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TO EVALUATE THE EFFECTS OF AROMA THERAPY ON PHYSIOLOGICAL FOR PAIN AND DAILY LIVING ACTIVITIES AMONG PATIENTS UNDERGOING ARTHROSCOPIC SURGERY IN RAJASTHAN HOSPITAL

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Abstract- Health is a resource of every day of life, not the objectives of living. Health is a positive concept emphasizing social and personal resources as well as physical capacities. Health is achieved through a combination of physical, mental, social wellbeing which together is commonly referred to us the health triangle.

The life of a man is typically divided into five major phases: infancy, childhood, adolescence, adulthood, and old age. An person has to find himself in various circumstances and face different problems in each of these phases. The most rapidly rising segment of the population is older adults. The world population, aged 65 years, is expected to grow to around 973 million by 2030, to rise from 6.9 percent to 12 percent in developed countries, and it is a statistical fact that they are not being taken care of according to their needs and problems.

When issues relating to the fulfillment of basic requirements such as social ties, personal care, nutrition and housing are applied to old age health concerns, the life of senior citizens becomes more complicated. The advancing age seems to carry meaningless suffering, primarily because industrial society has ignored and passed on the elderly. A large proportion of older adults are still being cared in day care centers or homes. To assess the aromatherapy programme was effective in reducing the pain, depression, anxiety, and stress levels of older persons in the intervention group.

Keywords: Health, Pain, Depression, Anxiety, Social Ties, Personal Care, Infancy, Childhood, Adolescence

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1. Introduction

Aromatherapy massage is a popular way to use essential oils with carrier oil as it works simultaneously in several ways. The skin absorbs essential oil while performing aromatherapy massage and also inhales them and experiences the massage's own physical therapy. In order to dilute the concentrated molecules and to help spread them over the surface of the skin, essential oil should never be used undiluted on the skin and must be mixed with carrier oil (also referred to as base oil), and this is done by diluting them in carrier oils.

Lavender oil is the most powerful analgesic in nature and it helps decrease depression. Lavender oil aroma therapy is absorbed through the skin and then penetrates deeply and is intended to reduce the excitement of the autonomic and central nervous system and increase parasympathetic activity.

The Aromatherapy massage consists of following steps:

Step 1:

Mixing the Aromatherapy Massage Oil: Pour about one cup of lavender oil with almond oil into the glass bowl in the ratio of 15 drops lavender oil with 100ml almond oil and mix it gently. Essential oils are highly concentrated so only a few drops are needed. Do not use mineral or baby oil as this will clog the pores of the skin.

Step 2:

Once the massage recipient is comfortably settled on the table or bed and cover with sheet except the area which should be massage, begin the massage.

Step 3:

Pour a little bit of the oil into the palm of your hand, rub your hands together and apply it to the recipient's leg with long, warming strokes from upper thigh to foot and ask them to smell it. Start aromatherapy massage with various massage strokes and techniques.

2. Psychological Effects Of Aromatherapy

Aromatherapy clinical experience suggests that the beneficial effects of aromas or fragrances are not only exerted by vapor inhalation but also by the absorption through the skin of fragrance molecules. Inhalation of aromas has long been known to cause physiological and psychological changes in humans and it is assumed that both pharmacological and psychological mechanisms evoke the effects of aromas.

The former acts directly on the physical organism, the latter acts through the sense of smell and can produce physiological effects in this way. The physiological and psychological effects are quite different, although they often occur simultaneously in order to study fragrance effects, researchers have taken a wide range of approaches, including measuring changes in brain electromagnetic activity patterns, physiological parameters, such as heart rate, electrodermal activity, blood pressure, muscle tension, skin temperature, etc.

The reported results of the effects of aromas have, however, been unclear to date. It seems that many aromas have both stimulating and sedative properties. It can therefore be misleading and confusing to classify odors as simply 'stimulant' or 'sedative'. In addition, it is too early to classify essences or aromas according to their action on physical organisms because there is very little detailed study on the effects of aromas. This paper therefore reviews selected experimental research on the physiological impacts and describes how aromatherapy can exert therapeutic effects. This paper's aims are:

(i) To alert aromatherapists on the scientific background underlying potential therapeutic uses of aromas

(ii) To encourage the clinical evaluation of aromas.

3. Effects of aromas on heart rate

Heart rhythms are the most common psychophysiological indicator of heart function. For instance, our heart can race and pound when we are afraid. Faster heart rate is often caused by stress. Other types of stress may result in a lower heart rate, such as depression. In general, ANS innervates the heart. The PNS decreases the activity of the heart and influences the heart

rate in particular, whereas the SNS increases the activity of the heart and influences the pumping function in particular.

There are pronounced vasodepressor and stress relief effects on the spiced apple scent. Heuberger, E., Hongratanaworakit, T., and Buchbauer, G. The changes in heart rate were also used (2003b)to measure the effects of lemon and rose aromas. The aroma of lemons produced a rise in heart rate, while the aroma of roses contributed to a decrease in heart rate. This finding probably indicates that the lemon aroma has a stimulating effect (increased heart rate), while the rose aroma has a sedative effect (a decrease of heart rate). The deceleration of the heart rate was improved by the L:emon aroma, suggesting a relaxing effect.

