Systematic Review Breast Cancer Survivor Optimism

Lilis Novitarum

Bachelor of Nursing STIKes Santa Elisabeth Medan

ARTICLE INFO

Article history:

Received 02 October 2020
Accepted 02 December 2020
Published 15 March 2021

Keyword:

Optimisme Survivor
Breast Cancer

ABSTRACT

Background: Perception of disease and quality of life are the main issues that consider breast cancer management. The form of suffering experienced by cancer patients, one of the significant experience problems is the fear of inevitable death. The diagnosis and treatment of breast cancer has a considerable psychological impact on women. After the diagnosis of breast cancer, the fear of death, hopelessness and fear related to the expected life changes, together with the impaired quality of life due to treatment can lead to negative perceptions in the patient. Patients are expected to have a positive attitude towards healing. Objectives: This systematic review aims to systematically review international research related to optimism in breast cancer over the last decade as reported in English journals from various countries. Methods: Source tracing strategy from three electronic databases: Proquest, PubMed, EBSCO with limitations from 2010 to 2020. The inclusion criteria used were articles related to optimism in breast cancer published online in English, having research sites in the community, from various countries. Results: The results of the analysis of the 30 articles related to optimism in breast cancer found 5 important things, namely factors that affect optimism, low optimism is a factor supporting recurrence, interventions to increase optimism, the impact of optimism and recommendations for future research.

This open access article is under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.

Kata kunci:

Optimisme Survivor
Kanker Payudara

**) corresponding author*

Lilis Novitarum
Bachelor of Nursing STIKes Santa Elisabeth
Jl. Beringin Raya No 1A Komp. Danintel -
Medan

Email: lilisnovit@gmail.com

DOI: 10.30604/jika.v6i1.799

ABSTRAK

Latar Belakang: Persepsi penyakit dan kualitas hidup adalah masalah utama yang mempertimbangkan manajemen kanker payudara. Bentuk penderitaan yang dialami oleh pasien kanker, salah satu masalah pengalaman yang signifikan adalah ketakutan akan kematian yang tak terhindarkan. Diagnosis dan pengobatan kanker payudara memiliki pengaruh psikologis yang cukup besar pada wanita. Setelah penetapan diagnosis kanker payudara, ketakutan akan kematian, keputusan dan ketakutan terkait dengan perubahan hidup yang diharapkan, bersama dengan gangguan kualitas hidup akibat pengobatan dapat menimbulkan persepsi negatif pada pasien. Pasien diharapkan memiliki sikap positif akan kesembuhan. Tujuan: Sistematis review ini bertujuan untuk mengkaji secara sistematis penelitian internasional yang berkaitan dengan optimisme pada kanker payudara selama dekade terakhir seperti yang dilaporkan dalam jurnal bahasa Inggris dari berbagai negara. Metode: Strategi penelusuran sumber dari tiga data base elektronik: Proquest, PubMed, EBSCO dengan batasan tahun 2010 sampai dengan 2020. Kriteria inklusi yang digunakan adalah artikel yang berhubungan dengan optimisme pada kanker payudara dipublikasikan secara online dalam bahasa Inggris, memiliki tempat penelitian di komunitas dari berbagai Negara. Hasil: Hasil analisa dari ke-30 artikel yang berkaitan dengan optimisme pada kanker payudara ditemukan 5 hal yang penting, yaitu faktor yang mempengaruhi optimisme, optimisme yang rendah merupakan faktor pendukung kekambuhan, Intervensi untuk meningkatkan optimisme, dampak optimisme dan rekomendasi untuk penelitian berikutnya.

INTRODUCTION

Breast cancer is the most common cause of cancer death in women in both developed and developing countries. Breast cancer accounts for 34 percent of all cancer cases among women in India. There has been an increase in the incidence of breast cancer over the last decade. Early breast cancer in developing countries is only 30 percent compared to 60-70 percent in developed countries (Subramanian, Salini, Anandan, & Insuvai, 2018). Breast cancer ranks first of all cancers in women with a prevalence rate of 56.5 per 100,000 women in the world (Parkin, Pisani, & Ferlay, 1999). Globocan also stated that the prevalence of breast cancer varies, in Western Europe 177.5 per 100,000 women, East Asia 38.7 percent per 100,000 women, East Africa 26.4 percent per 100,000 women, and Japan 92.3 percent per 100,000 women. Data from the Global Cancer Observatory shows that the most common cancer cases in Indonesia are breast cancer, which is 58,256 cases or 16.7 percent of the total 348,809 cancer cases (WHO, 2019). The incidence of breast cancer in Cameroon continues to increase and is the leading cause of death (Sama et al., 2017). The Indonesian Ministry of Health (2019) stated that the breast cancer rate in Indonesia reached 42.1 people per 100,000 population. The average death rate from cancer is 17 people per 100,000 population.

Disease perception and quality of life are the main issues considering breast cancer management (Hoseini, Kashani, Akbari, Akbari, & Mehr, 2016). The form of suffering experienced by cancer patients, one of the significant experience problems is the fear of inevitable death (Bibi & Khalid, 2019). The diagnosis and treatment of breast cancer has a considerable psychological impact on women. After establishing a breast cancer diagnosis, fear of death, hopelessness and fear related to expected life changes, together with impaired quality of life due to treatment can lead to negative perceptions in patients (İzci et al., 2018). Patients are expected to have a positive attitude towards healing.

