# AROMATHERAPY IN REDUCING STRESS SYMPTOMS IN THE NURSING TEAM: AN INTEGRATIVE LITERATURE REVIEW

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## AROMATERAPIA NA REDUÇÃO DOS SINTOMAS DE ESTRESSE NA EQUIPE DE ENFERMAGEM: REVISÃO INTEGRATIVA DE LITERATURA

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## AROMATERAPIA PARA REDUCIR SÍNTOMAS DE ESTRÉS EN EQUIPOS DE ENFERMERÍA: REVISIÓN INTEGRADORA DE LA LITERATURA

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Objective: to analyze the diverse scientific evidence regarding the use of aromatherapy in reducing stress-related symptoms in the Nursing team. Method: an integrative literature review carried out on July 1st, 2022, based on the "*Aromatherapy*", "*Stress*" and "*Nursing*" descriptors and using the *Rayyan* platform to select the studies, all in charge of two independent researchers. Full-text and free digital access documents in Portuguese, English or Spanish were included, which analyzed aromatherapy and the population of interest separately. Results: twelve studies were included, with predominance of randomized controlled trials and quasi-experimental studies. Inhalation aromatherapy with *Lavandula angustifolia* essential oil stood out. The use of a Control Group and multiple outcome measures were the criteria that presented the greatest weakness among the studies analyzed. Final considerations: Aromatherapy showed effectiveness and safety in reducing stress symptoms for the Nursing team.

Descriptors: Nursing team. Psychological stress Complementary therapies. Aromatherapy. Essential oils.

*Objetivo: analisar as evidências científicas em relação ao uso da aromaterapia na redução de sintomas relacionados ao estresse na equipe de Enfermagem. Método: revisão integrativa da literatura realizada em 01 de julho de 2022, a*

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*partir dos descritores "Aromatherapy", "Stress" e "Nursing", com utilização da plataforma Rayyan para seleção dos estudos realizados por dois pesquisadores independentes. Foram incluídos documentos de acesso digital na íntegra e gratuitos nos idiomas português, inglês ou espanhol, que analisaram a aromaterapia e a população de interesse separadamente. Resultados: doze estudos foram incluídos com predominância de ensaios clínicos randomizados e estudos quase experimentais. Destacou-se aromaterapia inalatória com o óleo essencial de Lavandula angustifolia. A utilização de grupo-controle e múltiplas medições dos desfechos foram os critérios que apresentaram maior fragilidade entre os estudos analisados. Considerações finais: a aromaterapia demonstrou efetividade e segurança na redução de sintomas de estresse para a equipe de Enfermagem.*

*Descritores: Equipe de enfermagem. Estresse psicológico. Terapias complementares. Aromaterapia. Óleos essenciais.*

*Objetivo: analizar las evidencias científicas en relación con utilizar Aromaterapia para reducir síntomas relacionados con el estrés en equipos de Enfermería. Método: revisión integradora de la literatura realizada el 1 de julio de 2022 a partir de los siguientes descriptores: "Aromatherapy", "Stress" y "Nursing", y empleando la plataforma Rayyan para seleccionar los estudios a cargo de dos investigadores independientes. Se incluyeron documentos con acceso digital a sus textos completos y gratuitos en portugués, inglés o español, y que analizaran la Aromaterapia y la población de interés en forma separada. Resultados: se incluyeron doce estudios, con predominio de ensaios clínicos aleatorizados y estudios cuasiexperimentales. Se destacó la Aromaterapia por inhalación con aceite esencial de Lavandula angustifolia. Emplear un Grupo Controle y de múltiples mediciones de los desenlaces fueron los criterios que presentaron mayor fragilidad entre los estudios analizados. Consideraciones finales: la Aromaterapia demostró ser efectiva y segura para reducir síntomas de estrés en equipos de Enfermería.*

*Descriptores: Equipo de Enfermería. Estrés psicológico. Terapias complementarias. Aromaterapia. Aceites esenciales.*

## Introduction

The high stress levels in Nursing teams have been widely investigated, whether during undergraduate studies, throughout professional life, or between different care contexts. Stress has been identified and associated with work, work overload and precarious working conditions[1-4].

On this issue, in the last three years we have experienced the COVID-19 pandemic, which devastated the global and national health contexts, aggravating the stress rates that have been affecting Nursing professionals. Of this scenario, we highlight risks such as physical and emotional exhaustion, scarcity of materials and technologies for assistance, potential exposure of family members to the virus, contamination with work leave, circadian cycle dysregulation, anxiety and depression symptoms, psychological distress, and skin injuries due to the use of Personal Protective Equipment[5-6].

