# Murottal Qur'an Psychotherapy on Breast Cancer Survivors in South Sulawesi

Psikoterapi Murottal Al Qur'an pada Penyintas Kanker Payudara di Sulawesi Selatan

Azriful Azriful\*1, Wahyuddin Wahyuddin2, Rini Jusriani3

<sup>1,3</sup> Department of Public Health, Faculty of Medical and Health Science, Universitas Islam Negeri Alauddin Makassar, Makassar, Indonesia
<sup>2</sup> Department of Islamic History and Civilization, Faculty of Adab and Humaniora, Universitas Islam Negeri Alauddin Makassar, Makassar, Indonesia

### Abstract

Indonesia is ranked 8th in Southeast Asia with a high cancer incidence, with a breast cancer proportion of 16.7%. Chemotherapy, which is usually done, has side effects and stress for breast cancer survivors, so a solution that has minimal side effects and is easy to do is needed. This study aims to assess the effect of *murottal* Qur'an psychotherapy on breast cancer survivors in South Sulawesi. This study was qualitative with a phenomenological study approach. The key informants were breast cancer survivors who were Think Survive Cancer Woman Support Group community members. Data were collected through observation, in-depth interviews, and documentation by triangulating sources, methods, and times. The reinforcing factor for doing *murottal* Al-Qur'an psychotherapy is family support, especially from husbands, health workers' support, and the support of fellow survivors. Through *murottal* Al Qur'an, the self-acceptance of survivors to carry out their duties and obligations as wives and mothers of their children become better. *Murottal* Al-Qur'an Psychotherapy positively impacts the stress level of breast cancer survivors. *Murottal* Al-Qur'an psychotherapy provides a sense of calm for breast cancer survivors so that it has a positive effect in reducing stress.

#### Abstrak

Indonesia berada pada urutan ke-8 di Asia Tenggara dengan angka kejadian kanker yang tinggi, dengan proporsi kanker payudara 16.7%. Kemoterapi yang biasanya dilakukan, memberikan dampak efek samping dan stres bagi penyintas kanker payudara, sehingga diperlukan solusi yang minim efek samping dan mudah dilakukan. Penelitian ini bertujuan untuk menilai pengaruh psikoterapi *murottal* Al Qur'an pada penyintas kanker payudara di Sulawesi Selatan. Penelitian adalah kualitatif dengan pendekatan penelitian studi fenomenologi. Informan kunci adalah penyintas kanker payudara yang tergabung dalam komunitas Think Survive Cancer Woman Support Group. Pengumpulan data dilakukan melalui, observasi, wawancara mendalam, dan dokumentasi dengan melakukan triangulasi sumber, metode dan waktu. Faktor penguat dilakukannya psikoterapi *murottal* Al-Qur'an adalah dukungan keluarga terutama suami, dukungan tenaga kesehatan, serta dukungan sesama penyintas kanker payudara. Melalui *Murottal* Al Qur'an penerimaan diri penyintas untuk menjalankan tugas dan kewajiban baik sebagai isteri maupun sebagai ibu dari anak-anaknya menjadi lebih baik. Psikoterapi *Murottal* Al-Qur'an berdampak positif terhadap tingkat stres penyintas. Kesimpulan. Psikoterapi *murottal* Al Qur'an memberikan rasa tenang pada penyintas kanker payudara sehingga berpengaruh positif dalam menekan stres.





## INTRODUCTION

Cancer is a disease with a high incidence worldwide. Global Burden Cancer (GLOBOCAN) data shows that by 2020, female breast cancer (KPD) has surpassed lung cancer, the most frequently diagnosed cancer. There are estimated to be 2.3 million new cases of breast cancer (11.7%), and the cause of death is 6.9%. The mortality rate for breast cancer is 12.4 to 15.0 per 100,000. Indonesia is ranked 8th in Southeast Asia with a high incidence of cancer, with a proportion of breast cancer 16.7% of the total 348,809 cancer cases and 22,692 (12.75%) mortality (Bray et al., 2018).

There are various therapeutic options that cancer patients can choose from. breast Chemotherapy and radiotherapy are types of therapy that breast cancer patients widely accept. The success rate of this pharmacological therapy is relatively high, and it has become a priority therapy for breast cancer patients. However, this therapy is not without side effects. Metabolism of chemotherapy drugs can have side effects that result in physical and psychological disorders. The effects of chemotherapy can also be in the form of distress that arises when a person is unable to manage stress causing anxiety, depression, and irritability (Sutrisno, 2018).