Someone who has a positive outlook and has hope for the future will be said to be optimistic (Scheier & Carver, 1994). Unpleasant feelings from cancer can be overcome by having a positive attitude towards healing. An optimistic attitude helps a person cope with life's stresses, reduces the risk of falling ill (Taylor, 2009), increases self-acceptance to be more positive (Chang, 2009), has a better ability to rise from adversity (Carver, Scheier, & Segerstrom, 2010), allows behavior change, increasing persistence in carrying out treatment (Rajandram, et al, 2011). Patients with advanced breast cancer face uncertainty about their recovery (Rahmah & Widuri, 2011).

METHOD

This article was written using a systematic review design. The study selection process was carried out by identifying research published in the database and focusing on empowering social networks in breast cancer. The databases used are Proquest, PubMed, and EBSCO. The initial selection

of the study was carried out by searching for keywords through optimism on breast cancer. The author carried out the selection process which was done manually. If the title and abstract meet the study criteria, a full text copy is taken as a reference. Guidelines in determining the study include:

1. Published full text during the period 2010 to 2020.
2. The research method used is qualitative and quantitative
3. There are themes related to optimism in breast cancer
4. Display data analysis

RESULTS AND DISCUSSION

Of the 30 research articles included in the inclusion criteria, they were carried out in several countries, namely the United States (USA: 5 articles, America: 1 article, California 1 article, Canada: 1 article, Washington: 2 articles), China (3 articles), Norway (2 articles), Netherlands (2 articles), Spain (2 articles), Brazil (1 article), Australia (1 article), Germany (1 article), Iran (1 article), Austria (1 article), Poland (1 article), Turkey (1 article), Scotland (1 article), Columbia (1 article), Greece (1 article), and Pakistan (1 article). The research method used was cross sectional, cohort and intervention. All research articles that met the inclusion criteria were published between 2010-2020. The research samples used were women of childbearing age, breast cancer patients, and patient caregivers. The sampling technique used is the majority of purposive sampling. Methods of data collection using a questionnaire. All studies show the research process including the analysis of the data used, as well as the instruments used for the research reported in writing.

The results of the analysis of the 30 articles related to optimism in breast cancer found 5 important things, namely factors that affect optimism, low optimism is a factor supporting recurrence, interventions to increase optimism, the impact of optimism and recommendations for future research.

Factors influencing optimism

Optimism is influenced by several factors, namely education level, absence of metastases, curative or additional treatment and mild pain (Wakiuchi, Marchi, Norvila, Marcon, & Sales, 2015 and Bibi & Khalid, 2019); psychological factors or depression (Colby & Shifren, 2012); clinical examination (Bredal & Ekeberg, 2016); stress, smoking, and low physical condition (Avis et al., 2020); sociodemographic factors (Xia, Tang, Deng, Yang, & Wang, 2017 and Bibi & Khalid, 2019); a person's activeness (Xia et al., 2017); physical and psychological variables Tang et al. (2017).

Education level, no metastases, curative treatment and mild pain. Wakiuchi et al. (2015) suggested that the expectations of breast cancer patients were influenced by a minimum of 8 years of education, no metastases, curative treatment and mild pain. These factors contributed significantly in increasing the expectancy score in breast cancer patients. Cancer patients undergoing chemotherapy have shown high levels of hope at the start and end of treatment, and the side effects and difficulties experienced

were not sufficient to dampen expectations. Expectancy rates increased at the end of treatment supported by higher education, no metastases, curative treatment, and the absence of moderate to strong pain (Wakiuchi et al., 2015). Bibi and Khalid (2019) support Wakiuchi et al's statement that education is associated with death anxiety in patients with breast cancer.

Psychological Factors. Psychological factors are one of the factors that play an important role in the quality of life in Chinese breast cancer patients and are closely related to psychological factors (Tang et al., 2017). Tang et al also suggested that doctors and nurses should pay attention to psychological factors in treating women with breast cancer to improve patients' quality of life. Colby and Shifren (2012) support this statement, breast cancer patients who score lower pessimism show more positive mental health, but they do not show an association with negative mental health

(Colby & Shifren, 2012). Colby and Shifren stated that breast cancer patients who were more optimistic than pessimistic had more positive mental health. Breast cancer patients with high optimism reported better social and mental functioning compared to women who scored low on optimism.

Clinical Examination. Bredal and Ekeberg (2016) showed that optimism was relatively stable in women who were diagnosed with breast cancer and underwent clinical examination. The results showed that 85% of women with breast cancer received a diagnosis at the time of diagnosis and 15% received it after surgical excision. 91.3% of women in the non-cancer group received a diagnosis after mammography or ultrasonography, 6.0% after diagnosis and 2.7% after surgical excision. The steps for using the LOT-R instrument are suggested to be applied to the breast cancer treatment process (Bredal & Ekeberg, 2016).

Scheme 1: Systematic Review Data Selection Flow

Stress, smoking, and low physical condition. Stress, comorbidities, and smoking are long-term susceptibility factors. Prediagnosis or screening for breast cancer in individuals with a history of smoking and stress shows low mental health. Screening in individuals with comorbidities or higher comorbidities has low physical function (Avis et al., 2020). Women who underwent breast cancer screening had a significantly lower quality of life compared to patients who were diagnosed and 1 year postdiagnosed. Second-year quality of life in screened and control women was not

significantly different. 88.4% of women who performed breast cancer screening had consistently good mental components and 11.6% had very low scores. 73.9% had a good physical component score and 26.1% had a low score (Avis et al., 2020). The breast cancer screening group and the non-cancer control group after two years had a lower quality of life. Hong et al. (2020) added that symptom distress, contextual factors, relapse, and disease representation had statistically significant direct, indirect, and total effects on psychological adjustment. These variables explain 76% of the

total variance of psychological adjustment in cancer patients undergoing chemotherapy.