One of the possibilities for coping with this problem is to offer non-medicalizing strategies that can reduce stress symptoms. In this context, Integrative and Complementary Health Practices (ICHPs), defined as a set of therapeutic resources and medical rationality, can enhance the treatment of several conditions. Its foundations include the integration of people's physiological and emotional dimensions and plurality of the care practices[7-8].

In Brazil, since 2006 there has been regulation of the ICHPs in the Public Health system through the National Policies of Integrative and Complementary Practices. An expansion of this policy in 2018 led to a total of 29 therapeutic resources that can now be offered across health services[7]. Among these, Aromatherapy represents one of those with research studies presenting diverse scientific evidence, relatively low cost-effectiveness and easy and safe applicability, being considered a foundation for the complementary treatment of several health aggravating factors and used by professionals of different backgrounds[8].

Aromatherapy resorts to a variety of essential oils, with a class called *stress-killers* among them, with examples such as: lavender (*Lavandula angustifolia*), lemon (*Citrus x limon*), bergamot (*Citrus bergamia*), geranium (*Pelargonium graveolens*), and damascena rose (*Rosa x damascena*). These oils have moderate evidence

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and positive results for anxiety and depressive symptoms, mood disorders and burnout syndrome, but their therapeutic potential may still be underestimated[9-10].

Therefore, the current context to which Nursing professionals are exposed, both from a professional and personal point of view, can make them develop stress as one of the main responses to coping, in the same way that it can represent a psychological distress intensification risk. Given this scenario, it is argued that, as an ICHP and in its holistic, integrated and humanistic purpose, Aromatherapy can represent a care possibility for Nursing professionals. Thus, the question is as follows: Would Aromatherapy reduce stress symptoms in the Nursing team?

To answer the question, we carried out an integrative literature review in order to analyze the diverse scientific evidence regarding the use of Aromatherapy in reducing stress-related symptoms in the Nursing team.

## Method

This is an integrative literature review aimed at understanding and systematizing data regarding the benefits of Aromatherapy on Nursing team professionals' stress, considering the *Preferred Reporting Items for Systematic Reviews and Meta-Analyses* (PRISMA) guidelines[11]. The research methodology has specific mechanisms and resources that provide good quality data retrieval. Thus, it is possible to analyze the available scientific production and, consequently, obtain fundamental tools to consolidate a critical sense and understanding of the topic[12].

It was developed in six stages: [1] Identification of the topic and guiding question to be answered; [2] Delineation of the inclusion and exclusion criteria for the scientific studies; [3] Definition and separation of relevant information for analyzing

the results; [4] Critical analysis of the studies included using all the information provided in the articles selected, contributing to the construction of a comprehensive perspective in this knowledge area; [5] Discussion of the results with consideration for the theoretical framework employed; and [6] Presentation of the review, offering the readers a critical assessment of the results[12].

Considering the study theme, Aromatherapy and stress among Nursing professionals, the Patient-Intervention-Control-Outcome (PICO) strategy[13] was employed to formulate the research question: Would Aromatherapy (Intervention) reduce stress-related symptoms (Outcome) in Nursing team professionals (Patient)?

After defining the research question, the inclusion and exclusion criteria for the articles were established. The inclusion criteria comprised fully accessible digital documents, available free of charge, in Portuguese, English or Spanish, and which separately analyzed Aromatherapy and the target population. The exclusion criteria were studies that did not answer the guiding question, as well as Gray Literature (books, theses, dissertations and monographs) and official documents issued by institutions and editorials or documents of the letter to the editor type. No time limits were set.

The following health database platforms were used: *Cumulative Index to Nursing and Allied Health Literature* (CINAHL), SCOPUS, *Excerpta Medical Database* (EMBASE), *PubMed®* and *Biblioteca Virtual em Saúde* (BVS). The search strategies, which aligned with specific descriptors for each informational resource, were organized using AND/OR Boolean operators. The "*Aromatherapy*", "*Stress*" and "*Nursing*" descriptors were included in the title, abstract and keywords sections (Chart 1).

