

Aromatherapy in Early Palliative Care for Oncology Patients

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Early Palliative care

- the active holistic care of individuals across all ages with serious health-related suffering due to severe illness
- It aims to improve the quality of life of patients, their families and their caregivers

(International Association for Hospices and Palliative Care 2019)



Complementary therapies

- supportive measures that control symptoms and enhance wellbeing overall patient care.
- interventions as surgery, chemotherapy, and radiotherapy tend to be biologically potentially harmful and extremely costly.
- On the other hand; complementary therapies are proven safe and effective



Aromatherapy: The Oldest Form of Medicine

- Form of complementary and alternative medicine (CAM)
- Demonstrate a simple, low-risk and cost-effective method physically and psychologically beneficial in a general hospital setting
- Antioxidant properties
- Improve the lymph circulation and detoxify the body



Lavender essential oil

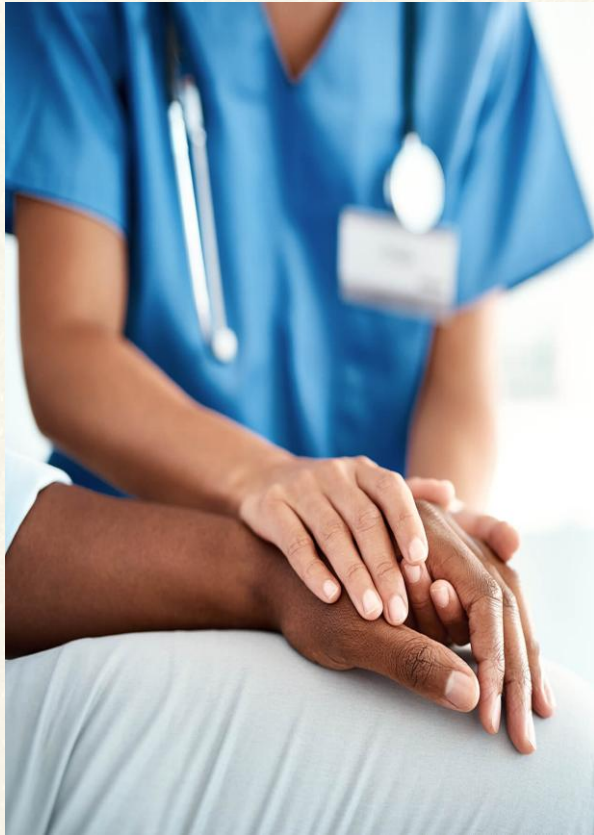


The most used essential oil in the world today

- the benefits of lavender were actually discovered over 2,500 years ago. The Egyptians used lavender for mummification and as a perfume.



Introduction



- Palliative care, a crucial component of cancer treatment, focuses on alleviating suffering and enhancing quality of life for individuals with serious illnesses. Aromatherapy, a complementary and alternative medicine practice utilizing essential oils, has gained attention as a potential palliative care intervention for oncology patients.



Significance of the Study

1 Aromatherapy's Potential

Numerous studies have explored aromatherapy's impact on cancer patients' mood, quality of life, and physical symptoms. However, research on combining inhalation and massage therapy for early palliative care is limited.

2 Addressing a Gap

This study aims to fill the gap by investigating the effectiveness of combining combining aromatherapy inhalation and massage therapy in managing early managing early complications of chemotherapy or radiotherapy.

3 Focus on Lavender Oil

While some research has examined lavender oil's efficacy in early palliative care, palliative care, this study develop deeper into its potential benefits for oncology oncology patients.

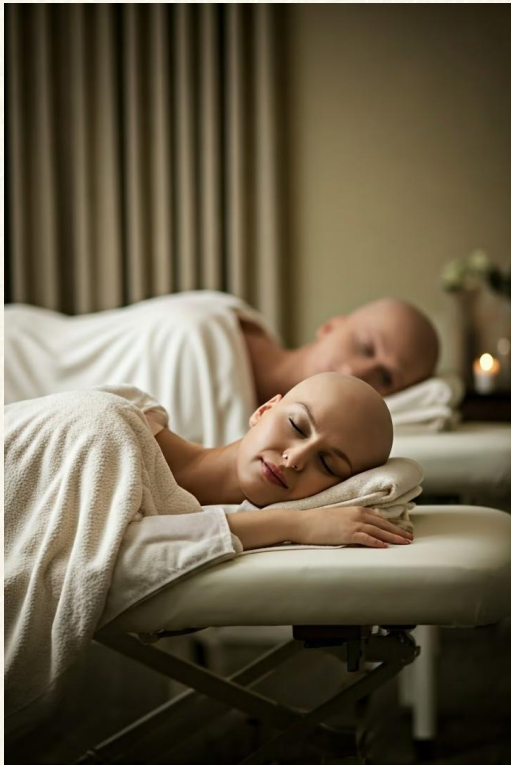




Aim of the Study



Aim of the Study



This study aimed to evaluate the effectiveness of effectiveness of early palliative care for cancer cancer patients by comparing the effects of massage, aromatherapy massage, and massage massage combined with aromatherapy inhalation. inhalation.



Hypotheses of the Study

Hypothesis (a)

Cancer patients receiving standard hospital intervention have higher quality of life scores in early palliative care.

Hypothesis (b)

Cancer patients receiving hand massage with with carrier oil have higher quality of life scores in scores in early palliative care.

Hypothesis (c)

Cancer patients receiving lavender oil hand massage have higher quality of life scores in early in early palliative care.

