HTechJ Health and Technology Journal (HTechJ)

Volume 01, Number 02
April 2023
p-ISSN: 2986-5662
e-ISSN: 2985-959X

Yoga Therapy for Improving the Quality of Life among Breast Cancer Patients: Literature Review

Rizeki Dwi Fibriansari[1], Laili Nur Azizah[2]

[1]Fundamental of Nursing, Faculty of Nursing, Universitas Jember, Indonesia
[2]Medical-Surgical Nursing, Faculty of Nursing, Universitas Jember, Indonesia

Correspondence should be addressed to:
Rizeki Dwi Fibriansari
rizekifibriansari@unej.ac.id

Abstract:
Cancer is a chronic disease that affects emotional states and changes in daily life, causing physiological and psychological problems. This condition can also affect the quality of life. This literature review aims to determine the effect of yoga therapy on improving the quality of life of breast cancer patients. The method used is by searching several published studies through databases through PubMed, Sage Journal, SpringerLink, and Science Direct. Research questions are designed using the PICO principle. Selected studies were published from 2018-2022. This yoga therapy can affect the improvement of the quality of life of breast cancer patients. Yoga can reduce depressing symptoms in patients undergoing cancer treatment and is beneficial in reducing treatment side effects, emotional improvement, and quality of life. The duration of yoga therapy, which is an average of 60 minutes, will improve the quality of life of breast cancer patients. Yoga shows significant results in improving the quality of life of breast cancer patients. Yoga can majorly affect the patient's high quality of life, namely physical function, role, emotional, cognitive, and social. Yoga interventions can relieve pain symptoms of patients undergoing cancer treatment and positively impact treatment side effects, improve emotions, and reduce the quality of life.

Article info:
Submitted:
10-01-2023
Revised:
12-02-2023
Accepted:
16-02-2023

Keywords:
yoga; quality of life; cancer

DOI: https://doi.org/10.53713/htechj.v1i2.20

INTRODUCTION

Breast cancer is currently one of the main diseases palliative care services treat. From year to year, breast cancer patients are increasing (Setiawan et al., 2021). Breast cancer is the most frequently diagnosed cancer in women worldwide (El-Hashimi & Gorey, 2019). Cancer is a chronic disease that affects emotional states and changes in daily life, causing physiological and psychological problems. Breast cancer patients experience a decreased mental and emotional status and a large decrease in quality of life. This is directly related to the severity of edema, pain, and neuropathy after mastectomy. 3-6 Women with breast cancer are at higher risk of depression, anxiety, sexual dysfunction, sleep, cognitive impairment, fatigue, and sexual problems (Eyigor et al., 2018). This condition can also affect the quality of life of a patient with breast cancer (Setiawan et al., 2021).

Quality of life (QoL) is overall well-being, including mental, physical, and social well-being (Jones et al., 2020). The patient's quality of life is influenced by several medical factors such as type, disease, length of illness, treatment given, and also complications; 3 psychosocial factors, these factors are negative emotions that a person will experience in connection with illness, such as anger, sadness and disappointment, anxiety, stress, and helplessness (Utami, 2020). The

Volume 01, Number 02
April 2023
p-ISSN: 2986-5662
e-ISSN: 2985-959X

incidence of breast cancer is increasing from year to year. Breast cancer can progress to late or advanced stages. At this advanced stage, cancer lacerations are around 5-10% in breast cancer patients (Purnamasari & Widani, 2020).

