

The Effect of Lavender Aroma Complementary Therapy on Insomnia in the Elderly at Joyah Uken Takengon Nursing Home

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ABSTRACT

Insomnia is a symptom experienced by clients when they have difficulty falling asleep, wake up frequently at night, and wake up too early in the morning. Treatment of insomnia in the elderly can be done pharmacologically and non pharmacologically. One type of non-pharmacological treatment for insomnia in the elderly is complementary lavender aroma therapy. Smelling lavender can make a person relax, making it easy for the elderly to fall asleep. This study aims to determine the effect of complementary lavender aroma therapy on insomnia in the elderly at the Joyah Uken Nursing Home, Central Aceh Regency. This research is a quasi-experimental type using the one group pretest and posttest design method. The population in this study were all elderly people over 60 years of age. The sample in this study used a total sampling technique of 14 elderly. The research instrument used a measuring tool for the study of biological psychiatry, the Jakarta insomnia rating scale, and using the observation sheet. Statistical analysis using paired t-test. The level of insomnia before being given complementary lavender aroma therapy in the elderly was mild 14.3%, moderate 50.0% and heavy 35.7%. The level of insomnia after being given complementary lavender aroma therapy decreased to 42.9% and moderate 57.1%. Hypothesis test results obtained sig value of 0.000 (<0.05). This shows that there is an effect of complementary lavender aroma therapy on insomnia. The conclusion is that there is an effect of complementary lavender aroma therapy on insomnia and it is suggested that lavender aroma therapy can be given as an effort to overcome and reduce insomnia levels in the elderly.

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1. Introduction

Sleep disturbance or insomnia is a condition in which a person experiences difficulty sleeping or wakes up frequently at night or wakes up too early [1]. Insomnia is classified into two categories, namely insomnia with symptoms of difficulty falling asleep and insomnia which is characterized by frequent or easy waking from sleep [2]. Insomnia can be caused by anxiety, tension, pain, caffeine (coffee), medications, emotional imbalance, and anxiety about not being able to wake up on time [3]. The bed environment also has a significant effect on insomnia, such as noise, uncomfortable beds, too light / dark, and unsuitable room temperature. Physical health factors can also cause insomnia [4].

The world's population reports that 30% experience chronic insomnia. There are 1/4 reports that residents in the United States (US) get occasional bad sleep and nearly 10% experience chronic insomnia. Each year it is estimated that about 20-50% of adults report sleep disturbances and about 17% experience serious sleep disorders. In the elderly 40 years, there are 7% of cases who complain of sleep problems. The same problem is also found in the 70 year age group as much as 22%. This elderly group often wakes up early, and there are 30% of 70 year olds who wake up at night (Dayli, 2017).

The prevalence of insomnia in the elderly in Indonesia is quite high, namely 10% of the total population and total population or around 28 million people who experience insomnia. About 67% of the population are over 65 years old. Insomnia is mostly experienced by women, namely 78.1%, aged 60-74 years (Sulistyarini and Santoso, 2016).

The scent of lavender is an essential aromatherapy which is known to have sedative and anti-neurodepressive effects [5] - [7]. Lavender aromatherapy has the main ingredient, namely linalool acetate, which can relax and relax the working system of the nerves and tense muscles [8] - [10]. Inhaling lavender increases the frequency of alpha waves and this state associated with relaxing (relaxation) also helps balance the body's health which is very useful in relieving insomnia [11], [12].

The results of research conducted by Lestari and Wardiyah (2014) at the UPT Panti Werdha Mojopahit Mojokerto concluded that there was an effect of Lavender Aromatherapy on Decreasing Insomnia with p value = 0.000. By showing that of the 15 respondents, before giving lavender aromatherapy all experienced moderate insomnia as many as 15 respondents (100%) and after giving lavender aromatherapy, almost all respondents experienced a decrease to mild insomnia by 14 respondents (93.3%), so it can be concluded that There is an effect of giving lavender aromatherapy on reducing insomnia at the UPT Panti Werdha Mojopahit Mojokerto.

2. Method

This research is a quasi-experimental type using the one group pretest and posttest design method. The population in this study were all elderly people over 60 years of age. The sample in this study used a total sampling technique of 14 elderly. The research instrument used a measuring tool for the study of biological psychiatry, the Jakarta insomnia rating scale and used the observation sheet. Statistical analysis using paired t-test.

3. Results&Analysis

3.1. Results

a) Univariate Analysis

Table 1.
Demographic Data Frequency Distribution

Karakteristik responden	Frekuensi	Persentasi %
Jenis Kelamin		
Perempuan	14	100 %
Laki-laki	0	100 %
Total	14	100 %
Umur		
59-64	5	35,7 %
65-70	9	64.3 %
Total	14	100 %

Based on table 1 above, data shows that all the elderly at the Joyah Uken Nursing Home are female, as many as 14 people. The age distribution of respondents shows that the respondents aged 59-64 were 5 people and respondents aged 65-70 were 9 people.

Table 2.
Insomnia Levels Before Given Lavender Aroma Therapy

Kategori	Frekuensi sebelum	Sebelum (%)	Mean sebelum
Ringan	2	14,3	
Sedang	7	50,0	2,21
Berat	5	35,7	

Based on table 2 above, it was found that before being given lavender aroma therapy, the average elderly experienced moderate insomnia as many as 7 people with 50%.

