The Effect of Pare (Palliative Care) Education Class on Quality of Life of Chemotherapy Patients In Kraton Hospital Pekalongan

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Abstract

Background. Cancer is known as a disease that has seriously physical and psychological impact on the sufferee. The development of cancer detection and treatment has greatly helped reduce mortality from cancer. One of them is chemotherapy. Long-term treatment undertaken by cancer patients can affect the health of patients related to quality of life (quality of life). One effort to be able to improve the quality of life of chemotherapy patients, namely by providing health education and social support for cancer patients. Objective: To determine the effect of the PARE (Palliative Care) education class on the quality of life of chemotherapy patients in Kraton hospital Pekalongan. Methods: This research is a Quasy experiment Design Without Control Group with a pre-post test approach. The sample used was 17 respondents who were selected using purposive sampling technique. Quality of Life cancer patients were measured using the Quality of Life Q-30 European Organization of Research and Treatment of Cancer (EORTC QLQ-C30) questionnaire. Results: Based on the analysis, it can be seen that the PARE education class has a positive impact on the quality of life of chemotherapy patients both on the functional scale domain (p value = 0.028), symptom item domain (p value = 0.006) and general health domain (p value = 0.012). Conclusion: There is an influence of the PARE education class on the quality of life of cancer patients undergoing chemotherapy.

Keywords: Education class, palliative care, quality of life

Introduction

In the world, cancer is the number 2 cause of death after cardiovascular disease. In Indonesia, the prevalence of cancer is 1.4 per 1,000 population, and is the number 7 cause of death (5.7%) of all causes of death (Riskesdas, 2013). It is estimated that in 2030 the incidence of cancer can reach 26 million people and 17 million of them die from cancer, especially for poor countries and developing events will be faster.

Cancer is known as a disease that has a serious physical and psychological impact on sufferers. Developments in the detection and treatment of cancer have greatly helped reduce mortality from cancer (Putri, 2017). The diagnosis and treatment of cancer has a significant impact on physical, psychological, information and social well-being so that it requires the support of strong care needs (Lioa et al., 2012). Long-term treatment for cancer patients can affect the

health of patients related to quality of life (Hananingrum, 2017). Some of the physical effects caused by chemotherapy as a cancer include treatment therapy spinal depression, gastrointestinal reactions, forced liver function, kidney function, cardiotoxicity, pulmonary toxicity, neurotoxicity, and allergic reactions. While the psychological effects of chemotherapy are patients experiencing anxiety, depression and stress (Desen, 2011) so that the action of this chemotherapy will also have an impact on reducing the quality of life of the patient himself.

Quality of Life according to the World Health Organization Quality of Life (WHOQOL) is defined as an individual's perception of the position of the individual in life in the cultural context and value system in which the individual lives and his relationship with the goals, expectations, standards applied and one's attention (WHO, 1997). According to

Ferrel et al. (2012) there are four dimensions of quality of life that must be considered in cancer patients, namely physical well-being, psychological well-being, social well-being and spiritual well-being.

Quality of life is an important goal in the treatment of cancer and concerns about physical, psychological conditions, body image disorders, and symptoms that can cause distress need to be anticipated to improve the quality of life of cancer patients. Palliative nursing offers an increase in the quality of life of patients and families in the face of life-threatening illnesses from first diagnosed to the process of grieving due to death through a psycho-socio, cultural, and spiritual approach (Macleod et al, 2012). Perwitasari's research (2009) which assessed the quality of life of cancer patients undergoing chemotherapy at Sardjito General Hospital Yogyakarta showed that the quality of life of cancer patients had decreased after undergoing chemotherapy therapy.

One effort to improve the quality of life of chemotherapy patients is to provide health education and social support for cancer patients to reduce anxiety and depression in accordance with several research results. In studies that include health education, coping techniques training, stress management and psychological support in breast cancer patients in Japan have shown a decrease in anxiety and depression (Fukui, et al, 2000). Through this PARE (Palliative Care) education class, it is hoped that cancer patients undergoing chemotherapy can share experiences about the same disease as a support system and the opportunity to exchange information between cancer patients will be able to provide psychological support so that the quality of life can be improved. With improved quality of life, adherence to cancer care and treatment can also be improved (Bayram et al, 2014).

This study aims to determine the effect of PARE (Palliative Care) education classes on the quality of life of chemotherapy patients at Kraton Regional Hospital, Pekalongan Regency.

