

Depression in Woman Breast Cancer: Literature Review

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Abstract—Depression is psychological distress often occurred on cancer patient. Depression can increase perception pain, inhibits healing process, and also increases burden patient with cancer. Breast cancer can affect a woman's self-image, it is considered a painful experience and may lead to psychological reactions such as depression. The purpose of this study was to review depressive condition in woman breast cancer in Indonesia. The search method for relevant article uses the database PubMed, Science Direct and Google Scholar using the keyword depression, breast cancer, woman Indonesia. Seven articles was included in the literature review. Age of woman with breast cancer in the selection range from 45 to 59 years. Based on the research objectives, there were seven studies that qualified for literature review and identified from seven studies found two types of articles that indicated a degree of major depression. Two types of articles indicate a moderate degree of depression. And three articles indicated a low depression level. Depressions in Indonesian woman still low. However, these results need to be confirmed at a later date to improve evidence-based nursing and need to research in the future, which based on the stage levels of breast cancer.

Keywords—depression, breast cancer, woman

I. INTRODUCTION

Cancer is abnormal grow of body tissue cells that turn into cancer cell [1]. Breast cancer is the most common cancer in women and it has more severe mental and emotional effects than other types of cancer [2]. According to data statistics, about 30% of breast cancer occurs in women [3]. Breast cancer is an important source of morbidity, morality and health care utilization for woman in the worldwide. In the US rates metastatic breast cancer increased in older woman, from 1,53 per 100.000 to 2.90 per 100.000 [4].

The prevalence of anxiety was 31.7% and depression was 22.0% among breast cancer patients. Study in Malaysia, depressions 3-4 times more likely to be associated with depression is due to having less financial support and being single [1]. In Indonesia, the prevalence of breast cancer is the second highest (0.5%) after cervical cancer (0.8%). From the initial coverage data, breast cancer was found to be the highest in West Java (24.4%), then Central Java (12.8%) and Bali (11.3%) [5].

Diagnosis with breast cancer is very unpleasant because it can interfere patient and family life. On the side caused fear, worry about recurrence of the disease and death and also mental and financial disorders which lead to increased depression in patients [2]. Women who suffer from breast cancer sometimes experience stress as a result of their disease, one of which is depression. Depression will cause an increase in physical symptoms, functional disabilities and decreased

adherence to medication. Depression, however, is very difficult to identify because the symptoms felt by the patient are almost the same as the accompanying conditions so that depression can damage important aspects of a person's life [6].

The prevalence of depression has been reported to be high as 49% and it has been shown to be higher in cancer patients [7]. A research conducted by Hassan et al [1] depression cancer was 22,0% and anxiety was 31.7%. Based on these data and problems, the current study was conducted as a literature review with the aim of reviewing and summarizing articles examining depression in Indonesian women with breast cancer. The results of this study are expected to provide an overview of the patient's condition to formulate future intervention planning.

II. METHODOLOGY

The purpose of this paper is to review the research published on depressive condition in woman breast cancer in Indonesia. The search for literature sources used relevant data bases, PubMed, Science Direct and the Google Scholar Search Engine using keywords: "Depression" + "breast cancer" + "woman" + "Indonesia". Literature search from 2018 to 17 March 2021, included literature inclusion criteria: 1). English 2). There are data on depression 4). There are explanatory data about depression 5). Articles in full text.

III. RESULT

The data base search used PubMed, Science Direct and the Google Scholar Search Engine with keywords "Depression" + "breast cancer" + "woman" + "Indonesia". found 295 research articles, then screening found 187 articles.

Furthermore, through abstract selection, 42 articles were obtained. The final stage, with the selection criteria for inclusion, obtained 7 articles for review (Figure 1).

Characteristic Method

a) Age

Based on the research objectives, there were seven studies that qualified for literature review and it was identified that from the seven articles the average age of patients diagnosed with breast cancer was 45 years to 59 years.

b) Depression

Based on the research objectives, there were seven studies that qualified for literature review and identified from seven studies found two types of articles that indicated a degree of major depression [8][9]. Two types of articles indicate a moderate degree of depression [10][11] and three articles indicated a low depression level [12][13][14].

