

Nursing Intervention Model to Overcome Psychosocial Problems of Breast Cancer Patients: A Literature Review

Henri Setiawan¹, Suharta², Ishana Balaputra³, Nur Hidayat⁴, Heri Ariyanto⁵,
Andan Firmansyah⁶

STIKes Muhammadiyah Ciamis^{1,4,5,6}

STIKes Bhakti Al-Qodiri Jember^{2,3}

Correspondence Email: henrisetiawan1989@gmail.com

ORCID: 0000-0001-9252-6277

ARTICLE INFORMATION

ABSTRACT

Publication information

Research article

HOW TO CITE

Setiawan, H., Suharta., Balaputra, I., Hidayat, N., Ariyanto, H., & Firmansyah, A. (2022). Nursing Intervention Model to Overcome Psychosocial Problems of Breast Cancer Patients, 5(4), 111-120.

DOI:

<https://doi.org/10.32535/jicp.v5i4.1916>

Copyright©2022 owned by Author(s).
Published by JICP



This is an open-access article.
License: Attribution-Noncommercial-Share Alike (CC BY-NC-SA)

Received: 05 October 2022

Accepted: 15 October 2022

Published: 15 November 2022

Chronic disease, such as breast cancer is a disease that requires comprehensive treatment and takes a long time. The prevalence of breast cancer patients continues to be high in number so that it will cause psychosocial problems such as social problems, anxiety, and even depression. This study aims to identify appropriate nursing interventions to address psychosocial problems in breast cancer patients. Literature review was used in this study. Article searches were conducted in six journal databases, namely PubMed, JSTOR, Taylor, Willey Online, Sage, and Google Scholar. Seven articles were found that matched the inclusion of criteria. Results of this review show that social support interventions, palliative support, psychological interventions, home care, home visits, virtual reality and music therapy, relaxation techniques and motivational support, psychological therapy programs via offline and telephone, Adapted Physical Activity and Diet (APAD), Aromatherapy Plus Music Therapy can be performed on cancer patients to help reduce psychosocial problems so that the patient's quality of life will improve.

Keywords: Breast Cancer, Intervention Model, Nursing Care, Psychosocial Problems, Therapy.

INTRODUCTION

Chronic diseases suffered by patients often realize that it is very unlikely that they will be able to fully recover from their illness. There is no treatment for chronic diseases that can cure them permanently, but nursing care carried out by nurses can improve the quality of life so that patients can maintain their lives (Setiawan & Budiman, 2021).

Health is one of the vital things in the world (Suprpto, 2022). However, cancer is a chronic disease whose number is increasing, the cure rate for cancer patients is very dependent on how quickly the treatment is carried out. This is due to the rapid process of metastasis that occurs during the stage of cancer. One of the most common cancers is breast cancer. Breast cancer is a disease that affects many women in the world. Breast cancer is one of the chronic diseases that scares women, but science and technology are growing rapidly, breast cancer can be detected early on abnormal developments in breast tissue, in general patients will find a lump in the breast area during an independent examination . Not only that, breast cancer treatment takes a long time, so it can cause several other problems that occur in patients and their families (Cherny, Paluch-Shimon, & Berner-Wygoda, 2018).

The impact of chronic disease is not only felt by the sufferer but can have an impact on families who experience emotional feelings when they find out the diagnosis, and are burdened with responsibility because caring for patients takes a long time. Unwillingness to continue treatment often results from feeling bored. This greatly affects the success of treatment, even non-adherence in treatment can cause a prolonged healing time (Setiawan, Khaerunnisa, Ariyanto, & Firdaus, 2020). The impact of chronic disease is not only felt by the sufferer but can have an impact on families who experience emotional feelings when they find out the diagnosis, and are burdened with responsibility because caring for patients takes a long time (Setiawan et al., 2020)

The Organization of World Health (WHO) revealed that the mortality caused by cancer until 2021 was 9.6 million people. 2030, it is estimated that there will be an increase of 13.2 million cases. The Asian population is the highest contributor to cancer cases in 2020 with 9,503,710 cases, followed by the European Union with 4,398,433 cases, while in Indonesia in 2019 there were, 1.4 cases per thousand Indonesian population. A report on more Research about the Breast Cancer of Research Foundation on breast cancer studies in more countries, since 2018 breast cancer patients have continued more increase by almost 2 million care diagnosed in newly (Momenimovahed & Salehiniya, 2019).