Hypothesis (d)

Cancer patients receiving combined aromatherapy inhalation and massage have higher quality of life scores in early palliative care.

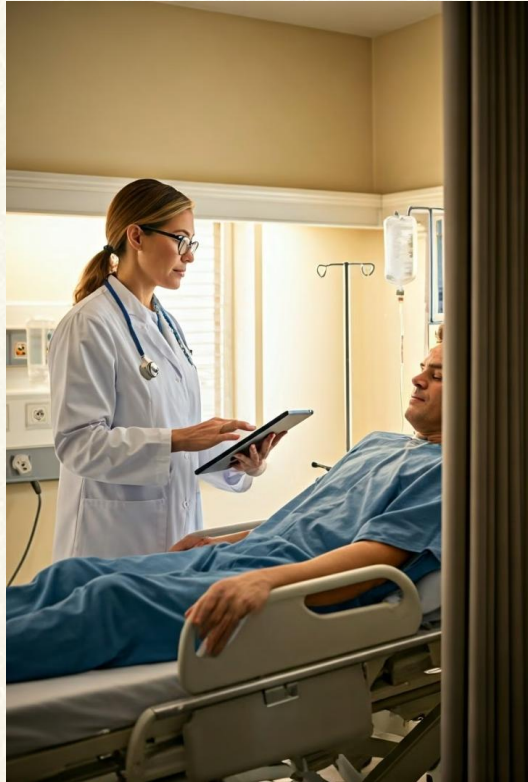




youngLIVING

Lavender (*Lavandula angustifolia*) MONA, UTAH

www.youngliving.com

**1**

True Experimental Design

A true experimental, pretest-posttest group design was employed to determine the effectiveness of aromatherapy interventions on the quality of life of oncology patients.

2

Oncology Center in Egypt

The study was conducted at an oncology center in Egypt, providing free international standard services to patients who cannot afford treatment. The center serves approximately 6,000 patients monthly.

3

Sample Selection

A sample of 100 participants attending the oncology center were randomly assigned to assigned to four groups, each receiving a specific intervention for two weeks.

4

Inclusion and Exclusion Criteria

Participants between the ages of 20 and 60 with second- or third-stage cancer, cancer, receiving chemotherapy or radiation therapy more than a month following month following surgery, and potentially receiving hormone therapy were included. Participants with cancer recurrence were excluded.



Instruments and Ethical Considerations

Modified Rotterdam Symptom Checklist (RSCL)

The RSCL, a self-report measure, assessed participants' quality of life in four domains: physical symptom distress, psychological distress, self-care activity level, and overall global life quality. Participants responded on a 4-point Likert scale for physical and psychological distress, a 4-point scale for activity level, and a 7-point scale for overall quality life.

Ethical Approval and Considerations

The study was approved by the ethical committee of Nursing Faculty at Modern University for Information and Technology (Registration No. 15) and the participating oncology center. Participants provided informed consent after understanding the study's objectives. Confidentiality, anonymity, and privacy were ensured, with participation entirely voluntary and the right to withdraw at any time without consequences.





Group 1: Standard Hospital Care

Received standard hospital care.



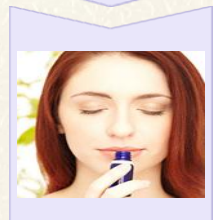
Group 2: Massage Only

Received a hand massage with a carrier (almond) oil three times a week for two weeks. The massage involved stroking and rubbing, lasting 30 minutes each session. Sweet almond oil was chosen for its light texture and absorption.



Group 3: Massage with Lavender Oil

Received a hand massage with lavender oil three times a week for two weeks. The massage technique and duration were the same as Group 2. Lavender oil was chosen for its calming aroma and potential benefits for anxiety and pain.



Group 4: Combined Aromatherapy

Received aromatherapy through lavender inhalation and massage. Inhalation involved adding three drops of lavender oil to boiling water and inhaling the mixture for five minutes, covering the head with a cloth. Lavender oil was also sprayed in the room four times daily and used on a sniff stick during symptom exacerbation.



Procedure of combined Aromatherapy inhalation and massage

- After 200 cc of boiled water was poured into a bowl, 3 drops of lavender oil were dripped in it and the patients were inhaled from an approximately 30-cm distance for 5 minutes.
- Spray patient room 4 times a day with lavender oil
- Put 10 drops of lavender oil on sniff stick for patient to smell when symptoms were severe.
- Combined with gently massage





Procedures

Assessment Phase

An initial assessment of all patients was performed using the RSCL tool to collect baseline data.

Implementation Phase

For two weeks, each group received the following intervention: Group 1 (standard hospital care), Group 2 (hand massage with almond oil), Group 3 (hand massage with lavender oil), and Group 4 (combined aromatherapy inhalation and massage).

Evaluation Phase

The efficacy of interventions on participants' quality of life was reevaluated using the RSCL tool after two months. Comparisons between intervention groups and control groups, as well as pre- and post-intervention comparisons, were conducted.