On the other hand, it was suppressed by the rose scent, which is probably a sedative influence. In the same year, Nagai et al. showed that heart rate deceleration was also suppressed by sweet fennel oil. During the presentation of valeric acid, an elevated heart rate was detected. Conversely, during the presentation of phenylethyl alcohol, a decrease in heart rate was found. Phenylethyl alcohol, while valeric acid was considered unpleasant, was rated pleasant. Recently, in response to olfactory stimulation, Hongratanaworakit et al. (2003b) investigated the effects of sweet orange fragrance on human behavior and detected heart rate changes. They reported that after inhalation, the sweet orange aroma caused significant increases in heart rate and subjective alertness. These results seemed to show that sweet orange oil had a stimulating effect. The pattern of heart rate changes thus reveals differences between stimulant aromas and sedative aromas.

4. Effect of aromas on electrodermal activity

One of the most widely used indices of the level of arousal is the electrical conductance of the skin. It was found that under stressful circumstances, such as meeting new people or having to perform in front of an audience, most individuals are familiar with having cold, clammy hands. The coldness results from the constriction of the smooth muscles surrounding the blood vessels, while the activity of the sweat gland causes dampness. In reaction to emotional and stress stimuli, the sweat glands secrete a salty solution, and this salty solution conducts electricity. It would therefore seem plausible that psychological processes such as attention and emotion are closely associated with this electrical conductance property. It is

now accepted that skin conductance changes represent changes in the activity of the sweat gland. Cholinergic sympathetic fibres mediate these.

Sweat glands are innervated by the SNS division alone and electrodermal measurements are therefore useful indicators of SNS activity during emotional states. Increased sweat gland activity is associated with the activity of the SNS and this activity is in turn associated with high skin conductance. Interesting results showed that the electrodermal activity of the aromas of synthetic rose and jasmine indicated a much lower arousal effect than that of the natural products concerned. This is important because it is not clearly indicated whether the sample used was synthetic or natural in many of the reported studies on the effects of these aromas. Since natural aromas are more expensive than synthetic aromas, in some cases, synthetic aromas are more likely to be used.

This study also tested Bergamot oil, lavender oil and a 2:1 mix of the two. When the electrodermal activity and the subjective activation measures were explored, lower arousal effects were ranked by the mixture than either of the single ones. This point seemed to increase the danger of assuming, in the case of mixtures, a combination of physiological effects. 2- Phenylethanol, widely used as a rose-like fragrance, showed a decrease in the level of skin conductance and was classified as a pleasant odor. On the other hand, pentanoic acid, a sweat or cheese-related odor, showed an increased level of skin conductance and was assessed as an unpleasant odor.

5. Effect Of Aromatherapy Massage With Lavender Essential Oil On Pain In Patients With Osteoarthritis Of The Knee

A type of joint disease affecting the joint cartilage and the underlying bone is osteoarthritis (OA), also known as degenerative arthritis or osteoarthrosis. OA can affect any joint, but it occurs in the knees most often. One of the five main causes of disability in the elderly is knee OA. The most significant symptom of OA is pain in the affected joints. Obesity, increasing age, previous joint injury, race, joint overuse, hormonal problems, and work are common risk factors for developing OA.

Age is the most important risk factor reported, so that the prevalence of OA increases considerably from 4% in the age group of 18e24 years to 85% in the age group of 75e79 years. On a global scale, about 3.6 percent of the population has knee OA. Almost 27 million people in the United States and about 8 million people in the United Kingdom are affected by OA[21]. The prevalence of knee OA is about 19.3 percent in rural communities in Iran, according to WHO-ILAR COPCORD research.

According to the same study, among the nationalities included in the study, Iranians are the community most involved with knee OA. OA treatment strategies focus on reducing symptoms, particularly pain, and include, as a last resort, pharmacological and non-pharmacological treatments and surgical interventions. The use of complementary therapies to reduce complications and costs can be helpful in the management of these patients, as pharmacological treatments and surgical interventions have many side-effects and are costly. Aromatherapy uses essential oil extracted from plants, which can be absorbed into the body through the skin or the olfactory system, as a form of complementary therapy. For the delivery of aromatherapy, various procedures such as inhalation, massage, baths and compresses are used. The most widely used complementary therapy is aromatherapy massage.

Several studies have been carried out to investigate the effects of massage aromatherapy as a way of managing symptoms of OA. Lavender is one of the essential oils used in aromatherapy. As a powerful aromatic and medicinal herb, Lavandulaangustifolia Mill (Lavender) is well known. For its analgesic and anti-inflammatory effects, lavender is used in complementary therapy in different parts of the world.

