The Differences In Quality Of Life Of Early And Advanced Cervical Cancer Patients At Dr. Sardjito Hospital Yogyakarta, Indonesia

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Background: Early detection of cervical cancer which is increasingly developing causes cancer patients to survive longer and the side effects of cervical cancer therapy will have long-term effects so that the quality of life of cancer patients is an important thing

Methods: The population was all suffer from cervical cancer who were undergoing a chemotherapy program at RSUP DR. Sardjito Yogyakarta in October - November 2017 using a purposive sampling technique with 62 respondents, 18 groups of early stages, and 44 advanced stages. This study uses family support instruments, the Indonesian version of the EORTC QLQ-C30, and the translated EORTC QLQ-C24 which has validity and reliability. Patients were measured on quality of life at the moment of chemotherapy.

Results: Quality of life for cervical cancer patients with early and advanced stages on health in general status (quality of life) and the function scale the mean value is >50 with the largest mean value at the early stage, which means that the early stage has a higher quality of life and better function with significant differences on physical function (p=0.003), role function (p=0.002), and social function (p=0.012) where p<0.05. For the symptom scale, the highest average score is almost all in the advanced stage with the highest score in financial difficulties with an average value of 57.58 ± 44.527 and the smallest value in dyspnea with an average value of 8.33 ± 22.875, except for dyspnea the largest value is in the early stages with an average 20.37 ± 23.260 vs. 8.33 ± 22.875. Significant differences in the symptom scale were found in fatigue with a value of p=0.040 and pain p=0.010.

On the EORTC QLQ-CX24, the multi-item and single-item scales have the greatest value at an advanced stage, except for the single-item scale, sexual anxiety is greater at the early stage with the highest score on peripheral neuropathy at 39.39 ± 44.474 and the lowest value on the sexual activity at the advanced stage. initial 1.85 ± 7.857 withouth statistically significant in difference (p>0.05)

In Conclusion there is a significant difference between the quality of life of early and advanced cervical cancer patients where the early stage has a better quality of life in terms of physical function, role function, social function, fatigue, and pain with a value of p> 0.05.

Keywords: Quality of Life, Early stage, Advanced stage, cervical cancer

BACKGROUND

Humans are holistic beings who are a unity between the physical, psychological, social, cultural, and spiritual and each will influence the other. Physical conditions that are experiencing chronic pain such as cancer will affect the psychological, social, cultural, and spiritual side of the individual.

Cancer is an agent of mortality and morbidity worldwide, with an estimated 14 million new victim and 8.2 million deaths from cancer in 2012[1], in the United States there are an estimated 12,990 new cases and around 4,120 women decease from this disease. In England, there were 3,200 new cases of cervical cancer patients in 2013, which means that 9 new cases are found every day.[2]

Cervical cancer is the secondary disease that causes death after breast cancer, and there are around 529,409 new cases worldwide and around 89% are in developing countries[3]. The American Cancer Society 2015 estimates that the amount of cervical cancer sufferers is around 12,900 and 4,100 people will die from cervical cancer. 59,107 with an incident of 20,928 and a mortality rate of 9,4983. It is estimated that 274,000 deaths occur each year.[4]

Early detection of cancer, both cervical and other cancers, is being pursued by the government with various efforts, but various obstacles originating from various factors, both from the patient's side, from the doctor's side, from the hospital's side, and misinformation about cancer in the media make cancer patients not only have early-stage cancer but many have advanced-stage cancer. [5]

METHOD

This study uses an analytical descriptive design with a cross-sectional approach, by comparing 2 conditions or measuring the dependent and independent variables and then carrying out the analysis. The study was arranged on 62 cervical cancer patients using the standardized QLQ-C30 questionnaire of Indonesian version and the QLQ-C24 which had been translated into Indonesian and a validity-reliability test was carried out on 30 respondents at RSUP Dr. Sardjito Yogyakarta with a value of r> 0.360 with a purposive sampling technique. Data analysis using the Mann-Whitney test after testing the normality of the data with the results of abnormal data distribution.

