Literature Review

TEXTO & CONTEXTO ENFERMAGEM
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EFFECTS OF AROMATHERAPY ON ANXIETY SYMPTOMS IN WOMEN WITH BREAST CANCER: A SYSTEMATIC REVIEW

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ABSTRACT

Objective: to assess the effect of aromatherapy on anxiety symptoms in women undergoing treatment for breast cancer.
Method: a systematic review, carried out from the PEOT strategy: what are the effects of aromatherapy in reducing anxiety symptoms in women undergoing treatment for breast cancer? The research was conducted in six databases and in eight other data sources. Randomized clinical trials without date and language restrictions were included.
Results: the sample consisted of seven studies. Aromatherapy was applied by inhalation (57.1%) and massage (42.8%), and was adopted alone or in conjunction with other interventions, demonstrating a reduction in anxiety symptoms in 71.4% of studies. The predominance of lavender, bergamot, frankincense and sandalwood essential oils is highlighted for their anxiolytic, relaxing, sedative, invigorating, antidepressant and muscle tension reducing effects.
Conclusion: aromatherapy showed positive and significant results in reducing anxiety symptoms in women undergoing treatment for breast cancer.

DESCRIPTORS: Breast neoplasms. Aromatherapy. Complementary therapeutic methods. Anxiety. Nursing.

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EFEITOS DA AROMATERAPIA NOS SINTOMAS DE ANSIEDADE EM MULHERES COM CÂNCER DE MAMA: REVISÃO SISTEMÁTICA

RESUMO

Objetivo: avaliar o efeito da aromaterapia sobre os sintomas da ansiedade em mulheres sob tratamento para câncer de mama.
Método: revisão sistemática, realizada a partir da estratégia PEOT: quais os efeitos da aromaterapia na redução dos sintomas da ansiedade em mulheres sob tratamento para o câncer de mama? A pesquisa foi realizada em seis bases de dados e em oito outras fontes de dados. Incluiu-se ensaios clínicos randomizados, sem restrição de data e idioma.
Resultados: a amostra foi composta por sete estudos. A aromaterapia foi aplicada por inalação (57,1%) e massagem (42,8%), tendo sido adotada sozinha ou em conjunto a outras intervenções, demonstrando redução dos sintomas da ansiedade em 71,4% dos estudos. Ressalta-se o predomínio dos óleos essenciais de lavanda, bergamota, olíbano e sândalo, pelos seus efeitos ansiolíticos, relaxantes, sedativos, revigorantes, antidepressivos e redutores da tensão muscular.
Conclusão: a aromaterapia apresentou resultados positivos e significativos na redução dos sintomas da ansiedade em mulheres em tratamento para câncer de mama.

DESCRITORES: Neoplasias da mama. Aromaterapia. Terapias complementares. Ansiedade. Enfermagem.

EFECTOS DE LA AROMATERAPIA SOBRE LOS SÍNTOMAS DE ANSIEDAD EN MUJERES CON CÁNCER DE MAMA: UNA REVISIÓN SISTEMÁTICA

RESUMEN

Objetivo: evaluar el efecto de la aromaterapia sobre los síntomas de ansiedad en mujeres en tratamiento por cáncer de mama.
Método: revisión sistemática, basada en la estrategia PEOT: ¿Cuáles son los efectos de la aromaterapia en la reducción de los síntomas de ansiedad en mujeres en tratamiento por cáncer de mama? La investigación se llevó a cabo en seis bases de datos y en otras ocho fuentes de datos. Se incluyeron ensayos clínicos aleatorizados, sin restricción de fecha e idioma.
Resultados: la muestra estuvo compuesta por siete estudios. La aromaterapia se aplicó por inhalación (57,1%) y masaje (42,8%), habiéndose adoptado sola o en conjunto con otras intervenciones, demostrando una reducción de los síntomas de ansiedad en el 71,4% de los estudios. Destaca el predominio de los aceites esenciales de lavanda, bergamota, incienso y sándalo por sus efectos ansiolíticos, relajantes, sedantes, tonificantes, antidepresivos y reductores de la tensión muscular.
Conclusión: la aromaterapia ha mostrado resultados positivos y significativos en la reducción de los síntomas de ansiedad en mujeres en tratamiento por cáncer de mama.