Breast cancer is the second most common cancer in the world after lung cancer, especially among women, among other cancers. The incidence of breast cancer is increasing. In 2008, there were 12.7 million new cases of breast cancer; in 2012, there were 1.7 million new cases; and in 2018, there were 2089 million new cases of breast cancer. The mortality rate from breast cancer was around 6.6% in 2018, with a death toll of around 627,000 (Hansen et al., 2017). The incidence of breast cancer in 2018 varies by region. Australia (New Zealand) has the highest incidence, 94.2 per 100,000 population, and 92.6 in Western Europe. Incidence of 90.1 per 100,000 population, then per 100,000 population in Eastern Europe (Mardhotilla, 2020). Southeast Asia, on the other hand, ranks 17th with an incidence of 38.1 per 100,000. The second highest prevalence of breast cancer in Indonesia, 0.5% (0.8%) after cervical cancer. According to the Ministry of Health, as of January 31, 2019, there were 42.1 breast cancer cases per 100,000, with an average death rate of 17 per 100,000. In 2013, there were 61,682 women with breast cancer in Indonesia, including 2,285 cases in West Sumatra. dr. M based on medical records of outpatient breast cancer in Jamil increased to 2,082 in 2014, 972 in 2015, 4,132 in 2016, and 1,941 in 2017 (Rochmawati et al., 2016).

The quality-of-life issues are very broad and complex, including physical health, psychological health, degrees of freedom, social relations, and the environment in which they live. Components of quality-of-life decisions can be determined by the psychological problems they experience. Health problems experienced by a person can affect a person's anxiety. This follows previous research that people with chronic illnesses experience anxiety. With related clinical conditions, namely progressive chronic diseases, nursing problems arise with anxiety diagnoses (Wulandari, 2019). The emergence of anxiety nursing problems (SDKI, 2017) is expected to overcome the anxiety level in patients. According to (SLKI, 2019), characteristics that must be achieved are less verbalized confusion, less verbalized anxiety about the status quo, less anxious behavior, less tense behavior, less dizziness, less appetite, less shivering, better concentration, improved sleep patterns, increased empowerment, etc. This certainly requires an action plan/intervention following the characteristic limitations to be achieved, one of which is education by demonstrating and practicing relaxation techniques, one of which is stretching (SIKI, 2018).

Yoga therapy intervention is one of the most commonly used complementary therapies for breast cancer. Yoga intervention is widely recognized as an active adjunctive therapy for breast cancer. In addition, increasing evidence shows that yoga significantly improves the quality of life for women with breast cancer. A recent meta-analysis concluded that a yoga intervention for women with breast cancer was highly effective in reducing anxiety and depression, but especially in improving their overall quality of life (El-Hashimi & Gorey, 2019). Yoga is a complementary medicine option that combines breathing, relaxation, and body movement. With elements of breathing, flexibility, and relaxation, yoga makes a suitable psychosomatic exercise program as a complementary or alternative treatment for cancer patients (Setiawan et al., 2021). Yoga can be seen as an alternative therapy to relieve fatigue in breast cancer patients who have been or are being treated for cancer (Dong et al., 2019).

The mechanism of action of the hormone is optimized by the relaxation process. The function of the pituitary gland as a producer of adrenocortical hormones inhibits the adrenal glands and regulates the secretion of adrenaline and cortisol within normal limits (Setiawan et al., 2021). This condition helps reduce the biological and psychological stress of cancer patients. Therefore, yoga greatly improves the quality of life for women with cancer (El-Hashimi & Gorey, 2019). Yoga is a

Volume 01, Number 02
April 2023
p-ISSN: 2986-5662
e-ISSN: 2985-959X

simple and inexpensive method that has proven effective for sick people (Jayawardena et al., 2020). In the short term, yoga positively affects the mental health of early-stage breast cancer patients and survivors (Carson et al., 2017). Yoga training under the guidance of an experienced can be a useful adjunct treatment for cancer patients (Haier et al., 2018). Participating in Tibetan yoga while receiving chemotherapy had modest short-term benefits for sleep quality, with long-term benefits for those who practiced at least twice a week (Alejandro Chaoul, 2018). This literature review aims to determine the effect of yoga therapy on improving the quality of life of breast cancer patients.