**Chart 1.** Search strategies according to the databases selected. São Paulo, SP, Brazil, 2023. (continued)

| Database | Search key |
|---|---|
| CINAHL | *(aromatherapy or essential oils or aroma therapy) AND (nurse or nurses or nursing) AND stress.* |
| SCOPUS | *(TITLE-ABS-KEY (aromatherapy) AND TITLE-ABS-KEY (nurses) AND TITLE-ABS-KEY (stress))* |

**Chart 1.** Search strategies according to the databases selected. São Paulo, SP, Brazil, 202' (conclusion)

| Database | Search key |
|---|---|
| EMBASE | (*'aromatherapy'/exp OR aromatherapy) AND ('nurse'/exp OR nurse) AND ('stress'/exp OR stress)* |
| BVS | *aromatherapy AND nurse AND stress) AND (collection:("06-national/BR" OR "05-specialized") OR db:("LILACS" OR "MEDLINE"))* |
| PubMed® | *((Aromatherapy) AND (Stress)) AND (Nurses)* |

Source: The authors.

The search was conducted on July 1st, 2022. After retrieving the materials, all studies were submitted to a first selection stage, which corresponded to the aforementioned inclusion and exclusion . Subsequently, two different researchers independently conducted a blind on reading of the abstracts and titles from all the studies selected, using the Rayyan platform[14]. This ease identifying and excluding duplicate articles across multiple informational resources. In this selection process, eight articles presented conflicts between the researchers, requiring the involvement of a third researcher to make decisions regarding their inclusion or exclusion. Thus, 14 articles were selected for full-text reading, excluding two of them. The final sample of studies analyzed consisted of 12 articles.

To extract all the information systematically, the following elements were used: article title, country of origin, publication year, journal, objectives, methodological design (study type), data on the study population (sample and sociodemographic and occupational characteristics), instruments for outcome and result measurement, and details about the intervention (essential oil, concentration, administration route, intervention duration).

The quality certification of the studies selected followed a validated study, the Joanna Briggs Institute assessment instrument, which considers nine questions: [1] Clarity regarding cause and effect; [2] Assessment of the participants in the study concerning the similarity of their characteristics; [3] Similarity in the participants' treatment/intervention; [4] Use of a Control Group; [5] Existence of multiple pre- and post-intervention outcome measurements over time; [6] Completion of full follow-up or adequate description/analysis of differences between groups; [7] Equal measurement of the participants' outcomes; [8] Reliable measurement of outcomes; and [9] Use of appropriate statistical analyses. Each question is answered with "Yes" or "no", and the higher the number of "Yes" responses for each elucidated item, the higher the methodological quality of the study[15].

**Results**

A total of 157 articles were found in the initial search across five databases using the Rayyan reference manager. After removing duplicates, 108 studies remained. The flowchart used to guide the literature review was based on the *Preferred Reporting Items for Systematic Reviews and Meta-Analyses* (PRISMA), represented in Figure 1[11]:

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**Figure 1 –** Study selection process according to the *Preferred Reporting Items for Systematic Reviews and Meta-Analyses* (PRISMA) methodology[11]. São Paulo, SP, Brazil, 2023.
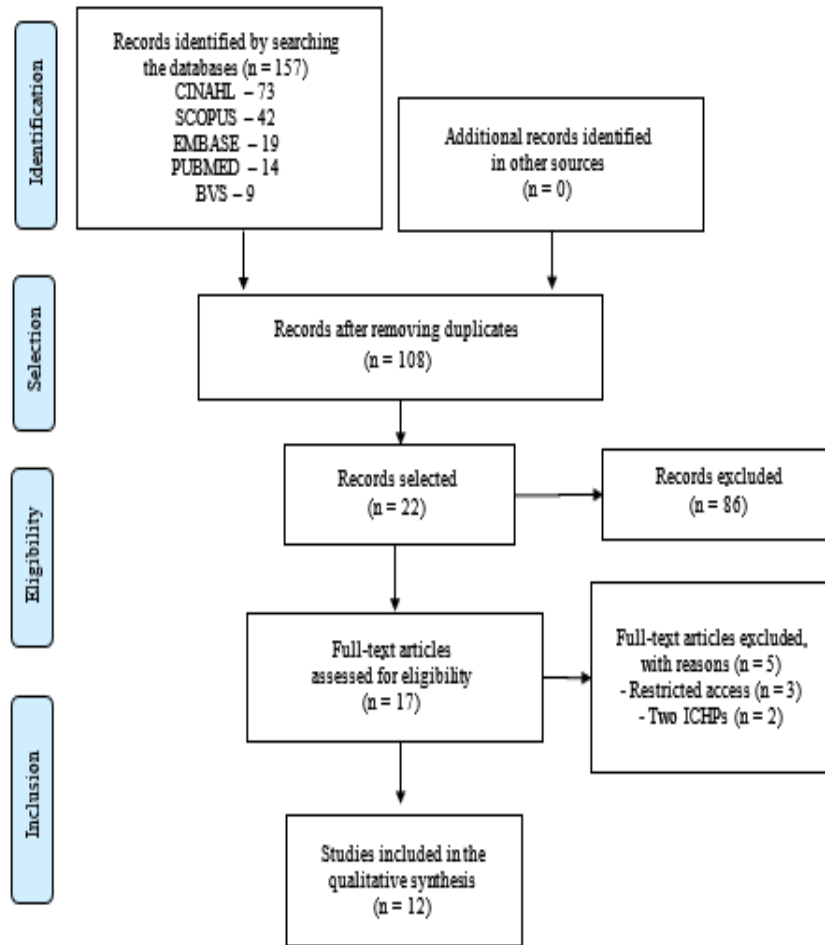