DESCRIPTORES: Neoplasias de la mama. Aromaterapia; Métodos terapéuticos complementarios. Ansiedad. Enfermería.

INTRODUCTION

Among the types of cancers, breast cancer is the second with the highest incidence globally, and it is estimated in Brazil, for the triennium 2020 to 2022, more than 60,000 new cases per year[1]. This cancer triggers physical and emotional symptoms that negatively interfere with treatment and quality of life as well as the general health of patients, compliance and continuity of treatment[2].

During the treatments, there is a lot of suffering, anguish, stress and anxiety, since women are faced with many uncertainties, incapacities of daily activities and loss of autonomy, self-esteem, health, memory and, mainly, the configuration of finitude[3–6].

According to a survey of 506 women with breast cancer admitted to the *Instituto Português de Oncologia do Porto*, 38.0% had clinically significant levels of anxiety before treatment. Among the patients who did not have anxiety before treatment, 12.1% had anxiety in the first year of treatment, 7.0% in the third year of treatment and 4.2% in the fifth year of treatment. A total of 18.2% of women had anxiety in all assessments. Thus, it is evident that most had fluctuating anxiety status over the five years of follow-up[7].

In this context, nursing team professionals who are in the front line of care should make a general assessment of women with breast cancer, in order to meet not only their physiological and clinical needs, but also their psychological needs. Thus, studies that contemplate Integrative and Complementary Health Practice (ICHP) use in the management of symptoms during treatment in patients with breast cancer may gradually provide other technologies to care for this audience as well as reduce symptoms related to the disease and treatment[8].

ICHP are characterized as an aid to conventional therapy, with safe and socially sustainable practices, offering therapies to remedy different symptoms in cancer patients, being subsidized by the World Health Organization and the Ministry of Health of Brazil guidelines, through Ordinance MO/MoH 971 of 2006 and the Brazilian National Policy on Integrative and Complementary Health Practices (PNPIC - *Política Nacional de Práticas Integrativas e Complementares em Saúde*). Moreover, it is noteworthy that the Federal Nursing Council through Resolution 581 of 2018 recognizes the PNPIC as a specialty of the profession[9].

Aromatherapy is one of the ICHP, which uses the properties of essential oils (EO). Its main purposes are to provide well-being, relaxation, relief and reduction of anxiety, pain and stress[10–11].

Among the purposes identified in the literature, there are neuroprotective, sedative, anxiolytic, mood improvement, antioxidant, cytotoxic, antinociceptive, fatigue reducing actions. It is known that there is a direct relationship between volatile substances and the limbic system, thus influencing patients' general condition, being absorbed by the main oral and mucosal, olfactory, pulmonary and dermal routes of use[11] Among the EO used in the treatment of anxiety, the following stand out: *Lavandula angustifolia*, *Pelargonium graveolense* and *Citrus bergamia*[12].

In this context, it is essential to carry out studies that compile national and international research in order to develop a scientific contribution on the researched topic, in order to provide a solid knowledge base that can be used in nursing care for women undergoing treatment with breast cancer. Therefore, the study aimed to assess the effect of aromatherapy on anxiety symptoms in women undergoing treatment for breast cancer.

METHOD

This is a systematic literature review (SLR), in order to identify, analyze and discuss the best scientific evidence related to a research question. The study followed the methodological process of methodological guidelines for elaboration of Ministry of Health systematic review and meta-analysis of randomized clinical trials[13] as well as a methodological trajectory guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)[14].

We used the Population, Exposure, Outcomes and Study Type (PEOT) strategy to construct the research question, in which: P= women undergoing treatment for breast cancer with radiotherapy, chemotherapy and/or surgery; E= EO use as an integrative or complementary therapy in women undergoing treatment for breast cancer; O= anxiety symptoms; and T= clinical trials.

Thus, the following question was obtained: what are the effects of aromatherapy in reducing anxiety symptoms in women undergoing treatment for breast cancer?