Breast cancer itself occurs due to the malignant growth of breast epithelial cells in the ducts or lobes. Breast cancer begins with uncontrolled hyperplasia so that it develops into carcinoma in situ. In general, tissue that has developed into carcinoma is difficult to stop its growth so that this disease will continue to increase and this requires perfect prevention, diagnosis, treatment, and rehabilitation efforts, so that patient treatment can be carried out as much as possible (Setiawan, Khaerunnisa, et al., 2021).

Several risk factors that can cause breast cancer include age, gender (women are more at risk, race, radiation exposure, breast thickness, history of cancer, menstrual periods, history of pregnancy and breastfeeding. The main causes that can cause cancer are not known for certain, However, some experts and research also state that the factors that cause breast cancer are unhealthy lifestyles such as excessive consumption of fast food and monosodium glutamate (MSG) and not implementing a healthy lifestyle such as exercise and so on (Hannafon & Ding, 2019).

Alfiani, Putri, and Widayanti said that obesity is the main factor that causes breast cancer, this is because fat cells can produce more estrogen, the increase in estrogen can trigger the growth of cancer cells. So it can be said that obesity has a cancer-stimulating effect (Alfiani et al., 2022).

Symptoms caused by breast cancer are quite typical, namely the presence of a lump in the breast area, this can be identified by means of an independent examination, then if the stage has progressed then the skin in the breast area will be red. If not treated immediately, the breast tissue will be damaged and require breast removal or what is called a mastectomy. Some of the treatment efforts in cancer patients, one of which is chemotherapy, but in handling cancer it takes a long time for non-surgical treatment (Hakim & Awale, 2020)

The impact received by cancer patients in the treatment process will be complex. Among the impacts that will be obtained are psychosocial problems. Psychosocial problems of breast cancer patients consist of social and psychological aspects. Psychosocial problems will arise, such as the suffering experienced by breast cancer sufferers including body image disorders, loss of motivation, mood changes, anxiety, stress, depression and others. Meanwhile, in social problems, patients will tend to close themselves off from social interactions (Handayani, Karim, & Wiratmo, 2021). According to research from Loquai states that breast cancer patients who are still young will experience higher distress than those who are older. This is influenced by adolescents who are still experiencing the task of psychosocial development, namely the intimate stage, where at this stage of development they have the task of having a clear commitment to form a heterosexual family or work responsibilities (Widiasih, Ermiasi, Jayanti, & Rais, 2019).

Psychosocial problems that will be dominant in breast cancer patients are from the social aspect. Guntari's research (2016) writes that social problems experienced by breast cancer sufferers such as social interaction will become a problem due to medical conditions, poor responses from others towards themselves, as well as communication problems with people around them causing sufferers to feel inadequate. confident and tend to be difficult to socialize (Nurjannah & Sym, 2021). In addition to social problems, physical conditions will have an impact on cancer sufferers. Physical problems will appear such as fatigue, difficulty sleeping, pain due to surgery, dissatisfied with yourself, pain that will affect their activities, nausea, hair loss, damaged tissue, shoulder and arm pain after surgery. Not only that, physical changes after being diagnosed with breast cancer and undergoing surgery will cause problems that occur physically, these physical problems are also related to body image (Kolodziejczyk & Pawlowski, 2019). Breast cancer sufferers often experience body image problems, namely feeling unattractive because of their illness, not being confident in their bodies, always worrying about other people about themselves, feeling less feminine, and weight will change (Faria, 2021).

