

Research Article

The Effect of Essential Oil Therapy and Lemon on the Care of COVID-19 Patients in Jakarta

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Abstract. Due to the rapid spread of COVID-19, the World Health Organization urges countries to continue their efforts to handle the virus strictly. The COVID-19 pandemic has had a significant impact on many aspects of Indonesian people's lives. Almost all sectors, not only health, have been affected, including the economic sector. COVID-19 requires a long treatment time to restore the patient's health. The average length of treatment for COVID-19 patients at the Koja Jakarta Hospital is 14 days. This study aimed to determine the effect of essential oil therapy and lemon on the length of stay of COVID-19 patients at Koja Hospital in Jakarta in 2021. The research was a quasi-experimental case-control study. The 40 participants were COVID-19 patients treated in the isolation room of the Koja Jakarta Hospital in February 2021. Participants were divided into two groups: 20 for the control group and 20 for the treatment group. Univariate results showed that the majority of COVID-19 patients had a length of stay > 10 days. Essential oil therapy and lemon had no effect on the length of stay ($p > 0.05$). It is hoped that nurses can find other alternatives to speed up the length of treatment for COVID-19 patients.

Keywords: essential oils therapy and lemon, long treatment for COVID-19 patients

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Published: 7 February 2022

Publishing services provided by
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Selection and Peer-review under the responsibility of the IVCN Conference Committee.

1. Introduction

The Covid-19 outbreak became a global pandemic after it was announced by the WHO or the World Health Organization, and with its rapid spread, Covid-19 became the main topic worldwide. Indonesia is no exception because the number of people infected with the Covid-19 or Coronavirus increases day by day. The World Health Organization (WHO) urges countries to continue their efforts to deal with the Coronavirus strictly. This was conveyed by WHO in line with reports of spikes in Corona cases in several countries. More than six months into a pandemic, this is not the time for any country to take steps (relax prevention efforts). More than 136,000 new cases were reported worldwide. Nearly 75 percent of the most reported cases of Corona were reported from 10 countries, mainly in America and South Asia [1].

As reported by worldometers.info at 08.00 WIB, Covid-19 cases worldwide today as of Wednesday (9/12/2020) reached 68,538,470 cases. Of these, 1,561,966 people died and 47,438,762 patients have recovered. There are 19,537,742 active cases or patients

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in care spread across various countries. In the United States, the number of Covid-19 cases was 15,583,519 cases, 293,334 people died, and 9,078,636 people recovered. As of today, there are 6,211,549 active Covid-19 cases in the USA. Indonesia was the worst hit by the Covid-19 spike in the Southeast Asia region to date [2].

Until now, the coronavirus (Covid-19) cases in Indonesia have reached 586,842 people, 85,345 people were treated, 18,000 people died, and 484,497 people recovered. There was an addition of 5,292 positive patients within 24 hours. Meanwhile, as many as 4,295 people have recovered from the coronavirus infection. Patients who recovered experienced a decrease of 139 people. The number of patients declared cured on Monday, December 7, 2020, reached 4,431 people. The accumulation of patients who have recovered from infection per day has reached 483,497 people. While the number of deaths until this afternoon reached 133 people. This number has increased from the previous case of 127 people [3].

DKI Jakarta with the highest addition of positive corona cases every day. As of December 8, there were 1,194 new positive cases of COVID-19 recorded. Overall, there were 146,621 confirmed positive corona patients in DKI Jakarta on the same day, 2,846 people died, and 132,166 people recovered [3].

The Covid-19 pandemic has had a significant impact on various aspects of Indonesian people's lives. Almost all sectors are affected, not only health. The economic sector has also been seriously affected by the coronavirus pandemic. Restrictions on community activities affect business activities which then have an impact on the economy. The high death rate of doctors, distance learning, economic recession, and many people are losing their jobs due to large-scale restrictions [4].

How to prevent the covid-19 virus is to wash your hands regularly and as often as possible with soap and water or materials containing alcohol will kill viruses that may be on your hands, keep a distance of at least 1 meter from those who are coughing or clean (apply social distancing), avoid touching eyes, nose and mouth, wear a mask correctly and if you have a fever, cough, and difficulty breathing, seek treatment immediately [5].

Anosmia, or loss of the ability to smell, has been identified as the main symptom of Covid-19. Some people experience anosmia for a long time, even after being declared cured. In April, the symptoms, which were first officially recognized as side effects from infection with the SARS-CoV-2 coronavirus by the Centers for Disease Control and Prevention (CDC), can severely affect their quality of life and interfere with their work. To restore the ability of the sense of smell, some patients are doing odor therapy. One organization that offers hope for people who have lost their smell is absent, a British charity that focuses on therapy for anosmia [6].