Spiritual Religious Coping (SRC) has proven to be an important coping strategy in stressful situations experienced by women with breast cancer. It is beneficial in overcoming the disease and the consequences of treatment (Borges et al., 2017). One of the spiritual therapies is *murottal* therapy which is considered to have a positive effect that can reduce patient stress levels. *Murottal* is a recording of the recitation of the Qur'an by the qori' in tartil. *Murottal* therapy is potentially effective in reducing the stress levels of cancer patients (Ernawati et al., 2020). Even Arabic research strongly recommends including *murottal* in nursing care before giving chemotherapy to reduce anxiety in breast cancer patients (Al-Jubouri et al., 2021).

In *murottal*, several surahs are usually recited in an attempt at psychotherapy. The choice of the surah that is most often recited on *murottal* is Surah Al Fatihah. According to Ibn Qoyyim Al Zaujiah explaining that Surah Al-Fatihah contains an antidote for the heart. Al-Fatihah is proven to be able to influence respondents' perceptions of the problems they face (Julianto & Subandi, 2015), reduce stress levels in autoimmune patients (Putra & Nashori, 2021), and reduce anxiety during wound care for ulcer patients (Prihati & Wirawati, 2018).

Before *murottal* began to be investigated for its potential as a psychotherapy medium, meditation music which has a relaxing effect, was also widely studied as a therapy for breast cancer patients (Chen et al., 2015; Chuang et al., 2011; Li et al., 2011; Li et al., 2012; Wang et al., 2018). Wang et al. (2018) reported that music intervention would likely improve and psychological physiological health. Complementary and alternative medicine can be one of breast cancer patients' supporting medical treatment options. Based on previous research searches, research related to *murottal* psychotherapy in cancer patients, especially breast cancer patients, has never been conducted in South Sulawesi. Therefore, this study aims to assess the effect of murottal psychotherapy on the incidence of stress in breast cancer survivors in South Sulawesi. Complementary and alternative medicine can be one of breast cancer patients' supporting medical treatment options. Based on previous research searches, research related to *murottal* psychotherapy in cancer patients, especially breast cancer patients, has never been conducted in South Sulawesi. Therefore, this study aimed to assess the effect of murottal psychotherapy on the incidence of stress in breast cancer survivors in South Sulawesi.

# METHODS

This type of research was qualitative with a phenomenological study approach. Phenomenological research is qualitative research carried out by seeing and hearing more closely and in detail the explanation and understanding of individuals about their experiences. This approach was used to interpret and explain the experiences experienced by women breast cancer survivors.

The research was conducted in the Makassar City area from March to August 2022. The informants in this study were women members of the Think Survive Indonesia Community Makassar Branch who were willing to participate in this study. Determination of the research sample is done by using purposive sampling. The criteria for sampling are breast cancer survivors who undergo chemotherapy, are Muslim, and routinely recite the Qur'an.

In phenomenological studies, researchers became good observers and listeners of informants who convey or tell their experiences. The data collection techniques used include in-depth interviews, observation, and documentation. Researchers are the main instrument in research. The researcher's position was one of the instruments in the research process because the researcher acts as a planner, the implementer of data collection, and analysis, the interpreter of data, is involved in participatory observation, and then plays a role in preparing research reports. An in-depth interview guide that contains open-ended questions, field notes, interview recordings, and documentation results during field observations was a tool used in this research.

In a more specific view, data analysis could be carried out with a cultural theme analysis approach by finding the location of existing relationships and relating them to various values, value orientations, and central fundamental values. Premise and cognitive orientation. The analysis was based on the view that everything researched is whole and holistic.

In analyzing and presenting data, what 'speaks' was data or information from in-depth interviews and field observations, while researchers try their best not to interpret. If there was an interpretation, then it is the result of understanding the informant's interpretation of the meaning of the variables studied.

### RESULTS

The research began by distributing questionnaires through a google form mediated by the general chairman of the Bakti Peduli Perempuan Cancer Foundation. All data were collected, then determined the research informants according to the specified inclusion and exclusion criteria. After that, the research team contacted each informant to explain the flow and purpose of the research and arrange visitation appointments for observation and in-depth interviews.