In addition to psychosocial problems, breast cancer sufferers often experience anxiety and anxiety which can lead to anxiety problems. The feeling of anxiety experienced by the patient will increase the recurrence of the tumor and the loss of confidence from the effects of mastectomy surgery (Setiawan, Setiawan, & Mustopa, 2021). The anxiety experienced by the sufferer will become more and more persistent so that it is marked by negative thoughts towards him which will vary and increase from time to time (Setiawan, Lutfi et al., 2021). This adversely affects the physical and mental condition of a breast cancer patient. With the persistence of negative thoughts, the bad view of himself and his environment will get worse. Not only that, another bad problem is the loss of enthusiasm and motivation for healing (Cherny et al., 2018). The impact of breast cancer sufferers that have been written above can be concluded that cancer sufferers not only experience physical impacts, but also psychological, social and anxiety

problems. Therefore, chronic diseases such as cancer will require routine and thorough treatment so that patient patience is needed (Tsaras et al., 2018).

Psychosocial care is needed by breast cancer patients because it can have a more positive impact on their quality of life such as physical, cognitive, social, anxiety and depression. The form of psychosocial intervention given to patients can be carried out with several actions such as establishing relationships through good therapeutic communication, this is related to the ability of nurses to provide information both about illness and patient treatment. In addition, social support also needs to be provided so that the patient's trust is established, so that feelings of comfort, respect, appreciation, and love emerge (Tang et al., 2019). Failure to overcome psychosocial problems will have an impact on the patient's situation and condition, so that he will experience increasingly severe anxiety and refuse treatment. Psychosocial intervention in treating patients in this hospital is still a challenge for nurses. Psychosocial interventions are services provided by medical personnel or nurses using a psychologist approach, psychosocial support and spirituality (Kugbey, Meyer-Weitz, A., & Opong Asante, 2019).

RESEARCH METHOD

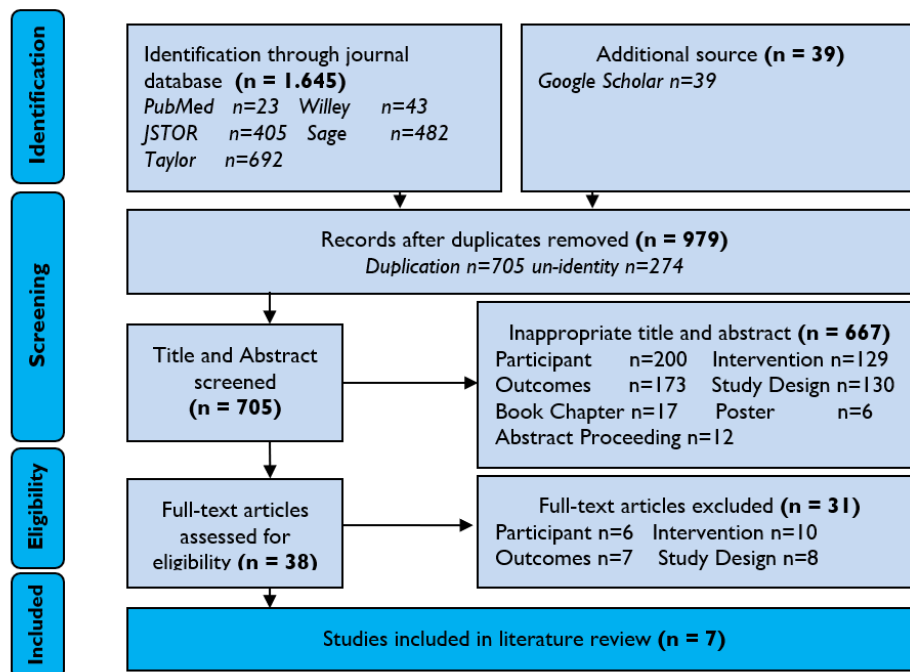


Figure 1. Identification procedures by prisma analysis

Literature review was used in this study. Articles were obtained from a number of journal databases such as; JSTOR, PubMed, Taylor, Sage, Willey Online, and Google Scholar using the MeSH term in advanced search engines; (((("Nursing Care"[Mesh])) OR "Nursing Intervention"[Mesh]) AND "Depression"[Mesh]) OR "Anxiety"[Mesh]) OR "Quality of Life"[Mesh]) AND "Breast Neoplasms"[Mesh]. We set the inclusion criteria, including published articles in 2012 to 2022 in English or Indonesian versions with complete access. Participants and the population (P) on this study was a patient with breast cancer and psychosocial nursing intervention (I) the form was psychosocial Outcome (O), Study Design by (S) or the research carried out that all method of research involving male and female subjects from some hospitals using nursing intervention. The author also used exclusion criteria, namely book chapters, the posters, or abstract proceedings. Additionally, the authors went through an analysis process for each

research they analyzed and gathered specific data to see how well nursing interventions affected patients with psychosocial breast cancer. Identification procedures by prisma analysis can be seen on Figure 1.