Currently, there are three times as many people doing odor therapy as before Covid-19 appeared. Smell therapy is a form of physiotherapy for the sense of smell. This therapy aims to increase the sensitivity of the nerves in the nose to respond to odor stimuli better. The odor therapy is carried out using a number of different aromas of essential oils such as rose, lemon, clove, and eucalyptus. The patient sniffed the scent for 20 seconds twice a day for a minimum of four months. Essential oils can be replaced with other strong-smelling substances that you may have at home, such as coffee, spices, etc. The key is to train the sense of smell. A person who loses the ability to smell will affect his mood. This makes people with anosmia feel isolated and less able to enjoy some of the simple pleasures of life, such as the smell of food or enjoying the smell of earth after the rain [6].

Aromatherapy is a recovery therapy using essential oils from herbal plants or flowers to improve health and psychological conditions. According to experts, aromatherapy oils work by activating areas in the nose called odor receptors. These receptors send messages through the nervous system to the brain. The oil is thought by experts to turn on parts of the brain, such as the limbic system, which affect emotions. In addition, essential oils in aromatherapy also have an impact on the hypothalamus. The hypothalamus responds by producing brain chemicals such as serotonin. Previously, combining medical therapy and other methods was widely applied in a number of areas to accelerate the healing of COVID-19 patients. The Palangka Raya Army Hospital, Central Kalimantan, for example, provides pure honey, boiled eggs, and vitamins to help the healing process of COVID-19 patients. The medical team at the TNI AD Hospital believes that pure honey is very effective in helping to increase a person's immune or immune system. Honey is also one of the treatments of ancestral heritage. "Treatment of medicines and food, one of which is ancestral heritage is that pure honey has been proven to greatly help increase immunity and accelerate healing" [5]

Lemon essential oil, RC essential oil, and thieves eucalyptus radiata are aromatherapy with many health benefits. Lemon essential oil cleanses toxins from every part of the body and is widely used to stimulate lymph drainage, rejuvenate energy, purify the skin and act as an insect repellent. RC essential oil is efficacious to overcome respiratory problems such as coughs and colds. Meanwhile, Eucalyptus Radiata has anti-infective, anti-bacterial, antiviral, anti-inflammatory (swelling) properties, and as a phlegm/expectorant [7].

2. Methods

2.1. Design

This study uses a quasi-experimental design with the type of Case-Control research, where this design aims to compare and see the effect of giving essential oil to patients who were given Thieves and lemon essential oil therapy with a control group who did not receive treatment [8].

2.2. Sample

The sample is a small part of the number and characteristics that exist in the population that represent the population (Omega, 2017). The samples in this study were all Covid 19 patients who were treated in the isolation room of the Koja Jakarta Hospital in February 2021 at the time of the study, as many as 40 people. This study using an accidental sampling technique, namely the sampling technique by chance.

2.3. Procedure

Submit a title and a research application.

Request a research permit from STIKes Abdi Nusantara Jakarta

The research permit is given to the related party. In this case, the head of the Koja Jakarta Hospital is submitted.

Provide informed consent to respondents to obtain approval and fill in the researcher's informed consent that will not disseminate respondent data to other parties other than educational purposes.

Ask for permission from the party concerned to collect patient data.

Questionnaire for Data Collection

How to collect data in this study is to use primary data taken directly by researchers from respondents by conducting direct observations. Respondents were divided into 2, namely the control group and the treatment group.

Data Analysis

Data analysis is an analysis of data that researchers have collected through specific methodological devices. In this study, the data that has been collected is then processed and analyzed by statistical techniques. The process of data entry and data processing using computer software applications.

TABLE 1: Distribution of the Frequency of Hospitalization for Covid 19 Patients at the Koja Hospital Jakarta in 2021

Number	Length of Care for Covid-19 Patients	Frequency	%
1.	≤ 10 day	2	5.0
2.	≥ 10 day	38	95.0
	Total	40	100.0

TABLE 2: Frequency Distribution of Thieves and Lemon Essential Oil Therapy at Koja Hospital Jakarta in 2021

Number	Giving Thieves and Lemon Essential Oil Therapy	Frekuensi	%
1.	Those who are treated	20	50.0
2.	Those who are not treated	20	50.0
	Total	40	100.0

3. Results

4. Discussion

Length of Care for Covid 19 Patients

From the results of the study, it can be seen that of the 40 respondents mostly with a length of stay >10 days as many as 38 respondents (95.0%) and respondents with a length of stay ten days, only two respondents (5.0%).