Sociodemographic factors. Optimism is closely related to functional status and quality of life. Factors that influence optimism are financial difficulties and fatigue for one year after diagnosis, fatigue, financial difficulties, and systemic side effects for long-term survivors (Xia et al., 2017). Respondents had higher scores on sexual function, sexual enjoyment, and financial difficulties. Xia et al suggested that these symptoms explain about 28-53% of the variability in expected functioning and quality of life scores for sexual enjoyment and sexual function. Although sociodemographic and clinical factors have relative importance to sexual function and sexual enjoyment, they are even smaller and have less impact on other dimensions (Xia et al., 2017). Bibi and Khalid (2019) support Xia et al's statement that marital status is associated with death anxiety in patients with breast cancer.

One's activity. People who are more active and have an optimistic attitude towards life have relatively higher functional and quality of life scores. Xia et al. (2017) stated that reducing fatigue load may be the preferred way to improve functional status and quality of life of breast cancer patients 1 year after diagnosis. Focusing on fatigue symptoms and side effects of systemic therapy simultaneously can provide a very useful effort to improve the functional status and quality of life of survivors in the long term (Xia et al., 2017). Dumontier, Clough-gorr, Silliman, Stuck, and Moser (2016) added that age and stage of breast cancer can affect physical function, mental health, emotional health, psychosocial functioning, and social support.

Physical and psychological variables. According to Tang et al. (2017), low quality of life was significantly associated with physical and psychological variables. Quality of life is related to symptom-related disability, somatic symptom severity, depression, anxiety, health-related anxiety, dysfunctional disease perception, and a sense of coherence. Disability obtained by survivors due to symptoms had a positive relationship with the strength of the weak relationship ($r = 0.211$, $p < 0.01$). The higher the survivor's disability, the lower the quality of life. The severity of somatic symptoms has a negative relationship with moderate strength ($r = 0.391$, $p < 0.001$), which means that the lower the severity of somatic symptoms, the higher the quality of life of survivors. Survivors with mild depression showed high quality of life ($r = 0.488$, $p < 0.001$). Anxiety in general and health-related has a negative relationship with moderate relationship strength ($r = 0.439$, $p < 0.001$ and $r = 0.398$, $p < 0.001$), the lower the anxiety, the higher the quality of life. Survivors with low disease perception had high quality of life ($r = 0.411$, $p < 0.001$). Survivors who have a low sense of coherence have a low quality of life with $r = 0.371$ and $p < 0.001$ (Tang et al., 2017). Tang et al concluded that through canonical correlation analysis, high somatic symptom severity, depression, anxiety, dysfunctional disease perception, and low sense of coherence showed the strongest correlations with low physical, emotional and social functioning. The first three significant canonical correlations between the two sets of variables are 0.78, 0.56, and 0.45.

Low optimism is a factor supporting recurrence

Breast cancer is a disease with a very high recurrence rate. Optimism of breast cancer survivors is related to psychological well-being that can lead to relapse (Starreveld,

Markovitz, Breukelen, & Madelon, 2018; Hong, Shin, & Jung, 2020), motivation to live (Dumontier et al., 2016) and social support (HONG). et al, 2020).

Psychological well-being. Starreveld et al. (2018) revealed that the course of breast cancer recurrence depends on the age of breast cancer sufferers. The younger survivors showed an increase in fear during the first 1.5 years after breast surgery, while the older survivors showed a steady level for the first 6 months after that it decreased. Less optimistic survivors report higher breast cancer recurrence rates (Starreveld et al., 2018). The final model included a significant interaction between age and time since surgery and the main effect for optimism.

Motivation to live. Hong et al (2020) stated that sequelae and recurrence of breast cancer can be minimized by increasing social support, optimism, and disease representation. This is useful for the successful psychological adjustment of cancer patients undergoing chemotherapy. Fear of cancer recurrence is a mediating factor for the effects of symptoms, contextual factors, and disease representations on psychological adjustment (Hong et al., 2020). Supported by Dumontier et al (2016) stated that breast cancer women who had motivation and survival rates with lower Getting Out of Bed Scale (GOB) scores were 0.78% of the causes of death 5 years after being diagnosed with breast cancer. Women with higher motivation have a lower hazard ratio (Dumontier et al., 2016).

Contrary to the opinion of Starreveld et al. (2018) and Hong et al (2020), researchers Dumalaon-Canaria, Prichard, Hutchinson, and Wilson (2016) stated that optimism did not moderate the relationship between causal attribution and relapse or well-being. Dumalaon-Canaria et al performed simultaneous multiple regression analyzes to explore the overall contribution of causal attribution to relapse and psychological well-being separately. Hierarchical multiple regression analysis was also used to examine the potential moderating effect of dispositional optimism on the relationship between causal attributes and relapse and psychological well-being. Causal attributes of environmental exposure, family history and stress were significantly associated with higher relapse. Stress was significantly associated with lower psychological well-being. The observed association between causal attribution for breast cancer and recurrence and psychological well-being suggests that the inclusion of causal attribution in screening for recurrence is potentially important (Dumalaon-Canaria et al., 2016).

