Analysis of Family Support in Enhancing Life Quality among Breast Cancer Patients at Haji Adam Malik Central General Hospital Medan

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Abstract

Cancer is the most common chronic disease worldwide, with cervical cancer, breast cancer, ovarian cancer, and skin cancer being the most prevalent. Breast cancer ranks second globally after lung cancer. Patients diagnosed with breast cancer undergo changes in their physical, sexual, social, and daily life activities, affecting their overall life quality. One crucial factor that can enhance the life quality for patients is the support from their families, which is a pivotal determinant for individual well-being. To determine the differences in the life quality among breast cancer patients with high and low family support and to analyze the correlation between family support and the breast cancer patients life quality. This study employed a quantitative analytic survey with a cross-sectional design. The research was conducted at Haji Adam Malik Central General Hospital from August to October 2023. The study population included all stage I and II breast cancer patients, totaling 205 outpatient individuals from March to April 2022, with a sample size of 66. Simple random sampling was utilized for participant selection. Data collection involved questionnaire interviews. Data analysis comprised two steps: first, univariate analysis using descriptive and frequency statistics, and second, bivariate analysis using Pearson's test and independent t-test with a significance level of 95% (p-value ≤ 0.05). Statistical results indicated a significant difference in the life quality between breast cancer patients with high and low family support (p=0.037). It was concluded that there is a significantive correlation between family support and the breast cancer patients life quality (p=0.001; r=-0.644). Family support is crucial for patients facing chronic diseases such as breast cancer. It is recommended that families strive to enhance their support to ensure patients' comfort during treatment and therapy programs, ultimately improving the breast cancer patients life quality.

Keyword: Breast Cancer, Family, Life Quality

INTRODUCTION

Cancer is the most prevalent chronic disease globally, standing as one of the leading non-communicable diseases causing substantial mortality worldwide in both developed and developing countries. The most prevalent cancer types include cervical cancer, breast cancer, ovarian cancer, skin cancer, and occasionally developing anal or colorectal tumors (Rukinah & Luba, 2021).

The IARC (*International Agency for Research on Cancer*) reports that there were 9.5 million cancer-related deaths and 18.5 million new cases of cancer globally in 2019. Breast cancer ranked second globally after lung cancer, with 2.089 million new cases and ranked fifth in the world for breast cancer-related deaths, totaling 627,000 (World Health Organization, 2020).

According to data from the Globocan in 2021, there were approximately 234,511 new cancer cases worldwide and 396,914 new cancer cases in Indonesia in 2020. The most prevalent cancer type was breast cancer, accounting for around 65,858 new cases (16.6%) out of the total 396,914 cases reported in Indonesia (Global Burden of Cancer Study, 2021).

Breast cancer is a malignant neoplastic disease originating from the parenchyma, which includes the glands, glandular ducts, and supporting tissues of the breast (Fernandez-Nogueira et al., 2020; Cserni, 2020). The uncontrolled growth of a cells number within the breast characterizes breast cancer (Juarto, 2023). This condition poses a significant challenge, leading to pain, suffering, and even mortality (Satpathi et al., 2023; Ali et al., 2024).

According to the data from the Sumatera Utara Provincial Health Office in 2022, the number of breast cancer patients in the Sumatera Utara region continues to rise, ranking among the top 10 highest out of the 38 provinces in Indonesia. Based on information from hospitals in the Medan City, the number of breast cancer cases in 2022 amounted to 3,206 cases, and it is projected to reach 4,809 cases by the year 2025 (Aulia, 2023).

The Haji Adam Malik Central General Hospital reported breast cancer patients the number in the year 2019, obtained from the inpatient ward, with 384 outpatients and 94 inpatients. In the year 2020, there were 250 outpatient cases and 83 inpatient cases. The data for the year 2021 indicated a diagnosis of breast cancer in 300 outpatients and 100 inpatients. In 2022, the diagnosis of breast cancer was reported in 315 outpatients and 80 inpatients.