RESULTS

Table 1. Characteristic of the Study

Author (year)	Method	Findings
Putri and Suryanto (2019)	Objective: To explain the form of psychosocial intervention in palliative care for breast cancer patients Design: Case Study Sample: 107 randomly Intervention & Duration: in-depth focused interview Instrument: Communication	The psychosocial model carried out by the palliative team is to provide social support in the form of a Palliative support group program, psychological intervention, providing home care, home visits.
Chirico et al. (2020)	Objective: evaluate the effectiveness of immersive and interactive VR in relieving chemo-related psychological discomfort in a cohort of breast cancer patients, as well as how it compares to music therapy (MT) Design: Randomized Control Trial Sample: 64 randomly Intervention & Duration: VR for 5-10 minutes. MR for 20 minutes Instruments: Earphones, Headsets, Tape Radio, The Virtual Reality (VR) Symptom Questionnaire.	During chemotherapy, VR and MT are both effective therapies for lowering anxiety and boosting mood in breast cancer patients. Additionally, VR seems to be more efficient than MT at reducing stress, exhaustion, and depression.
Azwardi, Mulyadi, and Aisyah (2022)	Purpose: to get an overview of nursing implementation for patients undergoing chemotherapy treatment with anxiety problems Design: Case Study Sample: 2 Person Intervention & Duration: providing information about chemotherapy and its side effects, use of relaxation techniques and motivational support for three days Instrument: Communication	After being given nursing implementation in the form of providing information, relaxation exercises and motivational support for three days the anxiety experienced by the two patients was resolved.
Hee, Choi, Kihye, and Won (2019)	Objectives: to create a psychological nurse-led intervention program and assess its impact on patients' quality of life and psychological distress while they receive chemotherapy for breast cancer. Design: randomized controlled trial. Sample: 60 People randomly Intervention & Duration: psychological therapy program via offline and telephone for 7 counseling sessions Instruments: Telephone, Korean version of Profile of Mood States -Brief (K -POMS -B), the European Organization for Research and Treatment of Cancer (EORTC) Quality of Life questionnaire – Core Questionnaire (QLQ - C30, version 3.0), and Hospital Anxiety and Depression Scale (HADS)	The intervention group showed gains in physical, role, and emotional functioning as well as a substantial decrease in mood disorders, anxiety, and depression as compared to the control group. Additionally, they noted fewer signs including exhaustion, nausea/vomiting, pain, and insomnia.
Carayol et al. (2019)	Objective to assess the effectiveness of the Adapted Physical Activity and Diet (APAD)	Significant effects on fatigue and quality of life, as a result

	<p>intervention in reducing anxiety, depression, body mass index (BMI), and fat mass, as well as in enhancing muscle and cognitive function and quality of life (QoL). Design: randomized controlled trial. Sample: 143 People randomly Intervention & Duration: APAD includes mixed aerobics and resistance three times a week with training sessions and 9 diet consultations Instrument: EORTC QLQ-C30, World Cancer Research Fund (WCRF) Guideline.</p>	<p>of the APAD intervention, remained for up to 12 months. BMI and fat mass significantly decreased, while physical endurance and mental flexibility improved.</p>
<p>Deng, Xie, Liu, and Li (2021)</p>	<p>Objective: to ascertain the impact of perioperative music therapy (MT) and aromatherapy (AT) on the levels of pain and anxiety in breast cancer patients. Design: randomized controlled trial. Sample: 160 People randomly Intervention & Duration: AT or/plus MT performed at 2 time point: 30 min before surgery (T1) then 4 hours after the tracheal ex-tubation (T2) Instruments: VAS and enzyme-linked immunosorbent assay (ELISA)</p>	<p>AT or/plus MT have significant effect in pain and anxiety, and so on the levels of IL-6 and the level of HMGB-1.</p>
<p>Bulfone, Quattrin, Renzo Zanotti, Regattin, and Brusaferrò (2019)</p>	<p>Objective: to assess how music therapy affects patients with breast cancer's anxiety Design: randomized controlled trial. Sample: 60 People randomly Intervention & Duration: patient selects and listens to music, for theme music is pre-recorded with music player and headphones for about 15 minutes Instrument: Spielberg State Trait Anxiety Inventory (STAI)</p>	<p>Music therapy can reduce anxiety in breast cancer disease patients who receiving a conventional treatment</p>