Social support. Hong et al (2020) support the statement by Starreveld et al that breast cancer sequelae and recurrence can be minimized by increasing social support, optimism, and disease representation.

Interventions to increase optimism

Some experts conduct research on interventions to increase optimism. Interventions that can increase optimism are spiritual well-being (Hoseini et al., 2016), social support (Hoseini et al., 2016 and Bibi & Khalid, 2019), self-esteem (Hoseini et al., 2016), spiritual interventions (Hoseini et al., al., 2016), increased motivation (Dumontier et al., 2016), Coping Strategies (Gonzalez, Nuñez, Flores, & Nápoles, 2016), lifestyle (Sabiston et al., 2018), beauty care (Richard, Harbeck, Wuerstlein, & Wilhem, 2018), gratitude intervention (Sztachariska, Krejtz, & Nezelek, 2019), Caring Guidance (Lally et al., 2019), humor intervention (Melton, 2016), Positive thinking group intervention (PTC), cancer-

fact group (CFC), and self-regulation condition (SRC) (Lu et al., 2018).

Spiritual well-being. Hoseini et al (2016) revealed that spiritual well-being has a direct effect on quality of life and perception of illness. Spiritual well-being had a second significant direct effect on the perception of illness. The spiritual aspect has been the center of attention through the history of science and more attention in Abrahamic religions such as Judaism, Christianity, and Islam. It is well accepted that spiritual health affects quality of life and even life expectancy and quantity of life (Hoseini et al., 2016). Hoseini et al have also found that spiritually seeking women with breast cancer are an effective resource for coping with negative physical and psychological responses to breast cancer.

Social support. Hoseini et al (2016) revealed that social support has a direct effect on quality of life and perception of disease. Social support has a significant indirect correlation with the perception of the disease. Hoseini et al's statement is supported by Bibi and Khalid (2019) that death anxiety is related to social support. Social support helps reduce death anxiety and improve their recovery program (Aunt & Khalid, 2019). Social support helps women with breast cancer to experience conception and better coping strategies. One possible way for sufferers is the evaluation of the disease which is influenced by the support received from others.

Pride. Self-esteem ranks third in the direct effect on quality of life and perception of disease (Hoseini et al., 2016). Self-esteem ranks third in direct effects on quality of life and perception of disease. One explanation for the significant relationship between self-esteem and perception of illness is that people with high self-esteem feel greater control over the process and treatment of their illness and at the time of their diagnosis are less prone to panic (Hoseini et al., 2016).). Breast cancer patients who find it difficult to communicate with others and have more fear will have a weaker self-concept. Breast cancer patients with high self-esteem are more accepting and honest and can easily communicate with others to build better relationships (Hoseini et al., 2016).

Spiritual Intervention. In deeply religious communities, spiritual intervention is an effective strategy to improve quality of life (Hoseini et al., 2016). When people believe that there is a source of strength and energy that loves them they can rely on, they find a greater sense of control over events and feel less fear and dread of the consequences of illness. Hoseini et al concluded that spirituality is a strong predictor of mental health and well-being through which social support influences health by regulating people's evaluation of stressful situations.

Increased Motivation. Measurement of motivation and survival scores via GOB showed that breast cancer women had a lower risk of all-causality in the unadjusted analysis (Dumontier et al., 2016). This effect diminished after adjusting for the confounding clinical and quality of life variables. GOB is a measure of motivation that may not be independently associated with cancer mortality, but reflects another quality of life variable that makes it a potential outcome to monitor in older patients with cancer. The statement of Dumontier et al is supported by Hoseini et al that optimism is the point of view that good things are likely to happen. Optimistic breast cancer patients tend to have less difficulty living than pessimists. Optimism is often associated with better immune function and optimism continues to work hard to control stressful conditions (Hoseini et al., 2016).

Coping Strategy. Gonzalez, Nuñez, Flores, and Nápoles (2016) showed that breast cancer women used 8 coping

strategies (religion/spiritual, benefit seeking, fatalism, optimism, fighting spirit, information seeking, rejection, and self-distraction). Chinese Americans indicated that breast cancer screening was the most frequently used intervention. Religious/spiritual coping was most commonly reported among Korean Americans and Mexicans (Gonzalez et al., 2016). Denial and self-distraction are strategies that are least used by breast cancer survivors (Gonzalez et al., 2016). Survivors harness their newfound psychic powers to successfully integrate their cancer experiences into their lives.

Lifestyle. Sabiston et al. (2018) show in the first study examining natural changes in lifestyle behavior and health outcomes in the period immediately following breast cancer treatment for more than six years. Sabiston et al suggested that quality of life needs to be improved during the post critical care period. Sabiston et al suggest that by providing important information on theoretically relevant and modifiable predictors of long-term natural trends in lifestyle activity, which in turn will inform advanced cancer care practices that promote positive lifestyle changes. Lifestyle changes during survival can help prevent recurrence and reduce the risk of long-term physical and psychological health problems. Modifiable predictors of lifestyle behavior have been identified in prominent psychosocial and motivational theories, but are rarely tested in clinical populations (Sabiston et al., 2018).

Beauty care. Richard, Harbeck, Wuerstlein, and Wilhem (2018) used beauty care interventions to increase the optimism of breast cancer patients. The intervention group reported fewer depressive symptoms, higher quality of life, and higher self-esteem compared with baseline and compared with controls. The results demonstrate the short- and medium-term effects of cosmetic treatments on psychological outcomes in patients with early breast cancer. These results emphasize the usefulness of this short and low-cost type of intervention in women undergoing medical cancer treatment to improve their well-being (Richard et al., 2018).