Breast cancer patients, upon diagnosis, undergo changes in physical, sexual, social, psychological, and daily life activities that impact their life quality (Utama, 2019; Brajkovic et al., 2021; Aydin et al., 2021). Life quality is a state in which breast cancer patients experience good health while carrying out or enjoying their daily lives (Lewandowska et al., 2020; Sesrianty et al., 2023). The chronic condition of breast cancer can have a negative impact on the physical health and patients life quality (Ng et al., 2021; Park et al., 2021).

Better life quality is associated with prolonged survival among breast cancer patients (Zhao et al., 2021). One factor contributing to improved life quality is the presence of family support (Shen et al., 2020). Family support empowers individuals to navigate life with strength and fosters a sense of optimism, which is crucial for breast cancer patients facing the challenges of their illness (Hidayati & Subriah, 2018). Families serve as endpoints in healthcare provision within communities to determine the risk of disruptions due to lifestyle and environmental influences (Rahmiwati et al., 2022). Someone with cancer requires support from their close family; the family acts as a support system for those in a vulnerable position due to their current circumstances (Marwiyah et al., 2021).

The research findings from Rosa, et al. (2022), indicate a correlation between family support and the breast cancer patients life quality at Siti Khodijah Islamic Hospital in Palembang. The results of the study by Sesrianty, et al. (2023), demonstrate a positive correlation between family support and the breast cancer patients life quality.

This situation ensures that the patient always feels accompanied and cared for, even while undergoing treatment, ultimately contributing to an improved life quality for breast cancer patients. Consequently, the researcher was intrigued to conduct this study with the aim of discerning the differences in the life quality between breast cancer patients receiving high and low levels of family support. Additionally, the study seeks to analyze the correlation between family support and the breast cancer patients life quality.

METHODS

This research is a quantitative analytical survey with a cross-sectional design. The study was conducted at Haji Adam Malik Central General Hospital from August to October 2023. The research population consisted of all stage I and II breast cancer patients, totaling 205 outpatient cases at Haji Adam Malik Central General Hospital in Medan during March-April 2023. Sample size calculation was performed using the Lemeshow formula due to its importance in accurately estimating the required sample size to ensure the reliability of research results. The Lemeshow formula aids in estimating the necessary sample size by considering factors such as the desired significance level, the expected effect size, and the model's fit in identifying any significant biases, resulting in a sample size of 66 breast cancer patients. Inclusion criteria for the study were as follows: 1) breast cancer patients living with other family members, and 2) stage I and II. Exclusion criteria included: 1) Breast cancer patients with complications or comorbidities, and 2) Patients unwilling to participate as respondents.

The sampling technique employed in this study was simple random sampling. Data collection procedures involved interviews based on a questionnaire. The questionnaire instrument used for assessing family support consisted of 12 questions covering emotional support, facilities, and information, utilizing a Likert scale with 4 points: never scored as 1, rarely scored as 2, often scored as 3, and very often/always scored as 4. Meanwhile, the questionnaire instrument used for assessing life quality was adopted from the EORTC QLQ-C30, comprising 30 questions also utilizing a Likert scale with 4 points: never scored as 1, rarely scored as 2, often scored as 3, and very often/always scored as 4.

The research variables included the dependent variable, life quality, measured on a ratio scale (numeric data), and the independent variable, family support, measured on a ratio scale (numeric data). Data analysis was conducted using SPSS software version 21. The analytical process involved two steps: first, univariate analysis utilizing descriptive and frequency statistics, and second, bivariate analysis employing Pearson's test and independent t-test with a significance level of 95% (p-value $\leq$ 0.05).

The principal researcher obtained an ethical approval certificate from University of Sumatera Utara the Research Ethics Committee (No:584/KEPK/USU/2023). Additionally, permissions were sought from academic administrators of the university and relevant authorities prior to data collection. This was done with the objective of securing informed consent from respondents before the distribution of the questionnaire.