DISCUSSION

Psychosocial care model in palliative care for breast cancer patients, this study describes a model of psychosocial intervention carried out by nurses, namely providing palliative support, social support, psychological intervention, home care and home visits. Palliative support is the provision of useful information for cancer patients related to their health, one of the activities carried out when patients visit for treatment according to their schedule. In addition, psychological intervention is one example of psychosocial support carried out by nurses. This psychological intervention is one of the psychosocial services that touch the psychological aspects of sufferers. This intervention is carried out as a support to relieve symptoms such as anger, anxiety and depression. Home visits and home care are also carried out by nurses (Brown, Cruickshank, & Noblet, 2021).

This intervention is one of the palliative cares that touches the medical and psychological aspects. Home visits are one of the treatments that apply an approach to the family, so that care for clients with chronic diseases can be more comfortable and clients and their families feel cared for by nurses. Not only that, treatment using the home visit method can increase the socialization that occurs between nurses, clients and families. In clients with chronic diseases, emotional problems are very susceptible to occur, not only in patients, the client's family can also experience this. In this study, it was stated that emotional disorders that commonly occur include being bored with treatment, desperate for healing, not wanting to socialize, being depressed and others. While emotional

disturbances that occur in the family, usually there is a decrease in enthusiasm in caring for clients and even the attention given to clients is reduced or even lost. This study also states that motivation by giving words, praise and encouragement can increase self-confidence and enthusiasm for clients and their families (Putri & Suryanto, 2019).

The study "Virtual reality and music therapy as a distraction intervention to reduce anxiety and improve mood in breast cancer patients during chemotherapy" is the first study to examine how well interactive and immersive VR can help breast cancer patients who experience anxiety and depression due to chemotherapy. It also compared with those receiving music therapy, analyzing the movement of disease symptoms through a specially developed questionnaire (VRSQ) to assess possible VR-related side effects. The results suggest that VR and other forms of MT can be used to help breast cancer patients feel less anxious and happier while they are receiving chemotherapy. In addition, VR interventions appear to be more successful than MT in reducing stress, fatigue, and depressive symptoms. Thus, despite its limitations, this study encourages further investigation into virtual reality (VR) as a distraction strategy that can meet the therapeutic need for globally effective non-pharmacological adjuncts (Chirico et al., 2020).

The research entitled "Nursing Implementation in Cancer Patients Undergoing Chemotherapy with Anxiety Problems." The implementation of nursing carried out in the form of providing information about chemotherapy and its side effects, teaching relaxation techniques and motivation provided by nurses and families can reduce breast anxiety. Cancer patients, as well as being able to make patients more enthusiastic and cooperative in undergoing treatment. In this study, it was stated that providing information about the medical action to be carried out was very influential on the client's level of anxiety. Chemotherapy is a medical procedure that causes various ampinal effects, so it is very important to provide information. Information is also an early stage to minimize errors regarding follow-up care independently by clients and families (Azwardi et al., 2022).