Gratitude intervention. The gratitude intervention was introduced by Sztachariska, Krejtz, and Nezelek, (2019), every day for 2 weeks, 42 women with breast cancer described their psychological well-being, social support, and coping strategies. The intervention group reported reporting reasons why they felt grateful that day. All respondents took part in a pre-test session where trait measures were taken to control for dispositional differences.

A list of reasons for gratitude led to higher daily levels of psychological functioning, greater perceived support, and better use of adaptation strategies.

Caring Guidance. Caring guidance is one of the interventions to increase the optimism of breast cancer survivors. The Caring Guidance group experienced a significantly greater reduction in the perceived social constraints of spouse/partners (S/P) and family/friends (F/F) over three months than the usual care group (Lally et al., 2019). Changes in social constraint of F/F significantly moderated changes in depressive symptoms and intrusive/avoidance thoughts, but the same was not true for changes in S/P constraint. Lally et al. stated that caring guidance plays an important role as an intervention for newly diagnosed women to manage perceptions of social constraints.

Humor Intervention. Melton (2016) proved that humor interventions in breast cancer survivors reported slightly lower levels of depression than controls. Coping with humor was not associated with depression, optimism, or

neuroticism, but depression was negatively correlated with optimism and positively with neuroticism. In the breast cancer group, humor coping was correlated with the subscales of coping with self-distraction, positive reframing, planning, and active coping. Humor coping in the control group was correlated with the subscales of coping with self-distraction, positive framing, planning, ventilation, and instrumental use (Melton, 2016)

Intervention Positive thinking group (PTC), cancer-fact group (CFC), and self-regulation condition (SRC). PTC, CFC, and SRC interventions have been shown to improve the quality of life of breast cancer patients. CFCs had improved quality of life compared with SRC from baseline to 1 and 2 months follow-up (QOL = 9.31, $p = 0.01$, $d = 0.44$; QOL = 9.45, $p = 0.025$, $d = 0.049$). PTC did not differ from writing cancer facts but had improved quality of life compared with SRC from baseline to 1 and 2 months follow-up (Δ QOL = 7.44, $p = 0.04$, $d = 0.35$; QOL = 11.72, $p = 0.06$, $d = 0.61$) (Lu et al., 2018).

Impact of Optimism

Optimism has a significant impact on physical, psychological, social, and quality of life aspects (Calderon et al., 2019), life satisfaction (Cobo-Cuenca, Martin-Espinosa, Rodriguez-Borrego, & Carmona-Torres, 2018), Positive perceptions of disease (Rooij et al., 2018), changes in anxiety and depression (Faye-Schjol & Schou-Bredal, 2019), decreased psychological distress (Leung, Atherton, Kyle, Hubbard, & McLaughlin, 2015), Improved quality of life (Finck, Barradas, Zenger, & Hinz, 2018), Psychosocial Adjustment (Kolokotroni, Anagnostopoulos, & Hantzi, 2018), Discovery of the benefits of the breast cancer experience (Gardner, Mrug, Schwebel, Phipps, & Whelan, Kimberly, Madan-Swain, 2018), mediation (Kuhlman et al., 2017)

Physical, psychological, social, and quality of life aspects. The prevalence rates of pessimism and depression were 23.3% and 40.0%, respectively. Fatigue and pain were the most common symptoms, 8.8% and 4.2%, respectively. Patients without partners were more pessimistic than couples; those with lower levels of education and subjects without a partner showed more depression (Calderon et al., 2019). Depression was the primary factor shown to have the greatest explanatory power for HRQoL (physical, role, emotional, cognitive, and social functioning) and global health status (range R^2 : 0.13 to 0.39). Of the five domains, fatigue had a significant effect on four and was followed by the pain domain (Calderon et al., 2019).

Life Satisfaction. Cobo-Cuenca et al (2018) stated that Satisfaction With Life (LISAT) or life satisfaction in general was good (61.7%), satisfaction with the economy (44.7%), and satisfaction with social life (75.9%) and medium sexual satisfaction (41.2%). 39% of respondents had lower self-esteem ($p < 0.001$). Respondents who worked ($p = 0.002$) and had breast reconstruction ($p < 0.037$) had good life satisfaction. Women with mastectomy had worse life satisfaction ($p < 0.001$). Self-esteem was associated with general life satisfaction (Pearson = 0.536, $p < 0.001$), social life satisfaction (Pearson = 0.502, $p < 0.001$), and sexual life satisfaction (Pearson = 0.329, $p < 0.001$). Women with breast cancer had good overall life satisfaction; the sexual aspect was evaluated as the lowest in terms of life satisfaction. Marital status, occupation, surgical treatment and self-esteem were associated with life satisfaction. Health professionals must know the variables that affect the life satisfaction of women with breast cancer in order to plan

and carry out appropriate treatment (Cobo-Cuenca et al., 2018).

Optimistic perception of the disease. Rooij et al. (2018) stated survivors with realistic disease perceptions (1230 survivors), having optimistic disease perceptions (582 survivors) were found to have a higher HRQOL ($P < .01$ in all European Organization for Research and Treatment of Cancer Quality of Cancer Life Questionnaire Core 30 [EORTC] QLQ-C30 scale) and lower all-cause mortality (hazard ratio, 0.72; $P < 0.01$). Survivors with a pessimistic disease perception (645 survivors) had a lower HRQOL ($P < 0.01$ on all scales) and higher all-cause mortality (hazard ratio, 1.52; $P < 0.01$) (Rooij et al., 2018). Optimistic disease perceptions are associated with better HRQOL and survival, even if they seem unrealistic with respect to cancer survivors' prognosis. Victims with a pessimistic perception of illness appear to have the worst outcomes (Rooij et al., 2018).

