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## The Anxiety of Pregnant Women in Post Abortion by Reading Ayatus Syifa and Lavender Aromatherapy



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### Abstract

Pregnancy and abortion can be a stressor that can increase anxiety. The Qur'an is just as a doubt antidote and diseases that are in the chest and it is commonly known as the heart. The Lavender one of essential oil which popular and it is widely used in the field of clinical health which especially addressing psychosomatic in gynecology. The purpose of this research was to determine the potential decrease of anxiety on pregnant women in post-abortion by reading verses syifa and lavender aromatherapy. The research used experimental design of Pre and Post Test-Group with a sample of all pregnant women who had abortion. The total sample was 24 people. The research was conducted in Aisyiyah Hospital and Muhammadiyah Hospital of Ponorogo in June - August 2018. The data analysis used T and Wilcoxon test. The result of data analysis were  $0,003 < 0,05$  and there was comparison between potential decrease of anxiety in pregnant women post abortion by reading verses syifa and giving aromatherapy of lavender. The comparison showed that the potency of decreasing of anxiety in pregnant woman post abortion by reading ayatus syifa and giving aromatherapy of lavender, 38% decreased anxiety level in pregnant woman post abortion because of lavender therapy and 62% was due to other factor. Then 89% decreased in anxiety level in pregnant woman post abortion because of reading ayatus syifa and 11% due to other factor. Research products can be used as media in the treatment of non pharmacological psikomatic in order to support quality of public health.

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## INTRODUCTION

Abortion is a case that often occurs in pregnancy, where the termination of pregnancy by certain causes at or before 22 weeks of pregnancy when the fetus is not able to live outside the uterus. Abortion cases that occur are divided into two types, namely spontaneous abortion and artificial abortion, and all types of abortion that occur in women have a physical or psychological impact on women who experience (Amalia & Sayono, 2015). According to WHO, abortion is a reproductive health problem that needs attention and is a cause of increasing mortality and a source of pressure in women. In the world there are 208 million pregnancies with 41 million experiencing cases of abortion, in developing countries 90% of abortions that occur are 11-13% contributing to an increase in maternal and child mortality. (Purwaningrum.ED, 2017). Based on e Toffol research data, from 742 respondents, 43.4% of women experienced an abortion, of whom 81% had a greater risk of experiencing mental disorders, with 34% of women experiencing abortion, 20.01% experiencing miscarriage and having an impact on anxiety disorders, 16, 01% have psychiatric disorders, and 75% abstain from alcohol (Toffol et al., 2016).

Pregnancy and abortion can be stressors that can increase anxiety. Anxiety is tension, insecurity, and worry that arises because something unpleasant is felt but the source is largely unknown and manifestations of anxiety can result in somatic and psychological changes, being anxious at some level can be considered part of the normal response to overcome the problem daily. However, if this anxiety is excessive and not proportional to the situation will turn into obstacles, and known as obstacles to clinical problems (Fidianty I, 2010). The occurrence of abortion during pregnancy is one of the causes of pressure that can increase anxiety in the mother. Feelings of loss and social burden due to fetal death have an impact on women who experience more isolation and have an impact on anxiety. The experience of abortion carries the risk of arising dominant emotions to face the next pregnancy. Cases of anxiety and emotional distress to some degree can be considered part of a normal response to solving the problem. However, if this anxiety will be unnatural and can be an obstacle because it will become a clinical obstacle (Nia Ariestha A, 2017).