Data Analysis and Results

Group	Mean Age (SD)	Female (%)	High School Education (%)	Breast Cancer (%)	Radiotherapy (%)	Chemotherapy (%)	Analgesics (%)
Control	52.4 (8.2)	56	36	32	44	60	96
Massage Only	51.2 (7.8)	52	38	34	36	56	92
Massage with Lavender Oil	53.6 (8.9)	58	34	28	40	64	98
Combined Aromatherapy	52.0 (8.5)	54	36	30	42	62	94



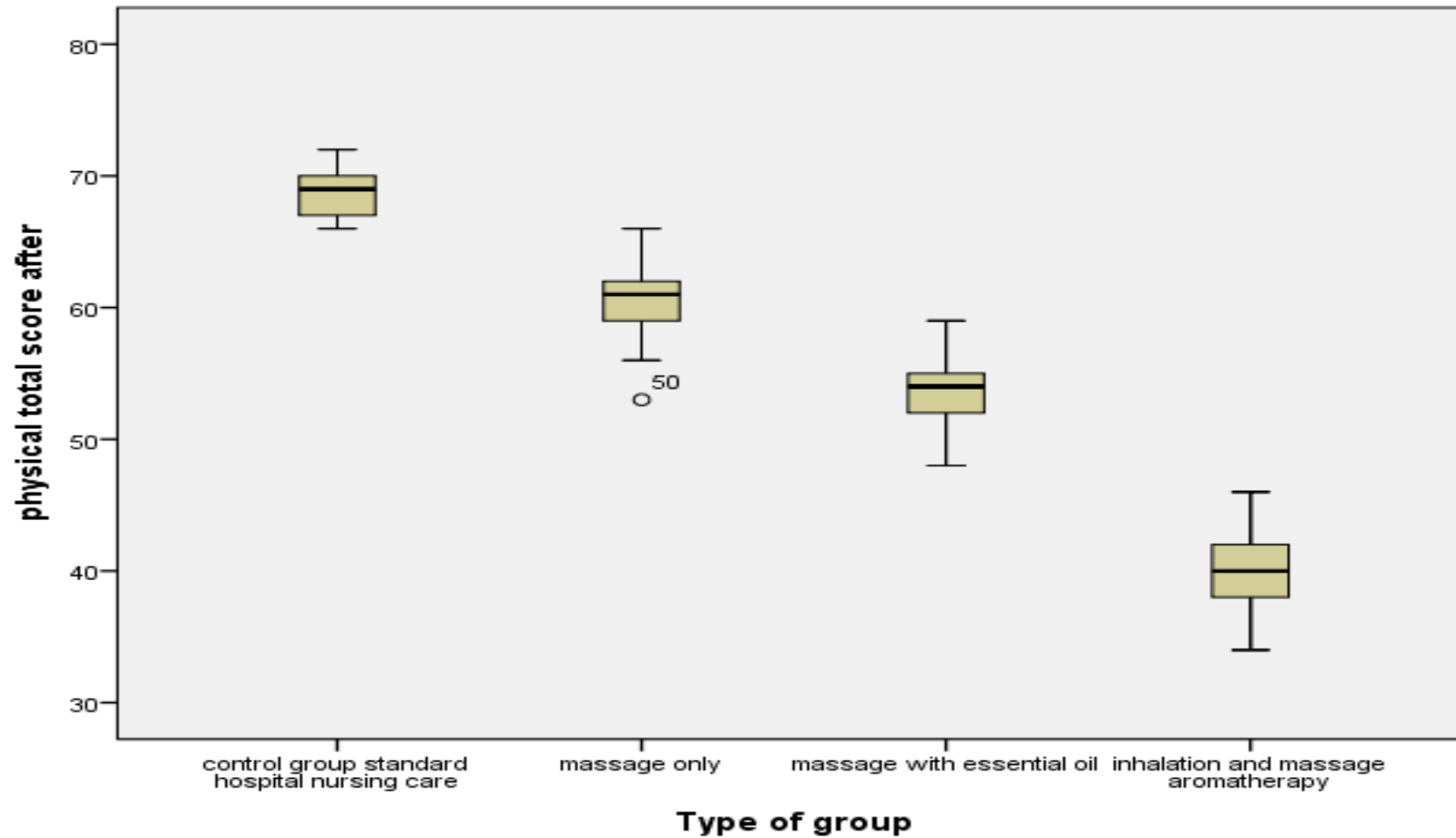
Percentage of Occurrence of Physical Symptoms before and after after Interventions in the Four Groups

Symptoms	Control Group	Massage Only	Massage with Lavender Oil	Combined Aromatherapy
Lack of Appetite	84% to 96%	72% to 52%	64% to 0%	76% to 0%
Low Back Pain	80% to 96%	80% to 36%	80% to 36%	76% to 20%
Nausea and Vomiting	76% to 100%	76% to 56%	80% to 32%	68% to 16%
Tingling in Hands or Feet	20% to 44%	60% to 24%	60% to 0%	52% to 0%
Shortness of Breath	64% to 76%	64% to 76%	60% to 12%	60% - 10%
Burning/Sore Eyes	64% to 80%	65% to 70%	62% to 56%	28% to 32%

