

*Original article***The Relationships between Palliative Care and Quality of Life among Breast Cancer Patients at Adam Malik Central Hospital in Medan, Indonesia***Received: Nov 27, 2019**Accepted: Mar 11, 2020;**Published: Apr 16, 2020*Rinco Siregar^{1,*} and Ivan Elisabeth Purba²¹Nursing Studi Program, Sari Mutiara Indonesia University²Graduate School Public Health Science, Sari Mutiara Indonesia University**Abstract**

Breast cancer is one of the most common cancers in women worldwide. The occurrence of breast cancer is very diverse, resulting from the internal and external factors of individuals. Patients diagnosed with breast cancer will experience social, medical, psychological, spiritual, and physical problems, which can affect quality of life. The purpose of this study was to determine the relationship between palliative care and quality of life among patients with breast cancer at Adam Malik Central General Hospital in Medan, Indonesia.. This study was a cross sectional study. Eighty- three (83) patients with breast cancer were selected by purposive sampling technique. Quality of life questionnaires for cancer patients, The EORTC QLQ-C30 Indonesian Version 28 item questionnaire and 43-item questionnaire of palliative care were used for data collection to measure the variables. We computed descriptive statistics (frequency, percentage, mean, standard deviation) and performed a Chi-square test for the association between accepting and receiving palliative care and having a good quality of life. The results of this study found that high percentages of patients with breast cancer accepted palliative care (67.5%), and a large percentage of breast cancer patients felt their quality of life was high (89.2%). There was a significant association between accepting palliative care and having a high quality of life of patients with breast cancer ($P=0.001$). Health care providers should promote palliative care to patients diagnosed with breast cancer to increase their perception and quality of life.

Keywords: Breast Cancer, Quality of Life, Palliative Care**Corresponding author:** Rinco Siregar E-mail: rincosiregar@yahoo.co.id

Introduction

Breast cancer is the most common cancer in women worldwide and the cases continue to increase (International Agency for Research on Cancer, 2019). Every year more than 250 new cases of breast cancer out of 4,230,000 new cases of all types of other cancers diagnosed in Europe and less than are diagnosed each year. 175 new cases of breast cancer from 3,792,000 cases of all types of cancer diagnosed in the United States (International Agency for Research on Cancer, 2019).

This breast cancer is one of the leading causes of death of women in the world, including Indonesia (Ministry of Health Republic of Indonesia, 2019). GLOBOCAN data, which is based on a report on the global burden of cancer produced by International Agency for Research on Cancer showed that in 2018, there were 18.1 million new cases with mortality rate of 9.6 million deaths. The implication is that 1 in 8 men and 1 in 11 women in the world experience cancer during their lifetime (International Agency for Research on Cancer, 2019). In Indonesia, there were 58,526 new cases of breast cancer in 2018 (World Health Organization, 2019)

Breast cancer is in the most incidence type of cancer (16.7%) found in Indonesia (Ministry of Health Republic of Indonesia, 2019). According to data presented by the Ministry of Health on January 31, 2019, the breast cancer rate was 42.1 per 100,000 people in the population, with an average death rate of 17 per 100,000 people (Abadi, 2019). The second most prevalent type was cervical cancer of 23.4 per 100,000 people with an average death rate of 13.9 per 100,000 people (Ministry of Health Republic of Indonesia, 2019). The highest cancer prevalence in Indonesia was in Yogyakarta province, which is 4.86 per 1000 people, followed by West Sumatra 2.47 per 1000 people, and Gorontalo 2.44 per 1000 people.

According to data reported several hospitals in Indonesia, breast cancer patients generally come to hospitals for treatment at an advanced stage of cancer. Over a period of five years (2014-2018), 60.71%, (n=768) of breast cancers were found in the stages of IIIa and IIIb and 7% were even in the stage IIIc. 67.98% of

those who were diagnosed with breast cancer were 30-45 years old (Masriadi, 2016), and. Thus, the handling of breast cancer patients at these advanced stages are very complex and requires support from various parties involved. It is estimated that the number of breast cancer patients showing this profile of being diagnosed at late stages will increase every year. Most of the patients at later stages also have poor prognosis, which cause many patients to be unable to survive (Adam Malik Central Hospital Medical Record).

Cancer has major impacts on patients suffering from it physically, psychologically and socially. These factors greatly affect patients' quality of life. Previous studies found that physical (Angraini et al., 2018) changes, psychological changes such as increased depression and anxiety (Nuridah, Saleh and Kaelan, 2019), social functioning, sexual functioning, stage of cancer (Toulasik, Kusumaningrum and Pradanie, 2019) and ability to independently complete daily activities (Putu et al. 2015) affected breast cancer patients' quality of life.