All informants are career women who have work routines every working day. Thus, research observations were carried out by following the routine activities of the informants two times a day, namely, one time on weekdays and one time on holidays, so that the validity of the data is done through triangulation of time, method, and source.

Characteristics are inherent in each individual, which in this study included age, last education, marital status, age at the sentence, type of treatment, early stage of detection, insurance ownership, comorbid disease, and location of breast cancer symptoms. The characteristics of research information can be seen in table 1. Table 1 shows that the informants are 38-49 years old, with the majority having a bachelor's degree. So far, the type of treatment received is a mastectomy followed by outpatient treatment (drug consumption). All informants were detected with breast cancer at stage II, used JKN insurance, and had no comorbid diseases. The majority with the location of the symptoms are on the left.

### Stress Management

Stress usually appears as a manifestation of a person's psychological impact by new or surprising things or unwanted things. News in the form of a verdict of having breast cancer can trigger the emergence of stress, affecting the severity of existing cancer.

The following was an informant's statement when he was first diagnosed with breast cancer.

"I am stressed, I am a lot of silence and doing istighfar" (SU, 49 years old, Symtomp Location: Right-Left)

"Early stress. I do not know what to say. I do not know how to deal with it. I was shocked. Why should I get this disease." (RA, 38 years old, Symtomp Location: Left)

"Yes, stress, of course." (SR, 45 years old, Symtomp Location: Left)

"Feels empty. I was shocked. On another side, I was scared." (EM, 46 years old, Symtomp Location: Left)

Stress levels do not stop at the beginning of the breast cancer verdict. Even at the stage when doctors recommend a mastectomy, stress levels rise again because of the breast "removal" procedure that will be undertaken. It does not stop there. Even at the therapeutic stage, stressful conditions can come and go to haunt people living with breast cancer.

This psychotherapy positively impacts the patient's psychology in the form of peace of mind. Recitation of the holy verses of the Qur'an can reduce stress hormones and activate natural endorphins such as cortisol, epinephrine-norepinephrine, dopamine, and growth hormone in the serum will decrease in relaxed conditions. The following are excerpts from interviews with breast cancer survivors regarding stress management through Quranic psychotherapy.

Table 1 Characteristics of Informants

Informant	Age*	Education	Marital Status	Age at Sentenced*	Type of Treatment	Early Stage detected	Insurance Ownership	Comorbid Disease	Symptom Location
SU	49	Undergraduate	Married	35	Mastektomi, Outpatient	II	JKN	None	Right-Left
RA	38	Graduate	Widow	35	Mastektomi, Outpatient	II	JKN	None	Left
HA	45	Undergraduate	Married	42	Mastektomi, Outpatient	II	JKN	None	Left
EM	46	Undergraduate	Married	42	Mastektomi, Outpatient	II	JKN	None	Left
MS	41	Undergraduate	Married	38	Mastektomi, Outpatient	II	JKN	None	Right
AA	48	Undergraduate	Married	45	Mastektomi, Outpatient	II	JKN	None	Right
SR	43	Postgraduate	Married	40	Mastektomi, Outpatient	II	JKN	None	Left

*Note:* \* =year; JKN = National Health Insurance

"Istigfar, many istighfar. If I do not have work, I reread the Qur'an. Alternatively, murottal, play on the cellphone. I feel good when I hear murottal. Like relieving my illness, my burden, and my stress. In essence, having cancer brought me closer to God. Because if you put all these burdens back on God, everything feels lighter. My thoughts are also much more positive. If it is murottal, I usually continue reading about my illness. Existing treatment patterns. Or a decisive surah to treat disease. But if you do murottal, any surah has the same effect for me. Together they lighten the burden of the existing mind." (SR, 45 years old, Symtomp Location: Left)

Almost all informants gave the same statement regarding the benefits of doing *murottal* in breast cancer treatment.

"Diseases also come with Allah's permission, so we return all of this to Allah. The burden is light if we leave it to Allah, yes while taking medication, medicine, chemo, follow the doctor's words." (SU, 49 years old, Symtomp Location: Left)

"Easing the burden and pressure by doing murottal AI Qur'an is a manifestation of surrender to Allah SWT. We humans, as His creatures, are well aware that apart from Allah, no one is able to shake the plans of Allah SWT. However, apart from doing murottal, it was stated by all informants that they also carried out management in the form of their husband's support as a life companion." (MS. 41 years old, Symtomp Location: Right) Sometimes, people with breast cancer are exhausted and do not have time to work at home due to the side effects of fatigue.