METHOD

This study was a literature review. A systematic search was used to find the related published literature. The protocol and evaluation of the literature review will use the PRISMA checklist to determine the selection of studies found and adjusted for the literature review.

The literature search was limited to the 2018-2022 publication years. Articles used in this literature review must meet the full-text requirements by using an online search on PubMed, Sage Journal, SpringerLink, and Science Direct.

Keywords are used to broaden and specify searches, making determining the articles or journals used easier. The keywords in this literature review consist of the following: Breast Cancer, Yoga, and Quality of Life (QoL) with the combination: (“Breast Cancer”) AND (“Yoga”) AND (“QoL”). The results of the literature search selection are illustrated in Figure 1.

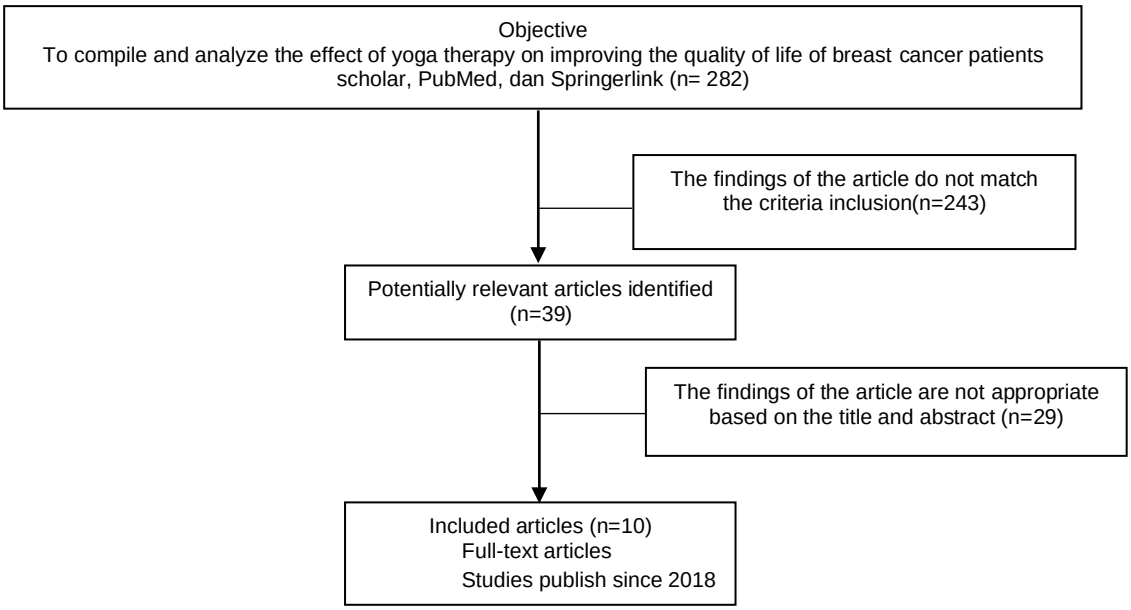

Figure 1. The Flow of literature search

HTechJ Health and Technology Journal (HTechJ)
Volume 01, Number 02
April 2023
p-ISSN: 2986-5662
e-ISSN: 2985-959X

RESULT

The literature search yielded 282 articles related to keywords. However, after the final selection, 10 relevant articles met the inclusion criteria to be included in the analysis of the research article. These study results are described in the following two tables.

Yoga Therapy for Breast Cancer

The finding showed that yoga therapy for breast cancer is about age, breast cancer stage, and duration of yoga therapy (Table 1).