**Source**: *Preferred Reporting Items for Systematic Reviews and Meta-Analyses* (PRISMA)[11].

The 12 articles included in this integrative review were organized to enhance data interpretability, thus promoting a comprehensive perspective for reflection and discussion on the studies (Chart 2).

**Chart 2.** Characterization of the studies in relation to their year and country of origin, objective, methodological design and main results and outcomes. São Paulo, SP, Brazil, 2023. (N=12)

(continued)

| Ref. | Country/ Year | Objectives | Design/ Sample | Instruments | Results |
|---|---|---|---|---|---|
| 16 | Norway 2006 | To test whether Aromatherapy massage exerts a positive effect on work-related stress. | RCT 32 nurses | Cooper Scale for Occupational Stress | There was a significant drop in stress reports in the Experimental Group. The result may have implications for the workforce, in addition to having a favorable economic value. |
| 17 | USA 2008 | To assess the effects of the topical application of a combination of Lavender and Sage essential oils, mixed in sweet almond carrier oil, on occupational stress among nurses in a medical-surgical intensive care unit. | Quasi-experimental 14 nurses | Self-perception test | All participants experienced positive stress-reducing effects. The results showed a decrease in the stress level perception in the Intervention Group during the three 12-hour work shifts, with only one intervention. |
| 18 | Taiwan 2015 | To investigate the effectiveness of inhaling lavender essential oil in reducing work-related stress symptoms. | Cross-sectional and experimental 110 nurses | Validated authorial instrument | In the Experimental Group, the stress symptoms decreased from 6.1 to 2.8 after Aromatherapy. The treatment is most effective when performed in 3-4 days (brief period of time) |
| 19 | USA 2017 | To assess perceived stress before and after using an intervention with Lavender essential oil. | Quasi-experimental 134 nurses | Authorial instrument | The frequency at which nurses felt stressed went from "half of the work time" to "only once". |

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**Chart 2.** Characterization of the studies in relation to their year and country of origin, objective, methodological design and main results and outcomes. São Paulo, SP, Brazil, 2023. (N=12)

(continued)

| Ref. | Country/Year | Objectives | Design/Sample | Instruments | Results |
|---|---|---|---|---|---|
| 20 | Turkey 2017 | To investigate the effects of Aromatherapy on the stress and anxiety levels of nurses working in intensive care units. | Quasi-experimental 45 nurses | PSS-10, STAI and AVS | Regarding the psychometric parameters, Aromatherapy did not have an effective reduction in the stress and anxiety levels. However, the time and the way the intervention was carried out contributed to reducing stress and anxiety. |
| 21 | Turkey 2017 | To assess the effectiveness of Lavender essential oil in nurses' occupational stress. | RCT 78 nurses | Gry-Taft Anderson Job Stress | The study found that the lavender intervention is more effective in managing stress in long treatments (4 weeks). |
| 22 | Australia 2017 | To assess the use of Aromatherapy massage and music as an intervention to deal with the occupational stress and anxiety experienced by the Emergency Room team. | Quasi-experimental 365 massages offered | Anxiety facial scale; PSS-10 | Emergency nurses were significantly more anxious in winter than in summer. Aromatherapy massage with music significantly reduced anxiety in the emergency nurses. |
| 23 | China 2018 | To evaluate the effectiveness of Aromatherapy and massage in relieving stress in nurses. | SR 10 articles | Miscellaneous | Most of the studies reported that Aromatherapy and massage exert a beneficial effect on nurses' stress. One study showed that Aromatherapy massage with music interventions exerts no effect on nurses' stress. However, the number of studies is limited and present high or uncertain risk bias. |