Table 3.
Levels of Insomnia After Lavender Aroma Therapy

Kategori	Frekuensi sesudah	Sesudah (%)	Mean sesudah
Ringan	6	42,9	
Sedang	8	57,1	1,57
Berat	0		

Based on table 3 above, it was found that after being given lavender aroma therapy, it was found that there was a decrease in the level of insomnia. Previously severe to moderate insomnia levels and moderate to mild insomnia levels. This means that lavender aroma therapy can reduce insomnia levels in the elderly.

b) Bivariate Analysis**Table 4.**

Effect of Lavender Aroma Therapy on Insomnia

Tingkat Insomnia	Mean	N	Std. Deviation	Selisih	p-value
Pretest	29.24	14	6.966	4.81	0.000
Post test	24.43	14	4.183		

Based on table 4 above, the average (Mean) before being given lavender scent is 29.24 and after giving lavender scent to insomnia is 24.43, then the p-value = 0.000 with (<0.05), thus testing the hypothesis fulfilled means that H_a is accepted. So it can be concluded that there is an effect of lavender aroma therapy on insomnia in the elderly at Joyah Uken Takengon Nursing Home.

Table 5.

Percentage of the Effect of Lavender Aroma Therapy on Insomnia

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.901 ^a	.812	.795	3.190	

Table 5 above explains the magnitude of the relationship / correlation which is denoted by (R) which is equal to 0.901. Whereas the R square column explains the percentage of influence before giving lavender scent and after giving lavender scent. From the table above, the coefficient of determination (R^2) is 0.812, meaning that the percentage effect of insomnia levels before and after being given the lavender scent is 81%.

3.2. Discussion

The results of the study before being given complementary lavender aroma therapy at the Joyah Uken Nursing Home showed that all female elderly experienced insomnia. There are 14 elderly who experience insomnia, aged 59-70 years (100%).

The results of research by Agustono (2018) on psychosocial relationships with the incidence of insomnia show that of the 85 respondents who experienced insomnia were 47 women. This is consistent with the theory that insomnia often occurs in elderly women. Hormonal factors play a role in creating this difference, insomnia is a symptom commonly experienced by women when feeling tension during pre-menstrual or menopausal periods even when body temperature is increasing, making it more difficult for women to sleep. Women's feelings are very sensitive and sensitive to things that interfere with their thinking will result in a woman experiencing more sleep disorders than men, (Green, 2009).

The results of the study before being given complementary lavender aroma therapy at the Joyah Uken Nursing Home showed that all female elderly experienced insomnia. There are 14 elderly who experience insomnia, aged 59-70 years (100%).

From the results of the study, it was found that all the elderly who were female at the Joyah Uken Nursing Home experienced insomnia. The cause of insomnia at the Joyah Uken Nursing Home was that psychologically the average elderly said they were lonely and missed their family. The cause of external factors is that the average elderly person does not turn off the lights and does not use special lights to sleep. as well as the elderly complained of the noise from Honda vehicles and cars at night.

The complementary lavender scent therapy is given 7 days for 6 consecutive nights from 21.00 to 05.00. The results of the study after being given the scent of lavender showed a decrease in the level of insomnia of respondents to mild insomnia by 6 people and moderate as many as 8 people.

The results of this study are in line with research conducted by Lestari and Wardiyah (2014) regarding the effect of giving lavender scent on reducing insomnia in the elderly at UPT Panti Werdha Mojopahit Mojokerto, showing that after giving lavender aroma therapy to 15 respondents, 14 respondents experienced mild insomnia and 1 people have moderate insomnia.

Based on the results of observations by researchers on respondents conducted at the Joyah Uken nursing home, it was shown that on the first night and the second night of giving the lavender scent there was no significant change. The elderly still have difficulty falling asleep, have difficulty maintaining sleep, appear restless to nightmares. On the third night until the sixth night the elderly got used to the scent of lavender, making it easier for the elderly to fall asleep. They need 5 to 15 minutes to fall asleep, wake up at night only for midnight prayers and the elderly do not seem restless and have no nightmares.

From the research data that has been conducted by researchers on 14 respondents, the level of insomnia before being given the lavender aroma was obtained an average of 29.24 with std.

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Deviation is 6.966 and the average value after intervention is 24.43 with std. Deviation 4.183. The p-value is 0.000 because the p-value (0.000 <0.05) can be concluded that there is an effect of complementary lavender aroma therapy on insomnia in the elderly at the Joyah Uken Takengon Nursing Home.

These results are supported by the research of Yeni Tri Lestari (2014) regarding the effect of giving lavender aroma therapy on reducing insomnia in the elderly at UPT Panti Werdha Mojopahit Mojokerto where all respondents experienced a decrease in insomnia to mild by 93% and the Wilcoxon sign test results showed that $p = 0.000 < 0.05$ thus it means that there is an effect of giving lavender aromatherapy on reducing insomnia in the elderly

The magnitude of the effect of complementary lavender aroma therapy on insomnia in the elderly at Joyah Uken Takengon Nursing Home is 81% with a decrease of 14 people. This result is supported by Anggraeni's (2009) research on lavender aromatherapy to improve insomnia in the elderly at the Griya Asih Nursing Home using the Wilcoxon test showing $p = 0.001 < 0.05$, thus there is an effect of lavender aromatherapy on reducing insomnia in the elderly with a large reduction of 3, 89.

From the results of research conducted at the Joyah Uken Nursing Home and the results by previous researchers, it was found that complementary lavender aroma therapy can reduce insomnia. Smelling lavender can make a person relax and affect moods so that it makes it easy for the elderly to fall asleep well and sleep quality will be good.

4. Conclusions

From the results of research on the effect of Lavender Aroma Complementary Therapy on Insomnia in the Elderly at the Joyah Uken Nursing Home, Central Aceh Regency, in 2019 there was a level of insomnia before being given complementary lavender aroma therapy, namely 7 people, weighing 2 people, the level of insomnia after being given complementary lavender aroma therapy became mild 6 people, moderate 8 people and there is an effect of complementary lavender aroma therapy on insomnia in the elderly at the Joyah Uken Nursing Home with a sig value of 0.000 (<0.05).

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