Changes in anxiety and depression. Anxiety and depression did not decrease after the first postoperative year (Faye-Schjol & Schou-Bredal, 2019). Pessimism was a predictor of changes in anxiety and depression 5 years after breast cancer diagnosis. The prevalence rates of anxiety and depression 5 years after diagnosis were 26.3% and 9.6%, respectively. Predictors of change in anxiety 5 years after diagnosis were pessimism (odds ratio [OR] = 0.82; 95% confidence interval [CI]: 0.76-0.89, $P < 0.001$), younger age (OR = 0.96; 95% CI: 0.93-0.99, $P = 0.005$), and anxiety at diagnosis (OR = 2.41; 95% CI: 1.33-4.37, $P = 0.004$). Predictors of change in depression 5 years after diagnosis were pessimism (OR = 0.84; 95% CI: 0.77-0.94, $P < 0.001$) and comorbidity (OR = 1.51, 95% CI: 1.10-2.06, $P = 0.01$). The statement of Faye-Schjol & Schou-Bredal is supported by zci et al. (2018) that patients with breast cancer were found to exhibit higher levels of anxiety and depression, lower levels of quality of life, and higher personality inventory subscale scores compared to healthy controls. In this group of patients, it was identified that the quality of life subscale scores were negatively correlated with anxiety, depression, hopelessness, and neurotic personality scores; there is a positive correlation between neurotic personality scores and depression, anxiety and hopelessness scores (zci et al., 2018). Breast cancer patients with extraversion personality traits had lower levels of anxiety and depression, maintaining a better quality of life, whereas patients with higher neuroticism scores may have a more impaired quality of life.

Decreased psychological stress. Leung, Atherton, Kyle, Hubbard, and McLaughlin (2015) revealed that higher levels of optimism were associated with lower odds of psychological distress in both control groups (OR = 0.57, 95% CI = 0.51-0.60) and breast cancer group (OR = 0.64, 95% CI = 0.47-0.88). However, in the model adjusted for general health, optimism was associated with lower odds of psychological distress only in the control group (OR = 0.50, 95% CI = 0.44-0.57) but not significantly in the breast cancer group (OR = 1.15, 95% CI = 0.32-4.11). In the breast cancer group, poor general health was stronger than psychological distress (OR = 4.98, 95% CI = 1.32-18.75). The results were consistent after adjusting for age, years since breast cancer diagnosis, year of survey, socioeconomic status, education, marital status, body mass index, smoking status, and alcohol consumption (Leung et al., 2015). This study confirms the value of multicomponent supportive care interventions for women with breast cancer. In particular, it suggests that after a breast cancer diagnosis, health care professionals need to provide advice and services that help

women to maintain or improve their psychological health and general health (Leung et al., 2015).

Improved quality of life. Breast cancer patients exhibited minimal quality of life on the most functioning and symptomatic scale on the EORTC QLQ-C30, while their general assessment of health and quality of life was no worse than controls (Finck, Barradas, Zenger, & Hinz, 2018). Optimism is positively correlated with quality of life. Most patients want and receive social support from their doctors and friends/family (Finck et al., 2018). The results show that optimism helps patients cope better with illness. A generalized assessment of global quality of life cannot replace a more specific assessment of functioning domains and symptoms.

Dura-Ferrandis et al., (2017) support the statement of Finck et al (2018), three trajectories were identified for each QoL domain: "maintained high", "phase shift" (lower scores but parallel to the "maintained high" group), and "accelerated descent" (lowest baseline score and steepest decline). Accelerated declines in emotional, physical and cognitive functioning were seen in 6.9%, 31.8%, and 7.6% of the older ones, respectively. maladaptive coping and lower social support increased adjusted odds of being in the accelerated decline cohort for all quality of life domains; lower optimism was only associated with decreased emotional functioning. Chemotherapy is related to physical and cognitive function trajectories but not emotional (Dura-Ferrandis et al., 2017). Personality and social resources influence the long-term emotional well-being of older breast cancer survivors; treatment is more important for physical and cognitive function than emotional function. Early identification of those who are vulnerable to damage can facilitate clinical and psychological support (Dura-Ferrandis et al., 2017).

Psychosocial adjustment. Kolokotroni, Anagnostopoulos, and Hantzi (2018) revealed that low optimism, increased social constraints, and higher levels of brooding appear to be risk factors for poor psychosocial adjustment to breast cancer. Disengagement-oriented coping and brooding partially mediate the relationship between social constraint and adjustment. Meditation does mediate the relationship between coping and release-oriented adjustment (Kolokotroni et al., 2018).

Discovery of the benefits of the breast cancer experience. The relationship between benefit discovery and quality of life was moderated by caregiver age, marital status, socioeconomic status, geographic location, acceptance and emotional-focused coping, optimism, nurturing demands, and post-traumatic stress (Gardner et al., 2018). Benefit findings were more strongly associated with quality of life among caregivers with fewer demographic/psychosocial resources (Gardner et al., 2018). Results suggest that finding a benefit in cancer experiences may have a greater positive impact for caregivers with relatively fewer demographic and psychosocial resources, and may have less impact for caregivers with relatively greater resources (Gardner et al., 2018).