The spokesperson for the Task Force for the Acceleration of Handling Covid-19 said, on average, patients who were confirmed positive took 7-10 days to undergo intensive treatment before being tested negative and sent home. But if we look at the average, 7 to 10 days, from the start, we take positive swab results until the results come out twice in a row negative [8]

In this study, the researcher did not find any previous research, so the researcher could not compare the results of his research. According to the researcher's assumption,

TABLE 3: The Effect of Thieves and Lemon Essential Oil Therapy on the Length of Care for Covid 19 Patients at Koja Hospital Jakarta in 2021

Thieves and Lemon Essential Oil Therapy	Length of Care for Covid-19 Patients						P. Value
	≤ 10 day		≥ 10 day		Total		
	f	%	f	%	f	%	
Those who are treated	0	0.0	20	100.0	20	100.0	0.487
Those who are not treated	2	10.0	18	90.0	20	100.0	
Total	2	5.0	38	95.0	40	100.0	

most of the COVID-19 patients at the Koja Jakarta Hospital have an average length of stay for COVID-19 patients for 14 days. According to CNN Indonesia, there is no definite benchmark for how long a Covid-19 patient can be declared cured. Patients who no longer show symptoms but still tested positive on the second test after undergoing isolation in the hospital for two weeks are welcome to go home and undergo self-isolation for 14 days. If it has been more than 14 days, the isolation period is free. Although still tested positive, within 10-14 days after infection, the virus is generally inactive. This means that the risk of transmission is lower. This was found in a number of studies. In this study, out of 40 respondents, only two patients were found with ten days of hospitalization because they had mild symptoms and no comorbidities, so, within ten days, their swab results were negative and declared cured, so they were allowed to go home.

The Effect of Thieves and Lemon Essential Oil Therapy on the Length of Hospitalization of Covid 19 Patients

From the results of the study, it can be seen that from 20 of the 20 respondents who were treated with Thieves and lemon essential oil therapy, all of them with a length of stay for Covid 19 patients >10 days were 20 respondents (100.0%), and of the 20 respondents who were not treated with essential therapy. oil thieves and lemon most of the length of stay for covid 19 patients >10 days as many as 18 respondents (90.0%)

The results showed that the Chi-Square statistical test obtained a p-value of 0.487 (p. value > 0.05), which means that thieves and lemon essential oil therapy have no effect on the length of stay for Covid 19 patients at Koja Hospital Jakarta.

The results of this study are inconsistent with the theory that some essential oils are even known to help improve immune system function. The whole plant has immunostimulator properties. Plants can increase the work of the immune system to maximize the body's defense response against viruses, bacteria, and other microbes that threaten the body. Essential or essential oils are oils derived from volatile plant extracts that give them a distinctive aroma. Aromatherapy is a complementary medicine concept that uses essential oils to treat or prevent certain diseases through various ways, starting topically, massage, inhaled, or used as a bathwater mixture. Some essential oils that can help increase endurance are eucalyptus, lemon, ginger, papering, thieves, RC, etc. (CNN Indonesia, 2020).

Essential Oils can be helpful as therapy in accelerating recovery and easing symptoms for people exposed to Covid-19. Essential Oil is a natural therapy for the target respiratory tract. So the initial use gives a good response, especially for the respiratory tract, relaxation, clearing the airways. After being evaluated, this essential oil can help relieve

complaints such as loss of smell, shortness of breath, cough, and runny nose. As we know, lately the symptoms of covid are loss of smell to the point of not smell their body odor. It gives excellent response, especially for pregnant, elderly, and comorbid patients, because this vulnerable group is our main concern [9].

In the results of this study, the researchers could not compare the results of other people's studies because the researchers did not find any research journals that examined the effect of Thieves and lemon essential oil therapy on the length of stay of previous COVID-19 patients.

According to the researcher's assumptions, the research results conducted at the Koja Hospital, Jakarta, showed that most of the patients needed treatment > 10 days, and there were no patients with less than ten days of treatment. The results showed that two patients recovered within ten days. The results of this study are in accordance with WHO, which states that the isolation time for coronavirus patients with symptoms of isolation is 13 days, 17 days, and 30 days. In this study, it was not found that thieves and lemon essential oil therapy affected the length of stay for covid 19 patients because the results showed that covid 19 patients who were given thieves and lemon essential oil therapy did not show any difference in their length of stay with patients who were not given thieves' essential oil therapy. And lemons. So it can be concluded that patients who were given Thieves and lemon essential oil therapy had an average length of stay of >10 days. According to its benefits, Thieves essential oil can help the immune system, not as a medicine. If lemon essential oil relieves nausea and most of its benefits are for air freshener, cleaning, and household care. So it can be concluded that thieves and lemon essential oils can relax the body but cannot cure covid 19.

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