RESULTS

The frequency distribution analysis of family support and breast cancer patients life quality at Haji Adam Malik Central General Hospital is presented as follows:

Table 1. Frequency Distribution of Family Support and Breast Cancer Patients Life Quality at Haji Adam Malik Central General Hospital

Frequency Distribution	n	%
Family Support		
High	56	84.4
Low	10	15.6
Breast Cancer Patients Life Quality		
Good	16	24.4
Poorly	50	75.8

According to table 1, the frequency distribution of family support for breast cancer patients at Haji Adam Malik Central General Hospital reveals that there are 56 patients (84.4%) with high family support and 10 patients (15.6%) with low family support. The frequency distribution of the life quality of breast cancer patients at Haji Adam Malik Central General Hospital reveals that there are 16 patients (24.4%) with good life quality and 50 patients (75.8%) with poorly life quality.

The analysis of the difference breast cancer patients life quality at Haji Adam Malik Central General Hospital between high family support and low family support is as follows:

Table 2. Mean Distribution of Breast Cancer Patients Life Quality in High Family Support and Low Family Support

Family Support	Breast Cancer Patients Life Quality			
	n	**Mean**	**SD**	**Pvalue**
High	56	97,00	17,676	0,037
Low	10	86,11	17,670	

According to table 2, it can be observed that the average life quality for breast cancer patients with high family support is 97.00 with a standard deviation of 17.676, whereas for the life quality for breast cancer patients with low family support, the average is 86.11 with a standard deviation of 17.670. The statistical test result yields a p-value of 0.037, indicating that at an alpha level of 0.05, it can be concluded that there is a differences in the breast cancer patients life quality at Haji Adam Malik Central General Hospital between high family support and low family support.

The Correlation between Family Support and Breast Cancer Patients Life Quality at Haji Adam Malik Central General Hospital

The analysis results of the correlation between family support and the breast cancer patients life quality at Haji Adam Malik Central General Hospital can be observed as follows:

Table 3. The Correlation between Family Support and Breast Cancer Patients Life Quality at Haji Adam Malik Central General Hospital

Correlation between Variables	Breast Cancer Patients Life Quality		
	n	*r*	*P value*
Family Support	66	0.644	0.001

According to table 3, the value of r = 0.612 was obtained. Thus, it can be concluded that the correlation between family support and the breast cancer patients life quality shows a strong and positively correlated pattern, meaning that the higher the family support, the higher life quality for breast cancer patients. The statistical test results yielded a pvalue of 0.001, indicating a significant correlation between family support and breast cancer patients life quality at Haji Adam Malik Central General Hospital.

DISCUSSION

Family support is a crucial aspect for cancer patients undergoing treatment, as it serves to motivate the patients throughout their medical journey, providing a sense of care and concern even in times of illness (Rosa et al., 2022; Testoni et al., 2023). Family support is characterized by the attitudes, actions, and acceptance of family members towards their loved ones, fostering an environment where family members are ready to provide assistance and aid when needed (Mahayani et al., 2020; Bisht et al., 2023). Family support is a subset of social support,

recognized as an essential resource when individuals face challenges and require motivation to seek medical intervention. This support encompasses emotional, facility, and informational aspects (Irma et al., 2022; Kaniamattam & Oxley, 2023; Duraku et al., 2023).

The family support for breast cancer patients at Haji Adam Malik Central General Hospital consists of 56 individuals (84.4%) who receive high levels of family support. This support encompasses both attention and active involvement in the treatment and therapy processes undertaken by breast cancer patients. Family members actively participating in motivating patients to maintain their health and adhere to treatment schedules represent a form of active involvement in treatment management. Support in other forms includes providing time, offering necessary information, encouraging continuous learning, and seeking additional knowledge about breast cancer and its treatment. These activities are carried out by family members to provide support to their loved ones undergoing treatment.

Positive family support contributes to the psychological well-being of patients, motivating them to adhere to their treatment regimen, including chemotherapy (Karim et al., 2023; Masoumi et al., 2022). This support ensures that the planned therapy program aligns with the intended targets, ultimately leading to an improved life quality for the patient (Hsu, et al., 2023; Faija et al., 2023).