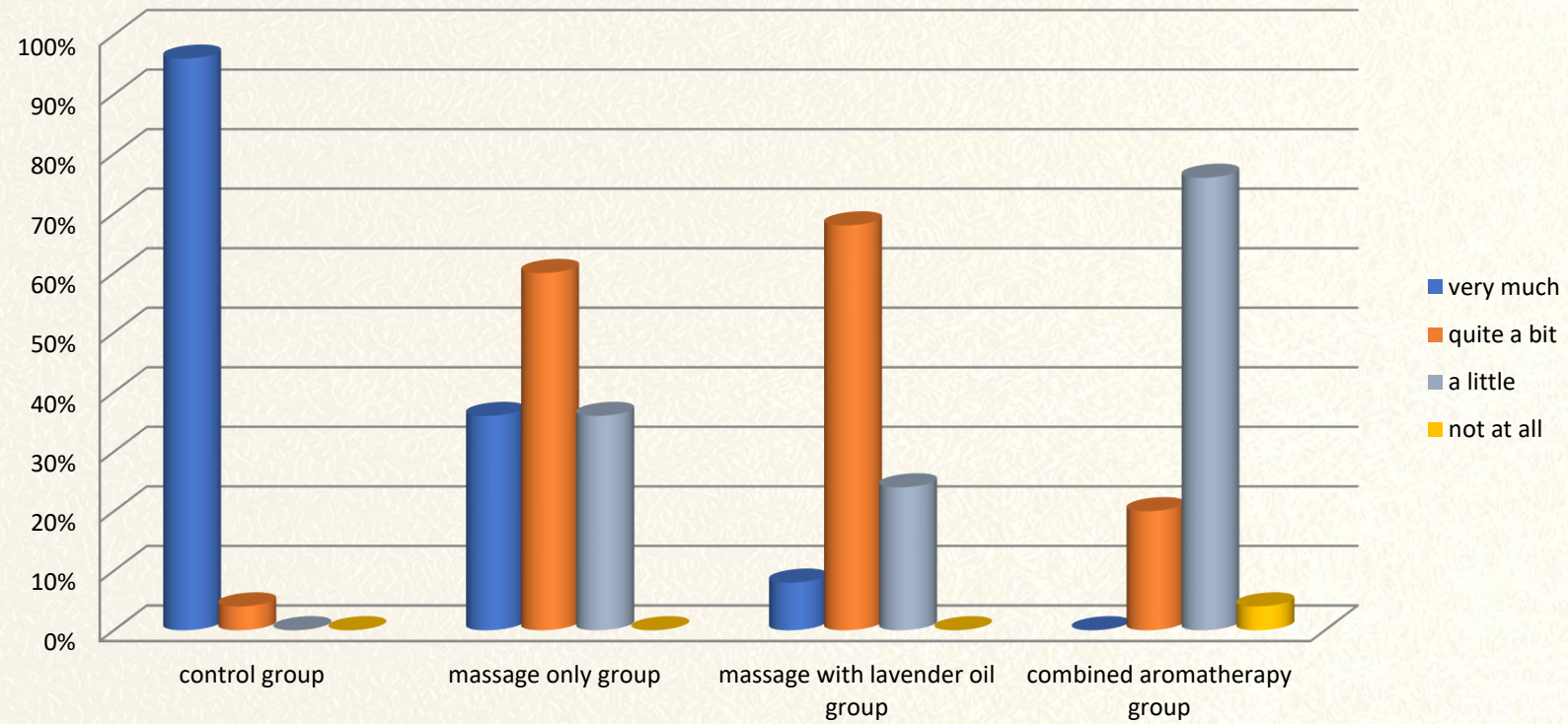




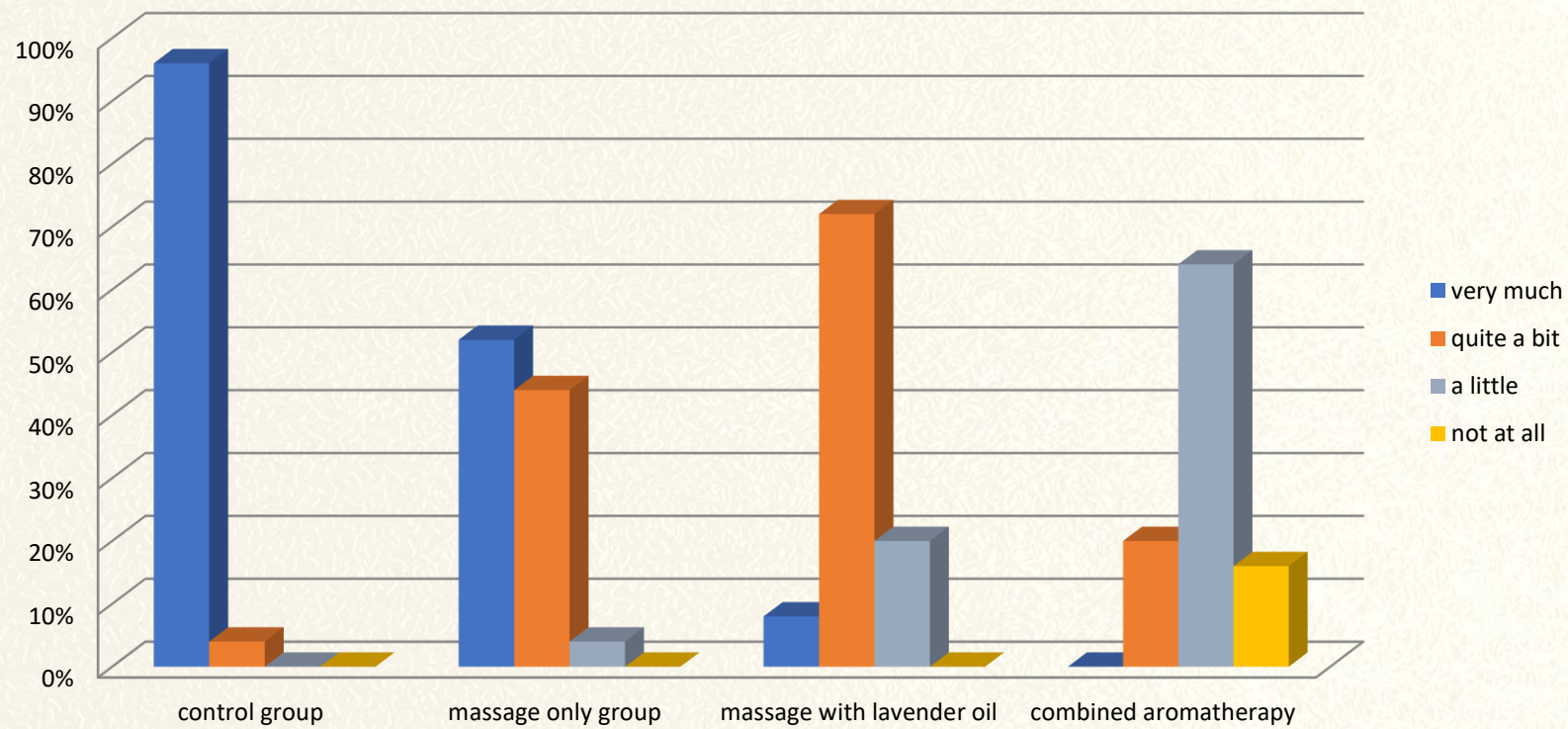
1-Physical total score after interventions