Data search and extraction was carried out in February 2022 by two independent reviewers. At first, the search was carried out in the databases and virtual libraries: CINAHL/Ebsco Cochrane Library, PubMed/MEDLINE, Scopus, Web of Science, Embase, ProQuest, OpenGrey and Traditional, Complementary and Integrative Medicines. It is important to notice that this fact may be due to the reduced number of studies on this subject under ideal research conditions, or some studies could have been non-indexed in the searched databases. CAPES Bank of Theses and Dissertations, Brazilian Digital Library of Theses and Dissertations, Clinical Trials, Comprehensive Cancer Information (NCI), Brazilian Registry of Clinical Trials (ReBEC) and Google Scholar.

For this purpose, descriptors and synonyms were used, in accordance with the Health Sciences Descriptors (DeCS), the Medical Subject Headings (MeSH) and the Emtree of Elsevier Life Science (Emtree), as shown in Chart 1. The terms for crossings were assessed together with an experienced librarian from the *Universidade Federal do Ceará* to which the research project is linked. Studies were pre-selected through titles and abstracts and, finally, were selected and included in the sample after complete reading.

We included original studies, with experimental study design, clinical trial research, according to the guiding question, indexed in selected or produced databases and available in other predetermined literature sources, without time and language restrictions. Moreover, we sought studies conducted with women undergoing treatment for breast cancer with radiotherapy, chemotherapy and/or surgery and older than 18 years. The exclusion criteria adopted were other types of cancer, other audience, male breast cancer, and no identification of the EO used.

Critical analysis of the feasibility and validity of studies found by the researcher and the reviewers followed the method described in the Cochrane Manual for the Development of Systematic Intervention Reviews (Cochrane's Reviewer's Handbook), whose instrument was the Review Manager (RevMan) [computer program]. Version 5.4.1, The Cochrane Collaboration, 2020. This is a tool that allows the identification of several types of biases found in clinical trials[15].

RESULTS

A total of 708 studies were recovered, 85 in the databases and 623 in other sources. Of the documents identified, 72 were excluded for being duplicates and 580 for title and abstract when it was found that they would not answer the research question. Then, 56 studies were read in full, and, of these, 49 did not meet the inclusion criteria and seven made up the final sample, as evidenced in the systematic review flowchart, in Figure 1.

Chart 1 - Search strategies according to database, virtual libraries and gray literature. Fortaleza, CE, Brazil, 2022**.**

Database	CINAHL/Ebsco	(“breast cancer” OR “breast neoplasm” OR “breast carcinoma” OR “breast tumor” OR “breast malignancy”) AND (aromatherapy OR “essential oils” OR “aroma-therapy” OR inhalation) AND anxiety
	Cochrane Library	(“Breast Neoplasms” OR “Breast Cancer” OR “Breast Tumors” OR “Neoplasms, Breast” OR “Tumors, Breast” OR “Breast Tumor”) AND (“Oils, Volatile” OR Aromatherapy OR “Essential Oil” OR Aromatherapies OR “Aroma Therapy” OR “Aroma Therapies” OR “Therapies, Aroma” OR “Therapy, Aroma”) AND Anxiety
	PubMed/MEDLINE	
	Scopus	
	Web of Science	
	Embase	(‘breast tumor’/exp OR ‘breast neoplasms’ OR ‘mammary tumor’ OR ‘mammary neoplasms’ OR ‘breast tumor’ OR ‘breast tumour’ OR ‘female breast neoplasm’ OR ‘female breast tumor’) AND ‘essential oil’/exp AND (‘anxiety’/exp OR ‘anxiety’)
Other data sources	Traditional, Complementary and Integrative Medicines	(“*Neoplasias da Mama*” OR “Breast Neoplasms” OR “*Neoplasias de la Mama*”) AND (*Aromaterapia* OR Aromatherapy OR *Aromaterapia*) AND (*Ansiedade* OR Anxiety OR *Ansiedad*)
	OpenGrey	“Breast Neoplasms” OR “Breast tumor” AND “Oils, Volatile” OR “Essential Oil” AND “Anxiety”
	CAPES Bank of Theses and Dissertations	**“***cancer de mama*” OR “*cancer da mama*” OR “*mama - cancer*” AND *ansiedade*
	Brazilian Digital Library of Theses and Dissertations	*“cancer de mama” E “oleos essenciais” E “oleo essencial” E “Cancer da mama” E “mama - cancer” E “mamas - cancer”*
	Clinical Trials	Breast Cancer Female AND Anxiety AND Oils, Volatile OR Essential Oil
	NCI	(aromatherapy OR essential oil) AND anxiety
	REBEC	aromatherapy
		essential oil
	Google Scholar	anxiety AND “aroma therapy” AND “breast cancer patients”
		anxiety AND “aromatherapy massage” AND “breast cancer patients”