The breast cancer patients majority at Haji Adam Malik Central General Hospital exhibit suboptimal life quality, with 50 individuals (75.8%) having a lesser life quality, while 16 patients (24.4%) report a good life quality. A good life quality is crucial for individuals to attain and maintain good health status, optimize physical function and abilities for as long as possible. Those with a higher life quality tend to possess a strong desire for recovery and an improved health status. Conversely, a decline in life quality correlates with a diminished desire for recovery.

Based on test statistical results, a pvalue of 0.037 was obtained, indicating a significant difference in the life quality among breast cancer patients between high and low levels of family support. Specifically, individuals with high family support demonstrated a better life quality compared to those with low family support, who exhibited a lower life quality.

This study the findings align with the research conducted to Lase & Hasibuan (2023), which states that there is a difference in the life quality among patients after being provided with family support education. This reinforces the family support importance for patients. These results are further supported by the research conducted to Rahmiwati et al. (2022), the tendency suggests that patients with high family support demonstrate a higher life quality level compared to those with low family support, particularly concerning indicators of emotional

and social functioning. This is related to one of the functions of family support, which provides emotional support and appreciation, making patients feel cared for and loved by their family members. This condition will undoubtedly provide good psychological support for patients, as they will have better hopes for the future and be able to reduce psychological problems such as anxiety, stress, and depression.

Family support can enhance the breast cancer patients life quality, as it is crucial for every patient (Heidary et al., 2023; Nurhidayati et al., 2023; Tan et al., 2023). Families play a significant role in providing motivation, attention, and care, addressing the needs of patients undergoing treatment (Karam et al., 2021; Novitarum et al., 2022).

Based on the statistical test the results, a p-value of 0.001 was obtained, indicating a significant relationship between family support and the life quality among breast cancer patients at Haji Adam Malik Central General Hospital. There is a noticeable tendency for patients with higher family support to exhibit a higher level of life quality. This condition is expected to provide strong psychological support for patients, fostering a more positive outlook for the future and potentially reducing psychological issues such as anxiety, stress, and depression.

The findings of this study are consistent with the research conducted to Sitanggang & Tambunan (2023), indicating a significant correlation between family support and the life quality among patients at Murni Teguh Hospital. Patients with cancer who receive family support tend to feel noticed, valued, and have a sense of hope for life, contributing to an enhancement in their life quality. These results are further supported by the research conducted to Jayanti, et al. (2023), which highlights the correlation between family support and the breast cancer patients life quality undergoing chemotherapy at Baladhika Husada Jember Hospital Level III. In this context, strong family support contributes to the psychological well-being of patients, motivating them to adhere to their treatment regimen, ultimately leading to an improved life quality.

Family support has the most significantive effect on the motivation and breast cancer patients spirit facing long-term treatments. Breast cancer patients require and anticipate emotional support, including empathy, appreciation, love, and attention from other family members. Breast cancer patients desire to be listened to regarding their feelings and concerns, aiming to avoid stress and fear they may be experiencing, thereby enhancing the life quality for patients.

CONCLUSIONS

Family support is crucial for patients facing chronic illnesses such as breast cancer. Family support empowers individuals to navigate life with strength and fosters a sense of optimism towards a better future, making it an essential element for breast cancer patients grappling with their health challenges. Based on research findings, there are notable differences in the breast cancer patients life quality between those with high and low levels of family support. Furthermore, a significant correlation was observed between family support and the breast cancer patients life quality at Hospital. Higher levels of family support correlate with an improved life quality, whereas lower levels are associated with a decline in life quality.

Recommendations include encouraging families to enhance their support to ensure patient comfort during treatment and therapy programs, ultimately improving the life quality for breast cancer patients. Moreover, it is suggested that doctors and nurses provide more education to patients' families regarding the patient's treatment to enhance the life quality for breast cancer patients. Hospitals are encouraged to provide the best facilities and services for breast cancer patients.