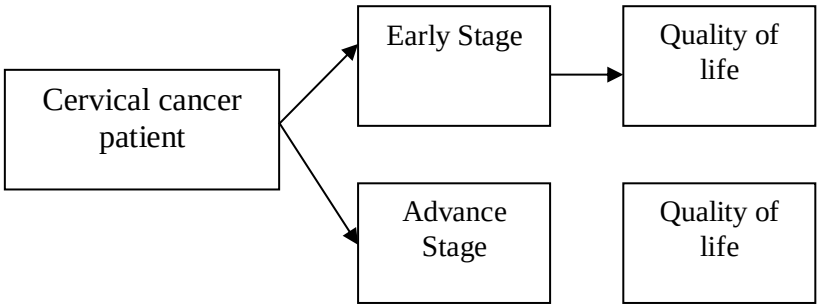

Figure 1: Research Flow

Table 1. Quality of life of cervical cancer victims at early and advanced stages

EORTC	Early Stage n: 18		Advance Stage n: 44		*P*
	Mean	SD	Mean	*SD*	
QLQ-C30					
General Health Status (Quality of Life)	76,39	± 18,579	70,08	± 22,181	0,372
Function Scale					
Physical function	87,78	± 15,551	65,45	± 32,763	0,003*
Role function	86,11	± 32,464	52,65	± 40,816	0,002*
Emotional function	80,09	± 26,834	74,24	±28,120	0,428
Cognitive function	88,89	± 14,003	78,03	±30,663	0,370
Social function	79,63	± 29,459	52,27	± 39,308	0,012*
Symptom Scale					
Fatigue	34,57	± 26,647	54,04	± 34,107	0,040*
Nauseous and vomiting	15,74	± 24,570	27,27	±36,848	0,327
Sore	20,37	± 23,260	45,45	± 35,101	0,010*
Dyspnea	11,11	± 28,006	8,33	±22,875	0,742
Insomnia	33,33	± 41,223	46,21	± 42,661	0,307
Loss of appetite	31,48	± 31,253	34,09	± 36,294	0,928
Constipation	11,11	± 19,803	20,45	±35,376	0,573
Diarrhea	,00	± 0.000	11,36	±30,452	0,102
Financial problem	35,19	± 44,527	57,58	± 44,527	0,070
QLQ-C24					
Multi-Item Scale					
Symptom experience	13,35	±8,619	21,14	±18,258	0,176
Body image	23,46	±31,169	27,53	±32,811	0,685
Sexual and vaginal function	2,78	±8,085	3,41	±12,099	0,856
Single-item Scale					
Lymphedema	3,70	±10,779	6,82	±25,479	0,646
Peripheral neuropathy	24,07	±35,802	39,39	±44,474	0,220
Early menopause	27,78	±38,348	28,79	±38,439	0,986
Sexual concerns	33,33	±42,779	21,97	±39,989	0,207
Sexual activities	1,85	±7,857	5,30	±14,275	0,358
Sexual pleasure	3,70	±15,713	9,85	±27,449	0,359

*significant

QLQ-C30 shows that the quality of life of cervical cancer victims with early and advanced stages on general health status (quality of life) and the function scale the mean value is >50 with the largest mean value in the early stages, which means that the early stages have a higher quality of life and better function. with significant differences in physical function (p=0.003), role function (p=0.002), and social function (p=0.012) where p<0.05. For the symptom scale, the highest average score is almost all in the advanced stage with the highest score in financial difficulties with an average value of 57.58 ± 44.527 and the smallest value in dyspnea with an average value of 8.33 ± 22.875, except for dyspnea the largest value is in the early stages with an average 20.37 ± 23.260 vs. 8.33 ± 22.875. Significant differences in the symptom scale were found in fatigue with a value of p=0.040 and pain p=0.010.

On QLQ-C24 the multi-item and single-item scales have the greatest value at an advanced stage, except for the single-item scale of sexual concern which is greater at an early stage with the highest score on peripheral neuropathy at 39.39 ± 44.474 and the lowest value of on sexual activity at an early stage 1.85 ± 7.857 with a statistically insignificant difference (p>0.05)

The most common stage in this study was an advanced stage, a study on the quality of life of cervical cancer victims that was in line with these results was a study conducted in Indonesia[6] which were mostly (50.6%) stage II and stage III (31.0%), this is contrary to previous research [7] where in this study The most common stage of cancer found was stage I > 50%, another previous study [8] suggested that the most respondents with cervical cancer were stages I and II, namely 77.9% and 17.3%. This is possible because this research was conducted in Indonesia where 65% of cancer cases were detected at an advanced stage when patients seek health services [5]

In the quality of life of patients with early and advanced cervical cancer, the mean value is > 50, but there is a significant difference between the two. In the early stages, the mean value is higher than in the advanced stages. The average difference in the early and advanced stages also has significant differences in physical function, role function, and social function where the early stage has better function than the advanced stage. Meanwhile, the advanced-stage symptom scale has a higher mean value with significant differences in fatigue and pain. In QLQ-CX24 the multi-item and single-item scales have the largest mean value in the advanced stage except for sexual concerns, the highest mean value is in the early stage with a mean value of <50 which means that in the advanced stage, the respondents feel more problems than the initial stage, but the difference between the two groups was not significant (p>0.05). This is consistent with previous research that stages 3 and 4 have more effect on the quality of life of cervical cancer patients, overall significant differences between stages on global health status (quality of life), role function, emotional function, and pain where stage III is higher than stage III. another stadium. [9,10]

In this study, pain had a significant difference between the early and advanced stages.[11] Pain from cancer can be caused by tumor processes in the bones, nerves, or organs, or it can be caused by cancer treatment. The neurophysiological process of pain in cancer involves mechanisms of inflammation, neuropathy, and ischemia from several sites. In neuropathic pain, there is increased damage to the central and peripheral nerves that occurs through compression, ischemia/hemorrhage, and chemical or transection. Peripheral nerve damage occurs due to the accumulation of damage to the sources/channels of sodium and calcium in the damaged area. [12]

How severe the pain is felt by the patient depends on the type of cancer, stage, and the patient's pain threshold regarding pain. Advanced cancer patients are more likely to feel pain .[4] Fatigue that appears at an advanced stage of cancer patients, is influenced by several things such as age, advanced cancer, or receiving combination therapy. The more the cancer cells spread, the slower the bone marrow produces red blood cells, causing anemia. Patients with advanced cancer will suffer from more fatigue than at an early stage, this happens because there are more cancer cells in the body, besides that cancer cells also produce substances called cytokinins which can cause fatigue.

The two existing stages, namely the early stage and the advanced stage which affect the quality of life of cervical cancer patients is the advanced stage, with significant differences on the scales of physical function, role function, social function, exhausted, and pain.

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