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The Effect of Murrotal Al-Quran on the Level of Anxiety in Breast Cancer Patients Undergoing Chemotherapy at Ibnu Sina Hospital Makassar

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ABSTRACT

Introduction: Anxiety is a serious problem in cancer patient's sufferers, especially breast cancer undergoing chemotherapy. It has an impact on reducing the quality of life and the success of treatment. A breast cancer sufferer start to experience psychological disorders from the diagnosis is established, undergoing treatment, during and after treatment, both surgery and chemotherapy. Anxiety is generally develop base on fearness about bad future, such as losing family support or even death. Listening to murrotal chanting will stimulate the brain to release Gamma Amino Butyric Acid (GABA), enkephalin, or beta endorphin which lead to eliminate anxiety, depression and stress neurotransmitters, resulting in calmness feeling.

Method: This research is a case control study with quasi-experimental design. Total of 30 respondents who were breast cancer chemotherapy patients at Ibnu Sina Hospital of Makassar, divided into two groups. The first group received voice recording of the Murrotal Al-Quran for 30 minutes with the same Qori and surah (Al-Ikhlash, Al-Falaq and An-nas) while the other group were treated with 0,5 mg alprazolam tablets. Interviews and measurements of anxiety level were measured using the Hamilton Anxiety Rating Scale carried out before and 60 minutes after treatment in both groups. Purposive sampling technique were used to collect data and analysed with Wilcoxon test.

Result: Significant anxiety levels improvements take place in both treatment groups ($p < 0.05$), without any significant differences ($p = 0,13$). Murrotal listening has the same effect as anti-anxiety drugs. The advantage of murrotal listening compared with medication are: easy administration method, no side effects and does not require a doctor's prescription, and get a spiritual reward.

Conclusion: Murrotal listening has a good in pact in improving anxiety level of breast cancer patients undergoing chemotherapy.

Keywords: Murrotal; Anxiety; Chemotherapy; Breast Cancer

INTRODUCTION

Breast cancer is the most common type of cancer suffered by women and usually attacks women over the age of 35 (1). Based on data (International Agency for Research on Cancer, 2018) in Indonesia, the largest new case of cancer in women is breast cancer with a total of 19.18% or 58,256 new cases which is in first place (2).

Breast cancer patients undergoing chemotherapy are prone to anxiety, therefore the problem of anxiety management in cancer patients requires special attention. The management of cancer patients is to reduce pain and stress management.

Breast cancer patients will feel afraid, worried and frustrated. After being diagnosed, before surgery, during and after surgery and when undergoing therapy, patients will feel lost and experience stress (3). Several studies have been conducted explaining that breast cancer patients have excessive emotions and these emotions can trigger patients to become anxious after diagnosis and treatment (4–6).

Anxiety and depression will arise when someone knows for sure that they have breast cancer, even at a very early stage. Usually patients feel anxious because they feel haunted by images of death, afraid of the effects of treatment. Anxiety disorders will affect the nerves and the release of hormones that have an impact on reducing the efficacy of chemotherapy, and reducing the production of antibodies (7).

Anxiety disorders or anxiety are psychological problems that are often experienced in adolescence and are a physiological response of the brain to a threat that everyone tries to avoid. Usually this happens when facing something new/never tried and when searching for self-identity. Anxiety disorders are characterized by feelings of fear accompanied by somatic signs in the form of a hyperactive autonomic nervous system such as headaches, sweating, palpitations, and mild tightness in the chest and stomach (8).

Although all patients with a history of cancer experience varying levels of anxiety across the disease course. The prevalence of anxiety among breast cancer patients was 41.9% (95% CI), indicating the importance of psychological as well as physical factors in breast cancer patients (9). It can be seen from several studies that breast cancer diagnosis often causes anxiety. Fear of the future becomes a major problem after diagnosis and during breast cancer treatment (10). Therefore, it seems necessary to take steps that will strengthen therapeutic management strategies.

Anxiety disorders are disorders with excessive fear. In overcoming anxiety, there needs to be an effort to overcome it, including relaxation by listening to music or listening to the Qur'an. Several studies have found that listening to music or the Qur'an can reduce anxiety and depression.

In the Islamic perspective, there are many discussions about peace and how to achieve it. Therefore, researchers around the world have conducted many studies in terms of Islamic perspective or using Islamic study methods. One of them is the effect of murottal Al-Qur'an on reducing stress, anxiety and depression caused by several factors that become psychosocial stressors that trigger stress in life.

Murottal is reading the Qur'an which focuses on two things, namely the correctness of the reading and the song of the Qur'an (11). Because the concentration of reading is focused on the application of tajwid as well as songs, the portion of the Qur'an song is not performed in full. In terms of language, there is no difference between Mujawwad and Murottal. Mujawwad means reading the Qur'an by paying attention to the Science of Tajwid, while Murattal reads the Qur'an with Tartil (Calmly without rushing) by paying attention to the science of tajwid and makharijul huruf. Several studies have shown that reading murottal with tartil has many benefits. For example, it provides and increases a sense of relaxation, and thus creates a sense of calm. Therefore, this study aims to determine the effect of murottal Al-Qur'an on the level of anxiety in breast cancer patients undergoing chemotherapy at RSP Ibnu Sina YW-UMI Makassar.

