fumigation with Rakshoghnna Dhoopa to protect new born from any infectious disease31.

3. Fumigation with Sarshap, Nimba, Lavan and Ghrit for ten days, two times a day in the Vranitaagar32 (Surgical hospital)

**SOME RECENT RESEARCHES-**

1. The inhalation of peppermint or ginger essential oils not only reduced the incidence and severity of nausea and vomiting but also decreased antiemetic requirements and consequently improved patient satisfaction33.

2. The practice of aromatherapy per se reduces the need for pain relief during labour, or the incidence of operative delivery. But a key finding of this study suggests that two essential oils, clary sage and chamomile are effective in alleviating pain. The evidence from this study suggests that aromatherapy can be effective in reducing maternal anxiety, fear and/or pain during labour34.

3. Decreased alpha-wave activity is known to correlate with states of increased anxiety. This study was designed to analyze the EEG activity elicited by inhaling aromas of pure essential oils in patients with an established diagnosis of anxiety states. The results showed that both neroli and davana essential oil aromas increased alpha-wave activity in patients with established anxiety states. These
physiological findings correlated with findings of decreased anxiety levels\textsuperscript{35}.
4. Guggulu contains ferulic acids, phenols, and other non-phenolic aromatic acids that are potent scavengers of superoxide radicals and could potentially be of importance for the treatment of Alzheimer Disease and other oxidative stress-related disease\textsuperscript{36}.
5. Aromatherapy used with massage may help to calm agitated people with dementia. There is some evidence that aromatherapy using various essential oils may have some potential for improving cognitive function, especially in patients with Alzheimer disease\textsuperscript{37}.
6. Pharyngitis is a common problem in patients receiving chemo-radiotherapy. A spray prepared from five aromatic essential oils (Eucalyptus citriodora, Eucalyptus globulus, Mentha piperita, Origanum syriacum, and Rosmarinus officinalis) has shown immediate relief from the symptoms of sore throat than placebo control group\textsuperscript{38}.

**IMPORTANT PLANT FAMILIES HAVING ESSENTIAL OILS**-
Aromatic oils evaporate when exposed to air at room temperature, and hence known as volatile oils or ethereal oils. These represent essence of active constituents of the plants and hence also known as essential oils\textsuperscript{39}. Some plant families contain aromatic oils which are used therapeutically\textsuperscript{40}.

1. **Bursereaceae**- This family has many medicinal plants with essential oils like *Commiphora mukul*, *Commiphora myrrha*, *Boswellia serrata* etc. aromatic oils of this family have calming and wound healing activity.
2. **Pinaceae**- *Cedrus deodar*, *Abies sp.* etc. are aromatic plants of this family. The plants of this family possess high anti-microbial activity.
3. **Poaceae**- *Lemon grass*, *Ushira*, wheatgerm oil etc. are from *Poaceae* family. The aromatic oils of this family have immunomodulating activity.
4. **Labiateae**- *Basil*, *Hyssop*, *Lavender*, *Marjoram*, patchouli, peppermint etc. are the plants of this family widely used in aromatherapy. These are adaptogens.
5. **Lauraceae**- *Cassia*, *cinnamon*, camphor etc. are some of the aromatic plants of this family. These act as expectorants.
6. **Myrtaceae**- *Clove*, *Eucalyptus*, *nutmeg*, *tea tree* are some of the aromatic medicinal plants of this family. The aromatic oil of this family is anti-inflammatory and anti-septic.
7. **Rutaceae**- *lemons*, *orange*, *bael*, *woodapple* etc. are the plants belonging to
this family. These aromatic oils are refreshing and invigorating.

8. **Apiaceae**- This is the family of aromatic plants. It includes *Choraka, Ajwain, brahmi, dhanyaka, shatpushpa* etc. these are all digestants and carminative.

9. **Zingiberaceae**- *Cardamon, ginger, galangal, turmeric* etc. are important medicinal as well as aromatic plants belonging to this family.

**COMPONENTS OF ESSENTIAL OILS**

The aromatic oils contain various functional groups which imparts them various medicinal qualities.

1. **Aldehydes**- Aldehydes are anti-inflammatory, calming, sedative and anti-viral. Aromatic oils which have high aldehyde content have lemon like characteristic smell e.g. lemongrass, eucalyptus etc.

2. **Ketones**- Ketones impart wound healing and mucolytic activity. Camphor is an example of an essential oil which is almost pure ketone.

3. **Alcohols**- Alcohols are bactericidal, anti-viral and diuretic. Aromatic oils which have high content of alcohols include peppermint, tea tree, sandalwood, ginger etc.

4. **Phenols**- They are immune stimulating and invigorating. They are mostly in cough syrups and lip balms.

Aromatic oils having high phenol content are clove, cinnamon, thyme, cumin.

5. **Terpenes**- Terpenes are very stimulating and potent anti-viral. Terpenes are some of the smallest molecules thus, evaporate very quickly. Lemon, orange, black pepper, nutmegs have high terpene content in their oil.

6. **Esters**- Esters are anti-fungal, sedative, calming, spasmylytic, fungicidal and anti-inflammatory. Lavender oil has a high content of esters.

7. **Ethers**- Ethers harmonize the nervous system. They are antiseptic, stimulant, expectorant, spasmylytic and diuretic. This group includes oils such as cinnamon, clove, anise and basil.

**DISCUSSION**

Aromatherapy is based on the sense of smell, one of the important *Gyanendriya* (sense organ) of human body. Ayurveda has always given importance to nose and nasal administration of drugs. Ayurveda considers it as a medium by which medicine can be quickly provided to brain. The modern researches have now proved this theory of Ayurveda. The aromatic oils when inhaled travel to both lungs and brain. From lungs they are absorbed in the blood stream just like after ingestion. Smell is a chemical reaction, receptors in brain
respond to the molecules present in aromatic oils. The sense of smell is related with limbic system. The limbic cortex is phylogenetically is the oldest part of cerebral cortex. The limbic system represents the primary area of control of autonomic functions in the forebrain. It controls heart rate, blood pressure, G.I.T. movements, emotions, hunger, sleep and sexual activity\textsuperscript{42}. Now, it is evident that limbic system controls \textit{Tray-upstambha} (Aahar, Nidra, Brhancharya) of life. These \textit{Tray-upstambha} are necessary for healthy human life\textsuperscript{43}.

**CONCLUSION**

Aromatherapy is an integral part of Ayurveda. Aromatic drugs had been a part and parcel of \textit{Ayurveda} since Vedic times. There is use of aromatic herbs in Ayurveda in every aspect right from the \textit{Dinacharya} to treatment of various diseases. Ayurveda used aromatic drugs in every possible way like internal use, inhalation, fumigation, nasal administration. \textit{Acharyas} were very much aware of therapeutic potentials of aromatic herbs on psychosomatic level. That is the reason for \textit{Hawan} with aromatic herbs at every occasion. This is the time to establish aromatherapy as a branch of Ayurveda and to expand its horizon merely from a massage therapy to the treatment of complex diseases by following principles of Ayurveda.
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