Emotional and psychological effects after abortion often occur, women who experience it will come several psychological phases where the most common are anger, feelings of guilt and shame, loss of confidence (Nia Ariestha A, 2017). Women who experience abortion will usually experience sadness, guilt, high anxiety, depression (Major B, Appelbaum M, Beckman L, Dutton m, Russo n, 2009). In our country, people have assumed that Islamic medicine is one alternative used to cure physical and mental illness. Alquran is a miracle from Allah SWT revealed to the prophet Muhammad PBUH as a guide for all human beings. Lavender is one of the popular essential oils and is widely used in the field of clinical health, especially overcoming psychosomatic problems in gynecology. Chu & Kemper (2001) explain that one of the clinical benefits of lavender in neuropsychiatry is as a sedative, anticonvulsant, anxiolytic agent, and analgesic. Lavender aromatherapy has a psychological therapeutic effect from the aroma inhaled through inhalation of volatile components. The efficacy of lavender aromatherapy has activity through the limbic system, especially in the amygdala and hippocampus. Although the cellular mechanism is not yet known with certainty, lavender has properties similar to benzodiazepines and increases the effects of gamma-aminobutyric acid in the amygdala (Sh, 2012).

In our country the people have considered that Islamic medicine is one of the alternatives used to cure physical and mental illnesses. The Qur'an is a miracle from Allah SWT that was revealed to the prophet Muhammad SAW as a guide for all mankind. A verse of the Qur'an that is read repeatedly will have an impact on peace in the heart and mind (Mar'ati & Chaer, 2017). Aromatherapy from lavender is one of the essential oils that can be used as therapy and is very well known and popular in all circles and is commonly used to treat psychomatic problems in gynecology. Anxiety disorders are some of the most common psychiatric disorders, with potentially debilitating consequences for an individual's functioning.

Based on secondary data, in 2017, the incidences of abortion in Muhammadiyah health charities were 25 cases. According to Gunawan & Sumadino (2007), the inability to plan and develop goals is one of the situations that can cause stress. Stress occurs when the welfare and integrity of a person in one's life is threatened. Abortion is a

psychosocial stressor (an event that causes changes in life) that can cause stress in life, is one of the causes of stress. In general, women who experience post-abortion psychiatric disorders show symptoms of post abortion syndrome such as feelings of guilt, low self-esteem, hopelessness, anxiety, insomnia, dreams about their babies, like daydreaming. (Ratnaniingtyas, Nani d, 2010). Existing pharmacotherapy for anxiety disorders is limited by delayed therapeutic effects, dependence, tolerance, and potential for abuse. Therefore, complementary or alternative therapies are safe and have been proven from various studies. Lavender oil is a lipophilic and concentrated plant extract that exhibits many medicinal properties, lavender essential oil has anxiolytic benefits which have recently been supported by clinical studies. (Malcolm & Tallian, 2017a). The purpose of this study was to determine the difference in the potential for reducing anxiety in pregnant women after abortion by reading ayatus syifa and giving lavender aromatherapy.

## METHODS

This research was experimental research. It used Pre and Post Test-Group design. The research was conducted in Muhammadiyah Hospital and Aisyiyah Hospital in Ponorogo. Based on secondary data, in 2017, Muhammadiyah health charities had an average of 25 cases. Based on this data, the researchers used Muhammadiyah Hospital & Aisyiyah Hospital as study sites. The research was conducted from June - August 2018. For population, the study took all pregnant women who experienced abortion. Then, for samples of this study were all pregnant women who experienced abortions at Muhammadiyah Hospital and Aisyiyah Hospital.

According to Sugiyono (2013), the number of samples for experimental research is between 10-20 elements. The population number in this study cannot be determined in the pre-study period so it used an incidental sampling method where when the study took place if there were pregnant women with abortion then she was directly used as a respondent. This research was to measure the comparison of the level of anxiety reduction in after abortion pregnant women by recitation ayatus the syifa verse and the lavender aromatherapy. The research procedure was 1 group (12 samples) read ayatus syifa and 1 group (12 samples) was given lavender aromatherapy. Before being given the treatment, the respondent's level of anxiety was measured, then given therapy based on the therapy group for 2 weeks provided by researchers who have a mam Spa training certificate and are accompanied by SPA therapists who have worked in the SPA for more than 3 years. The treatment group for reading the syifa verses was given the sifa verse & MP3 the Ayatus syifa and modules (to make it easier for respondents to read), while the lavender aromatherapy treatment group was given diffuser water & lavender oil. The research used the HARS questionnaire instrument to measure variable levels of anxiety uses. Results data were analyzed using the Wilcoxon test ( $\alpha = 5\%$ ). Before the T-test was done, the results of the distribution were tested using Shapiro-Wilk, all statistical tests used using SPSS software version 16.