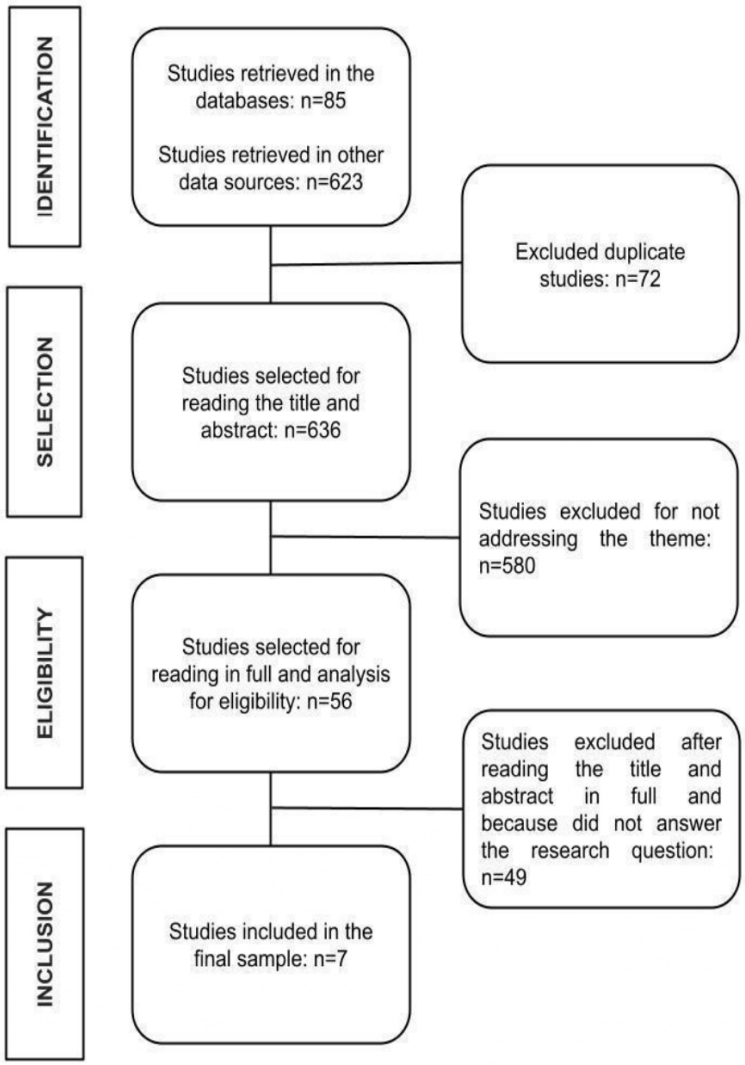

Figure 1 - Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart of the study inclusion process. Fortaleza, CE, Brazil, 2022**.**

The articles produced were published from 2005, with more recent dissemination in 2019. The surveys were conducted in the following countries: two in Korea, one in Japan, one in the Philippines, one in the United Kingdom, one in Turkey and one in China, with a predominance of English and Korean in the writing of the studies. As for the total number of participants among the documents included, it was 575 patients, and the samples varied between 12 and 284 participants. Regarding women's age, it ranged between 18 and 86 years. Chart 2 presents the authorship, the sample of participants, the intervention used, the exposure time and the main results.