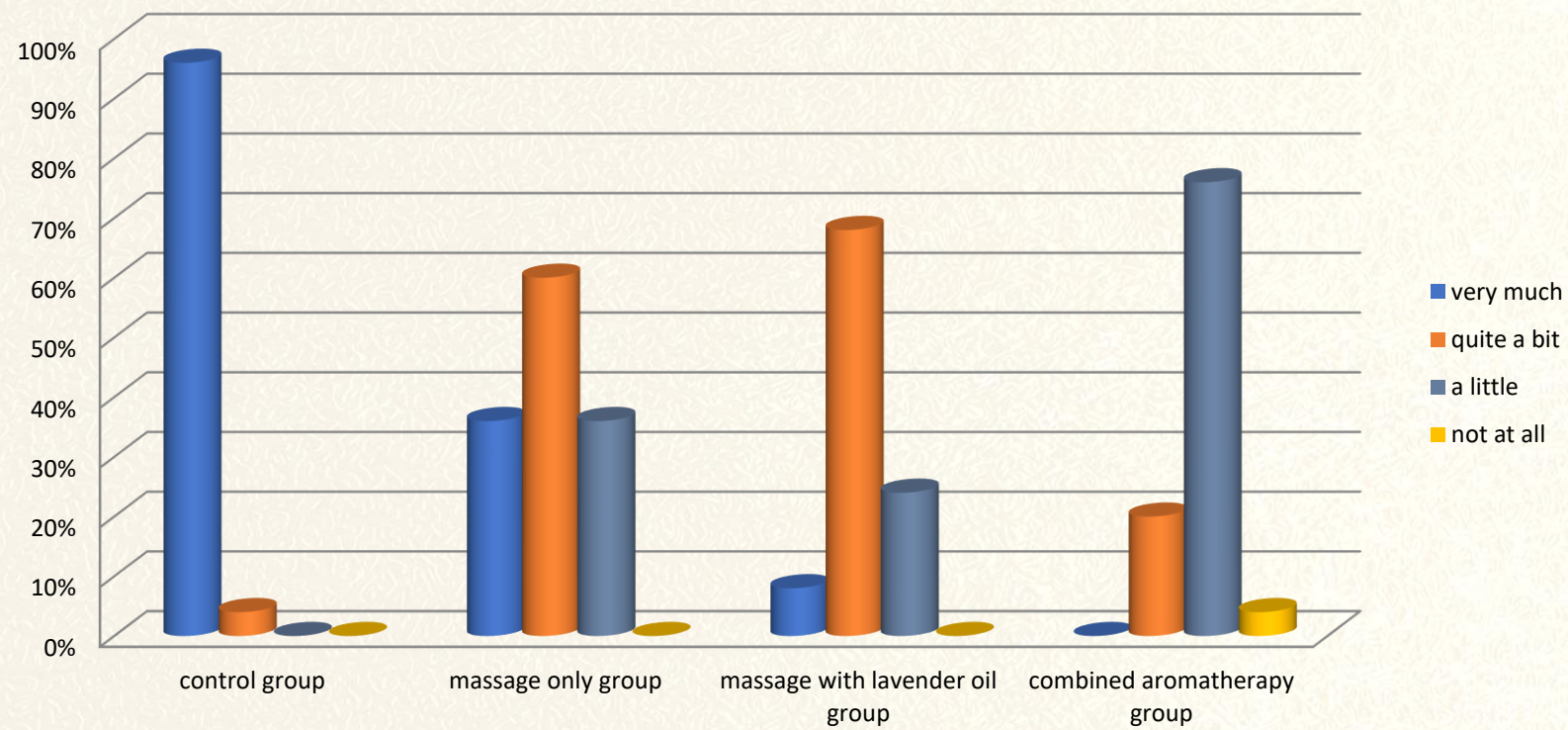
Nausea & vomiting



Lack appetite



Low back pain

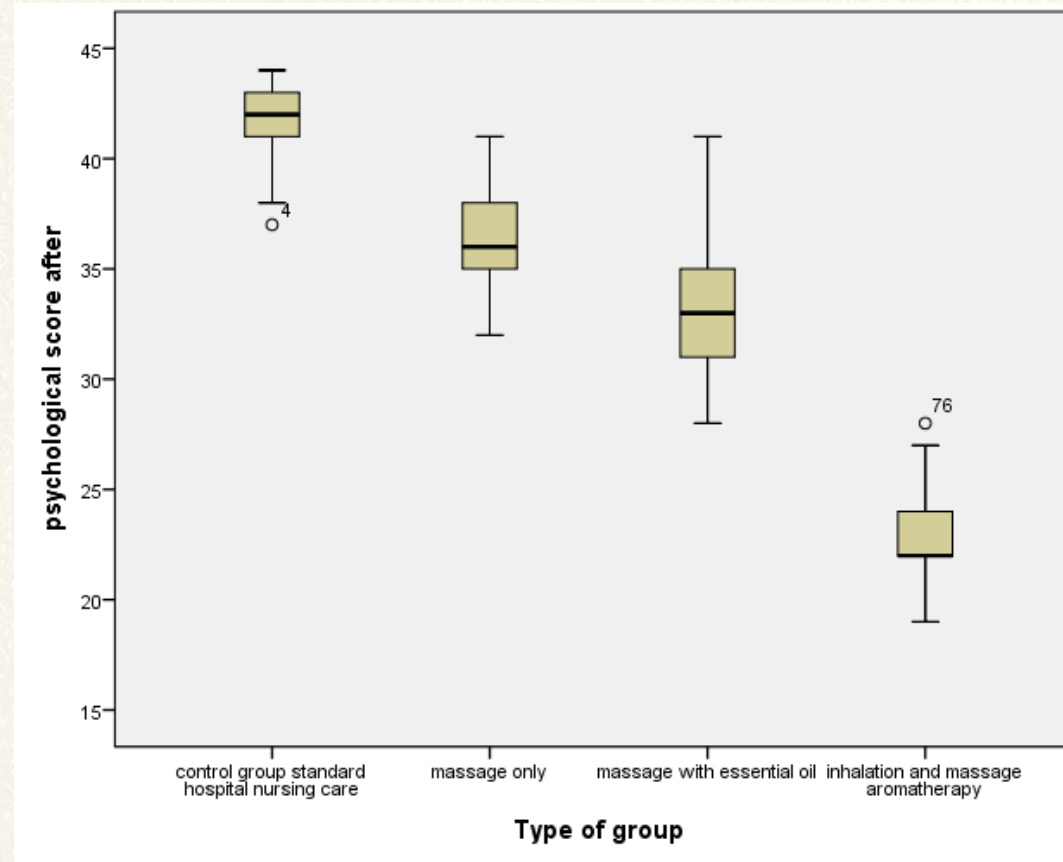


Percentage of Occurrence of Psychological Symptoms and Self-Care Activities before and after Interventions in the Four Groups

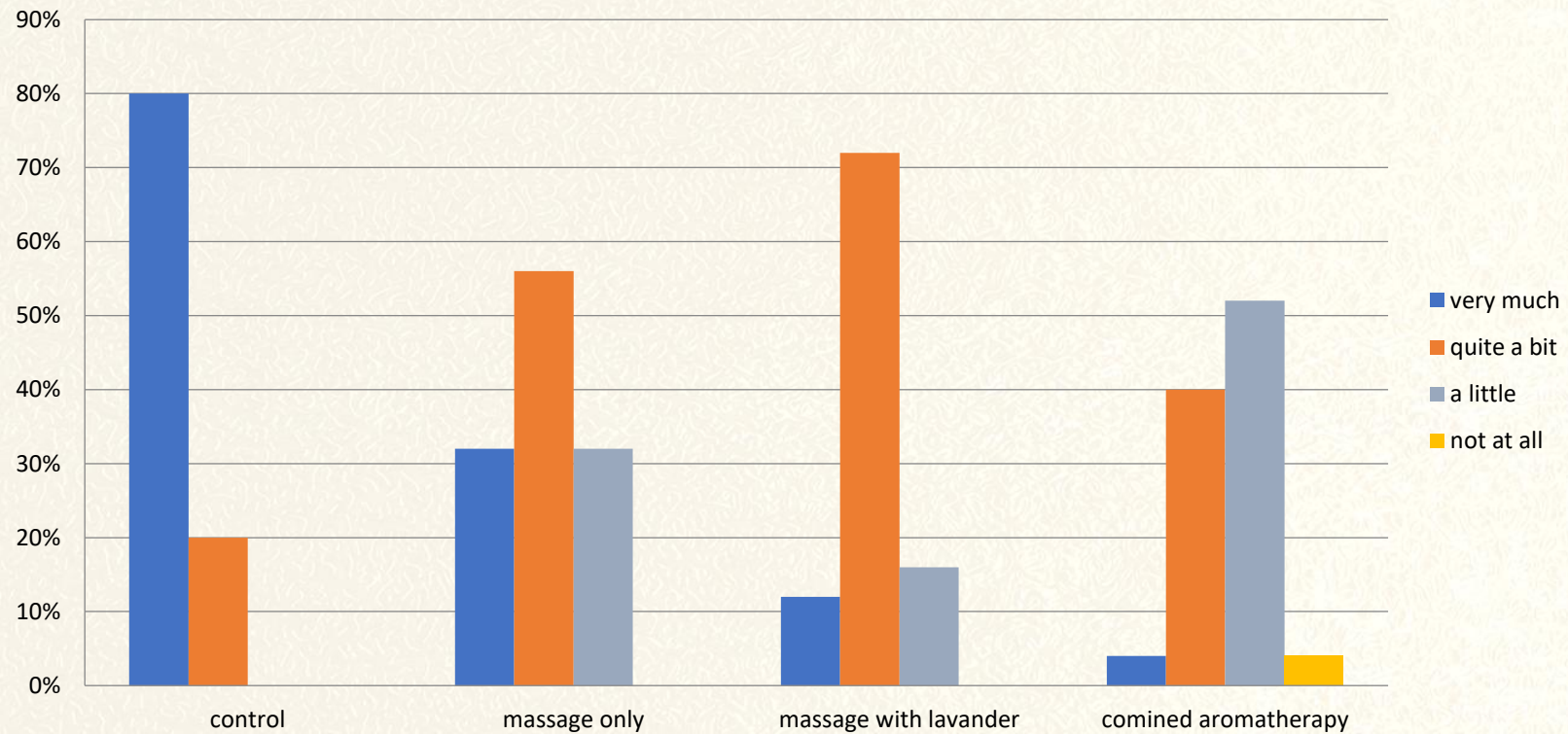
Psychological Symptoms	Intervention Group	after(%)	before (%)
Anxiety	Control Group	Very much: 68%	Very much: 80%
	Massage Only	Very much: 80%	Very much: 32%
	Massage with Lavender Oil	Quite a bit: 16%*	Quite a bit: 72%
	Combined Aromatherapy	Not at all: 0% **	Not at all: 52%
Irritability	Combined Aromatherapy	Not at all: 0% **	Not at all: 76%
	Control Group	Very much: 40%	Very much: 60%
Difficulty Concentrating	Massage with Lavender Oil	A little: 0% *	A little: 20%
	Control Group	Very much: 44%	Very much: 72%
Sleep Quality Improvements	Combined Aromatherapy	A little: 0%	A little: 60%
Overall Mood Enhancement	Massage Only	Very much: 32%	Very much: 64%