6. Conclusion

The problems of the new ideas about the effects of aromas were stimulated by scientific evaluation of aromatherapy. After obtaining the aromas, changes in physiological parameters are commonly used for scientific verification of the relaxing/sedative and stimulating effects of aromas. On the basis of the new aromatherapy model, several commercial aroma products have been produced. The different effects of these items were calming/relaxing, stimulating/uplifting, refreshing, sleeping well, healing, etc. Some goods claimed one impact

only, while others claimed more than one. Although the marketability of aroma products has improved dramatically, the results of aroma products have been inconsistent.

It is expected that this pattern of research and development in this area will continue and be faithful in the evaluation of the psychological effects of aromas. Further advanced study has also started on the endocrine, immunological and pharmacological impact of flavours and is expected to produce substantial results in the foreseeable future. Finally, the aim of this selective analysis is to alert aromatherapists to these potential and existing aroma therapeutic applications.

Their assessment through standardized clinical trials is what is now needed. From the above discussion, it should be clear that assessment will be difficult and will require different skills. In researching this fascinating field, this paper is expected to encourage the necessary collaborations between aromatherapists, scientists and psychologists. The findings of this research have shown that massage with lavender aromatherapy decreases pain in patients with knee OA. This approach can therefore be recommended because of its usability, protection and cost-effectiveness, given the high prevalence of OA. In addition, given the limitations of the current research and the scarcity of studies in this field, it may be interesting to conduct more studies in other countries and on other musculoskeletal pain.

Finally, it is proposed that future studies explore the effects of various forms (i.e. cream, ointment, etc.) and routes of administration of lavender essential oil for further confirmation/rejection of our findings with different types of study designs. In the future, pain will certainly become a much greater concern as the proportion of older people in the population rises. In the face of age and reduced physical activity, pain is inevitable. When an older individual suffers from chronic pain, psychological well-being is also affected. It has been found that pharmacological and nonpharmacological treatments are effective in the treatment of chronic pain in the elderly. It is considered that non-pharmacological treatments have less side effects and appear to be favoured by older people. There is a close relationship between pain and psychological distress, according to the total pain principle.

As a non-pharmacological intervention for the treatment of pain in older people, a four-week aromatherapy programme was planned and introduced. After the aromatherapy program,

levels of depression, anxiety, and stress were substantially decreased in the intervention group, indicating that aromatherapy can help to maintain the psychological health of older people living in the community. The secret to safe aging is to keep older individuals pain-free and in good psychological health. Educational activities can help foster understanding of the treatment of pain and pain in older people.

The study of the up-to-date evidence provided in our systematic review indicated otherwise when Yim et al. concluded that there was insufficient evidence to indicate that aromatherapy could be used as a complementary and alternative medicine for depression. An summary of the most recent evidence is given by the latest systematic review.

In particular, aromatherapy massage has proven more effective in alleviating depressive symptoms than inhalation aromatherapy. Inhalation aromatherapy, however, has also been shown to be successful, but further research would be required to provide more definitive evidence on this modality of aromatherapy. In the overall study carried out, aromatherapy has shown the ability to be used in a wide range of subjects as an important therapeutic option for the relief of depressive symptoms.

References

1. Basvanthappa. B.T, (2003). Medical Surgical Nursing. (1 sted.). New Delhi: Jaypeebrothers medical Publishers (P) Ltd.
2. David schiller, (2007). Aromatherapy for body and mind (1st ed.). Green mind publishers.
3. Daniel. W, (2001). Biostatistics foundation for analysis in Health sciences (7th ed.). philadelphia: Mosby publishers.
4. Jennifer. P, (2007). Hand book for Aromatherapy practice (1st ed.).US: Tree publishers.
5. Joyce. M. B. & Hawks. H. J, (2005). Medical Surgical Nursing. (7 th ed.). Missouri: Saunders publishers

6. Lewis. L. S., et al., (2007). Medical Surgical Nursing. (7 th ed.). Missouri: Mosby publishers.

7. Mahajan. B. K, (2006). Methods in Biostatistics. (6 th ed.). New Delhi: Jaypee Brothers publishers.

8. Pam. M, et al., (2004) Nursing Research – an introduction. (1 sted.). California: Sage publishers.

9. Shirley. P, (2009). The complete guide for Aromatherapy for health professionals. (3rd ed.). California: F.A. David publicatios.

10. Andreassi, J.L. 2000. Psychophysiology: Human behavior & Physiological Response, Lawrence Erlbaum Associated, New Jersey.

11. Heuberger, E., Hongratanaworakit, T., B¨ohm, C., Weber, R., and Buchbauer, G. 2001. Effects of chiral fragrances on human autonomic nervous system parameters and self-evaluation. Chem. Senses, 26: 281-292

12. Hongratanaworakit, T., Heuberger, E., and Buchbauer, G. 2002. Influence of Ylang-ylang Oil on Mental, Emotional and Human Physiological Parameters. Proc. 33rd International Symposium on Essential Oils (ISEO 2002), Lisbon, Portugal, September 4-7, 2002: 37.