As for the types of interventions, it was found that aromatherapy by inhalation was used in four studies (S1, S2, S4, S5) and by massage in three (S3, S6, S7). Fifteen types of EO were observed in the included studies: lemongrass (*Cymbopogonflexuosus*), neroli (*Citrus aurantium*), grapefruit (*Citrus paradisi*), bergamot (*Citrus bergamia*), frankincense (*Boswelliaerrata*), geranium (*Pelargonium*), lemon (*Citrus limonum*), lavender (*Lavandulaangustifolia*), rosewood (*Anibarosaeodora*), rose (*Rosa damascena*), sweet orange (*Citrus aurantium*), sandalwood (*Santalumalbum*), ylang-ylang (*Cananga odorata*), asparagus (*Asparagusofficinalis*). Among the carrier oils used for massage, jojoba and coconut oils were identified.

Chart 2 - Characterization of studies according to information from the aromatherapy performed. Fortaleza, CE, Brazil, 2022. (n=7).

Study code	Sample	Intervention used in the IG	Exposure time	Main results
S1[16]	80 participants divided into 2 groups of 40 each.	Gaze with three to four drops of lavender EO§ was used for inhalation.	20 minutes	There was a statistically significant difference in IG† ($p<0.05$), while in CG* there was no statistically significant difference ($p>0.05$).
S2[10]	100 participants divided into 4 groups.	Aromatherapy was prepared according to the proportions 1:2:3, choosing three types of EO§: lavender, bergamot and geranium.	30 minutes	During anesthetic recovery, the anxiety of patients in IG†, post-surgery at T2 and T3, decreased significantly, compared to CG* ($p<0.05$).
S3[17]	284 participants divided into 135 in the IG† and 149 in the CG*.	Individualized mixture of 1% of EO§ (lavender, lemongrass, neroli, grapefruit, bergamot, frankincense, sandalwood) for each patient.	1 hour	Mean anxiety scores improved in IG† to 5.2 (95% CI‡: 4.41 to 5.99), remaining relatively unchanged in CG (7.07) (95% CI‡: 6.27 to 7.87).
S4[18]	34 participants, 17 in the IG† and 17 in the CG*.	EO§ ylang-ylang was placed only once in the diffuser, before the start of chemotherapy sessions.	30 minutes	A significant reduction in the state of anxiety was observed in IG†. While in CG*, only those who had moderate anxiety showed improvement.
S5[19]	33 participants were divided into three groups (IG†-1, IG†-2 and CG*).	IG†-1: three times a day for six weeks. Lemon, lavender, rosewood and rose EO§ were mixed and inhaled in a 1:1:1:1 ratio. IG†-2: once a day, lemon, lavender, rosewood and rose EO§ were mixed and inhaled for 2 minutes. CG*: inhaled tea tree oil once a day for two minutes.	2 minutes	There was statistical significance in the results of IG†-1 and IG†-2, in which the level of anxiety was lower than in patients in the control group.
S6[20]	12 participants in only one group.	Massage with jojoba oil associated with EO§ in the neck and chest, back, shoulders, arms, hands and thighs.	30 minutes	Anxiety level was gradually reduced over time and there were significant differences between anxiety scores one month before the massage and immediately before the eighth massage ($p<0.05$).
S7[21]	32 participants, 15 in the IG† and 17 in the CG*.	Massage with frankincense, bergamot and lavender EO§, in a 1:1:2 ratio, mixed at 4% with jojoba, a carrier oil. Hand massage was performed.	10 to 20 minutes	There was statistical significance ($p=0.008$) in the degree of anxiety in patients with breast cancer. Number of associated symptoms and degree of depression decreased significantly after two weeks, but in CG* increased.

*Control Group; †Intervention Group; ‡Confidence Interval; §Essential Oil.

Inhalation aromatherapy corresponded to 57.1% of the sample included in this review. The time of exposure to the intervention was different in the surveys, ranging from 2 to 30 minutes. As for the way in which the oils were presented, they were offered through a diffuser (S4) and gauze (S1, S2). Regarding the frequency of interventions, it varied from 1 to 3 times a day, and the duration varied from one day to six weeks.

Regarding the studies that used aromatherapy with massage (42.8%), the technique was performed in three ways: 30 minutes twice a week for four weeks (S6); one hour a week for six weeks (S3); and 10 to 20 minutes twice a day for two weeks (S7). Among the included studies, only one study indicated a qualified aromatherapist for the intervention (S3), and another a qualified nurse for guidance on EO use (S5).