In the study "Psychological Intervention Program for Patients with Breast Cancer Under Chemotherapy and at High Risk of Depression: A Randomized Clinical Trial" Regarding their overall symptoms, participants in the intervention group reported higher health status. It has been shown that patient anxiety can be reduced and that symptom management education, which includes information about the expected side effects of chemotherapy and the coping skills the client needs during treatment, can encourage patients to be proactive and independent during breast cancer treatment. In conclusion, the intervention group showed gains in physical, role, and emotional functioning as well as substantial reductions in mood disorders, anxiety, and depression when compared to the control group. In addition, they noted fewer signs including fatigue, nausea/vomiting, pain, and insomnia. This study also means that psychological problems can cause various problems that arise in post-chemotherapeutic clients, this is due to the psychological burden that indirectly causes the brain's response to have an abnormal impact on other organs. Someone with a psychological burden also affects the quality of life of patients with chronic diseases, especially breast cancer. Breast cancer is a disease that requires regular treatment and takes a long time, so psychological support is needed to maintain the spirit and desire to recover, because basically something that has been done repeatedly will cause boredom and laziness. The success of treatment is largely determined by the client's desire to recover (Kim, Choi, Han, & Kim, 2018).

The study "Short and long term effects of adjusted physical activity and dietary counseling during adjuvant breast cancer therapy: the "APAD" randomized controlled trial explains that the Adapted Physical and Activity Diet (APAD) can reduce cancer-related fatigue and improve quality of life while undergoing chemotherapy and

radiotherapy, with long-term effects seen at 1 year post-intervention follow-up. The physical condition of patients with chronic diseases, especially breast cancer, is very different from the physical conditions in general. Patients will be very easily tired, prone to psychosocial and other problems. In this study, it was stated that the application of adjusted physical activity and dietary counseling during adjuvant breast cancer therapy was beneficial to improve the patient's body condition. At the end of radiation, positive benefits were also observed for anxiety, depression, recreational physical activity, BMI, fat mass, muscle endurance (sitting and standing tests), and cognitive flexibility. After one year of follow-up, body mass in the legs grew rapidly (Carayol et al., 2019).

"Aromatherapy Music Therapy Plus Improves Pain Intensity and Anxiety Scores in Patients with Breast Cancer During the Perioperative Period: A Randomized Controlled Trial" showed that there was a substantial group effect on pain, anxiety, and levels of IL-6 and HMGB-1, and that AT and MT have a positive impact in reducing anxiety. In conclusion, aromatherapy combined with music therapy resulted in greater reduction of pain and anxiety in breast cancer patients during the perioperative period than monotherapy. According to this study, combination therapy is a complementary and alternative therapy that can be used to treat breast cancer patients because these changes are associated with increased levels of IL-6 and HMGB-1 (Deng et al., 2021).

"Effectiveness of Music Therapy for Anxiety Reduction in Women with Breast Cancer in Chemotherapy Treatment". It was found that breast cancer patients who received traditional medicine experienced less anxiety thanks to music therapy. This procedure is affordable, non-invasive, and easy to use in the oncology setting. This study supports the beneficial impact of music on cancer patients. Investigations into women with breast cancer are new in Italy. Anxiety levels were 46.2 in the treatment group and 43.4 in the control group, according to data analysis.

Based on the intensity of anxiety compared to the type of anxiety, chemotherapy is an unpleasant experience that can be stressful for breast cancer patients. A woman who needs to undergo chemotherapy will experience anxiety, which in this situation can have a negative impact on the patient's quality of life. In the experimental group the level of anxiety decreased significantly. In this case, it is stated that music therapy is believed to be able to reduce physiological arousal and anxiety in a person and be able to increase their sense of well-being (Bulfone et al., 2019).

CONCLUSION

This literature review shows that the intervention increases effectiveness in dealing with psychosocial problems in breast cancer patients. The analysis from the research article is social support, it affects the social condition of a breast cancer patient, where a common problem is finding some desire to socialize after the patient is diagnosed with breast cancer. Then psychological interventions aimed at dealing with psychological problems such as body image disorders, even breast cancer patients and their families often feel bored and lose enthusiasm in seeking patient recovery. Furthermore, offering home care or home visits, this is very useful for fostering a trusting relationship between clients and nurses, not only home visits or home care can also increase motivation and self-esteem of clients and their families. then virtual reality and music therapy, relaxation techniques and motivational support were performed to reduce anxiety in patients with breast cancer. Psychological therapy programs via offline and telephone, Adapted Physical Activity and Diet (APAD), Aromatherapy Plus Music Therapy. Can be done on cancer patients to help reduce psychosocial problems that occur in patients with breast cancer and their families. because psychosocial problems do not only occur in patients, but the patient's family is also very vulnerable to experiencing psychosocial problems in the process of treating patients with breast cancer.