Methods

This study uses a Quasy experiment Design without Control Group design with a Pre-post test approach. The number of samples used in this study were 17 respondents selected based on inclusion criteria who had undergone chemotherapy ≥ 6 times, were able to communicate and were able to carry out independent activities.

The quality of life of patients undergoing autorotherapy was measured using a questionnaire of the European Organization of Research and Treatment of Cancer Quality of Life Q-30 (EORTC QLQ-C30) which had been translated into Indonesian and validated by Perwitasari et al. (2011). The EORTC QLQ-C30 questionnaire contains 30 questions consisting of 3 domains namely general health status domain, functional domain and symptom domain.

Bivariate analysis was used to determine the difference in Quality of Life before and after attending the PARE class using Wilcoxon nonparametric test.

Results

Respondent characteristic data consisted of age, gender, and diagnosis.

Table 1. Characteristics of respondents in the Chemotherapy Room Kraton Regional Hospital of Pekalongan Regency (n = 17)

Characteristics of		Freq	Persentase
	respondents		(%)
Age			
a.	30-40	3	17,64
b.	41-50	6	35,29
c.	51-60	4	23,53
d.	61-70	2	11,76
e.	71-80	1	5,88
Sex			
a.	Male	4	23,53
b.	Female	13	76,47

It can be seen that the majority of respondents aged 41-50 years were 6 respondents (35.29%) and female respondents were 13 respondents (76.47%).

The description of Quality of Life chemotherapy patients before joining PARE class is as follows:

Table 2. Overview of Quality of Life Chemotherapy patients

before attending PARE class

Domain	n	Min	Max	Mea n	Std. Deviatio n
Functional	1	57,7	95,5	76,7	9,69
scale	7	8	6	3	
Item	1	25,6	82,0	50,7	18,25
symptomp	7	4	5	5	
S					
General	1	25,0	83,3	61,7	16,15
health	7	0	3	7	

Based on table 2, it can be seen that the average score of quality of life for chemotherapy patients before attending PARE class for the functional scale domain is 57.78 ± 9.69 (moderate QoL), the symptom item domain is 25.64 ± 18.25 (poor QoL) and the public health domain 25.00 ± 16.15 (poor QoL). The description of Quality of Life chemotherapy patients after taking PARE class is as follows:

Table 3. Overview of Quality of Life Chemotherapy patients after taking PARE

classes

Classes					
Domain	n	Min	Ma x	Mea n	Std. Deviatio n
Functional	1	62,2	100	85,7	13,00
scale	7	2		5	
Item	1	38,4	100	73,4	17,36
symptomp	7	6		8	
S					
General	1	50,0	100	76,4	12,92
health	7	0		7	

Based on table 3, it can be seen that the average score of quality of life for chemotherapy patients before joining PARE class for domain functional scale is 85.75 ± 13.00 (good QoL), symptom item domain is 73.48 ± 17.36 (good QoL) and the public health domain 76.47 ± 12.92 (good QoL).

Table 4. Effects of PARE (Palliative Care) education classes on the quality of life of chemotherapy patients

		1 2 1			
Domain	n	Mean	Mean	Selisih	F
Domain	n	Pretest	Postest	mean	1
Functional scale	17	76,73	85,75	9,02	(
Item symptomps	17	50,75	73,48	22,73	(
General health	17	61,77	76,47	14,7	(

From the results of the bivariate test analysis (table 11) it can be seen that:

- a. There is an effect of PARE education class on the Quality of life of chemotherapy patients in the functional scale domain with a p-value of 0.028 (p <0.05).
- b. There is an influence of PARE education class on the Quality of life of chemotherapy patients in the symptom item domain with a p-value of 0.006 (p < 0.05).
- c. There is an influence of PARE education class on the Quality of life of chemotherapy patients in the domain of general health scale with a p-value of 0.012 (p < 0.05).

Discussion

Chemotherapy is a therapy for healing, controlling and palliative of cancer (Smeltzer & Bare, 2002). Cancer patients who undergo chemotherapy usually experience various symptoms as a result of the disease or from the chemotherapy itself. These symptoms affect the patient, both physically and emotionally and furthermore have a negative influence on treatment, disease prognosis and quality of life of patients (Rulianti et al., 2013).