It was evidenced that aromatherapy massage improved anxiety symptoms in the three studies that applied the technique (S3, S6, S7), while inhaled aromatherapy improved anxiety symptoms in three other studies (S1, S2, S4). Whereas one study reported that there was a significant reduction in both intervention groups and in the control group (S5).

Regarding the risks of bias in the studies included in the review, presented in Chart 3, the generation of random sequences showed that more than 50% of studies had low risk, 28.5% had an uncertain risk and 14.2% had a high risk of bias. Allocation concealment showed low risk (14.2%), high risk (28.5%) and uncertain risk (57.1%). As for the blinding of participants and professionals involved, there was a part of studies that presented low risk (14.2%), high risk (71.4%) and uncertain risk (14.2%). Regarding the blinding of the outcome evaluators, there was high risk (57.1%) and uncertain risk (42.8%). Finally, incomplete data showed more than 50% low risk and 42.8% of uncertain risk. With regard to selective reporting, all were judged to be at low risk of bias. Finally, in the item risk of other biases, 90% had a low risk of bias, and 14.2% had a high risk of bias.

Chart 3 - Risk of bias of studies included in the review. Fortaleza, CE, Brazil, 2022**.**

Studies	Risks of bias						
	Random sequence generation	**Allocation concealment**	**Blinding of participants and professionals**	**Blinding of evaluators**	**Incomplete outcomes**	**Selective outcome reporting**	**Risk of other biases**
S1	Low risk	High risk	High risk	Uncertain risk	Uncertain risk	Low risk	Low risk
S2	Uncertain risk	Uncertain risk	Uncertain risk	Uncertain risk	Low risk	Low risk	Low risk
S3	Low risk	Low risk	High risk	Uncertain risk	Low risk	Low risk	Low risk
S4	High risk	Uncertain risk	High risk	High risk	Low risk	Low risk	Low risk
S5	Low risk	High risk	High risk	High risk	Uncertain risk	Low risk	Low risk
S6	Uncertain risk	Uncertain risk	High risk	High risk	Uncertain risk	Low risk	High risk
S7	Low risk	Uncertain risk	Low risk	High risk	Low risk	Low risk	Low risk

DISCUSSION

The discussion about ICHP has expanded and matured considerably in recent decades. The search for these approaches is based on the integration between medicine and traditional knowledge, biomedical practice and the reduction of the side effects of treatments[22].

In this sense, this research revealed that aromatherapy use can favor the well-being of women with breast cancer. This audience may have reduced anxiety when receiving interventions with aromas. Therefore, nurses and other health professionals will be able to adopt this complementary therapy in their practices.

The studies included in this systematic review (SR) used aromatherapy techniques through inhalation and through massage or a combination of both methods. All research showed reduced anxiety in participants who were given scent inventions. These results are in line with the conclusions of a study carried out in China, which showed an improvement in anxiety and pain in breast cancer patients during the operative periods, when undergoing aromatherapy combined with other relaxation techniques[23].

As for the EO applied, the results of this research revealed high heterogeneity in the aromas of interventions in women with breast cancer, since fifteen different EO were used. A scoping review presented a similar conclusion, as it found that, according to the scientific literature, several EO can be implemented to improve the care of women with gynecological and breast cancers[24].

It is also worth noting that in view of the botanical choices of the authors, the Citrus genus had a greater predominance in the studies included in this SR, such as neroli, sweet orange, lemon, bergamot, grapefruit EO. This may be related to the fact that they have sedative, analgesic, anti-inflammatory and antidepressant effects on the activities of the hypothalamus, hippocampus and piriformis[12].

Despite this affinity for handling natural products and by-products, especially the Citrus genus, the mechanisms of action still need to be better established, since Brazilian research reports potential modulation in synaptic plasticity and reduction in the activity of the Hypothalamus - Pituitary - Adrenocortical (HPA) axis[12].

Most studies presented in the results of this SR used inhaled aromatherapy and indicated a decrease in anxiety in the participants of the investigations. A meta-analysis carried out in 2020 supported the findings of these studies by showing that the administration of aromatherapy by inhalation, especially with lavender, can significantly reduce anxiety and pain[25].