### Self-Acceptance

Self-acceptance is very important in managing stress for breast cancer survivors. After people living with breast cancer successfully compromise with their disease, stress management will be better. Most respondents stated that her role as a mother for her children and as a wife for her husband continued as usual.

> "Everything still works as it should. Especially with the children, I have been telling myself from the start if I cannot cry in front of my kids. I have to be strong so that the people around me are strong too. Moreover, Alhamdulillah, my husband is also strong, steadfast, and patient in accepting my condition. Sometimes even joked. I sometimes ask, "Am I still beautiful, dad?" because now I am bald. The children's father always said, "yes, mom is still beautiful. Nothing has changed". My heart knows it could be a lie, but at least it makes me more robust and less stressed." (AA, 48 years old, Symtomp Location: Right)

> "My thoughts are also much more positive. If it is murottal, I usually continue reading about my illness and existing treatment patterns. Alternatively, a powerful surah to treat disease. However, if you do murottal, any surah has the same effect on me. Together make light the burden of the existing mind." (SR, 45 years old, Symtomp Location: Right)

### DISCUSSION

The moral support of the closest family, especially the husband, is a tremendous reinforcing factor that strengthens the hearts of women with breast cancer (Dumrongpanapakorn & Liamputtong, 2017). Family encouragement to fill empty time with *murottal* or reading the Koran is one solution so that people living with breast cancer do not contemplate their fate but instead strive for healing and a better and healthier condition (Afidah et al., 2022). Additionally, the increase in science and treatment has resulted in a higher trend of success in the chemotherapy phase to kill the remnants of cancer cells still in the patient's body (Morrison et al., 2018).

Stress is the body's response or reaction when a load or mental demand is not specific (Sansbury et al., 2015). But besides that stress can also be a trigger factor or cause as well as a result of a psychological disorder (Bortolato et al., 2017). All of the informants in this study were careerwomen working in various fields. The burden of work demands can trigger the emergence of stress. Stress management needs to be done regularly. Quranic murottal psychotherapy has great potential to be a stress management solution (Rosmiarti et al., 2020). Moreover, several informants stated that murottal Qur'an psychotherapy before going to bed at night, which is done regularly, improves the guality of sleep (Alivian et al., 2022). This will then significantly affect the freshness of the body when wake up in the morning. Regarding the type of surah, the informant stated there was no specific surah to listen to and did not specify the duration of time in doing the *murottal*.

*Murottal*, played on PROM (patient-reported outcome measures) survivors, will stimulate endorphins so that feelings of happiness arise in the person who listens and becomes calm while working and resting (Darmadi & Armiyati, 2019). This is finally able to increase focus and happiness the next day. According to Surah Ar-Rad ayat 28:

> "Those who have believed and whose hearts are assured by the remembrance of Allah. Unquestionably, by the remembrance of Allah hearts are assured."

Tafsir Ibn Kathir QS. Ar-Rad by Ismail bin Umar Al-Quraishi bin Katsir Al-Bashri Ad-Dimasyqi interprets the meaning of the verse, namely if their hearts are calm and happy to be with Allah, willing to Him and at peace by remembering Him as their protector and helper. The verse emphasizes that a person can calm their soul, including during treatment and stress by remembering Allah.

Clinically, stress is caused by the human body's endocrine system and the sympathetic nervous system (Rachdaoui & Sarkar, 2017). The sympathetic nervous system will stimulate the adrenal glands, namely, from the endocrine system it will then release epinephrine, a state of stress manifested in physiological responses such as the hypothalamicpituitary adrenocortical (HPA) gland and the sympathetic adrenomedullary system (SAM). The hypothalamus gland will activate the pituitary, which will release adrenocorticotropic hormone (ACTH) which will then stimulate the adrenal glands to produce stress hormones, namely norepinephrine, epinephrine, and cortisol (Daiber et al., 2019). Specifically, the *murottal* of the Qur'an is carried out to remind humans of extraordinary blessings, and no creature or substance other than Allah SWT can do it. This is more about directing someone to learn to be grateful for what they have had and what they have now. Increasing gratitude is where the calm and extraordinary sense of sufficiency in the heart will increase. Things like this make a person feel the burden will fall slowly and feel lighter. In conditions like this, the body also automatically lowers stress levels.