Demographic factors consisting of gender and age are often used by health care providers to screen health problems. The results of the study consistently mention that gender (Ardlan et al., 2011) and age (Pradono et al., 2009) are variables that significantly affect quality of life.

Based on table 4, it can be seen that this PARE education class has a positive impact on the quality of life of chemotherapy patients in both the functional scale domain (p value = 0.028), the symptom item domain (p value = 0.006) and the public health domain (p value = 0.012). Education conducted in the PARE class is one of the elements that can shape a person's attitude other than affective and conative. The attitude of sufferers is strongly influenced by knowledge. If knowledge is good, it will have an impact on quality of life. Research conducted by Rosmawati et al. (2013) found that there were value significant differences in cognitive, emotional $\frac{0.028}{0.02}$ motivation in self-care before and after 0.012 health education. Providing education by using class models that are formed specifically for a

group of people who have the same interests so

that the process of health education is more

active, more dynamic interactions, the creation of social models and problem-oriented learning processes (Mensing and Norris, 2009).

The dominant aspect of establishing the quality of life of cancer sufferers is psychological aspects, including spirituality, social support and well-being. The sense of love and comfort from social support gives motivation for recovery and strength in life. Finally providing welfare that determines the quality of life of patients (Prastiwi, 2012).

Conclusion

There is an effect of PARE education class on the Quality of life of chemotherapy patients in the functional scale domain, symptom item domain and general health scale.

Acknowledgements

This research was supported by public funding of Universitas Pekalongan (grant number 010.m/B.06.01/LPPM/I/2019). The authors would like to thank Bandiyah (head of Chemotherapy room, Kraton Hospital) and team for their assistance. Conflict of interest the authors declared no conflict of interest.

References

- Baryam, Z., Durna, Z., & Akin, S. (2014). Quality of life during chemotherapy and satisfaction with nursing care in Turkish breast cancer patients. European Journal of Cancer Care, 23, 675-684. doi: 10.1111/ecc.12185
- Dessen, W. (2008). *Buku Ajar Onkologi Klinis*. Jakarta: Balai penerbit FKUI.
- Ferrell, B. R., Dow, K.H., & Grant, M. (2012). Quality of Life Instrument-Breast Cancer Patient Version (QOL-BC). Measurement Instrument Database for the Social Science.
- Fukui, S., Kugaya, A., Okamura, H., Kamigaya, M., Koike, M., Nakanishi, T., et al., 2000.

- A Psychosocial group intervention for Japanese women with primary breast carcinoma: A randomized controlled trial. American Cancer Society, 89(5), hlm. 1026-1036.
- Hananigrum, R.J. (2017 Hubungan Aktivitas Fisik dengan Kualitas Hidup pada Pasien Kanker Serviks yang Menjalani Kemoterapi di RSUD Dr. Moewardi Surakarta (Skripsi). Surakarta : Fakultas Ilmu Kesehatan Universitas Muhammadiyah Surakarta.
- Kementerian Kesehatan RI. (2013). Riset Kesehatan Dasar (RISKESDAS). Jakarta: Badan Litbang Kemenkes RI
- Lioa, M.N., Chen, S.C., Chen, S.C., Lin, Y.C., Hsu, Y.H., Hung, H.C., ... Jane, S.W. (2012). Changes and Predictors of Unmet Supportive Care Needs in Taiwanese Women With Newly Diagnosed Breast Cancer. Oncology Nursing Forum, 39(5), 380-389.
- Macleod, R., Vella-Brincat, J., & Macleod, A. 2012. The Palliative Care Handbook 10th ed., Wellington: Hospice New Zealand.
- Smeltzer & Bare. (2010). *Keperawatan Medikal Bedah Edisi 8 Vol 1*. Jakarta: EGC.
- Perwitasari, D. A. (2009). Pengukuran kualitas hidup pasien kanker sebelum dan sesudah kemoterapi dengan EORTC QLQ-C30 RSUP Sardjito Yogyakarta. Majalah Farmasi Indonesia, 20(2), 68–72.
- Prastiwi, T. F. 2012. Kualitas hidup penderita kanker. *Journal UNES*.
- Putri, R.H. (2017). Kualitas Hidup Pasien Kanker Ginekologi yang Menjalani Terapi. *Aisyah Jurnal Ilmu Kesehatan* 2(1): 69-74.
- World Health Organization. (1997).

 Development of The World Health
 Organization WHOQOL-BREF quality of
 life Assessment. Psychological medicine.