


Article journey:

Submitted
3/9/2022
Revised
11/11/2022
Accepted
4/1/2023
Online first
4/1/2023



ORIGINAL RESEARCH

Family support on motivation of compliance and chemotherapy protocol among patients with breast cancer

Ulfah Nuraini Karim¹, Agung Setiyadi² , Yeni Efrida³

Author information

Department of Nursing, Universitas Binawan, Indonesia



agung.setiyadi@binawan.ac.id



<https://doi.org/10.31603/nursing.v0i0.7792>

Abstract

Chemotherapy is a therapy using drugs to kill cancer cells that have spread beyond the breast and axillary areas that cannot be seen or found. This study aimed to determine the relationship between family support and motivation to comply with chemotherapy protocols in breast cancer patients in Tarakan Hospital Jakarta. This type of research is descriptive and correlative with a cross-sectional approach with the simple random sampling technique of 73 respondents—the results of the research data analysis using the Chi-Square test. From the study's results, it can be concluded that there is a significant relationship between family support and motivation to comply with chemotherapy protocols in breast cancer patients. Therefore, family support is needed to improve the quality of life in breast cancer patients undergoing chemotherapy.

Keywords: Chemotherapy; breast cancer; nursing care; nursing collaboration; family support

Introduction

Reproductive health is a state of complete physical, mental, and social well-being. It is not merely free from disease or disability in all matters relating to the reproductive system, function, and process (Sharma, Biedenharn, Fedor & Agarwal, 2013). The World Health Organization (WHO) stated that the problem of poor female reproductive health had reached 33% of the total burden of disease that attacks women worldwide (Skoracka, Ratajczak, Rychter, Dobrowolska & Krela-Kaźmierczak, 2021). One of the reproductive health problems that has long been a problem for women is breast cancer or Ca Mamae (Łukasiewicz et al., 2021). Breast cancer is the most common type of cancer globally, including in Indonesia. It was recorded that 2.3 million women worldwide were diagnosed with breast cancer, and 685.000 of them died in 2020. In Indonesia, breast cancer is the most common cancer, with new cases reaching 65.858 cases, and the number of deaths is 22.430 people in 2020. In addition, as many as 60-70% of Breast cancer patients in Indonesia are diagnosed at an advanced stage (III and IV), which results in lower quality of life and survival and an increasingly significant financing burden (Ministry of Health RI, 2020). The type of cancer is the most common in women and affects a million women every year, leading to death (Ji et al., 2020). The recent treatment of breast cancer is by mastectomy, which is a promising intervention (Storm-Dickerson & Sigalove, 2019). Cancer is the leading cause of death second in the world, with about 8.8 million deaths in 2015. Causes of death due to cancers of which are lung cancer 1.69 million deaths, liver cancer 788.000 Dead, cancer colorectal 774.000 Dead, cancer abdomen 754.000 Dead, and cancer breast 571.000 Dead. According to the Organization Countermeasures Cancer World and Body Health World, in the year (2030), 300 percent of incident cancer will be enhanced globally, including in Indonesia and other developing countries (WHO, 2015).

Patients with breast cancer who had mastectomies often felt depression, which led to adverse psychological outcomes. The condition is due to losing part of patients' bodies (Padmalatha et al., 2021). Besides that, patients feel afraid and worried about other health issues that could affect their quality of life (Mokhtari-Hessari & Montazeri, 2020). Breast cancer patients will experience anxiety, especially response partners, because sufferers already feel no interest or desire (Piroth, Draia, Jawad, & Piefke, 2022). Data obtained at Tarakan Hospital in 2019 showed 232 breast cancer patients, an increase of 2020 as many as 338 patients. Meanwhile, data from the Tulip room of Tarakan Hospital obtained about 10% of the patients who underwent chemotherapy during the past year or about 34 patients who did

not comply with chemotherapy according to the predetermined protocol. Breast cancer patients who received family support received good family support and did chemotherapy obediently (Alexander et al., 2019).

The lack of family support in breast cancer patients can cause these patients to be less motivated to undergo chemotherapy, so patients are lazy and do not even come according to the schedule determined by the doctor. Therefore, family support is fundamental to increasing the motivation of chemotherapy patients to live in the community. Besides that, based on the results of a survey through interviews, there are nine of 11 patients with cancer stated that there were no complaints, and 9 of them said worried and nervous because feel lost in their bodies. Worry will increase acute disease experienced by patients with cancer. The interviews found that most patients said that the family had supported the patient's recovery in treatment. As stated in the gaps above, this study aimed to evaluate family support in motivation and adherence to chemotherapy among breast cancer patients. The urgency of family support helps the patients to adhere to cancer treatments.