Table 1. Characteristic Breast Cancer and Yoga

No.	Author	Age	Stage	Duration
1.	(Odynets et al., 2019)	50-60 years old	Stage III	60 minutes per session, 3 times a week for 12 weeks
2.	(Alejandro Chaoul, 2018)	≥18 years old	Stage I-III	75-90 minutes per session, 2 times a week for 12 weeks
3.	(Prakash et al., 2020)	unidentified	Stage I-IV	120 minutes per session, once a week for 3 weeks
4.	(Eyigör et al., 2021)	18-70 years old	Stage I-IV	60 minutes per session, 2 times a week for 6 weeks
5.	(Zetzl et al., 2020)	≥18 years old	Stage I-IV	60 minutes per session, once a week for 8 weeks
6.	(Vadiraja et al., 2017)	30-70 years old	Metastatic stage	for 16 weeks
7.	(Hardoerfer & Jentschke, 2018)	≥18 years old	Stage I-IV	60 minutes per session, once a week for 8 weeks
8.	(Liu et al., 2022)	51-60 years old	Stage I-II	60 minutes per session, once a week for 8 weeks
9.	(Eyigor et al., 2018)	18-65 years old	Stage I-IV	120 minutes per session, 1 time a week for 10 weeks
10.	(Pagliaro & Bernardini, 2019)	≥50 years old	Stage I-IV	120 minutes per session, once per week

The characteristics of respondents in this study were breast cancer patients aged over 18 years with the most common type of breast cancer stage, namely I-IV. The most common duration of yoga practice is 60 minutes per session (50% of journal articles), with the most used frequency of yoga therapy being 1 time a week (60% of journal articles), with the longest duration of yoga therapy being 8 weeks (30% journal articles).

Quality of Life

The finding showed the quality of life of breast cancer patients on a functional scale, symptom scale, global health status scale, and p-value.

Volume 01, Number 02
April 2023
p-ISSN: 2986-5662
e-ISSN: 2985-959X

Table 2. Quality of Life at Breast Cancer Patient

No.	Author	Functional scale	Symptom scale	Global health status scale	P-value	Others
1.	(Odynets et al., 2019)	20,03	17.13	18.00	*P* = 0.023	Increase
2.	(Alejandro Chaoul, 2018)	-	11,52	0,0003	*P* < 0,001	Increase
3.	(Prakash et al., 2020)	73.33	(4,48 ± 11,48)	66.66	*P* = 0,048	Increase
4.	(Eyigör et al., 2021)	74.9±12.1	19.3±8.1	56,6±16,7	*P* = 0,035	Increase
5.	(Zetzl et al., 2020)	21,0	2.1	59,5	*P* = 0,002	Increase
6.	(Vadiraja et al., 2017)	-	19.84 (6.19)	-	*P* < 0,001	Increase
7.	(Hardoerfer & Jentschke, 2018)	0,026	0,042	0,122	*P* = 0,005	Increase
8.	(Liu et al., 2022)	96,34	15.96	90,89	*P* = 0.03	Increase
9.	(Eyigor et al., 2018)	82.4	16.8	71.6	*P* ≤ 0.05	Increase
10.	(Pagliaro & Bernardini, 2019)	-	17,883	-	*P* < 0,001	Increase

The journals reviewed using the quality-of-life instrument for breast cancer patients using the EORTC-QLQ C30. The results of the journal review showed a 100% increase in patients' quality of life before and after yoga therapy.

DISCUSSION

Most breast cancer patients are over 18 years of age with the most common type of breast cancer stage, namely I-IV. The large number of patients aged 40 years and over because this age is the greater the risk of developing breast cancer. Breast cancer begins to grow rapidly at the age of 40-49 years, while the risk of breast cancer itself develops until the age of 50 with an odds ratio of 1 in 50 women (Elmika, 2020). Patients with advanced breast cancer are mostly found between the decades of 40 to 60 years. In the decade 40 to decade 60, according to research, breast cancer sufferers tend to increase, usually accompanied by several supporting factors, such as the lifestyle of sufferers that affect BMI more than normal limits (Rahmawaty et al., 2020).