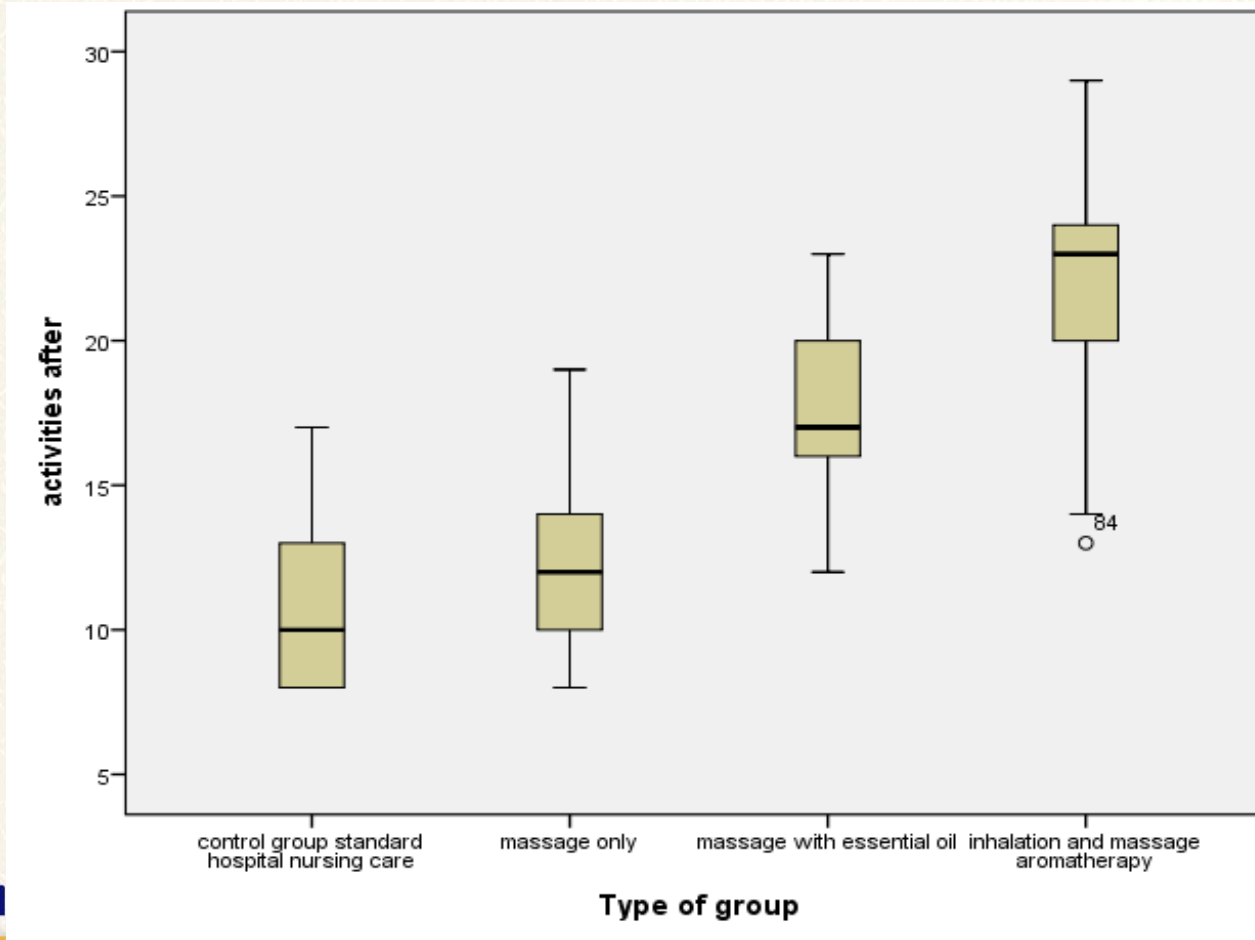
Psychological Symptoms



anxiety percentage

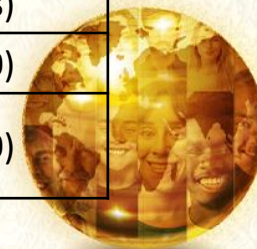


Self-Care Activities



Percentage of Quality of life among Cancer Patients before and after Interventions