METHOD

Because the concentration of reading is focused on the application of tajwid as well as songs, the portion of the Qur'an song is not performed in full. In terms of language, there is no difference between Mujawwad and Murottal. Mujawwad means reading the Qur'an by paying attention to the Science of Tajwid, while Murattal reads the Qur'an with Tartil (Calmly without rushing) by paying attention to the science of tajwid and makharijul huruf. Several studies have shown that reading murottal with tartil has many benefits. For example, it provides and increases a sense of relaxation, and thus creates a sense of calm. Therefore, this study aims to determine the effect of murottal Al-Qur'an on anxiety levels in breast cancer patients undergoing chemotherapy at RSP Ibnu Sina YW-UMI Makassar. This study is an experimental study with a cross-sectional study design and one group pre-test-post-test single blind method. Because in this study, the independent variables and dependent variables were measured at the same time and were carried out before and after the independent variables. This study aims to determine the relationship between listening to murottal Al-Qur'an and improving anxiety levels in breast cancer patients undergoing chemotherapy at RSP Ibnu Sina YW-UMI Makassar in 2024. This study was conducted at RSP Ibnu Sina YW-UMI Makassar and

implemented in March 2024. The sample used in this study were breast cancer patients undergoing chemotherapy at RSP Ibnu Sina YW-UMI without looking at sessions that met the inclusion and exclusion criteria.

The data used in this study are primary data. The collected data are then processed using the SPSS computer program. While the data analysis used in this study using univariate analysis is carried out to describe the frequency distribution of each variable, both dependent variables and independent variables. The processed data are presented in a frequency distribution table. And bivariate analysis is carried out using the Wilcoxon test to determine the significant relationship between each independent variable and the dependent variable. The basis for taking the research hypothesis is based on the level of significance (p value), namely:

If the p value > 0.05 then the research hypothesis is rejected

If the p value < 0.05 then the research hypothesis is accepted

RESULTS

Table 1. Influence of Murottal

Anxiety Level	Before		After		p-value
	n	%	n	%	
Not experiencing anxiety	1	6,7	7	46,7	0,001*
Mild anxiety	4	26,7	5	33,3	
Moderate anxiety	4	26,7	3	20	
Severe anxiety	6	40	0	0	
Total	15	100	15	100	

Source: Primary Data, 2024

*Wilcoxon Test

Table 1 of the results of the study above obtained the number of samples before the administration of murottal who did not experience anxiety as many as 1 person (6.7%), mild anxiety as many as 4 people (26.7%), moderate anxiety as many as 4 people (26.7%), and those who experienced severe anxiety as many as 6 people (40%). While the number of samples after the administration of murottal who did not experience anxiety as many as 7 people (46.7%), mild anxiety as many as 5 people (33.3%), moderate anxiety as many as 3 people (20%), and no one experienced severe anxiety (0%).

With a p value or Asymp. Sig. (2-tailed) value of 0.001 < 0.05, it is concluded that there is an effect on improving anxiety levels in breast cancer patients undergoing chemotherapy with relaxation therapy listening to Al-Qur'an murottal.

Table 2. Effect of Alprazolam Drug

Anxiety Level	Before		After		p-value
	n	%	n	%	
Not experiencing anxiety	0	0	5	33,3	0,004*
Mild anxiety	6	40	6	40	
Moderate anxiety	5	33,3	4	26,7	
Severe anxiety	4	26,7	0	0	
Total	15	100	15	100	

Source: Primary Data, 2024

*Wilcoxon Test

Table 2 of the research results above obtained the number of samples before administration of alprazolam who did not experience anxiety none (0%), mild anxiety as many as 6 people (40%), moderate anxiety as many as 5 people (33.3%), severe anxiety as many as 4 people (26.7%). While the number of samples after administration of alprazolam who did not experience anxiety as many as 5 people (33.3%), mild anxiety as many as 6 people (40%), moderate anxiety as many as 4 people (26.7%), and severe anxiety none experienced it (0%).

With a p value or Asymp. Sig. Value (2-tailed) of 0.004 < 0.05 it is concluded that there is an effect of being given alprazolam as a research control on improving anxiety levels in breast cancer patients undergoing chemotherapy.