Helping breast cancer patients means increasing the number of patients that are cured and improving the quality of life of patients by using palliative care. (Azis et al., 2008), namely palliative care therapy (Schroeder & Lorenz, 2018; Ministry of Health Republic of Indonesia, 2018). Palliative care is an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual. Palliative care therapy is treatment given to relieve the symptoms and reduce the suffering caused by cancer and other life-threatening diseases. Palliative cancer therapies are given together with other cancer treatments, from the time of diagnosis, through treatment, survivorship, recurrent or advanced disease, and at the end of life (WHO, 2019).

At Adam Malik Central Hospital, palliative care for breast cancer patients has been carried out. Palliative care includes spiritual activities, social and psychological support or therapy, palliative nurses, anesthesia, nutrition, and providing emotional support/

counseling during disease development and mourning process. Since the incidence and mortality rate of breast cancer have increased over time in study area of Medan, Indonesia, the researchers would like to determine whether or not there is a relationship between receiving palliative care and improvement in the quality of life of breast cancer among patients in Adam Malik Central Hospital.

Research Methodology

This cross-sectional study aimed to determine the relationship between receipts of palliative care with the quality of life among breast cancer patients. This research was conducted at the Adam Malik Central Hospital Medan between March and June 2019. The amount of palliative care that a patient received was measured using the Palliative Care Questionnaire (PCQ) scale (Pradana, 2012). The scale consisted of 43 items with each response being rated on a scale of 1- 4 (1=never to 4=always). An English translation of the 43 items used in the questionnaire are included. Higher scores indicate that the patient received a higher level of palliative care. We categorized level of palliative care as “low,” “medium,” and “high.” People living with a life limiting illness whose needs are straightforward and predictable; including families and carers of these people (Level 1; low), people living with a life limiting illness whose needs range from straightforward and predictable to intermediate and fluctuating; including families and carers of these people (Level 2; medium), and people living with a life limiting illness whose needs include straightforward and predictable, intermediate and fluctuating, or complex and persistent; including families and carers of these people (Level 3; high).

Quality of life for breast cancer patients was measured using European Organization for Research and Treatment of Cancer Quality of Life Questionnaire-C30 (EORTC QLQ-C30 Indonesian version). EORTC QLQ-C30 consisted 30 item questions. An English translation of the 30 questions used in the EORTC QLQ-C30 are included. The higher score indicated worse the quality of life. In Part 2 of the EORTC QLQ-C30, there are 2 questions that use somatic deferential with the highest score of 8 and the lowest of 1. For Part 2 or for the entire questionnaire, the higher the

score, the worse the quality of life, the lower the score, the better the quality of life. We categorized patient’s quality of life as “low” and “high.” The EORTC QLQ-C30 quality of life questionnaire has been translated and validated in Indonesian version by Perwitasari et al (2011). It was used with chemotherapy patients at Dr. Sardjito Central Hospital in Yogyakarta.

Study Population and Sample

The underlying population of this study was all breast cancer patients in Adam Malik Central Hospital that were diagnosed with breast cancer from March 2019 to June 2019. Based on review of medical records at the Adam Malik Central Hospital, 499 patients have been hospitalized from March 2019 to June 2019. A total of 83 breast patients were selected using purposive sampling techniques. Inclusion criteria were: 1) Being breast cancer patients with compos mentis awareness (fully aware), 2) being stage III who are undergoing some form of palliative care, 3) being hospitalized as in Rindu B room Adam Malik Central Hospital, 4) and being breast cancer patients who are willing to participate in the study. Our study excluded breast cancer patients who have mental disorders.

Study Design

This study was cross-sectional with the aim to determine the relationship between level of palliative care with the quality of life among breast cancer patients. This research was conducted at the Adam Malik Central Hospital in Medan, Indonesia between March to June 2019.

Data Collection

Participants spent approximately 45-50 minutes filling out questionnaires measuring palliative care and quality of life. Study staff reviewed the questionnaire to make sure that the participants answered the questionnaire correctly. If the questionnaire was filled out incorrectly, the participant was asked to make appropriate correction. All participants provided written informed consent.

Data Analysis

We used the Chi-square test to analyze the relationship between levels of palliative care received with the quality of life among breast cancer patients.