ACKNOWLEDGMENT

We appreciate the support of the National Research and Innovation Agency and the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia in sponsoring this study. with contract number 159/E5/P6.02.00.PT/2022; 098/SP2HT/PT/LL7/2022; 015/SBA.LPPM/P/V/2022.

DECLARATION OF CONFLICTING INTERESTS

There are no conflicts of interest, we officially declare.

REFERENCES

- Alfiani, D., Putri, M. P., & Widayanti, W. (2022). Literature study: Obesitas sebagai faktor risiko pada kanker payudara triple negative. *Bandung Conference Series: Medical Science*, 2(1), 326–329. doi:10.29313/bcsms.v2i1.760
- Azwardi., Mulyadi., & Aisyah, P. A. (2022). Implementasi keperawatan pasien kanker yang menjalani kemoterapi dengan masalah kecemasan 1. *Jurnal Keperawatan Merdeka*, 2(1), 73–80.
- Brown, T., Cruickshank, S., & Noblet, M. (2021). Specialist breast care nurses for support of women with breast cancer. *Cochrane Database of Systematic Reviews*, 2(2), CD005634. doi:10.1002/14651858.CD005634.pub3.
- Bulfone, T., Quattrin, R., Renzo Zanotti, F., Regattin, L., & Brusaferrro, S. (2019). Effectiveness of music therapy for anxiety reduction in women with breast cancer in chemotherapy treatment. *Holistic Nursing Practice*, 1(7), 238–242.
- Carayol, M., Ninot, G., Senesse, P., Bleuse, J., Gourgou, S., Sancho-garnier, H., . . . Jacot, W. (2019). Short- and long-term impact of adapted physical activity and diet counseling during adjuvant breast cancer therapy: the ‘ APAD1 ’ randomized controlled trial. *Journal of BMC Cancer*, 19(737), 1–20.
- Cherny, N. I., Paluch-Shimon, S., & Berner-Wygoda, Y. (2018). Palliative care: Needs of advanced breast cancer patients. *Breast Cancer: Targets and Therapy*, 10, 231-243.
- Chirico, A., Maiorano, P., Giordano, G. G., Pietro, G., De Giordano, A., Iodice, G., . . . Botti, G. (2020). Virtual reality and music therapy as distraction interventions to alleviate anxiety and improve mood states in breast cancer patients during chemotherapy. *Journal of Cellular Physiology*, 1(12), 1–10. doi:10.1002/jcp.29422
- Deng, C., Xie, Y., Liu, Y., & Li, Y. (2021). Aromatherapy Plus music therapy improve pain intensity and anxiety scores in patients with breast cancer during perioperative periods: A randomized controlled trial. *Clinical Breast Cancer*, 13(1), 1–6. doi:10.1016/j.clbc.2021.05.006
- Faria, B. M.. (2021). The impact of mastectomy on body image and sexuality in women with breast cancer: A systematic review. *Psicooncologia*, 18(1), 91–115. doi:10.5209/psic.74534
- Guntari, S. (2016). Gambaran fisik psikologis penderita kanker payudara post mastektomi di RSUP Sanglah Denpasar Tahun 2014. *Archive of Community Health*, 3(1), 24-35.
- Hakim, A., & Awale, R. N. (2020). Thermal imaging-an emerging modality for breast cancer detection: a comprehensive review. *Journal of Medical Systems*, 44(8), 1–18.
- Handayani, S., Karim, U. N., & Wiratmo, P. A. (2021). The relation between the cycle of administration of chemotherapy to psychosocial problems in breast cancer patients. *Jurnal Mitra Kesehatan*, 4(IAHSC), 61–66. doi:10.47522/jmk.v1iiiahsc.113
- Hannafon, B. N., & Ding, W.-Q. (2019). Functional role of miRNAs in the progression of breast ductal carcinoma in situ. *The American Journal of Pathology*, 189(5), 966–974.
- Hee, K. Y., Choi, K. S., Kihye, H., & Won, K. H. (2019). A psychological intervention