Mediation. According to Kuhlman et al. (2017), exposure to abuse during childhood was strongly associated with lower psychological resources and increased depressive symptoms. Furthermore, lower optimism and attention mediate the association between childhood abuse and increased depressive symptoms. These results support the existing theory that childhood abuse is associated with lower psychological resources, which partly explains the increased depressive symptoms in a sample of women facing breast cancer diagnosis and treatment (Kuhlman et al., 2017).

CONCLUSIONS AND SUGGESTIONS

Unpleasant feelings from cancer can be overcome by having a positive attitude towards healing. Optimism helps a person cope with the stresses of life, reduces the risk of falling ill, increases self-acceptance to be more positive, has a better ability to rise from adversity, allows behavior change, and increases persistence in implementing treatment. Interventions to increase optimism are mostly related to psychological interventions in the form of spiritual, Caring guidance, and humor. This is related to social networks, namely religious leaders, peers, health workers and families.

REFERENCES

- Avis, N., Levine, B., Goyal, N., Crawford, S., Hess, R., Colvin, A., ... Greendale, G. (2020). 19. *Health-related quality of life among breast cancer survivors and noncancer controls over 10 years* *Pink SWAN.pdf*.
- Bibi, A., & Khalid, M. A. (2019). Death anxiety , perceived social support , and demographic correlates of patients with breast cancer in Pakistan. *Death Studies*, 43(1), 1–6. <https://doi.org/10.1080/07481187.2019.1614108>
- Bredal, I. S., & Ekeberg, Ø. (2016). *The Stability of Dispositional Optimism in Relation to Receiving or Not Receiving a Cancer Diagnosis*. (June), 806–814.
- Calderon, C., Carmona-bayonas, A., Hernandez, R., Ghanem, I., Castelo, B., Castro, E. M. De, ... Jimenez-fonseca, P. (2019). Effects of pessimism , depression , fatigue , and pain on functional health-related quality of life in patients with resected non-advanced breast cancer. *The Breast*, 44, 108–112. <https://doi.org/10.1016/j.breast.2019.01.012>
- Cobo-Cuenca, A. I., Martin-Espinosa, N. M., Rodriguez-Borrego, M. A., & Carmona-Torres, M. J. (2018). Determinants of satisfaction with life and self-esteem in women with breast cancer. *Quality of Life Research*, 27(1), 0. <https://doi.org/10.1007/s11136-018-2017-y>
- Colby, D. A., & Shifren, K. (2012). *Optimism , mental health , and quality of life: A study among breast cancer patients*. (September 2013), 37–41. <https://doi.org/10.1080/13548506.2012.686619>
- Dumalaon-Canaria, J., Prichard, I., Hutchinson, A., & Wilson, C. (2016). 2. *Fear of cancer recurrence and psychological well-being in women with breast cancer The role of causal cancer attributions and optimism.pdf*(pp. 1–12). pp. 1–12.
- Dumontier, C., Clough-gorr, K. M., Silliman, R. A., Stuck, A. E., & Moser, A. (2016). Journal of Geriatric Oncology Motivation and mortality in older women with early stage breast cancer: A longitudinal study with ten years of follow-up. *Journal of Geriatric Oncology*. <https://doi.org/10.1016/j.jgo.2016.12.002>
- Dura-Ferrandis, E., Mandelblatt, J. S., Clapp, J., Luta, G., Faul, L. A., Kimmick, G., ... Hurria, A. (2017). 20. Personality, coping, and social support as predictors of long-term quality-of-life trajectories in older breast cancer survivors CALGB protocol 369901 (Alliance).pdf. *Psycho-Oncology*, 26(11), 1914–1921.
- Faye-Schjol, H. H., & Schou-Bredal, I. (2019). 11. Pessimism predicts anxiety and depression in breast cancer survivors A 5-year follow-up study.pdf. *Psycho-Oncology*, 28, 1314–1320.
- Finck, C., Barradas, S., Zenger, M., & Hinz, A. (2018a). Calidad de vida en pacientes con cáncer de mama: asociación con