## RESULT

### 1. Respondents Characteristics

Characteristics of the respondents can be seen in the following Table:

**Table 1 Respondent Characteristics by Age, History of Abortion, History of ANC**

	N	Minimum	Maximum	Sum	Mean	SD
Age	24	19	36	624.00	26	5.77099
Abortion history	24	0	1	4.00	0.1667	0.38069
ANC history	24	0	1	21.00	0.8750	0.33783

Based on the above table it can be explained that the distribution of respondents based on age, the average age is 26 years, the minimum age is 19 years and the maximum age is 36 years.

Respondents who had a history of abortion were 4 respondents, while respondents who did ANC examination were 21 respondents, and those who did not do ANC were 3 respondents.

2. The differences between Reduction of Anxiety in Pregnant Women Post Abortion on Therapy of Ayatus Syifa Recitation and Lavender Aromatherapy Therapy

**Table 2** Statistical Tests Differences between Reduction Anxiety in Pregnancy Women Post-Abortion- on Therapy of Ayatus Syifa Recitation and Lavender Aromatherapy Therapy

Paired Differences	Mean	Std. D	Std. Error Mean	95% Confidence Interval		t	df	Sig. (2-tailed)
				Lower	Upper			
Pre-post lavender	0.83	0.71774	0.20719	0.37730	1.28936	4.022	11	.002
Pre-post ayatus syifa	1.08	0.28868	0.08333	0.89992	1.26675	13.000	11	.000

This research was used to measure the comparison of the level of anxiety reduction in after abortion pregnant women by recitation yatus the syifa verse and the lavender aromatherapy. From the analysis of the above data mean values before and after therapy of ayatus syifa recitation was higher, at 1.083 compared than before and after therapy of lavender aromatherapy, at 0.83. From the analysis of the data, it was known that  $0.033 < 0.05$  and  $0.00 < 0.05$  then it was revealed that there was a comparison between the Reduction of Anxiety in Pregnant Women After Abortion Based on Recitation of Ayatus Syifa with Lavender Aromatherapy, then if  $r$  (correlation) is squared it showed the contribution of lavender therapy and ayatus syifa therapy to change in the decrease in maternal anxiety levels after abortion. The value of  $0.617^2$  was 0.380 equal to 38% decrease in anxiety levels in post-abortion mothers due to lavender therapy and 62% due to other factors. Then the value of  $0.944^2$  was 0.89 equal to 89% decrease in anxiety levels in post-abortion mothers due to the recitation of ayatus syifa and 11% due to other factor.

## DISCUSSION

The results of the research data showed that there was a significant difference in reducing anxiety in post-abortion pregnant women by reading ayat syifa with lavender aromatherapy. Then the mean value before and after reading ayatus syifa was lower than before and after lavender aromatherapy treatment. The results of data analysis can be seen that there was a contribution from lavender therapy and ayatus syifa therapy to change in reducing maternal anxiety levels after abortion. Then the value of  $0.944^2$  was 0.89 which was equal to 89% decrease in anxiety level in post-abortion pregnant

women due to reading ayatus syifa therapy and 11% due to other factors.

Simultaneous verses of the Qur'an can reduce anxiety levels. The majority of stimuli from reading the Qur'an were dominated by delta waves. The stimulant of the Qur'anic verse therapy, namely this ayatus syifa, can stimulate the activation of delta waves in the frontal and central areas on the right and left of the brain. One of the functions of this frontal part become the general intellectual center and source of emotional control, then the function of the brain area that can stimulate this delta wave become the control center of the movement carried out. Therefore, giving stimulation through the reading of the syifa verse will provide comfort and serenity. Therapeutic ayatus of the Qur'an had a positive effect, because what is heard will be conveyed to the brain to be perceived. Then this therapy of the Qur'an verses affected the quality of awareness of Allah and had an impact on the attitude of submitting to Allah SWT (Julianto V, 2011)