The duration of yoga therapy applied in the 10 reviewed articles was found to be 60 minutes per session, 3 times a week for 12 weeks, (Odynets et al., 2019), 75-90 minutes per session, 2 times a week for 12 weeks (Alejandro Chaoul, 2018), 120 minutes per session 1 time per week for 3 weeks (Prakash et al., 2020), 60 minutes per session, 2 times per week for 10 weeks (Eyigör et al., 2021), 60 minutes, 1 time per week for 8 weeks (Zetzl et al., 2020), for 16 weeks (Vadiraja et al., 2017), 60 minutes per session, 1 time per week for 8 weeks (Hardoerfer & Jentschke, 2018), 60 minutes per session, 1 time per week for 8 weeks (Liu et al., 2022), 120 minutes per session, 1 time per week for 10 weeks (Eyigor et al., 2018), and 120 minutes per session, 1 time per week (Pagliaro & Bernardini, 2019).

Yoga is present as a complementary therapy option that combines breathing techniques, relaxation techniques, and physical techniques. With breathing exercises, flexibility, and relaxation components, yoga is a mind-body exercise program that qualifies as a complementary or alternative therapy for cancer patients (Eyigör et al., 2021). As a result of the relaxation process, the work function of the hormone becomes optimal. The function of the pituitary gland as a producer of the hormone adeno-corticotropin suppresses the adrenal glands to regulate the excretion of adrenaline and cortisol within normal limits. Conditions like this will help reduce

Volume 01, Number 02
April 2023
p-ISSN: 2986-5662
e-ISSN: 2985-959X

biological and psychological stress in cancer patients. So yoga can substantially improve the quality of life of women with cancer (Setiawan et al., 2021). Yoga intervention with a duration of 60-120 minutes. Doing yoga will help reduce biological and psychological stress in cancer patients to improve the quality of life for women with cancer.

Yoga interventions are increasingly used as a complementary therapy to manage the disease and treatment-related side effects in patients. Yoga intervention positively affects the physical and psychological condition of a patient with chronic diseases such as cancer. When yoga activities are supported by breathing exercises and meditation, the body will experience a detoxification process of substances or poisons that are harmful to human physical health. As a result, physically, the body feels fresher and fitter, and the immune system increases as a hormonal reaction to the work of the pituitary gland, which reduces adrenocorticotrophin (ACTH) and cortisol so that immunity increases. Psychologically there will be a feeling calmer and less anxiousness. Thus, yoga can relieve anxiety, depression, and fatigue during treatment and improve the patient's quality of life.

The EORTC QLQ-C30 is a questionnaire to measure the specific Quality of Life (QoL) for cancer patients. In the EORTC-QLQ assessment, the quality of life increased in 10 articles according to (Odynets et al., 2019), (Alejandro Chaoul, 2018), (Prakash et al., 2020), (Eyigör et al., 2021), (Zetzl et al., 2020), (Vadiraja et al., 2017), (Hardoerfer & Jentschke, 2018), (Liu et al., 2022), (Eyigor et al., 2018) and (Pagliaro & Bernardini, 2019).

The EORTC QLQ-C30, version 3.0, is a cancer-specific measure of HRQOL.17 It consists of 30 items to assess physical, role, emotional, cognitive, and social functioning, global health status or QOL scales, fatigue, pain, nausea and vomiting, dyspnea, insomnia, appetite loss, constipation, diarrhea, and financial difficulties. The EORTC QLQ-BR23 is a breast-specific module that comprises 23 questions to assess body image, sexual functioning, sexual enjoyment, future perspective, systemic therapy side effects, breast symptoms, arm symptoms, and upset by hair loss.

On the functional scale, the area with the highest average score in cognitive function. Cognitive function questions consist of recollection questions and concentration questions. Several studies have shown that breast cancer patients have good memory and concentration; in this case, cognitive function is still good or has not changed after chemotherapy. The lowest functional scale is physical functionality. Most breast cancer patients experience mild to moderate physical dysfunction due to the side effects of chemotherapy. This can affect the patient's quality of life. Breast cancer patients receiving adjuvant chemotherapy tend to have ongoing physical symptoms. Cancer patients with good physical function have a quality of life 1.6 times better than patients with poor physical function (Marwin et al., 2021).

