



(REVIEW ARTICLE)



A Review on the different studies on aromatherapy conducted in the Philippines

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GSC Biological and Pharmaceutical Sciences, 2021, 16(02), 028–031

Publication history: Received on 01 July 2021; revised on 05 August 2021; accepted on 07 August 2021

Article DOI: <https://doi.org/10.30574/gscbps.2021.16.2.0223>

Abstract

Aromatherapy has become prevalent in complementary and alternative medicine to treat ill conditions. The common substances utilized in this type of therapy are essential oils which contains odoriferous compounds. These substances can be directly applied or thru infusion in the closed environmental air. There are wide applications of aromatherapy from massage therapies up to its potential therapeutic utilizations. Across the globe in different countries, the custom of aromatherapy is gaining an acceptance in their respective health care systems. In the Philippines the use of aromatherapy is gaining its prominence to be an established complementary and alternative commodity. This article is focused to summarize the different published and available research information about aromatherapy conducted across the regions in the Philippines. This type of therapy is a prospective technique that could support customary health care procedures in treating diseases physiologically and psychologically in the Philippine health care setting.

Keywords: Aromatherapy; Essential oils; Complementary and Alternative Medicine; Philippines

1. Introduction

Aromatherapy is a natural means of treating body and mind aspects of a human being. In the old times as well as the start of civilizations from China, Egypt and India utilized this as an alternative or complementary therapy for various illnesses that can be traced back from thousands of years. Aromatherapy has been ascertained to be utilized as a commodity for treating various diseases and ill-conditions. This therapy became pervasive in the 20th up to 21st century [1,2].

Aromatherapy utilizes essential oils are primarily composed of terpenes which blends with different organic compounds such alcohols, hydrocarbons, esters, ketones, phenols and its substituents. These essential oils are odoriferous principles that came from the bark, leaves, fruits, roots and other parts from plants. They can be extracted thru distillation process, mechanical techniques as well as with modern microwave assisted and super critical fluid extraction processes. These essential oils are colorless and possess therapeutic properties such as carminative, anxiolytic, antimicrobial, anti-inflammatory, antihypertensive and antioxidant. For this reason, these substances are used in aromatherapy [3-5]. This type of complementary therapy is widely utilized in most countries across the globe as well as in some Asian countries through air diffusion, incorporation with massage therapy or topical application [6]. In the Philippines the utilization of aromatherapy is gaining its importance that it can also aid in treating certain conditions. This review article summarizes through a modest narrative literature review of different studies on the importance and utilization of aromatherapy based in the Philippines.

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2. Methods

This review was conducted using journal databases such as Google Scholar, Elsevier, Directory of Open Access Journals and Wiley online library. Search approach was established for articles on each database without impediments on language and timeframe of the conducted of the study. The search started in July 1, 2021. Suitable studies or articles were identified using specific criteria as follows: articles focused on Aromatherapy conducted in the Philippines and articles related to reports on therapeutic applications and utilization of aromatherapy and essential oils in the Philippine region. Other considered characteristics for screening of these studies consists of study design, interventions if any [7,8]. There was no online review procedure for this review article.

3. Results and discussion

The applications of aromatherapy in complementary and alternative medicine has been imperative in the past years. Previous investigations demonstrated the effects of aromatherapy in the psychological aspects on humans. Its character in mood and mental stress was one of the mainstream topics for studies on the therapeutic utilizations of aromatherapy. Some studies tried to analyze the effects of aromatherapy regarding its work ability and spontaneous actions in the brain through certain clinical parameters [9-11]. Since essential oils are the main substances utilized in this type of therapy thru infusion in the air, the prospective penetration of these oils attribute their structure which resembles physiological hormones. The suggested mechanism of action includes the reaction of the molecules present in the oils into a biological signal of the receptor cells upon inhalation. The signals will be transmitted to the hypothalamus and limbic areas of the brain thru the olfactory bulb. These physiological phenomena would allow the brain to release neuro messengers such as serotonin, endorphins and noradrenaline and would reach the subcutaneous tissues which is one of the important effects of this type of therapy [12-14]. The types of aromatherapy are as follows, cosmetic aromatherapy, massage aromatherapy, medical aromatherapy, olfactory aromatherapy and psycho-aromatherapy. Among these classifications, the psycho-aromatherapy is one of the most vital and commonly utilized and it affects moods and emotions which gives pleasure of relaxation and memory [15, 16].

Out of these applications and utilizations of aromatherapy, there are some studies conducted to prove it's the rapeutic effects focused on psychological conditions is some countries [17].

In the Philippines, there are some investigations proved the effectivity of aromatherapy on certain conditions.

A randomized clinical trial was conducted in a tertiary hospital in the Philippines on the application of aromatherapy in the management of postpartum pain. The subjects were post-partum patients that underwent spontaneous vaginal delivery. The trial consisted of 64 participants and 32 of them received 2% lavender oil thru direct inhalation with the aid of masks and the other were assigned as the placebo-controlled group. The findings of their study demonstrated that aromatherapy caused a significant decrease of pain scores of the subjects under the treatment group. Aromatherapy was capable to bring positive biological effect in pain reduction in post-partum patients [18].

In July to August 2015, a quasi-experimental trial was conducted to assess the effectivity of sweet orange oil aromatherapy on pain and anxiety during needle insertion in procedures for hemodialysis and was performend in three outpatient hemodialysis centers in the Philippines. The total number of subjects carried was 50 patients with chronic kidney disease and were non-randomly assigned to sweet orange oil aromatherapy intervention group and the control group. Numeric scale rating and state trait anxiety inventory were used to measure degree of pain and anxiety respectively. After the administration of the intervention, both pain and anxiety scores were suggestively decreased for the patients receiving the aromatherapy. The study also suggested that sweet orange oil aromatherapy is efficacious in reducing anxiety and pain conditions in procedures in needle insertion in hemodialysis [19].

A true experimental study was conducted in a Higher Education Institution in the Philippines on the effect of commercially prepared Cinnamon oil used for aromatherapy on memory retention. The subjects were level II Nursing students that were divided into groups (test and control groups). Benton Visual Retention Test was used to measure memory retention of the study participants. The study demonstrated that there is significant difference in the memory retention of level II nursing students given with cinnamon oil aromatherapy as compared with those that were not given with the intervention. Cinnamon oil in aromatherapy has a potential to aid memory retention [20].

A molecular docking studies of Aromatherapy oils against SARS-CoV-2, the cause of COVID-19 diseases was conducted in an institution in the Philippines. The constituents of aromatherapy commodities such as terpenes were docked to key structures in SARS-CoV-2 invasion, the spike protein and the human ACE2 and TMPRSS2 proteins. The study results

presented that methyl salicylate, eucalyptol and α -pinene demonstrated favorable binding to ACE2 and spike proteins. The study suggest that these agents can be considered for clinical researches in pursuit for treatment of COVID-19 [21].

4. Conclusion

A number of different studies were conducted in the Philippines about the efficacy of aromatherapy in alleviating pain, anxiety, stress and it could aid in memory retention. This could also be a potential commodity for viral infections as well. Aromatherapy is a promising complementary and alternative dimension that can be utilized to succor conventional health care process through integration of different type of medicinal practices to manage and treat conditions specifically in the Philippine setting.

Compliance with ethical standards

Acknowledgments

The authors wish to acknowledge San Pedro College for their support in this endeavor.

Disclosure of conflict of interest

The authors declare that they have no conflict of interest.

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