Method

The study used an observational study design conducted in October - December 2021. This type of research is descriptive and correlative with a cross-sectional approach. The population in this study included all patients who had undergone chemotherapy in the Tulip Room of Tarakan Hospital Jakarta for the last three months. Ninety patients comprised the study population from October to December 2021. The sample used in this study was 73 respondents using a simple random sampling technique. The inclusion criteria in this study were patients who received chemotherapy programs with stages 1-2 and were conscious and willing to be respondents. They signed informed consent as provided by the researchers. The exclusion criteria were patients having metabolic disturbances after receiving chemotherapy. The relevant instruments were used to assess both variables. This instrument's validity and reliability tests were conducted on 15 respondents, comprising 15 statements of family support and 15 statements of motivation. Data collection using a questionnaire compiled using a Likert Scale. The results of the research data analysis used are univariate and bivariate analyses using the Chi-Square test. The alfa score was set at 0.05 for hypothesis testing in this study. The study protocol examination and ethical clearance were obtained before the study's outset.

Results

The following are the details of the study found. Univariate analysis in this study describes the characteristics of each variable. The data type is categorical, so the descriptive results are presented as a frequency distribution with a percentage size. Based on the analysis carried out on 73 respondents, it was found that of respondents with good family support, 43.8% had sufficient family support, as many as 56.2% (**Table 1**). Based on the analysis carried out on 73 respondents, it was found that respondents with strong motivation were 34.2%, and respondents with moderate motivation were 65.8% (**Table 2**).

Table 1. Frequency of respondent's family support

Family Support	Frequency	Percent
Well	32	43.8
Enough	41	56.2
Not enough	0	0
Total	73	100%

Table 2. Frequency of respondent's motivation

Motivation	Frequency	Percent
Strong	25	34.2
Currently	48	65.8
Weak	0	0
Total	73	100%

Based on the analysis data above, it can be seen that respondents with good family support and strong motivation are 53.1%, and respondents with less family support and moderate motivation are 80.5 %. Breast cancer patients in the Tulip Room Tarakan Hospital Jakarta obtained a relationship between family support and encouragement to comply with chemotherapy protocols in breast cancer patients in Tarakan Hospital, Jakarta (**Table 3**).

Table 3. Cross table of family support on motivation to adhere to chemotherapy protocol

Family support	Motivation				Total		p
	Strong		moderate		n	%	
	n	%	n	%			
Well	17	53.1	15	46.9	32	100%	0.003
Enough	8	19.5	33	80.5	41	100%	
Not enough	0	0	0	0	0	0	
Total	25	34.2	48	65.8	73	100%	

Discussion

From the results of the study, it was found that all respondents had excellent and sufficient family support. Family support is a form of assistance a family member gives to provide physical and psychological comfort when someone is sick (Wang, Yang, Di, & Dai, 2020; Ho, Mahirah, Ho, & Thumboo, 2022). Family support for cancer patients includes emotional, appreciation, instrumental, and information support (Aprilianto, Lumadi, & Handian, 2021). In line with the research, Alexander et al. (2018) explained that most chemotherapy patients received family support. Meanwhile, according to Marlinda's study (2019), most respondents received less family support and were less motivated. Therefore, fostering motivation in breast cancer patients undergoing chemotherapy requires high support from the family. Strength from within breast cancer patients will increase if it is supported by other strengths (family support) and with self-confidence from within the patient himself. Family support is an external factor influencing a person's motivation, but family support is significant for those facing or suffering from a disease. Especially in breast cancer patients undergoing chemotherapy, this can help accelerate healing (He et al., 2022).

Our study found that respondents with moderate motivation were more significant than those with solid motivation. Motivation comes from the word motive, which means encouragement or reason. Motive is a driving force that drives humans to act or a force within humans that causes humans to work or do something. Motivation is also said to be a plan or desire to achieve success and avoid life failure. In other words, motivation is the process of completing a goal (Donsu, 2017). According to the results of Marlinda's research (2019), it was explained that more respondents received good family support with good motivation than those with less motivation. The motivation of patients undergoing chemotherapy treatment is that they need time to adjust to the chemotherapy they are experiencing. If they have undergone chemotherapy several times, then they are used to the side effects that are felt. Unlike those undergoing chemotherapy for the first time because they have not adapted to the perceived side effects. From the bivariate analysis results, it can be concluded that there is a relationship between family support and motivation to comply with chemotherapy protocols in breast cancer patients in the Tulip room of Tarakan Hospital, Jakarta. Family support is the assistance given to other family members through goods, services, information, and advice to make the support recipient feel loved, valued, and at ease. This support is the family's attitude, action, and acceptance toward the sick patient. Family members believe supportive people will always be ready to help and assist. One family member receives support from other family members to carry out the functions contained in a family. The form of family support for family members is moral or material (Jadidi & Ameri, 2022). Family support will increase patients' self-confidence in dealing with treating their disease (Katapodi, Ellis, Schmidt, Nikolaidis, & Northouse, 2018). Family support is a significant factor for someone facing problems and can motivate the person to undergo treatment, such as breast cancer patients undergoing chemotherapy. Family support can be both material and moral. According to the research results by Marlinda & Fadhillah (2019), there is a relationship between family support and the motivation of breast cancer patients to undergo chemotherapy. Respondents with good family support had nine times the risk of having good motivation in undergoing chemotherapy compared to breast cancer patients with less family support.