In this condition, the brain waves were at a frequency of 7 - 14 Hz, which was a brain state that had maximum energy and was able to reduce stress and anxiety. Areas involved in the hearing process of reciting the Qur'an include the primary auditory area (areas 41 and 42) and the auditory association area (area 22) located in the temporal lobe. Research showed that listening to the sound of Qur'an recitation (murattal) can increase calmness. This was evident from a significant increase in delta waves. Qur'an recitation areas that experienced a significant increase occurred in the area of Fp1 (left Prefrontal), Fp2 (Right Prefrontal), and P4 (right Parietal). In the Fp1 and Fp2 areas, increases were dominant by beta, alpha, and theta waves. In other hand, in P4, the dominant increase was experienced by beta, theta, and delta

waves. Reciting the Qur'an showed there were activities of thinking, activities of thinking that involve emotions and there was an activity of God (Julianto V, 2011).

In the research, therapy was given on the therapy group for 2 weeks provided. The verses of the Qur'an that were read had a relaxing effect and can reduce anxiety if they were listened to at a 60-70 rhythm regularly. When someone reads a verse of the Quran the hearing area is involved were the primary auditory area (area 41 and 42) and area 22 which is in the temporal lobe. (Saleh et al., 2018).

Based on research from the Faculty of Mathematics and Sciences (Faculty of Mathematics and Sciences, Padjajaran University Bandung, Andri Abdurrahman conducted a comparative research on the murotal verses of the Qur'an with classical music for depression reduction therapy, and the Quranic verses played by the murotal method have the best relaxing effect compared to listening to classical music. (Arief, 2017).

The value of  $0.617^2$  was 0.380 which were equal to a 38% decreased in anxiety levels in post-abortion pregnant women due to lavender therapy and 62% due to other factors. In this study, it was also strengthened from some of the results of previous studies, where in this study it resulted in a significant comparison of reading the verses of the Qur'an, namely a collection of syifa verses with lavender aromatherapy therapy and it can be proven that the verses of the Qur'an have the effect of reducing anxiety in post-abortion pregnant women. Lavender oil had a pretty good sedative effect and can reduce motor activity by up to 78%, so it was often used for stress management. A few drops of lavender oil can help combat insomnia, improve one's mood, and provide a relaxing effect. This was also reinforced by the results of a study where lavender aromatherapy was given to 72 haemodialysis patients who were divided into 2 experimental groups and a control group. (Bagheri-Nesami et al., 2017).

Lavender is analgesic; for headaches, muscle pain, is antibacterial, antifungal, anti-inflammatory, antiseptic, and sedative. So far there are no known contraindications and no irritation when used on the skin and also does not irritate the mucosa. That smelling lavender will increase the alpha waves in the brain and help to feel relaxed (Malcolm & Tallian, 2017b).

A few drops of lavender oil can help overcome insomnia, improve one's mood, and provide a

relaxing effect. This opinion is also supported by Sharma (2009) which stated that lavender was analgesic; for headaches, muscle aches, are antibacterial, antifungal, anti-inflammatory, antiseptic, and sedative. So far no known contraindications and no irritation if used on the skin and also do not irritate the mucosa. That smelt of lavender would increase alpha waves in the brain and helps to relax (Bangun & Nur'aeni, 2013)

## CONCLUSION

There was a difference in the potential for decreased anxiety in post-abortion pregnant women by reciting ayatus syifa and giving the aroma of lavender therapy, 38% decrease in anxiety levels in post-abortion pregnant women due to lavender therapy and 62% due to other factors. Then an 89% decrease in anxiety levels was in post-abortion pregnant women due to reciting ayatus syifa and 11% due to other factors. Recitation of ayatus syifa in the Qur'an had the best level of relaxation compared to other relaxation techniques.

## SUGGESTION

The suggestion that needs to be given is that the researcher needs to develop the results of the analysis by carrying out research in a wider area and the research products can be used as a medium in psychomatic non-pharmacological treatment to support the health status of the community.

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