When a person listens to murottal Al-Qur'an, the pathway through which impulses (stimuli) go to the brain, among others, passes through the auditory area (earlobe, middle ear, cochlea) and then transmits the signal of the Qur'anic verse to the thalamus and is delivered to the amygdala (center of the emotions brain) which is an essential part of the system that affects emotions and behavior (Privanto et al., 2020). Then the signal is delivered to the hippocampus (emotional memory center) and hypothalamus (autonomic control center), so that the sound of the chanting of the holy verses of the Qur'an that is played creates an energy that has a positive effect on mood (Babamohamadi et al., 2017). Although at this stage, the individual does not understand the meaning of the murottal Al-Qur'an that is heard. Recitation of the Qur'an physically has an element of the human voice, an affordable and fantastic healing instrument. The sound can produce natural endorphins to reduce stress hormones, increase relaxation, and divert anxiety, tension, and fear (Rosmiarti et al., 2020). In addition, it can also help the brain produce chemicals in the form of neuropeptides that can strengthen the body's receptors and provide feedback, such as comfort and enjoyment (Putra et al., 2018). This is clearly explained in Surah Al A'raf ayat 204.

"So when the Qur'an is recited, then listen to it and pay attention that you may receive mercy."

*Murottal* provides a more positive psychological effect. When listening to *murottal* Al Qur'an, the quality of awareness and totality of submission to Allah SWT becomes more open. Psychologically, by surrendering to Allah SWT, it is revealed that people with PROM (patient-reported outcome measures) have a lighter burden. This manifestation of surrender is manifested in a routine that should be kept intact to be done every day.

### CONCLUSIONS

The reinforcing factor for murottal psychotherapy for stress in KPD survivors is the excellent support of the husband and the support of doctors to direct the addition of murottal Al-Qur'an psychotherapy apart from drugs that must still be consumed regularly. Breast cancer survivors must understand that by murottal the Qur'an directs one's body to become calmer and lighten the burden of life. Self-acceptance of people living with breast cancer related to their illness is very positive, and management is able to compromise with the disease more quickly by calming down and surrendering to Allah SWT, which is balanced, with maximum effort. Murottal psychotherapy on the stress of PROM survivors has a positive impact on calming one's soul, lowering one's stress levels, and realizing to be closer to Allah SWT. Al-Qur'an murottal psychotherapy must be included in stress and anxiety management for people with cancer because it has no side effects. Research related to *murottal* Al-Qur'an psychotherapy can be developed in other disease conditions besides breast cancer. For further researchers, it is also possible to examine the effect of murottal Al-Qur'an psychotherapy on breast cancer patients at the chemotherapy stage. The limitation of this research is that the respondents are only in South Sulawesi. It is advisable for further research to accommodate respondents from a larger coverage area. This study's strength is the respondents' openness during interviews, and data collection was carried out based on triangulation of sources, time, and place.

### ACKNOWLEDGEMENT

We would like to thank the Institute for Research and Community Service (LP2M) Universitas Islam Negeri Alauddin Makassar and the Think Survive Indonesia Community Makassar Branch, especially breast cancer survivors in South Sulawesi who have played a major role and active participate role in this research.

#### FUNDING

This work was supported in part by the Kemenag MORA 2022 and LP2M Universitas Islam Negeri Alauddin Makassar.

### AUTHORS' CONTRIBUTIONS

Azriful designed the study, formulated the concept, acquired the data, and performed the field work. Wahyuddin designed the study, formulated the concept, and performed the field work. Rini Jusriani formulated the concept, wrote the manuscript, and enrolled participants. All authors revised and approved the final manuscript.

### **AUTHORS' INFORMATION**

Dr. Azriful, SKM., M.Kes. is an assistant professor and researcher in Department Public Health, Universitas Islam Negeri Alauddin Makassar, South Sulawesi, Indonesia. Dr. Wahyuddin G,S.Ag.,M.Ag is an an associate professor and researcher in Department of Islamic History and Civilization, Universitas Islam Negeri Alauddin, Makassar, South Sulawesi, Indonesia. Rini Jusriani, SKM., M.Kes. is an laboratory manager and researcher in Department Public Health, Universitas Islam Negeri Alauddin Makassar, South Sulawesi, Indonesia.