Furthermore, in the studies listed in this SR, the lavender EO demonstrated benefits for the symptom of anxiety in women with breast cancer, which corroborates other findings in the literature, in which the use of this EO in multiple groups is reported, with the aim of reducing anxiety, calming, relaxing and improving sleep quality[26–27].

The Citrus genus and its products have a potential anxiolytic action, which is in line with the results of this SR, in which the authors used this genus in conjunction with other EO and did not report adverse effects or inefficiency of EO in patients. Also[12], a study found the effectiveness of aromatherapy in reducing stress and anxiety levels by applying lavender, geranium and bergamot EO.

Therefore, EO use, through diffusers in environments, can be a promising resource to reduce the stimuli interpreted by the areas of the cortex and promote collective spaces of comfort for patients, having seen that the areas of perception and memory can receive the olfactory stimulus coming from the aroma and interpret it as a less hostile environment and likely to relax.

Dermal application has also shown positive results in three studies[17,20–21], which converges with the literature, as aromatherapy massage is one of the most popular complementary therapies in nursing, being non-invasive, low-cost and simple to apply[28].

Thus, there is the possibility of applying aromatherapy via inhalation or massage safely. The studies did not register complications associated with aromatherapy use, which suggests that under professional guidance, aromatherapy proves to be a safe and favorable practice for clinical and home spaces in the care of the researched audience.

Although the understanding and information produced are still barely perceptible, which was evidenced by the crossings, the bases selected and the results obtained in this SR, health professionals must increasingly engage in order to demystify the science surrounding aromatherapy, in order to broaden the understanding of safe and effective practices for the scientific and non-scientific community in the face of empiricism and the denial of the effectiveness of this technique.

It is noteworthy that due to the high costs imposed on the health system, the treatment of various complications and symptoms associated with cancer treatments, through integrative and complementary therapies, can be a bridge between modern and traditional medicine for female oncology care.

In quality of clinical trial analysis, the risk of bias presented a high potential for risk of bias related to the criteria for blinding participants and professionals, blinding of outcome assessors due to the non-blinding of the intervention, uncertain risk of bias for allocation concealment, as it did not clearly describe the information and, finally, low potential for bias related to the specifications of the criteria for generating the random sequence, incomplete outcomes, selective outcome reporting and other sources of bias, mainly because study protocols were available, pre-specified primary outcomes that are of interest to the review were reported, and because they are free from other sources of bias.

It can be noticed the scarcity of information regarding the description of the procedure adopted to obtain the EO, the assessment of the physical-chemical and biological properties of the EO used, as well as the description of the methods to generate sequences of random allocation, the calculation of sample size and limitations.

The results of this SR encourage reflection on the effectiveness of the researched therapy, given the multiple EO and form of application. However, the outcomes reveal the chemical potentials of EO for anxiety symptoms as well as they do not exclude the possibility of associating EO through aromatherapy with other therapeutic practices. They make it possible to analyze, in a more specific way, and assess which EO can present satisfactory results, being used alone or associated with other practices, in order to provide significant reductions in anxiety levels in women with breast cancer.

Thus, this study presents as contributions to clinical practice and research in nursing, the fact that it can support the practice of health professionals who work with cancer patients, when gathering data on the application of different EO in women with breast cancer, through different routes, and concluding the improvement of anxiety symptoms, which induces the effectiveness of aromatherapy use to provide well-being and, therefore, improves quality of life and coping with the assessed audience's health-disease process.

Regarding the limitations of this SR, the few studies obtained at the end of the crossings, even with the inclusion of gray literature, are mentioned, which can lead to conclusions that are not generalizable, despite what was presented in the discussion with the results and literature.

CONCLUSION

Thus, considering the results found, it is evident the need for studies that further support aromatherapy, because despite the therapeutic potential, the studies' interventions presented divergent methods, which makes reproducible methods that cover administration, time to provide the desired effect of reducing anxiety, choice and quality certifications of the EO used, possible interferences and associations of EO in chemotherapy treatments difficult.

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NOTES

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