REFERENCE

Ali, A.S., Nazar, M.E., Mustafa, R.M., Hussein, S., Qurbani, K., & Ahmed, S.K. (2024). Impact of heavy metals on breast cancer. *World Academy of Sciences Journal*, *6*(1), 1-12. https://doi.org/10.3892/wasj.2023.219

Aulia, F. (2023, 18 Juli). Sosialisasi Pencegahan Kanker, YKI Sumut Siap Berkolaborasi dengan PD Muhammadiyah dan PD Aisyiyah Medan. Diakses 2 Maret 2023 dari https://infosumut.id/sosialisasi-pencegahan-kanker-yki-sumut-siap-berkolaborasi-dengan-pd-muhammadiyah-dan-pd-aisyiyah-medan/

Aydin, M., Kose, E., Odabas, I., Bingul, B.M., Demirci, D., & Aydin, Z. (2021). The effect of exercise on life quality and depression levels of breast cancer patients. *Asian Pacific journal of cancer prevention: APJCP*, *22*(3), 725-732. https://doi.org/10.31557/APJCP.2021.22.3.725

Bisht, J., Rawat, P., Sehar, U., & Reddy, P. H. (2023). Caregivers with cancer patients: focus on hispanics. *Cancers*, *15*(3), 626. https://doi.org/10.3390/cancers15030626

Brajkovic, L., Sladic, P., & Kopilaš, V. (2021). Sexual quality of life in women with breast cancer. *Health Psychology Research*, *9*(1), 1-14. https://doi.org/10.52965/001C.24512

Cserni, G. (2020). Histological type and typing of breast carcinomas and the WHO classification changes over time. *Pathologica*, *112*(1), 25-41. https://doi.org/10.32074/1591-951X-1-20

Duraku, Z.H, Davis, H., & Hamiti, E. (2023). Mental health, study skills, social support, and barriers to seeking psychological help among university students: a call for mental health support in higher education. *Frontiers in Public Health*, *11*, 1220614.

Faija, C.L., Connell, J., Gellatly, J., Rushton, K., Lovell, K., Brooks, H., ... & Bee, P. (2023). Enhancing the quality of psychological interventions delivered by telephone in mental health services: increasing the likelihood of successful implementation using a theory of change. *BMC psychiatry*, *23*(1), 405. https://doi.org/10.1186/s12888-023-04829-2

Fernandez-Nogueira, P., Mancino, M., Fuster, G., Bragado, P., Puig, M.P.D, Gascon, P., ... & Carbo, N. (2020). Breast mammographic density: Stromal implications on breast cancer detection and therapy. *Journal of Clinical Medicine*, *9*(3), 776, 1-24. https://doi.org/10.3390/jcm9030776

Global Burden of Cancer Study (GLOBOCAN). (2021). *New Global Cancer Data*. https://www.uicc.org/news/globocan2020-new-global-cancer-data

Heidary, Z., Ghaemi, M., Rashidi, B.H., Gargari, O.K., & Montazeri, A. (2023). Quality of life in breast cancer patients: A systematic review of the qualitative studies. *Cancer Control*, *30*, 1-10. https://doi.org/10.1177/10732748231168318

Hidayati, H., & Subriah, S. (2018). Hubungan dukungan keluarga dengan kualitas hidup pasien kanker serviks di Rumah Sakit Ibnu Sina Makassar Periode Januari-Juni 2017. *Media Kesehatan Politeknik Kesehatan Makassar, 12*(1), 66-72. https://doi.org/10.32382/medkes.v12i1.130

Hsu, T., Elias, R., Swartz, K., & Chapman, A. (2023). Developing sustainable cancer and aging programs. *American Society of Clinical Oncology Educational Book*, *43*, e390980.

Irma, Wahyuni, A.S., & Sallo, A.K.M. (2022). Dukungan keluarga dan kualitas hidup penderita kanker payudara. *Journal of Midwifery and Nursing Studies, 4*(2), 20 - 27.

