



Self-Help Group on Quality of Life of Patients Treating Chemotherapy

Sylvia Marlina Turnip^{1*}, Kiking Ritarwan², Nunung Febriany Sitepu³

¹Master Student, Faculty of Nursing, Universitas Sumatera Utara, Indonesia

²Lecturer, Faculty of Medicine, Universitas Sumatera Utara, Indonesia

³Lecturer, Faculty of Nursing, Universitas Sumatera Utara, Indonesia

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ABSTRACT

The self-help group is one of the group therapies which provides social and psychological support for its members since they can share their problems, and information about nursing, prevention, and medication. The study was to identify the influence of self-help groups on the life quality of patients under chemotherapy treatment. The study was a quasi-experimental method with a pretest-posttest without a control group design. The samples were 35 patients under chemotherapy treatment using the purposive sampling technique. The data were gathered by using a questionnaire, the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire (EORTC-C30) pre and post-intervention. The data were analyzed by using Wilcoxon Signed Rank Test. The study showed that there was a significant influence on the quality of life of those who were under chemotherapy treatment after self-help group intervention ($p=0.000$). It is recommended that the hospital management evaluate the life quality of the patients under chemotherapy treatment regularly. The nursing education department should make self-help groups the subject materials for the students as one of the nursing interventions.

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Kata kunci:

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**) corresponding author*

Sylvia Marlina Turnip

Faculty of Nursing, Universitas Sumatera
Utara
Jl. Prof. T. Maas No.3, Kampus, Padang
Bulan, Kec. Medan Baru, Kota Medan,
Sumatera Utara 20155, Indonesia

Email: sylviamarlinaturnip@gmail.com

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ABSTRAK

Self-help group adalah salah satu terapi kelompok yang memberikan dukungan sosial dan psikologis bagi anggotanya karena mereka dapat berbagi masalah, informasi tentang keperawatan, pencegahan, dan pengobatan. Penelitian ini bertujuan untuk mengidentifikasi pengaruh kelompok swadaya terhadap kualitas hidup pasien yang menjalani pengobatan kemoterapi. Penelitian ini merupakan penelitian eksperimen semu dengan metode pretest-posttest without control group design. Sampel penelitian adalah 35 pasien yang menjalani pengobatan kemoterapi dengan teknik purposive sampling. Data dikumpulkan dengan menggunakan kuesioner, European Organization for Research and Treatment of Cancer Quality of Life Questionnaire (EORTC-C30) sebelum dan sesudah intervensi. Analisis data menggunakan Wilcoxon Signed Rank Test. Hasil penelitian menunjukkan bahwa ada pengaruh yang signifikan terhadap kualitas hidup mereka yang menjalani pengobatan kemoterapi setelah intervensi kelompok swadaya ($p=0,000$). Direkomendasikan agar manajemen rumah sakit mengevaluasi kualitas hidup pasien yang menjalani pengobatan kemoterapi secara teratur. Jurusan pendidikan keperawatan sebaiknya menjadikan kelompok swadaya sebagai bahan ajar mahasiswa sebagai salah satu intervensi keperawatan.

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INTRODUCTION

Cancer is a chronic disease that can affect all ages, genders, and races. If you get treatment too late or at an advanced stage, recovery is difficult to obtain, so the prognosis for this disease is usually poor and can end in death (Potter & Perry, 2017). According to World Health Organization (2018), cancer is the second leading cause of death in the world. In general, about 1 in 6 people die from cancer. This is in line with Ferlay et al. (2015) who said that cancer is the most common cause of morbidity and mortality worldwide with + 14 million new cases and 8 million deaths in 2012 and is projected to increase by 70% by 2030 (Torre et al., 2015).

Cancer management is chosen depending on the type, location, and stage of cancer, the patient's physical condition, patient preferences, and the availability of facilities. Several options in cancer management include surgery/surgery, chemotherapy, radiation, immunotherapy, and gene therapy (Diananda, 2009). Chemotherapy is a cancer treatment using special drugs to kill cancer cells (Tampil, Komaliq, & Langi, 2017). The most feared of chemotherapy is the side effects. Some patients do not feel any side effects of chemotherapy, but some patients experience mild to severe side effects. The side effects of chemotherapy depend on the type of drug, body condition, and the patient's psychological condition (Diananda, 2009). The treatment regimen used in chemotherapy can significantly affect overall health, well-being, and quality of life (Kean, Iverson, & Boylan, 2016).