**Chart 2.** Characterization of the studies in relation to their year and country of origin, objective, methodological design and main results and outcomes. São Paulo, SP, Brazil, 2023. (N=12)

(conclusion)

| Ref. | Country/ Year | Objectives | Design/ Sample | Instruments | Results |
|---|---|---|---|---|---|
| 24 | Korea 2020 | To investigate the effects of patchouli inhalation on emergency nurses in terms of their stress, satisfaction, compassion, compassion fatigue, burnout, blood pressure and heart rate. | RCT 50 nurses | ProQOL, AVS, PA | Patchouli oil inhalation effectively reduced the stress levels and increased satisfaction with compassion in emergency nurses. |
| 25 | Australia 2017 | To measure the effect of essential oils diffused in critical care settings on stress among nurses. | Prospective study 39 nurses | PSS-10, DASS-21, POMS | Aromatherapy exerted significant impacts on nurses' stress. The intervention with these types of oil was found to be effective. |
| 26 | Turkey 2021 | To assess the effect of Aromatherapy with rose damascena essential oil on occupational stress among nurses in the Emergency sector. | RCT 60 nurses | NSS-57 | A reduction was verified in the Experimental Group stress level in relation to the Control Group. It recommended combining another therapy with Aromatherapy. |
| 27 | Iran 2022 | To evaluate the effects of Aromatherapy with rose damascena on anxiety, stress and accuracy at work in Operating Room nurses. | RCT 60 nurses | STAI | The instruments found a significant improvement in the 3 parameters. The Experimental Group witnessed greater efficacy of Aromatherapy when compared to the Control Group. |

Source: The authors.

Key: PSS-10 (Perceived Stress Scale), DASS-21 (Depression, Anxiety and Stress Scale), POMS (Profile of Mood States), NSS-57 (Nursing Stress Scale), ProQOL (Professional Quality of Life), STAI (Spielberger State-Trait Anxiety Inventory), AVS (Analogue Visual Scale), SR (Systematic Review), RCT (Randomized Clinical Trial).

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Aromatherapy was conducted following clinical practice precepts, featuring appropriate administration characterized by safe and therapeutic dosage, suitable administration route and adequate exposure time. Chart 3 presents all the information related to the intervention conducted and analyzed, according to the essential oil (scientific name) used, dosage, intervention duration, frequency, administration route, concentration, and presence or absence of carrier oil.

**Chart 3.** Characterization of the Aromatherapy interventions. São Paulo, SP, Brazil, 2023. (N=12)

(continued)

| Ref. | Scientific name | Dosage | Route | Duration |
|---|---|---|---|---|
| 16 | Oils were used at the therapists' discretion | No information | T | 90 minutes |
| 17 | *Lavandula angustifolia* <br> *Salvia sclarea* | 6% concentration for Lavandula, 4% concentration for Sage | T | Cream acting on the skin for 12 hours (duration of the shift), with sweet almond oil used as carrier oil |
| 18 | *Lavandula angustifolia* | Small necklaces containing 3% Lavender | I | Four days of work |
| 19 | *Lavandula angustifolia* | Approximately 15 ml every 24 hours | I | Total of 30 days, diffused 24 hours a day |
| 20 | *Lavandula angustifolia* | 5 drops soaked in cotton, inhalation only once | I | 15-minute intervals, at a distance of 30 cm from the nose |
| 21 | *Lavandula angustifolia* | 0.5 mL at 3% concentration | I | 2 hours, before shift handoffs |
| 22 | *Lavandula angustifolia* <br> *Cananga odorata* <br> *Citrus bergamia* <br> *Pogostemon cablin* | Spray blend | I/T | 15 minutes |
| 23 | *Lavandula angustifolia* <br> *Salvia sclarea* | 3% concentration for Lavandula, 2% concentration for Sage | I/T | - Gargling: Once a day, for 3 days. <br> - Topical: 12 absorption hours (cream left on the skin). <br> - Inhalation: 24 hours a day, for 30 days |
| 24 | *Pogostemon cablin* | 0.5 mL dissolved in mild almond oil. 5% concentration | I | 20 minutes, 2 inhalations with a 24h interval between each |
| 25 | *Citrus x paradisi* <br> *Citrus x sinensis* | 250 drops (15 ml) | I | 2 minutes, 5-minute break. 1 week of intervention, 1-week interval, for 30 days |
| 26 | *Rosa x damascena* | 2 drops, 4% concentration | I | 10 minutes, cotton wool soaked with essential oil at a distance of 5 cm |