Cancer is a family disease where everyone who gets cancer affects the whole family emotionally, psychologically, financially, and physically. Positive support from the family is needed for breast cancer patients undergoing chemotherapy because it can motivate them to undergo chemotherapy. Another study explained a positive and significant relationship between family support and recovery motivation in cancer patients undergoing

chemotherapy (Niveau, New, & Beaudoin, 2021). So, it can be concluded that a significant relationship exists between family support and recovery motivation in cancer patients undergoing chemotherapy. Most respondents said they had received full support from their families, which motivated them to get well soon. Therefore, cancer patients undergoing chemotherapy feel that their health is a priority for their families and a basic need for their families. Respondents also said that family social support received by respondents with cancer who received chemotherapy impacted patients, namely reducing the level of stress experienced after being diagnosed with cancer by a doctor. However, when hearing the motivation and seeing the family's efforts and involvement to support the sufferer in getting or seeking treatment immediately, These sufferers become excited again to directly get therapy to cure the cancer that is being experienced.

Conclusion

The results showed that most patients undergoing chemotherapy were supported by their families. The majority of patients adhered to the chemotherapy protocol at Tarakan Hospital, then based on data analysis of the relationship between family support and motivation to comply with chemotherapy protocols in breast cancer patients in the Tulip Room Tarakan Hospital Jakarta obtained p-value = 0.0 03 < alpha value (0.005). This research is expected to provide additional information and input in the development of nursing science, especially Family Nursing and Medical Surgical Nursing, so it is necessary to emphasize the material on family support with chemotherapy motivation.

Author's declaration

The authors made substantial contributions to the conception and design of the study and took responsibility for data analysis, interpretation, and discussion of results. For manuscript preparation, all the authors read and approved the final version of the paper.

Funding

None declared.

Availability of data and materials

All data are available from the authors.

Competing interests

The authors declare no competing interest.

Acknowledgements

The authors thank the people who contributed to this study.

References

- Alexander, A., Kaluve, R., Prabhu, J. S., Korlimarla, A., Srinath, B. S., Manjunath, S., Patil, S., Gopinath, K. S., & Sridhar, T. S. (2019). The Impact of Breast Cancer on the Patient and the Family in Indian Perspective. *Indian journal of palliative care*, 25(1), 66–72. <https://doi.org/10.4103/IJPC.IJPC.158.18>
- Alexander, A., Kaluve, R., Prabhu, J. S., Korlimarla, A., Srinath, B. S., Manjunath, S., Patil, S., Gopinath, K. S., & Sridhar, T. S. (2019). The Impact of Breast Cancer on the Patient and the Family in Indian Perspective. *Indian journal of palliative care*, 25(1), 66–72. <https://doi.org/10.4103/IJPC.IJPC.158.18>
- Aprilianto, E., Lumadi, S. A., & Handian, F. I. (2021). Family social support and the self-esteem of breast cancer patients undergoing neoadjuvant chemotherapy. *Journal of public health research*, 10(2), 2234. <https://doi.org/10.4081/jphr.2021.2234>
- Donsu, Jenita DT. (2017). *Psikologi Keperawatan*. Yogyakarta : Pustaka Baru
- He, C., Yang, T., He, Y., Guo, S., Lin, Y., Wu, C., Gao, L., Liu, X., Wu, S., & Cao, B. (2022). Relationship between family functioning and self-transcendence in patients with breast cancer: A network analysis. *Frontiers in public health*, 10, 1028860. <https://doi.org/10.3389/fpubh.2022.1028860>
- Ho, Y. L., Mahirah, D., Ho, C. Z., & Thumboo, J. (2022). The role of the family in health promotion: a scoping review of models and mechanisms. *Health promotion international*, 37(6), daac119. <https://doi.org/10.1093/heapro/daac119>
- Jadidi, A., & Ameri, F. (2022). Social Support and Meaning of Life in Women with Breast Cancer. *Ethiopian journal of health sciences*, 32(4), 709–714. <https://doi.org/10.4314/ejhs.v32i4.6>