Dehkordi, Heydarnejad, and Fatehi (2009) said that cancer patients undergoing chemotherapy had sufficient quality of life during chemotherapy. In Dehkordi's research, the domain of quality of life used to evaluate the quality of life of cancer patients is the general condition of the patient, physical activity, social status, and work function as well as the patient's sleep pattern. In contrast to the research results of Perwitasari et al. (2011), said that the quality of life of cancer patients decreased after chemotherapy compared to before chemotherapy. This decrease in quality of life is more influenced by the patient's role domain, pain symptoms, decreased appetite, and financial difficulties. Meanwhile, according to research conducted by Singh, Kaur, Singh Banipal, Singh, and Bala (2014), the results showed that chemotherapy did not show a significant improvement in quality of life, but chemotherapy can reduce the negative perception of cancer as a deadly disease.

One of the nursing actions that has been studied as a supporting effort to improve the quality of life is a self-help group. The self-help group is a group therapy that can provide social and psychological support for its members because all members can share and tell each other all problems, treatment information, prevention, and treatment, then other members can provide motivation and ways to solve problems (Ririnisahawaitu, 2010). Relawati, Hakimi, and Huriah (2015) said that the indications for giving self-help group therapy are patients with mental disorders, weight problems, recovery from drug dependence, diabetes clients, the elderly, cancer clients, and chronic diseases.

Based on research conducted by Eliášová, Majerníková, Hudáková, and Kaščíková (2015) regarding the Effect of the Self-Help Group on the Quality of Life for Multiple Sclerosis Patients, the results showed that the group that received the self-help group intervention showed a significant difference in the quality of life score consisting of 3 domains, namely physical health, survival, and social relations. The group that received the intervention had a better score. Therefore, researchers are interested in examining how the influence of

self-help groups on the quality of life of patients undergoing chemotherapy at Murni Teguh Memorial Hospital Medan.

METHOD

Participant characteristics and research design

The sample of this study were patients undergoing chemotherapy with the following inclusion criteria: 1) Patients undergoing chemotherapy at least 3 times, 2) Patients having experience with the same number of chemotherapy cycles, 3) Patients not currently undergoing radiotherapy, 4) Age 18-65 years, 5) Conscious and cooperative, 6) Can communicate well. This study was a quasi-experimental pre-post test without a control group with a self-help group intervention.

Sampling procedures

Sampling in this study was carried out using a non-probability sampling technique, namely purposive sampling, and was based on the inclusion criteria and dropout criteria made by the researcher. The study was conducted at Murni Teguh Memorial Hospital from March to July 2019.

Sample size, power, and precision

The research sample will be determined based on the power analysis method with a significant value (α) of .05, γ (power) of .80, and $1-\beta$ (effect size) of .25, so the sample in this study was 123 respondents. To prevent dropout, 10% of the total sample is added. So the total sample is 135 respondents.

Procedures

Researchers conducted preliminary data collection (pre-test) using the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire-C30 (EORTC-C30) questionnaire instrument. Researchers formed 3 groups (group I consisted of 12 people who were undergoing the 3rd cycle of chemotherapy, group II consisted of 12 people who were undergoing the 4th cycle of chemotherapy, and group III consisted of 11 people who were undergoing the 5th cycle of chemotherapy.) and each group consisted of 8 meetings once a week at Murni Teguh Memorial Hospital with a duration of 60 minutes/meeting. Performing a five-step role play in self-help group activities, namely: 1) discussing the problems faced by each respondent during chemotherapy; 2) respondents share information on how to solve problems that occur; 3) discuss each way of solving the problem; 4) each respondent performs a role-play (role-playing) the method of solving the problem that has been chosen; and 5) discuss ways to prevent a recurrence, signs of recurrence and actions to be taken when recurrence occurs. Researchers conducted a post-test to identify the quality of life using a questionnaire (EORTC-C30).

Measures

This study used a standardized questionnaire that was adopted from the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire-C30 (EORTC-C30) questionnaire. Besides Perwitasari et al. (2011),

the EORTC-C30 questionnaire has also been used in research and has been tested for validity by Noviyani, Tunas, Indrayathi, and Budiana (2016) with the Variance Extracted (AVE) value for the EORTC-C30 questionnaire is 0.90. The questionnaire is considered valid if it has a VE value > 0.5. If validity has been achieved by the criteria, then the data is free from systematic errors.

