Aromatherapy Study and ADHD Tatiana Barsanti Attention deficit hyperactive disorder (ADHD) is a phenomenon of the twentieth century. In the past two decades, ADHD has become one of the most commonly diagnosed disorders of the childhood in the US. Typically patients with ADHD are prescribed a stimulant medication and/or some anti- depressants. Many people are concerned about the side effects and long term effects that these medications may have and are turning to alternative and complementary ways to treat symptoms of ADHD. One of the alternative ways to treat ADHD is aromatherapy using essential oils which are substances that are able to cross the blood-brain barrier and heal the brain directly.

ADHD is one of the most common childhood disorders and can continue through adolescent and adulthood. ADHD affects about 4.1% American adults age 18 years and older in a given year. ADHD affects 9% of American children age 13-18 years. Boys are four times at risk than girls. Symptoms include difficulty staying focused and paying attention, difficulty controlling behavior and hyperactivity. ADHD has three subtypes: Predominantly hyperactive- impulsive, predominantly inattentive and combined hyperactive- impulsive and inattentive.

ADHD interferes with a person's ability to stay on a task and to exercise age-appropriate inhibition (cognitive alone or both cognitive and behavioral). Some of the warning signs of ADHD include failure to listen to instructions, inability to organize oneself and school work, fidgeting with hands and feet, talking too much, leaving projects, chores and homework unfinished, and having trouble paying attention to and responding to details.

Like many other illnesses, ADHD probably results from a combination of factors. Scientists are not sure what causes ADHD, although many studies suggest that genes play a large role. In addition to genetics researches are looking at possible environmental factors, and are studying how brain injuries, nutrition, and the social environment might contribute to ADHD. To help determine the presence of ADHD, those with the condition do share certain traits: chronic forgetfulness, an inability to carry our instructions or finish tasks, emotional storms triggered by relatively minor events, talking too much, and becoming easily distracted.

Currently available treatments focus on reducing the symptoms of ADHD and improving functioning. Treatments include medication, various types of psychotherapy, education or training or a combination of treatments. Treatments can relieve many of the disorder's symptoms, but there is no cure. With treatment, most people with ADHD can be successful in school and lead productive lives.

The most common type of medication used to treat ADHD is called a "stimulant". It has a calming effect on children with ADHD. Those medications reduce hyperactivity and impulsivity and improve their ability to focus, work, and learn. One aspect of such stimulants are the side effects such as decreased appetite, sleep problems, anxiety, and irritability. Current medications do not cure ADHD. Rather, they control the symptoms for as long as they are taken. Medications can help a child pay attention and complete schoolwork.

Aromatherapy is the use of essential oils in a way that can affect physical, emotional and mental health. Stimulation of the limbic region of the brain helps treat ADHD. The aromas from therapeutic essential oils have a powerful ability to stimulate this part of the brain, since the sense of smell is tied directly to the mind's emotional and hormonal centers. As a result, the aroma of an essential oil has the potential to exert a powerful influence on ADHD.

In a two-year case study (1999-2001) Dr. Terry Friedman M. D. found significant results when children that had previously been diagnosed with ADHD were administered therapeutic essential oils by inhalation. The essential oils of Vetiver, Lavender, and Cedar wood were used. The oils were administered by inhalation 3 times per day for 30 days. An inhalation device (diffuser) was also used at night to administer a continuous inhalation of oil. The inhalation of the oils proved to settle the children's brain waves back into normal patterns and improved their scholastic performance and behavioral patterns. The final results were: Lavender increased performance by 5%, Cedar wood increased performance by 83%, Vetiver increased performance by 100%.

Some essential oils that are good for ADHD are: Ylang Ylang, Lavender, Cedarwood, Vetiver, Cypress, Rosemary, and Frankincense.

Ylang Ylang oil- Cananga odorata- has sedative effects and can considerably elevate attentiveness and the feeling of content. Ylang Ylang will be great treatment for those with ADHD and problems like inattentive behavior. It is classed as a non-toxic, non-irritant and non-sensitizing oil, yet could cause sensitivity have been reported and excessive use of it can lead to headaches and nausea.

Lavender oil- Lavandula angustifolia - is a calming and relaxing to the nervous system. On of the most widely used of all essential oils, it is often effective in producing a sedative effect, causing a person to calm down and relax. In research conducted in 2001 at Osaka Kyoiku University, lavender was found to increase alertness and reduce mental stress. It improves concentration and researchers have found that inhaling lavender increased beta waves in the brain, helping the brain to relax at the same time as improving cognitive performance. Among the many benefits of Lavender is that it helps with calming and concentration. Precautions includes not to use with low blood

pressure, for pregnant clients ok to use on third trimester onward, use in moderation and low dilution.

Cedarwood oil- *Cedrus atlantica* is the one of the most ancient of all the essential oils, Cedarwood helps to oxygenate the brain, resulting in clarity of thought. This oil comes from the Cedar tree (see picture below) and stimulates limbic region of the brain, which helps to balance emotions. It also stimulates the pinneal gland, which helps regulate melatonin. Moreover, Cedarwood has a calming effect, especially when diffused into the air.

Precautions for this oil include: avoid during pregnancy, check for allergies with cedar, not to use with children under 5 years of age.

Vetiver oil- *Vetiveria zizanoides* – is considered to be mentally balancing and a deep relaxant, which makes valuable EO for anxiety, especially related to ADHD. It is sedating, grounding, and mood stabilizing. Vetiver helps people with ADHD because it is a calming essential oil. Its strong scent has grounding, stress-relieving and nervous tension-alleviating properties. This oil helps balance your mood and also promotes sleep if sleep difficulty is one of your ADHD symptoms.

Precautions: It is unsafe to take vetiver if you are pregnant. It might cause a miscarriage. It's also best to avoid vetiver if you are breast-feeding. The effects on a nursing infant are unknown

Frankincense- *Boswellia carterii*- stimulates the limbic system of the brain, which is the center of memory, in addition to stimulating the hypothalamus, pineal and, pituitary glands. It combats depression, overcome stress, helps focus the mind, centering, comforting, and elevating.

Precautions: Frankincense avoid during pregnancy. It might cause irritation when applied to the skin.

Rosemary- Rosmarinus officinalis- helps with those with ADHD to concentrate, mood swings, and to deal with emotional issues. Rosemary is also good for the nerves; it supports the spine making us ore strong and balanced.

Precautions include avoid during pregnancy, do not use with epilepsy, do not use with high blood pressure, do not use with homeopathic medication, as a stimulating oil, it is better taken more than six hours before sleep time.

In conclusion the use of essential oils have brought lot of peace and pleasure into the lives of those that are suffering from ADHD. They can help them relax and calm down and also can settle down so the child can sleep properly. In addition those oils can help the child to settle down and focus better.

## Bibliography

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