Table 3. Differences between Murottal and Alprazolam Medicine

Anxiety Level	Murottal		Alprazolam		p-value
	n	%	n	%	
No changes	1	6,7	5	33,3	0,13*
Not experiencing anxiety	8	53,3	6	40	
Mild anxiety	6	40,0	4	26,7	
Total	15	100	15	100	

Source: Primary Data, 2024

*Wilcoxon Test

Table 3 of the research results above obtained the difference in the number of anxiety levels before and after the administration of the Al-Qur'an murottal which did not change as many as 1 person (6.7%), those who did not experience anxiety as many as 8 people (53.3%) and those who experienced anxiety as many as 6 people (40%). The difference in the number of anxiety levels before and after the administration of alprazolam which did not change as many as 5 people (33.3%), those who did not experience anxiety as many as 6 people (40%), and those who experienced mild anxiety as many as 4 people (26.7%). With a p value or Asymp. Sig. (2-tailed) value of 0.13 > 0.05, it can be concluded that there is no difference between the murottal group and the 0.5 mg alprazolam drug. Listening to murottal has the same effect as anti-anxiety drugs. The advantages of listening to murottal compared to medication are: the method of administration is easy, does not cause side effects and does not require a doctor's prescription, and gets spiritual rewards.

DISCUSSION

Before undergoing chemotherapy, breast cancer patients are often worried about chemotherapy. Chemotherapy, a form of medical therapy, can cause anxiety due to fear of the effects that occur after therapy, such as physical changes such as nausea, vomiting, decreased appetite, weight loss, and hair loss, even the possibility of death. Patients who have undergone chemotherapy often experience severe side effects, which are often intolerable by patients and can even cause death. For most patients who have been diagnosed with cancer, the consequences of chemotherapy cause them to feel worried, anxious, and afraid of the pain and threat of death while undergoing chemotherapy. If the patient experiences excessive anxiety, such as excessive fear of the therapy they are undergoing, this can have a negative impact on the therapy they are undergoing, so that the patient does not want to undergo chemotherapy.

Al-Quran murottal therapy, or reading the Quran, can reduce the patient's anxiety levels. This has proven to be useful in the healing process because it can relieve pain and make patients feel more relaxed, thereby reducing anxiety. With a result of $p = 0.001 (< 0.05)$, it was found that murottal therapy affects anxiety in breast cancer patients undergoing chemotherapy. These results show that murottal therapy affects anxiety. Several studies show that murottal therapy can reduce anxiety levels in breast cancer patients undergoing chemotherapy (12–15). Thus, murottal therapy can help breast cancer patients who experience anxiety by reducing their anxiety levels.

Men and women are equally at risk for anxiety, but the way men and women deal with stress is different. Women release certain hormones as a result of stress, which cause feelings of anxiety and fear. Men can generally deal with and enjoy competition and stress, even considering it a good motivation. This means that women are more susceptible to stress in situations of pressure or conflict. This is related to research findings that show that female patients are more likely to experience depression compared to men. This is in line with several previous studies stating that women are more likely to experience stress than men (16–19).

Several studies determine the results of the quality of life of breast cancer patients, namely positive feelings felt by breast cancer sufferers, which are meant to be feelings of patience, optimism and peace. The condition and condition of breast cancer sufferers such as increased thinking ability and patient concentration are classified as good, components of self-esteem include self-confidence and hope, components of self-image include changes in body shape, and negative feelings felt by sufferers such as anxiety, sadness, and fear (20–23).

Physically, the recitation of the Qur'an contains elements of the human voice. This sound can cause stress hormones to decrease and endorphins to become active, increasing feelings of relaxation, diverting attention from fear, anxiety, and tension.

Furthermore, the release of endorphins can divert the patient's attention from pain and create a calm that can reduce levels of body substances such as cortisol, epinephrine-norepinephrine, dopamine and so on.

The results of the Wilcoxon test showed that the level of anxiety of respondents changed both before and after therapy. Murottal therapy increases the patient's awareness of God and brings them to alpha waves, a brain energy frequency of 7-14 Hz, which optimizes the patient's body system. As a result, this has an impact on the health of the

body, such as reducing stress levels and creating feelings of calm. When the brain becomes clear in a situation like this, patients are able to get closer to God, which causes them to experience coping or optimism.

CONCLUSION

This study concluded that the level of anxiety before giving murottal Al-Qur'an, the most experienced was severe anxiety. Then, the level of anxiety after giving murottal Al-Qur'an, the most sample was not experiencing anxiety. And there was a decrease in the level of anxiety after giving murottal Al-Qur'an when compared to before giving murottal Al-Qur'an.

SUGGESTION

It is expected that officers on duty in the chemotherapy room will increase their insight and knowledge about anxiety, the consequences that arise if this condition is not addressed, and effective prevention and management strategies.

It is recommended that hospital management pay attention to and consider appropriate methods for assessing anxiety levels. Researchers recommend using the Hamilton Anxiety Rating Scale (HARS) questionnaire, which has been proven accurate in recognizing anxiety.

For further researchers, in order to be able to carry out sample homogeneity, so that the results of anxiety incident factors can be analyzed properly and more effectively.

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