Jayanti, N.P.I, Cahyono, H.D., & Prasetyo, H. (2023). Dukungan keluarga dengan kualitas hidup pada pasien kanker payudara yang menjalani kemoterapi. *Jurnal Keperawatan Malang*, *8*(1), 301-307.

Juarto, B. (2023). Breast cancer classification using outlier detection and variance inflation factor. *Engineering, MAthematics and Computer Science Journal (EMACS)*, *5*(1), 17-23. https://doi.org/10.21512/emacsjournal.v5i1.9223

Kaniamattam, M., & Oxley, J. (2023). Qualitative analysis of social support for caregivers of children with neurodevelopmental disorders in South India. *Research in Developmental Disabilities*, *138*, 104539. https://doi.org/10.1016/j.ridd.2023.104539

Karam, M., Chouinard, M. C., Poitras, M. E., Couturier, Y., Vedel, I., Grgurevic, N., & Hudon, C. (2021). Nursing care coordination for patients with complex needs in primary healthcare: a scoping review. *International Journal of Integrated Care*, *21*(1), 1-21. https://doi.org/10.5334/ijic.5518

Karim, U.N., Setiyadi, A., & Efrida, Y. (2023). Family support on motivation of compliance and chemotherapy protocol among patients with breast cancer. *Journal of Holistic Nursing Science*, *10*(1), 22-26.

Lase, D.V., & Hasibuan, M.T.D. (2023). Pengaruh edukasi program dukungan keluarga terhadap kualitas hidup pasien kanker payudara di Murni Teguh Memorial Hospital. *Indonesian Trust Health Journal*, *6*(1), 63-69. https://doi.org/10.37104/ithj.v6i1.161

Lewandowska, A., Rudzki, G., Lewandowski, T., Próchnicki, M., Rudzki, S., Laskowska, B., & Brudniak, J. (2020). Quality of life of cancer patients treated with chemotherapy. *International Journal of Environmental Research and Public Health*, *17*(19), 6938. https://doi.org/10.3390/ijerph17196938

Mahayani, N.L.P., Sukraandani, N.K., & Suniyadewi, N.W. (2020). Hubungan dukungan keluarga dengan self esteem pada pasien kanker payudara di Poliklinik Bedah Onkologi RSUP Sanglah Denpasar. *Jurnal Keperawatan, 9*(2): 181 –189. https://doi.org/10.36565/jab.v9i2.210

Marwiyah, M., Maulida, M.N., & Idriansari, A. (2021, November). Studi komparatif: dukungan keluarga dalam merawat pasien kanker payudara yang menjalani kemoterapi. *Proceeding Seminar Nasional Keperawatan*, 7 (1), 105-109.

Masoumi, S., Amiri, M., & Afrashteh, M. Y. (2022). Self-compassion: the factor that explains a relationship between perceived social support and emotional self-regulation in

psychological well-being of breast cancer survivors. *Iranian Journal of Psychiatry*, *17*(3), 341-349. https://doi.org/10.18502/ijps.v17i3.9734

Ng, S.M., Fung, M.H.Y., Chan, J.S.M., Chan, C.H.Y., & Chan, C.L.W. (2021). Physical activity, confidence and quality of life among cancer patient-carer dyads. *Sports Medicine – Open, 7*(1), 1-9. https://doi.org/10.1186/s40798-021-00333-7

Novitarum, L., Karo, M., & Perangin-angin, I. (2022). Pemberdayaan Keluarga dalam Memberikan Dukungan Fungsi Keluarga pada Penderita Kanker Payudara. *Jurnal Kreativitas Pengabdian Kepada Masyarakat (PKM)*, *5*(4), 977-982. https://doi.org/10.33024/jkpm.v5i4.4673

Nurhidayati, T., Firdaus, A. D., & Harningtyas, S. (2023). The relationship between family support with self-concept in patients with post mastectomy. *The Journal of Palembang Nursing Studies*, *2*(1), 42-49. https://doi.org/10.55048/jpns.v2i1.61