- Ji, F., Yang, C. Q., Li, X. L., Zhang, L. L., Yang, M., Li, J. Q., Gao, H. F., Zhu, T., Cheng, M. Y., Li, W. P., Wu, S. Y., Zhong, A. L., & Wang, K. (2020). Risk of breast cancer-related death in women with a prior cancer. *Aging*, 12(7), 5894–5906. <https://doi.org/10.18632/aging.102984>
- Katapodi, M. C., Ellis, K. R., Schmidt, F., Nikolaidis, C., & Northouse, L. L. (2018). Predictors and interdependence of family support in a random sample of long-term young breast cancer survivors and their biological relatives. *Cancer medicine*, 7(10), 4980–4992. <https://doi.org/10.1002/cam4.1766>
- Łukasiewicz, S., Czezelewski, M., Forma, A., Baj, J., Sitarz, R., & Stanisławek, A. (2021). Breast Cancer-Epidemiology, Risk Factors, Classification, Prognostic Markers, and Current Treatment Strategies-An Updated Review. *Cancers*, 13(17), 4287. <https://doi.org/10.3390/cancers13174287>
- Marlinda & Fadhillah, N., (2019). Family Support To Increase The Motivation Of Breast Cancer Patients Undergoing Chemotherapy. *Sai Wawai Metro Medical Journal*, 12 (2), 1–8. <http://www.ejurnal.poltekkes-tjk.ac.id/index.php/JKM/article/view/1973>
- Ministry of Health RI. (2020). Through Breast Cancer Awareness Month, the Ministry of Health together with YKPI and PT. Uni-Charm Indonesia Collaborates on BSE Campaign. Directorate General of Disease Prevention And Control. <http://p2p.kemkes.go.id/melalui-bulan-kesadaran-kanker-payudara-kemenkes-bersama-ykpi-dan-pt-uni-charm-indonesia-berkolaborasi-kampanyekan-sadari/>
- Mokhtari-Hessari, P., & Montazeri, A. (2020). Health-related quality of life in breast cancer patients: review of reviews from 2008 to 2018. *Health and quality of life outcomes*, 18(1), 338. <https://doi.org/10.1186/s12955-020-01591-x>
- Niveau, N., New, B., & Beaudoin, M. (2021). How Should Self-Esteem Be Considered in Cancer Patients?. *Frontiers in psychology*, 12, 763900. <https://doi.org/10.3389/fpsyg.2021.763900>
- Padmalatha, S., Tsai, Y. T., Ku, H. C., Wu, Y. L., Yu, T., Fang, S. Y., & Ko, N. Y. (2021). Higher Risk of Depression After Total Mastectomy Versus Breast Reconstruction Among Adult Women With Breast Cancer: A Systematic Review and Metaregression. *Clinical breast cancer*, 21(5), e526–e538. <https://doi.org/10.1016/j.clbc.2021.01.003>
- Piroth, M. D., Draia, S., Jawad, J. A., & Piefke, M. (2022). Anxiety and depression in patients with breast cancer undergoing radiotherapy: the role of intelligence, life history, and social support-preliminary results from a monocentric analysis. *Strahlentherapie und Onkologie : Organ der Deutschen Rontgengesellschaft ... [et al]*, 198(4), 388–396. <https://doi.org/10.1007/s00066-022-01904-7>
- Sharma, R., Biedenharn, K. R., Fedor, J. M., & Agarwal, A. (2013). Lifestyle factors and reproductive health: taking control of your fertility. *Reproductive biology and endocrinology: RB&E*, 11, 66. <https://doi.org/10.1186/1477-7827-11-66>
- Skoracka, K., Ratajczak, A. E., Rychter, A. M., Dobrowolska, A., & Krela-Kaźmierczak, I. (2021). Female Fertility and the Nutritional Approach: The Most Essential Aspects. *Advances in nutrition (Bethesda, Md.)*, 12(6), 2372–2386. <https://doi.org/10.1093/advances/nmab068>
- Storm-Dickerson, T., & Sigalove, N. M. (2019). The breast surgeons' approach to mastectomy and prepectoral breast reconstruction. *Gland surgery*, 8(1), 27–35. <https://doi.org/10.21037/gs.2018.11.06>
- Wang, L., Yang, L., Di, X., & Dai, X. (2020). Family Support, Multidimensional Health, and Living Satisfaction among the Elderly: A Case from Shaanxi Province, China. *International journal of environmental research and public health*, 17(22), 8434. <https://doi.org/10.3390/ijerph17228434>
- WHO. (2015). Breast cancer: prevention and control. Retrieved 10 July 2021 from <http://www.who.int/cancer/detection/breastcancer/en/index1.ht>