On the symptom scale, the areas with the highest score or scores were pain, malaise, insomnia, and loss of appetite. Breast cancer patients often experience pain. Chemotherapy can also cause pain in breast cancer patients. Chemotherapy agents that can cause pain include cyclophosphamide, carboplatin, and taxanes. Taxane class of drugs can cause neuropathic pain, usually characterized by numbness or tingling. Pain harms cancer patients and can affect their quality of life values. Fatigue is a common symptom in cancer patients. Fatigue is severe physical and emotional exhaustion related to cancer or cancer treatment. Fatigue can last up to 5 years after treatment. Fatigue can harm work, social relationships, mood, and daily life, reducing the quality of life for cancer patients. Breast cancer patients receiving chemotherapy tend to suffer from insomnia. Insomnia can affect physical and psychological functions such as the immune system, cognitive impairment, depression, and malaise. Loss of appetite is associated with poor food intake, weight loss, and malnutrition and can affect the quality of life. Chemotherapy

suppresses the patient's appetite via chemoreceptors in the brain and can cause anorexia. Global health consists of two questions about respondents' perceptions of overall health and quality of life (Marwin et al., 2021).

The use of the EORTC QLQ-C30 domain assessment instrument that has a major influence on patients' high quality of life is the functional scale consisting of physical, role, emotional, cognitive, and social functions. The domain that affects the decrease in the patient's quality of life is on the symptom scale, namely fatigue, pain, insomnia, and loss of appetite.

Yoga interventions can relieve pain symptoms of patients undergoing cancer treatment and positively impact treatment side effects, improve emotions, and reduce the quality of life. Several authors describe cancer patients' increasing positive and negative effects following yoga programs. Previous studies have looked at the benefits of yoga in cancer patients: health, quality of life and physical improvement, anxiety, depression, sleep disturbances, malaise, psychosocial stress, and reduction of musculoskeletal symptoms. In this study, the quality-of-life index remained stable in the yoga intervention group, but the overall quality of life was significantly reduced in the control group. Yoga intervention will significantly improve the quality of life of cancer patients.

CONCLUSION

The quality of life before and after using yoga therapy changes for the better and is proven to help improve the quality of life for breast cancer patients. Physical, role, emotional, cognitive, and social functioning have a big influence on patients' high quality of life.

Yoga interventions need to be given to cancer patients to help improve the quality of life of patients whether they are undergoing chemotherapy treatment or not. Hospital nurses, especially in cancer treatment rooms, can apply yoga as an alternative intervention for cancer patients.

ACKNOWLEDGEMENT

Thank you to all who have participated and helped in the process of compiling this literature review.

CONFLICT OF INTEREST

This literature review is prepared without conflict in the writing.

REFERENCES

Alejandro Chaoul. (2018). Randomized trial of Tibetan Yoga in Breast Cancer Patients Undergoing Chemotherapy Alejandro. *HHS Public Access*, *176*(3), 139–148. https://doi.org/10.1002/cncr.30938.Randomized

Carson, J. W., Carson, K. M., Olsen, M. K., Sanders, L., & Porter, L. S. (2017). Mindful Yoga for women with metastatic breast cancer: Design of a randomized controlled trial. *BMC Complementary and Alternative Medicine*, *17*(1). https://doi.org/10.1186/S12906-017-1672-9

Dong, B., Xie, C., Jing, X., Lin, L., & Tian, L. (2019). Yoga has a solid effect on cancer-related fatigue in patients with breast cancer: a meta-analysis. *Breast Cancer Research and Treatment*, *177*(1), 5–16.

