

# THE TABLET: PALLIATIVE CARE PHARMACY TIPS



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If you have a topic you  
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## TODAY'S TOPIC:

### Lavender oil for insomnia in palliative care

#### Background:

Insomnia is a common symptom that negatively affects quality of life of palliative care patients. There are pharmacologic interventions utilized in clinical practice such as benzodiazepines, hypnotics, and antihistamines; however, these medication classes can be accompanied by many adverse effects. Several studies have suggested that lavender can be used in the management of insomnia due to its sleep-promoting effects.

#### Importance:

It is reported in the literature that the prevalence of intense sleeplessness which is reported to be 62% in palliative care patients. In the palliative care population, sleeplessness can increase the severity of other symptoms and may adversely affect quality of life. Lavender has been studied in its use in the management of sleep disorders in varied populations, palliative care clinicians should be aware of the evidence for its use in palliative care-specific population.

#### The Literature:

[Complement Med Res. 2020;27\(5\):328-335.](#)

#### **The Effect of Lavender Oil on Sleep Quality and Vital Signs in Palliative Care**

**Objective:** Determine the effect of lavender oil on sleep quality and vital signs in palliative care patients

**Methods:** RCT; n=68 (34 lavender, 34 control group); average age ~67 yo in palliative care unit

- Lavender intervention: 10 deep breaths from 3 mL of 100% pure lavender oil prepared in a small glass bowl before bedtime at 10:00pm; bowl was then placed 1 meter away from the patient between 10:00pm and 6:00am on their nightstand
- Study took place over 3 nights in which lavender intervention was performed on the 2nd and 3rd night

#### Outcomes:

- Sleep quality assessed by self-reported Richards-Campbell Sleep Questionnaire
- Vital signs collected by nurse with Nurse Follow-Up Form

#### Results:

- The frequency of awakening decreased in the experimental group on the first day of the intervention compared to the control group ( $p < 0.05$ )
- On Day 2, those who utilized lavender reported that they slept more “deeply”, fell asleep more easily, overnight awakenings decreased, easier ability to fall asleep after awakening, and overall sleep quality mean scores were higher compared to control group and statistically significant ( $p < 0.05$ )
- No significant difference was found between the vital signs before intervention, after intervention on the 1st day and 2nd day of the experimental and control groups ( $p > 0.05$ )

**Conclusion:** “Lavender has no effect on the vital signs of palliative care patients but is an effective and reliable approach to enhance their sleep quality. The use of lavender may be recommended for the management of sleep problems of palliative care patients.”

[Clin J Oncol Nurs. 2018 Apr 1;22\(2\):203-210.](#)

#### **Aromatherapy: The effect of lavender on anxiety and sleep quality in patients treated with chemotherapy**

**Objective:** examined the effects of lavender oil aromatherapy on anxiety and sleep quality in patients undergoing chemotherapy

**Methods:** RCT; n=70; (30 lavender, 20 tea tree oil, 20 control); Outpatient setting

- Three drops of lavender or tea tree oil were put onto a piece of cotton that was placed on each patient’s neck and shoulders, about 10 inches below the nose for 30 days

#### Outcomes:

- State of anxiety and depression assessed with the self-evaluation State-Trait Anxiety Inventory (STAI), Sleep quality with the self-reported Pittsburgh Sleep Quality Index (PSQI)

#### Results:

- No difference in trait anxiety levels among patients in the tea tree oil and control groups at the first and second assessments, whereas the trait anxiety levels of patients in the lavender group significantly decreased by the second assessment
- The use of lavender significantly increased the sleep quality of patients with cancer, based compared to the other two groups however no statistical difference was found between the lavender and control groups

**Conclusion:** Lavender oil inhaled nightly before sleep reduced patients’ trait anxiety levels and improved sleep quality

#### Bottom Line:

- Overall *perceived* sleep quality is improved with the inhalation of lavender before and during sleep
- Lavender intervention can include deep breaths of lavender oil before bed or placing it near the patient during sleep
- All assessments of patient’s sleep quality are self-reported, therefore any improvement in sleep quality is perceived
- There were limitations to both articles in terms of their methodology, although given that lavender oil has no reported adverse effects and is generally safe/well-tolerated it seems to be worth a try for patients who are struggling with insomnia
- Interventions have small sample sizes and short durations indicating a need for larger studies

**CLINICAL PEARL:** It is possible that the inhalation of lavender oil before and during sleep can improve patient’s perceived sleep quality in cancer and palliative care patients.