### **COMPETING INTERESTS**

The author(s) declare no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

### REFERENCES

- Afidah, I., Sholeh, N. S. M., Khuza'i, R., & Siddiq, A. A. (2022, April). Sufistic Approach Psychotherapy as a Mental-Spiritual Development Effort. In 4th Social and Humanities Research Symposium (SoRes 2021) (pp. 370-373). Atlantis Press. https://doi.org/10.2991/assehr.k.220407.075
- Alivian, G. N., Awaludin, S., Hidayat, A. I., & Purnawan, I. (2022). The Efficacy of *Murottal* and Prayer as Therapy for The Management of Elderly's Anxiety and Sleep Disturbances. *Jurnal Berita Ilmu Keperawatan*, *15*(1), 104-110. https://doi.org/10.23917/bik.v15i1.17036
- Al-Jubouri, M. B. A., Isam, S. R., Hussein, S. M., & Machuca-Contreras, F. (2021). Recitation of quran and music to reduce chemotherapy-induced anxiety among adult patients with cancer: A clinical trial. *Nursing Open*, 8(4), 1606-1614. https://doi.org/10.1002/nop2.781
- Babamohamadi, H., Sotodehasl, N., Koenig, H. G., Al Zaben, F., Jahani, C., & Ghorbani, R. (2017). The effect of Holy Qur'an recitation on depressive symptoms in hemodialysis patients: A randomized clinical trial. *Journal of religion and health*, 56, 345-354. https://doi.org/10.1007/s10943-016-0281-0
- Borges, M. L., Caldeira, S., Loyola-Caetano, E. A., Magalhães, P. A. D., Areco, F. S., & Panobianco, M. S. (2017). Spiritual/religious coping of women with breast cancer. *Religions*, 8(11), 254. https://doi.org/10.3390/rel8110254
- Bortolato, B., Hyphantis, T. N., Valpione, S., Perini, G., Maes, M., Morris, G., & Carvalho, A. F. (2017). Depression in cancer: the many biobehavioral pathways driving tumor progression. *Cancer treatment reviews*, 52, 58-70. https://doi.org/10.1016/j.ctrv.2016.11.004

- Bray, F., Ferlay, J., Soerjomataram, I., Siegel, R. L., Torre, L. A., & Jemal, A. (2018). Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA: a cancer journal for clinicians*, 68(6), 394-424. http://www.doi.org/10.3322/caac.21492
- Chen, S. F., Wang, H. H., Yang, H. Y., & Chung, U. L. (2015). Effect of relaxation with guided imagery on the physical and psychological symptoms of breast cancer patients undergoing chemotherapy. *Iranian Red Crescent Medical Journal*, *17*(11). https://doi.org/10.5812%2Fircmj.31277
- Chuang, C. Y., Han, W. R., Li, P. C., Song, M. Y., & Young, S. T. (2011). Effect of long-term music therapy intervention on autonomic function in anthracycline-treated breast cancer patients. *Integrative cancer therapies*, *10*(4), 312-316.