El-Hashimi, D., & Gorey, K. M. (2019). Yoga-Specific Enhancement of Quality of Life Among Women With Breast Cancer: Systematic Review and Exploratory Meta-Analysis of Randomized Controlled Trials. *Journal of Evidence-Based Integrative Medicine*, *24*, 1–9.

https://doi.org/10.1177/2515690X19828325

Elmika, E. (2020). Gambaran Umur, dan Jenis Kelamin Pasien Kanker Payudara di RS Ibnu Sina Kota Makassar Elma Elmika. *Penelitian Kesehatan Suara Forikes*, *11*(5), 422–424. DOI: http://dx.doi.org/10.33846/sf11101

Eyigör, S., Apaydin, S., Yesil, H., Tanlgor, G., & Hopanci Bicakli, D. (2021). Effects of Yoga on Phase Angle and Quality of Life in Patients with Breast Cancer: A Randomized, Single-Blind, Controlled Trial. *Complementary Medicine Research*, *28*(6), 523–532. https://doi.org/10.1159/000515494

Eyigor, S., Uslu, R., Apaydın, S., Caramat, I., & Yesil, H. (2018). Can yoga have any effect on shoulder and arm pain and quality of life in patients with breast cancer? A randomized, controlled, single-blind trial. *Complementary Therapies in Clinical Practice*, *32*(3), 40–45. https://doi.org/10.1016/j.ctcp.2018.04.010

Haier, J., Duda, A., & Branss-Tallen, C. (2018). Improvement of well-being in cancer patients by yoga training. *Medical Journal of Indonesia*, *27*(3), 185–193. https://doi.org/10.13181/mji.v27i3.2744

Hansen, E. D., Mitchell, M. M., Smith, T., Hutton, N., Keruly, J., & Knowlton, A. R. (2017). Chronic Pain, Patient-Physician Engagement, and Family Communication Associated With Drug-Using HIV Patients' Discussing Advanced Care Planning With Their Physicians. *Journal of Pain and Symptom Management*, *54*(4), 508–513. https://doi.org/10.1016/j.jpainsymman.2017.07.036

Hardoerfer, K., & Jentschke, E. (2018). Effect of yoga therapy on symptoms of anxiety in cancer patients. *Oncology Research and Treatment*, *41*(9), 526–532. https://doi.org/10.1159/000488989

Jayawardena, R., Ranasinghe, P., Ranawaka, H., Gamage, N., Dissanayake, D., & Misra, A. (2020). Exploring the therapeutic benefits of "Pranayama" (yogic breathing): A systematic review. *International Journal of Yoga*, *13*(2), 99. https://doi.org/10.4103/ijoy.ijoy_37_19

Jones, T. L., Sandler, C. X., Spence, R. R., & Hayes, S. C. (2020). Physical Activity and Exercise in Women with Ovarian Cancer: A Systematic Review. *Obstetrical and Gynecological Survey*, *75*(10), 606–607. https://doi.org/10.1097/01.ogx.0000697060.44191.0a

Liu, W., Liu, J., Ma, L., & Chen, J. (2022). Effect of mindfulness yoga on anxiety and depression in early breast cancer patients received adjuvant chemotherapy : a randomized clinical trial. *Journal of Cancer Research and Clinical Oncology*, *0123456789*. https://doi.org/10.1007/s00432-022-04167-y

Mardhotilla, F. (2020). Profil Paparan Asap Rokok Lingkungan pada Pasien Kanker Payudara di Sumatera Barat Tahun 2020. *Jurnal Ilmu Kesehatan Indonesia*, *1*(2), 82–86. https://doi.org/10.25077/jikesi.v1i2.95

Marwin, M., Perwitasari, D. A., Candradewi, S. F., Septiantoro, B. P., & Purba, F. D. (2021). Kualitas Hidup Pasien Kanker Payudara Di Rsup Dr. Kariadi Semarang Menggunakan Kuisioner Eortc Qlq-C30. *Jurnal Ilmu Farmasi Dan Farmasi Klinik*, *18*(01), 16. https://doi.org/10.31942/jiffk.v18i01.4895