**Chart 3.** Characterization of the Aromatherapy interventions. São Paulo, SP, Brazil, 2023. (N=12)

(conclusion)

| Ref. | Scientific name | Dosage | Route | Duration |
|------|-----------------|--------|-------|----------|
| 27 | *Rosa x damascena* | 2 drops, 40% concentration | I | 10 minutes near the nose area |

Source: The authors.

Key: I – Inhalation; T – Topical. Ways of use: Aromatic necklace - It involves placing the essential oil or a blend of oils in a pendant and tying a cord around the neck to ease inhalation throughout the day. Blend - A mixture and dilution of essential oils created by an aromatherapist based on the specific complaint or issue.

All studies analyzed[16-27] met the criteria for clarity on cause and effect, assessment of the study participants, similarity in their characteristics, similarity in the participants' treatment/intervention, and equal measurement of outcomes. Eleven studies showed appropriate use of statistical analyses[16-20,22-27]. Ten studies evidenced reliable outcome measurements[16-18,20,22-27], and another ten conducted complete follow-up or adequately described the analysis of differences between the groups[16,18-20,22-27]. Nine studies were designed with multiple measurements of the pre- and post-intervention outcomes over time[16-21,24,26-27]. Finally, seven studies used a Control Group[16-22].

## Discussion

Applying Aromatherapy to relieve stress symptoms is a recent theme in scientific research studies. The results of this review showed that Aromatherapy represents an effective and safe therapeutic resource for reducing stress in Nursing professionals. Among the materials reviewed, the most studied essential oil was *Lavandula angustifolia*[16-23], and the botanical family of citrus oils was also investigated[16-17,22-23,25]. The most commonly considered administration route was inhalation[18-21]. These findings corroborate the results of other research studies[28-29].

Most of the materials were published between 2017 and 2022[19-27], a period when research on Aromatherapy for stress management gained prominence, showing positive effects on various psychological and somatic conditions, a topic that has been increasingly explored in the contemporary scientific society.

Aromatherapy has various administration routes, namely: inhalation, topical application, essential oil intake, mouthwash and gargling, and diffusion. The ways of administering Aromatherapy are eased by ensuring non-invasive application routes of the essential oils. In a way, this process eases therapeutic application of Aromatherapy. The correct administration route should be chosen based on the treatment objective[30]. For local pain and fatigue, topical massage is a preferred administration method, whereas inhalation is recommended for more systemic, emotional, mental and acute effects[31].

The therapeutic effects of Aromatherapy go beyond the physical dimension and, by acting on the limbic system, they activate memories, sensations and feelings. The inhalation route exploits the volatile characteristic of essential oils. This process makes aromatic molecules available in the atmospheric air, which can be absorbed by the nasal mucosa, in order to obtain a therapeutic effect. This technique is called "olfactory therapy"[32]. In this modality, aromatic molecules can cross the blood-brain barrier, producing direct impacts on the Central Nervous System, which will mediate a systemic response in each of the systems that make up the biological body[33]. This mechanism of action exerts an acute effect and allows managing of symptoms related to the nervous system, whether psychological and/or neurological.

With dissemination of knowledge about ICHPs and their therapeutic potential, it

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became common for these interventions to be deliberately practiced, oftentimes not led by trained professionals but, rather, through self-medication. This process contributes to ICHP misuse, which can cause undesirable effects and unpleasant experiences in individuals who choose this use modality. Deliberate Aromatherapy use is oftentimes perceived as "harmless". When resorting to this practice without due prescription by a professionally trained person, the risks associated with Aromatherapy increase, including the potential for neurotoxicity, nephrotoxicity, cardiogenic action, and development of allergic reactions and other complications[32].

In this literature review, no data referring to adverse or side effects from the reported interventions were found, supporting the argument for the safety of using Aromatherapy for stress symptoms[32].