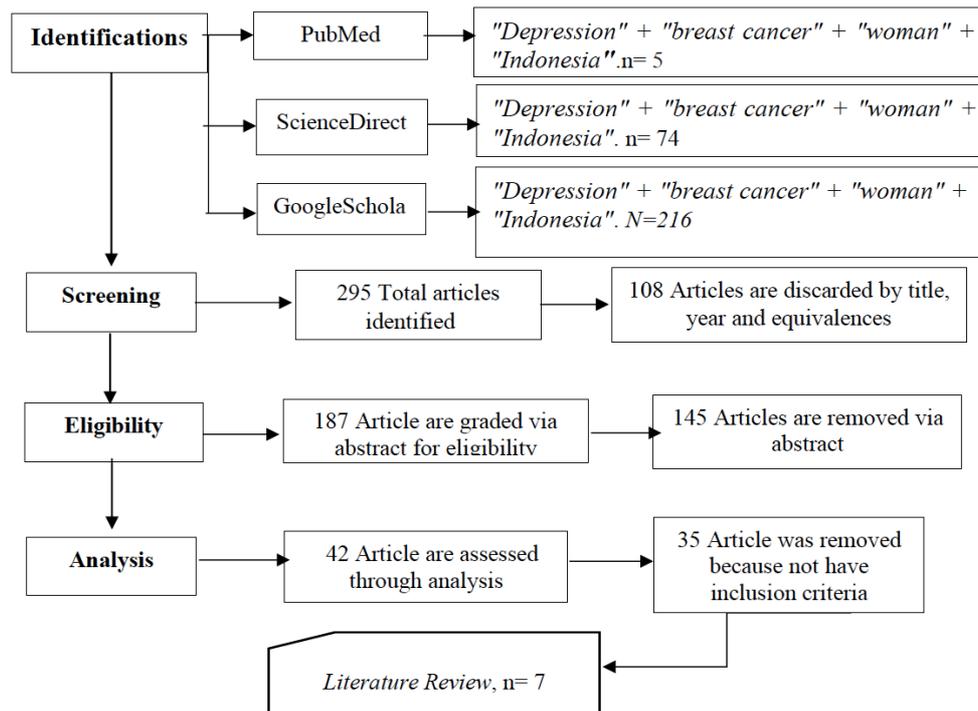


Figure 1. Article search process

Table 1. Characteristic study

Author, year	Average age (years)	Research design	Sample	Result	Conclusion
(Catherine et al. 2019)	50	Cross-sectional	47	A significant correlation between depression and symptoms score: fatigue, pain, insomnia, loss appetite, diarrhea and financial problem Not significant correlation between depression and functional scales: physical, emotions and cognitive functions	The depression is high, depression decreased in quality of life.
(Wahyuni, Sitepu, and Daulay 2020)	46-55	Descriptive	41	The depression was very low with presentence: no depression 80,5%, low depression 9,8%, moderate depression 4,9% and high depression 4,9%.	80,5% do not expression depression
(Satrianegara and Mallongi 2020)	-	Experiment	20	The depression score was high before given treatment which score 19,00 in patient intervention and 20,90 in patient control	The depression score was high in patients breast cancer
(Nihayati, Fadila, and Fauziningtyas 2020)	46-55	Cross-sectional	121	Patient breast cancer have mild stress 38%, moderate stress 60,3% , severe stress 1.7%.	Category stress in patients cancer is moderate with percentage 60,3%
(Savitri et al. 2020)	50	Descriptive	24	Patient not have experience with anxiety 66,7%, rarely obtained social support 83.3%. Not have social problem 62,6%. Not have physical problem 62,5% and not have depressive symptoms 62,5%. Medium score for discomfort 45,5 ± 10,75, Low score in level pain 29,2 ± 27,9. And low score level anxiety and depression. Otherwise, coping spirituality and family support and nursing service attain high score.	Distress in patients with breast cancer is rarely experienced Low score for level anxiety and depression : 40 ±16 and 38,25 ±12,75
(Nuraini et al. 2018)	45-59	A cross-sectional study	205	Before giving intervention, patients have moderate depression 71,4 % in group intervention and moderate depression also in group control (77,1)	The depression score patients breast cancer the level moderate