Odynets, T., Briskin, Y., & Todorova, V. (2019). Effects of Different Exercise Interventions on Quality of Life in Breast Cancer Patients: A Randomized Controlled Trial. *Integrative Cancer Therapies*, *18*. https://doi.org/10.1177/1534735419880598

Pagliaro, G., & Bernardini, F. (2019). A Specific Type of Tibetan Medicine Meditation for Women with Breast Cancer: A Pilot Survey. *Oncology (Switzerland)*, *97*(2), 119–123. https://doi.org/10.1159/000500676

Prakash, K., Saini, S. K., & Pugazhendi, S. (2020). Effectiveness of yoga on quality of life of breast cancer patients undergoing chemotherapy: A randomized clinical controlled study. *Indian Journal of Palliative Care*, *26*(3), 323–331. https://doi.org/10.4103/IJPC.IJPC_192_19

Purnamasari, N. N. I., & Widani, N. L. (2020). EFEKTIFITAS YOGA PRANAYAMA DAN AROMATERAPI TERHADAP PENINGKATAN KUALITAS TIDUR DAN KUALITAS HIDUP PASIEN KANKER. *Jurnal Kesehatan Saelmakers PERDANA*, *3*(1), 1–10.

Rahmawaty, S. D., Abidin, Z., & Paramita, S. (2020). Hubungan Faktor-Faktor Treatment Delay

Volume 01, Number 02
April 2023
p-ISSN: 2986-5662
e-ISSN: 2985-959X

Dengan Kasus Kanker Payudara Stadium Lanjut Di Rsud Abdul Wahab Sjahranie Samarinda Tahun 2019. *Motiva Jurnal Psikologi*, *2*(2), 74. https://doi.org/10.31293/mv.v2i2.4807

Rochmawati, E., Wiechula, R., & Cameron, K. (2016). Current status of palliative care services in Indonesia: a literature review. *International Nursing Review*, n/a-n/a. https://doi.org/10.1111/inr.12236

SDKI. (2017). *Standar Diagnosa Keperawatan Indonesia Edisi1*.

Setiawan, H., Nantia Khaerunnisa, R., Ariyanto, H., Fitriani, A., Anisa Firdaus, F., & Nugraha, D. (2021). Yoga Meningkatkan Kualitas Hidup Pada Pasien Kanker: Literature Review. *Journal of Holistic Nursing Science*, *8*(1), 75–88. https://doi.org/10.31603/nursing.v8i1.3848

SIKI. (2018). *Standar Intervensi Keperawatan Indonesia Edisi 1*.

SLKI. (2019). *Standar Luaran Keperawatan Indonesia Edisi 1*.

Utami, S. D. R. (2020). insulin-dependent diabetes. *STRES, KECEMASAN DAN DEPRESI DENGAN KUALITAS HIDUP PASIEN DM DI KOTA SEMARANG.*

Vadiraja, H. S., Rao, R. M., Nagarathna, R., Nagendra, H. R., Patil, S., Diwakar, R. B., Shashidhara, H. P., Gopinath, K. S., & Ajaikumar, B. S. (2017). Effects of yoga in managing fatigue in breast cancer patients: A randomized controlled trial. *Indian Journal of Palliative Care*, *23*(3), 247–252. https://doi.org/10.4103/IJPC.IJPC_95_17

Wulandari, A. (2019). Hubungan Antara Tingkat Kecemasan Dengan Kualitas Hidup Pada Lansia Terdiagnosa Penyakit Kronis. *Publikasi Ilmiah*.

Zetzl, T., Renner, A., Pittig, A., Jentschke, E., Roch, C., & Van Oorschot, B. (2020). *Yoga effectively reduces fatigue and symptoms of depression in patients with different types of cancer*. https://doi.org/10.1007/s00520-020-05794-2/Published