Data analysis

Demographic data was presented in the form of numbers and presentations. Data were analyzed using the Wilcoxon Signed Rank Test, with the help of IBM software 20.

RESULTS AND DISCUSSION

Table 1.
Distribution of Frequency and Percentage of Data on Demographic Characteristics of Respondents Patients Undergoing Chemotherapy at Murni Teguh Memorial Hospital Medan (n=35)

Variable	f	%	Mean ± SD
Age (year)			
Late Adulthood (36-45)	12	34.3	
Early Elderly (46-55)	15	42.9	49.63 ± 8.78
Late Elderly (56-65)	8	17.1	
Gender			
Male	11	31.4	-
Female	24	68.6	
Marital status			
No/has not yet married	3	8.6	
Married	30	85.7	-
Widow/widower	2	5.7	
Income monthly			
< Rp500.000	15	42.9	
Rp500.000 to Rp1.000.000	3	8.6	-
Rp1.000.000-Rp2.000.000	5	14.3	
> Rp2.000.000	12	34.3	
Chemotherapy Cycle			
Cycle III	12	34.3	
Cycle IV	12	34.3	-
Cycle V	11	31.4	
Long-suffering (year)			
1-2	22	62.9	2.26 ± 1.50
3-4	11	31.4	
5-6	1	2.9	
7-8	1	2.9	

Table 1 shows that the majority of the age were early elderly (46-55 years) (42.9%) with an average age of 49.63 years. The majority gender was female (68.6%), the majority of marital status was married (85.7%), the majority income

was <Rp 500,000 (42.9%), the majority of chemotherapy cycles were 3rd and 4th cycles (34.3%), the majority of duration of suffering was 1 year (42.9%).

Table 2.
Distribution of Frequency and Percentage of Quality of Life of Patients Undergoing Chemotherapy Before and after being given the Self-Help Group Intervention at Murni Teguh Memorial Hospital Medan (n=35)

Quality of life	Before		After	
	f	%	f	%
General Health Status Scale				
Good	0	0	17	48.6
Moderate	26	74.3	17	48.6
Poor	9	25.7	1	2.8
Functional Scale				
Good	0	0	27	77.1
Moderate	33	94.3	8	22.9
Poor	2	5.7	0	0
Symptom scale				
Good	16	0	8	40.0
Moderate	19	54.3	13	37.1
Poor	0	45.7	14	22.9

Table 2 shows that the majority of respondents before the self-help group intervention had a moderate level of quality of life on the three quality-of-life scales, namely 74.3% on the general health status scale, 94.3% on the functional scale, and 54.3% on the symptom scale. However, The majority of respondents after the self-help group

intervention had a good and moderate level of quality of life on the general health status scale, namely 48.6, on the functional scale the majority had a good quality of life 77.1%, but on the symptom scale, the majority had a poor quality of life 40%.

Table 3.
Effect of Self-Help Group on Quality of Life of Patients Undergoing Chemotherapy at Murni Teguh Memorial Hospital Medan (n=35)

Quality of life	Pre-test		Post-test		P
	Mean	SD	Mean	SD	
Functional scale	59.75	12.399	68.47	10.009	0.000
Symptom scale	38.31	12.799	57.02	16.726	0.000
General Health Status Scale	42.38	16.834	63.57	16.304	0.000

Table 4 shows the effect of self-help groups on the quality of life of patients undergoing chemotherapy during the pre and post-test. The results of the analysis using the Wilcoxon Signed Rank Test obtained *Asymp. Sig. (2-tailed)*= 0.000 (<0.05) for each quality of life scale, the research hypothesis was accepted, so it can be concluded that there was an effect of self-help groups on the quality of life of patients undergoing chemotherapy at Murni Teguh Memorial Hospital Medan.

In this study, the measured quality of life consisted of 3 scales, namely the general health status scale, the functional scale, and the symptom scale. At the time before being given the self-help group intervention, the mean quality of life on the general health status scale was 42.38 with details of 26 people having a moderate level, 9 people having a bad level, and no good level. However, after being given a self-help group intervention, the mean value of the patient's quality of life on the general health status scale increased to 63.57 with details of 17 people for each good and moderate level, and 1 person with poor level.