- optimismo y apoyo social. *International Journal of Clinical and Health Psychology*, 18(1), 27–34. <https://doi.org/10.1016/j.ijchp.2017.11.002>
- Finck, C., Barradas, S., Zenger, M., & Hinz, A. (2018b). Quality of life in breast cancer patients: Associations with optimism and social support. *International Journal of Clinical and Health Psychology*, 18(1), 27–34. <https://doi.org/10.1016/j.ijchp.2017.11.002>
- Gardner, M. H., Mrug, S., Schwebel, D. C., Phipps, S., & Whelan, Kimberly, Madan-Swain, A. (2018). HHS Public Access. *Cancer Nurs*, 40(5), 1–21. <https://doi.org/10.1097/NCC.0000000000000419>.Benefit
- Gonzalez, P., Nuñez, A., Flores, K. F., & Nápoles, A. M. (2016). *Coping With Breast Cancer: Reflections From Chinese American , Korean American , and Mexican American Women*. 35(1), 19–28.
- Hong, S. J., Shin, N., & Jung, S. (2020). *A predictive model of fear of cancer recurrence for patients undergoing chemotherapy*.
- Hoseini, L., Kashani, F. L., Akbari, S., Akbari, M. E., & Mehr, S. S. (2016). *Model Development of Illness Perception and Consequences in Breast Cancer Patients*. 17, 185–190.
- İzci, F., Sarsanov, D., Erdogan, Z. İ., İlgin, A. S., Çelebi, E., & Alço, G. (2018). *Impact of Personality Traits , Anxiety , Depression and Hopelessness Levels on Quality of Life in the Patients with Breast Cancer*. 105–111. <https://doi.org/10.5152/ejbh.2018.3724>
- Kolokotroni, P., Anagnostopoulos, F., & Hantzi, A. (2018). The Role of Optimism , Social Constraints , Coping , and Cognitive Processing in Psychosocial Adjustment Among Breast Cancer Survivors. *Journal of Clinical Psychology in Medical Settings*, 0(0), 0. <https://doi.org/10.1007/s10880-018-9555-x>
- Kuhlman, K. R., Boyle, C. C., Irwin, M. R., Ganz, P. A., Crespi, C. M., Asher, A., ... Bower, J. E. (2017). Childhood maltreatment , psychological resources , and depressive symptoms in women with breast cancer. *Child Abuse & Neglect*, 72(March), 360–369. <https://doi.org/10.1016/j.chiabu.2017.08.025>
- Lally, R. M., Kupzyk, K., Mills, A., Gallo, S., Meneses, K., Lally, R. M., ... Meneses, K. (2019). Effects of social constraints and web-based psychoeducation on cancer-related psychological adjustment early-after breast cancer diagnosis. *Journal of Psychosocial Oncology*, 0(0), 1–22. <https://doi.org/10.1080/07347332.2018.1546787>
- Leung, J., Atherton, I., Kyle, R. G., Hubbard, G., & McLaughlin, D. (2015). *Psychological distress , optimism and general health in breast cancer survivors : a data linkage study using the Scottish Health Survey*. <https://doi.org/10.1007/s00520-015-2968-2>
- Lu, Q., Dong, L., Wu, I. H. ., You, J., Huang, J., & Hu, Y. (2018). *The impact of an expressive writing intervention on quality of life among Chinese breast cancer patients undergoing chemotherapy*.
- Melton, L. M. (2016). If I Don ' t Laugh , I ' ll Cry : Exploring Humor Coping in Breast Cancer. *Journal of Psychosocial Oncology*, 7332(September). <https://doi.org/10.1080/07347332.2016.1233926>
- Parkin, D. M., Pisani, P., & Ferlay, J. (1999). Global cancer statistics. *CA: A Cancer Journal for Clinicians*. <https://doi.org/10.3322/canjclin.49.1.33>
- Richard, A., Harbeck, N., Wuerstlein, & Wilhem, F. (2018). *29. Recover your smile Effects of a beauty care intervention on depressive symptoms, quality of life, and self-esteem in patients with early breast cancer.pdf*(pp. 401–407). pp. 401–407.
- Rooij, B. H. De, Thong, M. S., Roij, J. Van, Bonhof, C. S., Husson, O., & Ezendam, N. P. M. (2018). 10. Optimistic, realistic, and pessimistic illness perceptions; quality of life; and survival among 2457 cancer survivors the population-based PROFILES registry.pdf. *Cancer, September*, 3609–3617.
- Sabiston, C. M., Wrosch, C., Fong, A. J., Brunet, J., Gaudreau, P., Loughlin, J. O., & Meterissian, S. (2018). *Life after breast cancer : moving on , sitting down or standing still ? A prospective study of Canadian breast cancer survivors*. 1–8. <https://doi.org/10.1136/bmjopen-2018-021770>
- Sama, C. B., Dzekem, B., Kehbila, J., Ekabe, C. J., Vofo, B., Abua, N. L., ... Angwafo, F. (2017). Awareness of breast cancer and breast self-examination among female undergraduate students in a higher teachers training college in Cameroon. *Pan African Medical Journal*, 28, 1–9. <https://doi.org/10.11604/pamj.2017.28.91.10986>
- Starreveld, D. E. J., Markovitz, S. E., Breukelen, G. Van, & Madelon, L. (2018). *The course of fear of cancer recurrence : Different patterns by age in breast cancer survivors* .18. <https://doi.org/10.1002/pon.4505>
- Subramanian, L., Salini, V. U., Anandan, H., & Insuvai, U. (2018). Breast Cancer Awareness in South India. *International Journal of Scientific Study*, 39(5), 39. <https://doi.org/10.17354/ijss/2018/220>
- Sztachariska, J., Krejtz, I., & Nezlek, J. B. (2019). Using a Gratitude Intervention to Improve the Lives of Women With Breast Cancer: A Daily Diary Study. *Frontiers in Psychology*, 10(June), 1–11. <https://doi.org/10.3389/fpsyg.2019.01365>
- Tang, L., Fritzsche, K., Leonhart, R., Pang, Y., Li, J., Song, L., ... Schaefer, R. (2017). *Emotional distress and dysfunctional illness perception are associated with low mental and physical quality of life in Chinese breast cancer patients*. 1–10. <https://doi.org/10.1186/s12955-017-0803-9>
- Wakiuchi, J., Marchi, J., Norvila, L., Marcon, S., & Sales, C. (2015). *Hope of cancer patients undergoing chemotherapy*. 28(3), 202–208.
- WHO. (2019). Kasus Kanker Payudara Paling Banyak Terjadi di Indonesia. *Databoks*.
- Xia, J., Tang, Z., Deng, Q., Yang, R., & Wang, J. (2017). Predictors of the quality of life in Chinese breast cancer survivors. *Breast Cancer Research and Treatment*. <https://doi.org/10.1007/s10549-017-4512-1>