IV. DISCUSSION

Based on the results of the study, it was found that the age of patients who had breast cancer had an age range of 45 years. These results are supported by Brentnall et al [15] where the estimated cancer is relatively high in patients over 40 years of age. Age in the range of 40-59 is associated with the presence of menopause and the hormones estrogen and progesterone [16].

Depression in this study have many different levels of depression. Depression is related to the coping mechanism of the patient himself. For example, *giving more attention to patient can improve coping mechanisms and can reduce the level of depression*. Sari, Dewi, and Daulay [17] research shows, that mechanism depression there was an associated between good family support and effective coping strategies in patients breast cancer

Majority of patients have been able to develop coping stress strategies, among other, refusing, getting closer to Allah SWT, consultation with health care, discussing with panther/family, search for various alternative treatment, discussing with other cancer patients [12].

In addition, nursing intervention can be implemented for cancer patients who have risk of depression can be done by providing music therapy or muscle relaxation. Based psychotherapeutic study, combines music therapy and progressive muscle relaxation training can reduce depression and anxiety patients. This beneficial when it comes to reduce the days spent in hospital [18].

Recommendation to giving spiritual intervention can be implementing in patients breast cancer, spiritual intervention may improve spiritual well-being and quality of life and reduce depressions, anxiety, and hopelessness for patients with cancer [19].

V. CONCLUSION

Based on the results of study, depressions in Indonesian woman still low. However, these results need to be confirmed at a later date to improve evidence-based nursing and need to research in the future, which based on the stage levels of breast cancer.