General health status consists of two questions regarding the respondent's assessment of his overall health condition and quality of life (Perwitasari et al., 2011). The mean results in this study are almost the same as the mean values of the research conducted by Chean, Zang, Lim, and Zulkefle (2016) which is 66.7. The influence of high social support on the individual will make the individual have a more positive view of himself so that he can survive the consequences of his illness (Yulita, Mudayatining Sih, & Yasin, 2017). According to (Agustini et al., 2015) patients will not experience a significant reduction in the quality of life on the general health status scale if they have previously received information about what they will face while receiving chemotherapy.

The symptom scale consists of several questions regarding the symptoms experienced by respondents during chemotherapy, including symptoms of nausea and vomiting, pain, fatigue, dyspnea, difficulty sleeping, decreased appetite, constipation, diarrhea, and financial difficulties. In the self-help group, respondents discussed more symptoms of nausea and vomiting, decreased appetite, pain, fatigue, and financial difficulties. These symptoms are an unpleasant side effect of using cytotoxic drugs during chemotherapy. Through self-help groups, respondents discussed their experiences in dealing with and how to overcome the symptoms mentioned above. Kolin, Warjiman, and Mahdalena (2016) said that the effects of chemotherapy are often the subject of patients' minds, to get rid of these negative thoughts, respondents can do various ways, one of

which is talking to friends. However, after the self-help group intervention, the quality of life of the patient's symptom scale decreased. The researcher assumes that the decrease in the quality of life on the symptom scale occurs because of the number of chemotherapy cycles that the respondent is currently undergoing.

This is in line with Agustini et al. (2015) who say that there is a significant difference in the quality of life on the symptom scale between cycles 1,2,3,4, and 5, which means that symptoms are felt from cycle 1 to cycle 5. In addition, the one that has the most significant influence on the quality of life on the symptom scale is financial difficulty. The majority of respondents in this study have an income of less than Rp. 500,000 per month.

Oncology nurses have a major role in overcoming the side effects of chemotherapy, one of which is overcoming nausea and vomiting experienced by patients. Nurses have a role to overcome nausea and vomiting by providing promotions in the form of education to patients and providing antiemetic prophylaxis based on guidelines that apply in hospitals (Clark-Snow, Affronti, & Rittenberg, 2018). Financial difficulties are unavoidable for patients undergoing chemotherapy. This is to research conducted by Shankaran, Jolly, Blough, and Ramsey (2012) which reported that 38% of colon cancer patients undergoing chemotherapy experienced financial difficulties despite having health insurance due to low income.

On the functional scale, the average quality of life before being given a self-help group intervention was 59.75 with details of 33 people having a moderate level, 2 people having a bad level, and no good level. Then the average quality of life increased to 68.47 after being given intervention with details of 27 people at a good level, 8 people at a moderate level, and no bad level. The function scale consists of several questions related to physical function, role function, emotional function, cognitive function, and social function. Respondents communicated effectively with each other to convey their feelings and complaints about their condition through the roleplay method. Respondents learn to recognize how to manage the problems they face. High motivation, open attitude, and cooperativeness in providing feedback during the self-help group sharing experiences and feelings during the discussion also support the achievement of the goals of this self-help group. Motivation in the form of a better view of the future is a very important factor in reducing stress so that it improves the quality of life of emotional function (Pratifri, 2014).

LIMITATION OF THE STUDY

The limitation of this research is that the interaction schedule between groups sometimes clashes so the schedule between groups must be rearranged and agreed upon again. The agreed schedule sometimes suffers from setbacks and even does not happen. So that the planned research time for 2 months had to be pushed back to 4 months.

CONCLUSIONS AND SUGGESTIONS

There was a significant effect on the quality of life of patients undergoing chemotherapy after being given a self-help group intervention ($p=0.000$). For oncology nurses in hospitals, they should pay more attention to overcoming the symptoms that arise due to side effects of chemotherapy so that they can improve the quality of life of patients undergoing chemotherapy.

ETHICAL CONSIDERATIONS

This study was approved by The Research Ethics Committee, Faculty of Nursing, Universitas Sumatera Utara No. 1652/II/SP/2019.

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Conflict of Interest Statement

The author declares that there is no potential conflict of interest concerning the authorship and publication of this article.

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