Park, J., Rodriguez, J.L., O'Brien, K.M., Nichols, H.B., Hodgson, M.E., Weinberg, C.R., & Sandler, D.P. (2021). Health-related quality of life outcomes among breast cancer survivors. *Cancer*, *127*(7), 1114-1125. https://doi.org/10.1002/cncr.33348

Rahmiwati, R., Yenni, Y., & Adzkiya, M. (2022). Kualitas hidup pasien kanker payudara berdasarkan karakteristik pasien dan dukungan keluarga. *Human Care Journal*, *7*(2), 281-289. https://doi.org/10.32883/hcj.v7i2.1557

Rosa, Y., Siswandi, A., Anggraeni, S., & Setiawati, O.R. (2022). Hubungan dukungan keluarga terhadap kualitas hidup pada penderita kanker payudara yang sedang menjalani kemoterapi di RS Abdul Moeloek Bandar Lampung 2021. *Jurnal Kesehatan Tambusai, 3*(1), 280-290.

Rukinah, R., & Luba, S. (2021). Pengetahuan wanita usia subur tentang pencegahan kanker payudara. *Jurnal Ilmiah Kesehatan Sandi Husada, 10* (1), 248–252. https://doi.org/10.35816/jiskh.v10i1.597

Satpathi, S., Gaurkar, S. S., Potdukhe, A., Wanjari, M. B., & Wanjari, M. (2023). Unveiling the role of hormonal imbalance in breast cancer development: A comprehensive review. *Cureus*, *15*(7). https://doi.org/10.7759/cureus.41737

Sesrianty, V., Selsa, T., & Fradisa, L. (2023). Hubungan dukungan keluarga dengan kualitas hidup pasien kanker payudara. *Jurnal Kesehatan Saintika Meditory, 6* (2), 473-481. https://jurnal.syedzasaintika.ac.id

Shen, A., Qiang, W., Wang, Y., & Chen, Y. (2020). Quality of life among breast cancer survivors with triple negative breast cancer–role of hope, self-efficacy and social support. *European Journal of Oncology Nursing, 46*(May). https://doi.org/10.1016/j.ejon.2020.101771

Sitanggang, H.Y.B., & Tambunan, D.M. (2023). Hubungan dukungan keluarga dengan kualitas hidup pasien dengan kanker kolon yang menjalani kemoterapi di Rumah Sakit Murni Teguh. *Indonesian Trust Nursing Journal*, *1*(3), 20-28.

Tan, Y., Qin, M., Liao, B., Wang, L., Chang, G., Wei, F., & Cai, S. (2023). Effectiveness of peer support on quality of life and anxiety in breast cancer patients: a systematic review and meta-analysis. *Breast Care*, *18*(1), 49-59. https://doi.org/10.1159/000527849

Testoni, I., Nicoletti, A.E., Moscato, M., & Vincenzo, C.D. (2023). A Qualitative analysis of the experiences of young patients and caregivers confronting pediatric and adolescent oncology diagnosis. *International Journal of Environmental Research and Public Health*, *20*(14), 6327. https://doi.org/10.3390/ijerph20146327

Utama, Y.A. (2019). Hubungan dukungan keluarga terhadap kualitas hidup pasien kanker payudara di Rumah Sakit Islam Siti Khodijah Palembang Tahun 2018. *Jurnal Ilmiah Universitas Batanghari Jambi, 19*(3), 529-531. doi: 10.33087/jiubj.v19i3.698

World Health Organization. (2020). Data Penderita Kanker Payudara di Dunia. International Agency for Research On Cancer. https://gco.iarc.fr/

Zhao, Y., Wang, H., Sun, D., Ma, D., Li, H., Li, Y., Zhang, X., Xie, Z., & Sun, J. (2021). Job satisfaction, resilience and social support in relation to nurses' turnover intention based on the theory of planned behaviour: A structural equation modelling approach. *International Journal of Nursing Practice, 27* (2020), 1–10. https://doi.org/10.1111/ijn.12941.