The *Lavandula angustifolia* essential oil was the most studied among the articles analyzed that correlate Aromatherapy and stress, observed in more than 70% of the studies[17-23]. The main evidence of Lavender points to a reduction in the cortisol level, which consequently implies a reduction in the stress symptomatology. The outcomes that represent the highest levels of evidence are the following: well-being, vitality and quality of life, and mental health[9-28-29]. In addition, the pharmacological properties of the aromatic molecules in the Lavender essential oil span the calmness spectrum, with strong indications for use in relaxation, sedative effects, soothing properties, insomnia issues, distress, fear, spiritual distress, nervous disorders, stress management, anxiety, depression and analgesic effects[33].

From a pharmacological point of view, the *Lavandula angustifolia* essential oil has substances such as linalool (25-45%), linalyl acetate (25-45%) and □-ocimene (5-16%) as its main constituents[33]. Among the essential oils identified in the studies analyzed, citrus oils (*Citrus bergamia, Citrus paradisi, Citrus sinensis*) share a common high concentration of monoterpenes, with d-limonene as their main

representative[39]. Together, these substances are indicated for psycho-emotional situations, reducing stress and anxiety symptoms in different care contexts.

According to the *Joanna Briggs* model[20], the methodological quality of the studies reaches a relative reliability level. It is noted that the weakness of some scientific studies lies in the absence of a Control Group[26-27,30] and the lack of multiple measurements of outcomes (pre- and post-intervention)[17-21]. These two aspects are fundamental for the construction of a good quality methodological design, as they reduce the placebo effect and the study risk of bias, a process with negative repercussions on internal validity of the studies.

Despite the contrast between the medical rationalities, it is important to highlight an intentional effort in combining both rationalities to generate greater effectiveness in a person's treatment. Understanding the pathophysiology of the disease and the use of pharmacological and non-pharmacological therapies to reduce or prevent the manifestation of symptoms is fundamental to a comprehensive care practice. The human dimensions—spiritual, emotional, mental, sociocultural and biological—require communication and integration of knowledge capable of innovating health interventions, expanding the therapeutic spectrum[10].

The hegemonic technical-scientific model imposes barriers in relation to the implementation of ICHPs. For a higher level of evidence and study quality, a robust methodological design is required, wherein the properties deny the expression of individual feelings and the manifestation of wills and desires, not incorporating irrefutable subjective elements of the illness experience into the investigation. Psychometric parameters do not encompass the metaphysical dimension of ICHPs and, eventually, end up limiting and reducing the potential for integral analysis of this theme.

## Final considerations

A sample of twelve studies allows asserting that the use of Aromatherapy for relieving stress symptoms in Nursing professionals is safe. It also demonstrates that the interventions conducted were thoroughly described, a situation that enables their application in other scenarios. Regarding the intervention, it was observed that the *Lavandula angustifolia* essential oil and the *Citrus* botanical genus are the most explored and administered through inhalation.

The use of other essential oils, the development of robust methodologies with a well-established Control Group, and a serial analysis of outcomes during the intervention were identified as gaps in this analysis. In addition to that, based on the search methods employed and on the sources consulted, no studies conducted in Brazil were identified. It is recommended that Nursing actively engage in research endeavors to enhance the clinical evidence of Clinical Aromatherapy applied in various health care contexts, integrating this therapeutic approach into clinical reasoning and the health work process.

## Collaborations:

1 – Conception and planning of the project: Vitor Conti Giani, Jaciane Araújo Cavalcante, Lucas Cardoso dos Santos, Juliana Brandão Albiol Garcia, Káren Mendes Jorge de Souza and Thiago da Silva Domingos;

2 – Data analysis and interpretation: Vitor Conti Giani, Jaciane Araújo Cavalcante, Lucas Cardoso dos Santos, Juliana Brandão Albiol Garcia, Káren Mendes Jorge de Souza and Thiago da Silva Domingos;

3 – Writing and/or critical review: Vitor Conti Giani, Jaciane Araújo Cavalcante, Lucas Cardoso dos Santos, Juliana Brandão Albiol Garcia, Káren Mendes Jorge de Souza and Thiago da Silva Domingos;

4 – Approval of the final version: Vitor Conti Giani, Jaciane Araújo Cavalcante, Lucas Cardoso dos Santos, Juliana Brandão Albiol Garcia,

Káren Mendes Jorge de Souza and Thiago da Silva Domingos.

## Conflicts of interests

There are no conflicts of interest.

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