Ethical Approval

This study was approved by the Health Research Ethics Commission of the Faculty of Nursing, North Sumatra University (Ref.No.1168 / III / SP / 2019). All participants involved in this study provided informed consent to participate.

Results

A total of 83 respondents were recruited and selected based on inclusion criteria. All patients were seen at the oncology inpatient room at Adam Malik Central Hospital Medan. The majority of respondents were above 40 years old (60.2%), and 53.0% were private employees (Table 1).

A high percentage (67.5%) of breast cancer patients reported receiving a high level of palliative care at the Adam Malik Central Hospital in Medan. A high percentage of breast cancer patients (89.2%) also reported having a high level of quality of life.

Table 1. Demographic characteristics, level of palliative care received, and level of quality of life among breast cancer patients in Adam Malik Central Hospital in Medan (n = 83)

Characteristic	N	%
Age (years)		
30-35	6	7.2
36– 40	27	32.5
> 40	50	60.3
Occupation		
Unemployed	24	28.9
Private employees	44	53.0
Laborers	6	7.2
Farmers	9	10.8
Level of Palliative Care Received		
Low	1	1.2
Medium	26	31.3
High	58	67.5
Level of Quality of Life		
High	74	89.2
Low	9	10.8

Table 2. The relationship between level of palliative care and quality of life among breast cancer patients at Adam Malik Central General Hospital in Medan (n = 83)

Level of palliative care received	Quality of life level				Total		P-value
	Low		High				
	n	%	n	%	N	%	
Low	1	1.2	0	0.0	1	1.2	0.01*
Medium	6	7.3	20	24.1	26	31.1	
High	2	2.5	54	65.0	56	67.5	

*Chi-Square test (X^2) Significant at the level of 0.05

67.5% (n=54) of the 83 patients in this study received a high level of palliative care. 65.0% (n=54) of 83 patients have both a high level of palliative care and a high quality of life (Table 2). Of the 56 patients that had a high level of palliative care, 96.4% (n=54) had a high quality of life. The Chi square test statistic for the relationship between level of palliative care and quality of life for breast cancer patients was significant and corresponding p-value was 0.01 ($P < 0.05$). The results of this test show that there was a significant relationship between level of palliative care and quality of life of breast cancer patients. The higher the palliative care received, the higher the quality of life for breast cancer patients was in our study.

Discussion

In the present study, we found that a majority (96.4%) of patients who obtained high level of palliative care also had high level of quality of life. There was a significant relationship between palliative care and quality of life among breast cancer patients at Adam Malik Central Hospital. Based on our observations or from cited literature, breast cancer patients receiving palliative care feel loved, valued by those around them, and got sincere care from nurses. They also accepted the situation of his/her illness and felt ready to accept the effects of his/her illness.

Our study results match research by Irawan and colleagues (2013) that palliative care has an important role for the treatment of patients with terminal illness. Palliative care can be done simply. Its main priority of maintaining the patient's quality of life. The results of this study also correspond to another study by Anita' and colleagues (2016) which concluded that there is a relationship of palliative care with the quality of life of cancer patients. Likewise, Nazario's research (2014)

concluded that there is a relationship of palliative care with the quality of life of patients diagnosed with cancer by helping patients overcome physical, psychological, social and spiritual problems. According to Meier's research (conclusion (2011), it concludes that palliative care and quality of life have a very strong relationship.

Palliative care or integrated care that is active and comprehensive, with integrated multidisciplinary approaches (Matzo & Sherman, 2014), aims to reduce patient suffering, improve quality of life, and also provide support to their families (Rasjidi, 2010). Through palliative care, patients get assistance with physical, psychological, social and spiritual problems (Campell, 2013). The results of this study also correspond with a study by Suranta (2016) which found that those who get high-level palliative care tend to have a good quality of life. It can be concluded by researchers that palliative care has an important role in improving the quality of life among breast cancer patients in the management of pain, psychology, spirituality and others.

Conclusion

From results of this study, it can be concluded that palliative care has a direct relationship with the quality of life of breast cancer patients in the Adam Malik Central Hospital. The higher the palliative care obtained by breast cancer patients, the better the quality of life obtained.

Research Implication

For nursing education, it is very important to include palliative care in the nursing curriculum. Palliative care can be taught to nursing students so that whenever they treat breast cancer patients, the palliative care services can be given. Finally, breast cancer

patients can survive; accept the situation, become stronger and more ready to face the problem of the disease.

Suggestions for the further study

Based on the results of this study, we suggested that future researchers examine the effect of receiving palliative care on quality of life among breast cancer patients in various places in Indonesia.

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