Quality of Life	Control Group		Massage Only Group		Massage with Lavender Oil Group		Combined Aromatherapy Group	
	Before	After	Before	After	Before	After	Before	After
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Excellent	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Good	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	5 (20)
Moderately good	3 (12)	1 (4)	2 (8)	3 (12)	4 (8)	3 (12)	4 (16)	10 (40)
Neither good nor bad	5 (20)	6 (24)	5 (20)	9 (36)	8 (32)	13 (52)	7 (28)	8 (32)
Rather poor	7 (28)	8 (32)	8 (32)	9 (36)	8 (32)	5 (20)	8 (32)	2 (8)
Poor	8 (32)	6 (24)	8 (32)	4 (16)	3 (12)	2 (8)	4 (16)	0 (0)
Extremely poor	2 (8)	4 (16)	2 (8)	0 (0)	2 (8)	1 (4)	2 (8)	0 (0)



Conclusions and Recommendations



Symptom Reduction and Quality of Life Improvement

1

Combined aromatherapy demonstrated the most significant reduction in physical symptoms, symptoms, including lack of appetite, low back pain, nausea and vomiting, and tingling in hands tingling in hands or feet. The massage only and massage with lavender oil groups also showed also showed improvements in physical symptom scores compared to the control group.

2

Psychological Symptom Reduction

Combined aromatherapy effectively reduced psychological symptoms like anxiety and irritability. The irritability. The massage only and massage with lavender oil groups also exhibited improvements in improvements in psychological symptom scores compared to the control group.

3

Improved Activity Levels

Combined aromatherapy significantly improved participants' activity levels, levels, indicating a positive impact on their ability to perform daily tasks.

4

No Significant Difference in Overall Quality of Life

While combined aromatherapy showed the most improvement, there was no significant significant difference in overall quality of life scores between the control group and the and the massage only group.



conclusion

- The study's findings suggest that combined aromatherapy inhalation and massage therapy may be an effective intervention for improving the quality of life of cancer patients in early palliative care.
- The combined aromatherapy group showed significant improvements in physical and psychological symptoms, as well as self-care activities, compared to the other groups.
- These findings highlight the potential benefits of aromatherapy as a complementary therapy for cancer patients.



Massage and Aromatherapy's Complementary Effects

Massage's Role

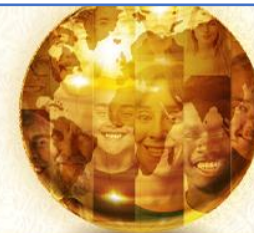
Massage therapy alone, without aromatherapy, also demonstrated a positive impact on physical symptoms and activity levels, highlighting the inherent benefits of massage as a palliative care intervention.

Aromatherapy's Enhancement

The combined aromatherapy intervention, however, exhibited a greater reduction in symptoms and improvements in activity levels compared to massage alone. This suggests that aromatherapy, particularly lavender oil inhalation, enhanced the effectiveness of massage therapy.

Synergy and Individualized Care

The synergistic effect of massage and aromatherapy highlights the importance of considering individualized care plans. Depending on patients' preferences and needs, integrating aromatherapy into massage therapy may offer more comprehensive symptom management and improved quality of life.



Massage Therapy Benefits

The study highlights the positive impact of massage therapy, particularly when combined with aromatherapy inhalation, on inhalation, on physical, psychological symptoms, activity levels, and overall quality of life for oncology patients receiving early receiving early palliative care.

Supporting Aromatherapy Programs

Nurses and other healthcare providers are encouraged to support programs that offer massage therapy to oncology patients, aiming to reduce reported bodily symptoms, psychological problems, and limitations in daily activities.

Further Research

Further research is recommended to investigate the long-term effects of aromatherapy interventions and explore the optimal combination of aromatherapy techniques and massage therapies for different types of cancer and symptom profiles.



1

Longitudinal Studies

Further research is needed to investigate the long-term effects of aromatherapy on quality of life in oncology patients. Longitudinal studies with larger sample sizes and extended follow-up periods are crucial for gaining a deeper understanding of the long-term benefits and potential risks associated with aromatherapy.

2

Other Essential Oils

Exploring the efficacy of other essential oils, including those with anti-inflammatory, analgesic, or anti-nausea properties, could expand the scope of aromatherapy applications in palliative care. This research should be conducted with rigorous methodology and ethical considerations.

3

Patient Education and Empowerment

Developing patient education materials on aromatherapy and its potential benefits in palliative care can empower patients to actively participate in their treatment decisions. These materials should be comprehensive, culturally sensitive, and easily accessible to patients.



- Established a certified national institution for complementary therapy to support new researcher and provide professional care.



Breathe In

Pretend you are smelling a flower.



Breathe Out

Pretend you are blowing a leaf.

