

Aromatherapy for Dementia

by Nobuko Usher

Japan is the fastest aging society in the world. Based on 2013 publication of ministry of Internal affairs and communications of Japan, by the year 2020, 30% of the Japanese population will be over 65 years old. As people age, dementia concerns increase. Experts predict that by 2020, 8.9 % of Japanese senior population over 65 will have dementia. This is happening not only in Japan but also in many developed countries. It is a worldwide trend. Based on the World Health Organization fact sheet published in April 2012, there are 35.6 million people who have dementia worldwide and there are 7.7 million new cases every year. The US is not an exception. Dementia is one of the major causes of disability and dependency among older people worldwide. Alternative, natural ways to attenuate dementia would be very beneficial for a growing senior-age group with dementia and for those who are trying to prevent dementia.

Over the past few years, a number of clinical trials on effectiveness of essential oil use for dementia have been conducted. Some research results suggest that the treatments using certain essential oils resulted in significant benefit including reductions in agitation, sleeplessness, wandering, and unsociable behavior associated with dementia. Essential oils may be inhaled or massaged into the skin to ease symptoms associated with dementia. The use of essential oil provides soothing sensory stimulation that may relieve agitation and boredom in elderly adults with dementia. Restoring a sense of calm may increase safety, improve quality of life and reduce stress on caregivers.

The University of Maryland Medical Center proposes that inhaling essential oils may trigger smell receptors that stimulate the hippocampus and amygdala, areas of the brain responsible for emotional responses, memory and mental health. There is another study that a research group of faculty of medicine at Tottori University school of health science in Japan also conducted. In that study, study participants who are elderly adults with dementia received aromatherapy treatment. Essential rosemary (*Rosmarinus officinalis*) and lemon (*Citrus limon*) oil were used in the morning, and lavender (*Lavandula angustifolia*) and sweet orange (*Citrus sinensis*) oils were used at night. All of the study participants show improvement in their orientation, or sense of self and awareness of their surroundings, with no negative side effects. According to their research, these essential oils stimulate autonomic nervous system. Specifically, Lemon (*Citrus limon*) and rosemary (*Rosmarinus officinalis*) stimulate the sympathetic nervous system that improves memory function and focus, and lavender (*Lavandula angustifolia*) and sweet orange (*Citrus sinensis*) stimulate the parasympathetic nervous system that nourish, relax and regenerate the body. These oils are thought to be effective to prevent from becoming dementia.

Listed below are the essential oils that are thought to be helpful for people living with dementia including Lemon (*Citrus limon*), rosemary (*Rosmarinus officinalis*), lavender (*Lavandula angustifolia*), and sweet orange (*Citrus sinensis*) oils mentioned above.

Lemon (*Citrus limon*)

Lemon oil helps to enhance memory and alertness. It is refreshing and cooling, calming and relaxing, improves concentration, and stimulating and clearing to the mind.

Precautions: May cause dermal irritation or sensitization reaction. Phototoxic. Not for use in the bath.

Rosemary (*Rosmarinus officinalis*)

Rosemary has been related with feelings of contentment. It was also been shown to have optimistic effects on mood and performance. Rosemary has been proven to help with memory, which would benefit those seniors with dementia or even those with slight memory loss.

Precautions: Do not use with high blood pressure, epilepsy or homeopathic remedies. Rosemary is stimulating in nature and may be too much four to six hours before sleeping.

Lavender (*Lavandula angustifolia*)

Lavandula angustifolia has been associated with feelings of contentment, improved memory, and increased cognitive performance as well as overall mood. It has showed other calming and mild sedative effects. *Lavandula angustifolia* has soothing properties and is believed to promote deep sleep.

Precautions: Do not use with low blood pressure. Not advised during pregnancy.

Sweet orange (*Citrus sinensis*)

Sweet orange counters depression, insomnia, is tonic to nervous systems. It is warm and soothing.

Precautions: May cause dermal irritation or sensitization reaction. Phototoxic. Not for use in the bath.

Lemon balm (*Melissa Officinalis*)

Lemon balm oil has been shown to help calm and relax people who have anxiety and insomnia, improve memory and ease ingestion. It is sedative, calming, and antidepressant.

Precautions: Non-toxic but could cause sensitization and irritation and should always be used in low dilutions.

Peppermint (*Mentha piperita*)

Peppermint is an energizer and can be used to stimulate the mind and calm nerves at the same time. It counters confusions, mental fatigue, stress and improve concentration. Best used in the morning.

Precautions: Possible skin sensitivity due to the high menthol content. Not compatible with homeopathic remedies. Peppermint is cooling and stimulating in nature. It may be too much if you take four hours before sleeping.

Bergamot (*Citrus bergamia risso et poiteau*)

Bergamot can be used to relive anxiety, agitation, mild depression and stress. This mood elevating and calming oil can also be used to relive insomnia.

Precautions: Photosensitizing

Ylang Ylang (*Cananga odorata*)

Ylang Ylang oil can help ease depression, anxiety, frigidity, nerve tension, and insomnia.

Precautions: Avoid with low blood pressure.

Benefits of using essential oil for the elderly with dementia are many. Here are some of the benefits for the elderly to use.

- 1) No significant side effect if you use pure, organic, therapeutic grade essential oils and use them in a proper amount and proper application method.
- 2) Relatively inexpensive option to ease symptoms associated with dementia
- 3) Variety of application methods available: diffusing, massaging, bath blend, etc.

Some of nursing homes, elderly-care facilities, and hospitals in Japan have started using essential oils for elder people with dementia and those with signs of future dementia risk (shrinking hippocampus) in addition to the existing treatment options. Many facilities diffuse essential oils and are experiencing positive changes in the elderly's dementia symptoms and mood.

I wish more researches on potentials of essential oil use for dementia will be done near future to show direct link between essential oil use and reduction of symptoms associated with dementia so that dementia patients and people with the potential risk to have dementia can have more options of treatment and prevention measures.

References:

- Ministry of Internal Affairs and Communications of Japan
Website: www.soumu.go.jp
- World Health Organization Fact sheet
- The Journal of Quality Research in Dementia
by Elaine Perry, Professor of Neurochemical Pathology
- Psychogeriatrics
December 2009 issue
- 認知症予防に対するアロマセラピーの可能性
Potential of Aromatherapy for Dementia Prevention
by Miyako Taniguchi, an assistant professor at school of life science,
Tottori University
Katsuya Urakami, a professor at school of life science, Tottori University
- International Journal of Neuroscience
December 2006 issue
- Dechen, Shanti, Clinical Aromatherapy Level 1 Text, 2015