- program for patients with breast cancer under chemotherapy and at a high risk of depression: A randomized clinical trial. *The Institutional Review Board of Asan Medical Center in Seoul*, 1(1), 1–2. doi:10.1111/ijlh.12426
- Kim, Y. H., Choi, K. S., Han, K., & Kim, H. W. (2018). A psychological intervention program for patients with breast cancer under chemotherapy and at a high risk of Depression. *Journal of Clinical Nursing*, 27(3-4), 572-581. doi: 10.1111/jocn.13910
- Kolodziejczyk, A., & Pawlowski, T. (2019). Negative body image in breast cancer patients. *Advances in Clinical and Experimental Medicine*, 28(8), 1137–1142. doi:10.17219/acem/103626
- Kugbey, N., Meyer-Weitz, A., & Oppong Asante, K. (2019). Access to health information, health literacy and health-related quality of life among women living with breast cancer: Depression and anxiety as mediators. *Patient Education and Counseling*, 102(7), 1357–1363. doi:10.1016/j.pec.2019.02.014
- Momenimovahed, Z., & Salehiniya, H. (2019). Epidemiological characteristics of and risk factors for breast cancer in the world. *Breast Cancer: Targets and Therapy*, 11, 151-164.
- Nurjannah, N., & Sym, N. (2021). Adaptasi psikologi klien dengan kanker payudara di RS Nurul Hasanah Kutacane tahun 2021. *Jurnal Maternitas Kebidanan*, 6(2), 51–56. doi:10.34012/jumkep.v6i2.1971
- Putri, A. A. N., & Suryanto. (2019). Psychosocial service model in palliative care for breast cancer patients. *Prosiding Seminar Nasional 2020 Fakultas Psikologi UMBY*, 1(1), 98–109.
- Setiawan, A., & Budiman, B. (2021). Perilaku prososial pada relawan komunitas peduli kanker anak dan penyakit kronis lainnya (KPKAPK). *Indonesian Journal of Behavioral Studies*, 1(4), 402–418.
- Setiawan, H., Khaerunnisa, R. N., Ariyanto, H., & Firdaus, F. A. (2020). Telenursing meningkatkan kualitas hidup pasien dengan penyakit kronis. *Jurnal Mutiara Ners*, 3(2), 95–104.
- Setiawan, H., Lutfi, Y. D. S., Andarini, E., Kurniawan, R., Richard, S. D., & Ariyanto, H. (2021). The effect of genetic counseling on depression, anxiety, and knowledge level among diabetes mellitus patients. *Journal of Nursing and Social Sciences Related to Health and Illness*, 23(4), 330–337. doi:10.32725/kont.2021.035
- Setiawan, H., Khaerunnisa, R. N., 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. doi:10.31603/nursing.v8i1.3848
- Setiawan, H., Setiawan, D., & Mustopa, A. H. (2021). Development of Android-based mobile application 'Cyber Gen' for Genetic Counselling Implementation among Thalassemia Patients. *Journal of Physics: Conference Series*, 2111(1), 12037.
- Suprpto, S (2022). Capacity building for nurses in hospitals. *Asia Pacific Journal of Management and Education*, 5(1), 11-21.
- Tang, Y., Fu, F., Gao, H., Shen, L., Chi, I., & Bai, Z. (2019). Art therapy for anxiety, depression, and fatigue in females with breast cancer: A systematic review. *Journal of Psychosocial Oncology*, 37(1), 79–95. doi:10.1080/07347332.2018.1506855
- Tsaras, K., Papatheanasiou, I. V, Mitsi, D., Veneti, A., Kelesi, M., Zyga, S., & Fradelos, E. C. (2018). Assessment of depression and anxiety in breast cancer patients: prevalence and associated factors. *Asian Pacific Journal of Cancer Prevention: APJCP*, 19(6), 1661.
- Widiasih, R., Ermianti, Jayanti, T. N., & Rais, Y. (2019). Psychosocial Interventions for improving the quality of life in breast cancer survivors: A Literature Review. *IOP Conference Series: Earth and Environmental Science*, 248(1), 012056. doi:10.1088/1755-1315/248/1/012056