REFERENCES

- [1] Hassan, Mohd Rohaizat, Shamsul Azhar Shah, Hasanain Faisal Ghazi, Noor Mastura Mohd Mujar, Mohd Fadhli Samsuri, and Nizam Baharom. 2015. "Anxiety and Depression among Breast Cancer Patients in an Urban Setting in Malaysia." *Asian Pacific Journal of Cancer Prevention* 16(9):4031-35.
- [2] Jafari, Azar, Amir Hossein Goudarzian, and Masoumeh Bagheri Nesami. 2018. "Depression in Women with Breast Cancer: A Systematic Review of Cross-Sectional Studies in Iran." *Asian Pacific Journal of Cancer Prevention* 19(1):1-7.
- [3] Bener, Abdulbari, Reem Alsulaiman, Lisa Doodson, and Tony Agathangelou. 2017. "Depression, Hopelessness and Social Support among Breast Cancer Patients: In Highly Endogamous Population." *Asian Pacific Journal of Cancer Prevention* 18(7):1889-96.
- [4] Park, Eliza M., Shari Gelber, Rosenberg Shoshana M, Davinia SE Seah, Lidia Schapira, Steven E. Come, and Ann H. Partridge. 2018. "Anxiety and Depression in Young Women with Metastatic Breast Cancer: A Cross-Sectional Study." Elsevier 1-14.
- [5] Dharmayanti, Ika, Khadijah Azhar, and Dwi Hapsari Tjandrarini. 2020. "Environment as a Breast Cancer-Causing Factors in Urban Women in Indonesia." *Global Journal of Health Science* 12(11):45.
- [6] Al-Shammari, Monefah, and Amani Khalil. 2020. "Factors Associated with Depression and the Relationship to Quality of Life among Saudi Women with Breast Cancer." *Journal of Nursing Education and Practice* 11(4):43.
- [7] Shim, Eun Jung, Jong Won Lee, Jihyoung Cho, Hong Kyu Jung, Nam Hyoung Kim, Jung Eun Lee, Junwon Min, Woo Chul Noh, Sung Hwan Park, and Yoo Seok Kim. 2020. "Association of Depression and Anxiety Disorder with the Risk of Mortality in Breast Cancer: A National Health Insurance Service Study in Korea." *Breast Cancer Research and Treatment* 179(2):491-98.
- [8] Catherine, Catherine, Vita Camellia, Muhammad Surya Husada, Bahagia Loebis, Elmeida Effendy, and Mustafa Mahmud Amin. 2019. "Affective Psychopathology towards the Quality of Life of Breast Cancer Patients with Radiotherapy in Medan, Indonesia." *Open Access Macedonian Journal of Medical Sciences* 7(9):1456-60.
- [9] Satrianegara, M. Fais, and Anwar Mallongi. 2020. "Influence of Self Ruqyah Treatment on Cortisol Content, Depression, and Quality of Life, Spiritual Life Quality of Cancer Patients Undergoing Radiotherapy in Makassar City, Indonesia." *Systematic Reviews in Pharmacy* 11(7):212-18.
- [10] Nihayati, Hanik Endang, Firdha Lailil Fadila, and Rista Fauziningtyas. 2020. "The Relationship between Psychosocial Stress and Coping Strategies for Breast Cancer Patients." *Systematic Reviews in Pharmacy* 11(3):817-22.
- [11] Putri, Sri Burhani, and Miftahul Jannah. 2019. "The Effect of Logotherapy on Depression in Breast Cancer Patients Under Chemotherapy." *World Journal of Research and Review* 8(2):30-32.
- [12] Wahyuni, Sri Eka, Yenni Epriyanta Br Sitepu, and Wardiyah Daulay. 2020. "Stress, Anxiety and Depression in Chemotherapy's Patient with Breast Cancer." (03):241-48.
- [13] Savitri, Wenny, Universitas Jenderal, Achmad Yani, Amin Haryati, Universitas Jenderal, and Achmad Yani. 2020. "Psychosocial Distress in Breast Cancer Patients." Pp. 147-49 in *Proceedings of the International Conference on Health and Medical Sciences (AHMS 2020)*. Vol. 34. Atlantis Press.
- [14] Nuraini, Tuti, Andrijono Andrijono, Dewi Irawaty, Jahja Umar, and Dewi Gayatri. 2018. "Spirituality - Focused Palliative Care to Improve Indonesian Breast Cancer Patient Comfort." *Indian Journal of Palliative Care* 196-201.
- [15] Brentnall, Adam R., Jack Cuzick, Diana S. M. Buist, and Erin J. Aiell. Bowles. 2018. "Long-Term Accuracy of Breast Cancer Risk Assessment Combining Classic Risk Factors and Breast Density." *JAMA Oncology* 4(9).
- [16] Group, Collaborative, and Breast Cancer. 2019. "Type and Timing of Menopausal Hormone Therapy and Breast Cancer Risk: Individual Participant Meta-Analysis of the Worldwide Epidemiological Evidence." *The Lancet* 394(10204):1159-68.
- [17] Sari, Dina Keumala, Ratna Dewi, and Wardiah Daulay. 2019. "Association between Family Support, Coping Strategies and Anxiety in Cancer Patients Undergoing Chemotherapy at General Hospital in Medan, North Sumatera, Indonesia." *Asian Pacific Journal of Cancer Prevention* 20(10):3015-19.
- [18] Sari, Yulia, Tintin Sukartini, and Esti Yunitasari. 2020. "Prevention of Depression in Patients with Cancer: A Systematic Review." *Journal of Psychiatric Research* 120(7):113-23.
- [19] Xing, Lu, Xiujing Guo, Lu Bai, Jiahui Qian, and Jing Chen. 2018. "Are Spiritual Interventions Beneficial to Patients with Cancer?" *Medicine* 97(35):e11948.