http://www.doi.org/10.1177/1534735411400311

- Daiber, A., Kröller-Schön, S., Frenis, K., Oelze, M., Kalinovic, S., Vujacic-Mirski, K., & Münzel, T. (2019). Environmental noise induces the release of stress hormones and inflammatory signaling molecules leading to oxidative stress and vascular dysfunction— Signatures of the internal exposome. *Biofactors*, 45(4), 495-506. https://doi.org/10.1002/biof.1506
- Darmadi, S., & Armiyati, Y. (2019). *Murottal* and clasical music therapy reducing pra cardiac chateterization anxiety. *South East Asia Nursing Research*, 1(2), 52. https://doi.org/10.26714/seanr.1.2.2019.52-60
- Dumrongpanapakorn, P., & Liamputtong, P. (2017). Social support and coping means: the lived experiences of Northeastern Thai women with breast cancer. *Health Promotion International*, *32*(5), 768-777. https://doi.org/10.1093/heapro/dav023
- Ernawati, R., Feriyani, P., & Tianingrum, N. A. (2020). The Effectiveness of Qur'an Recitation Therapy and Aromatherapy on Cancer Patients' Stress Level in Abdul Wahab Sjahranie Hospital Samarinda, Indonesia Malaysian Journal of Medicine and Health Sciences, 16(3), 47-51.
- Julianto, V., & Subandi, S. (2015). Membaca AI Fatihah reflektif intuitif untuk menurunkan depresi dan meningkatkan imunitas. *Jurnal psikologi, 42*(1), 34-46. https://doi.org/10.22146/jpsi.6941
- Li, X. M., Yan, H., Zhou, K. N., Dang, S. N., Wang, D. L., & Zhang, Y. P. (2011). Effects of music therapy on pain among female breast cancer patients after radical mastectomy: results from a randomized controlled trial. *Breast cancer research and treatment*, *128*, 411-419. https://doi.org/10.1007/s10549-011-1533-z
- Li, X. M., Zhou, K. N., Yan, H., Wang, D. L., & Zhang, Y. P. (2012). Effects of music therapy on anxiety of patients with breast cancer after radical mastectomy: a randomized clinical trial. *Journal of advanced nursing*, 68(5), 1145-1155. https://doi.org/10.1111/j.1365-2648.2011.05824.x
- Morrison, A. H., Byrne, K. T., & Vonderheide, R. H. (2018). Immunotherapy and prevention of pancreatic

cancer. *Trends in cancer*, 4(6), 418-428. https://doi.org/10.1016/j.trecan.2018.04.001

- Prihati, D. R., & Wirawati, M. K. (2018). pengaruh Terapi Murrotal Terhadap Penurunan Tingkat Nyeri dan Kecemasan Saat Perawatan Luka Pasien Ulkus Dm Di Rsud KRMT Wongsonegoro Semarang. Indonesian Journal of Nursing Research (IJNR), 1(2). https://doi.org/10.35473/ijnr.v1i2.177
- Priyanto, P., Kamal, A. F., & Dahlia, D. (2020). The Effectiveness of Psychoreligious Intervention: *Murottal* Al-Quran on Pain and Stress Level of Bone Cancer Patient. *Indonesian Journal of Global Health Research*, 2(4), 375-384. https://doi.org/10.37287/ijghr.v2i4.260
- Putra, M. F. E., & Nashori, F. (2021). The Effectiveness of Reflective-Intuitive AI Fatihah Reading Therapy in Reducing Autoimmune Survivor Stress. Jurnal Fuaduna: Jurnal Kajian Keagamaan dan Kemasyarakatan, 5(1), 83-94. http://dx.doi.org/10.30983/fuaduna.v5i1.4218
- Putra, P. S., Gumilar, R., Kusuma, S. R., Purnomo, H., & Basumerda, C. (2018). The effect of Quran *murottal*'s audio on short term memory. In *MATEC Web of Conferences* (Vol. 154, p. 01060). EDP Sciences. https://doi.org/10.1051/matecconf/201815401060
- Rachdaoui, N., & Sarkar, D. K. (2017). Pathophysiology of the effects of alcohol abuse on the endocrine system. *Alcohol research: current reviews*, *38*(2), 255. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC55136 89/
- Rosmiarti, R., Ria, G., Maya, A., & Jamalluddin, S. B. (2020). *Murottal* Al-Quran therapy on decreasing labor pain and anxiety in maternity mothers first phase. *Enfermeria clinica*, 30, 110-114. https://doi.org/10.1016/j.enfcli.2019.11.034
- Sansbury, B. S., Graves, K., & Scott, W. (2015). Managing traumatic stress responses among clinicians: Individual and organizational tools for selfcare. *Trauma*, 17(2), 114-122. https://doi.org/10.1177/1460408614551978
- Sutrisno, I. T. (2018). Pengaruh Spiritual Caring Dengan Murottal Terhadap Stres, Cemas, Dan Depresi Pada Pasien Kanker Serviks Stadium IIIB Yang Menjalani Kemoterapi di RSUD Dr. Soetomo Surabaya (Doctoral dissertation, Universitas Airlangga). https://repository.unair.ac.id/77606/
- Wang, X., Zhang, Y., Fan, Y., Tan, X. S., & Lei, X. (2018). Effects of Music Intervention on the Physical and Mental Status of Patients with Breast Cancer: A Systematic Review and Meta-Analysis. *Breast Care*, 13(3), 183-190. http://www.doi.org/10.1159/000487073