

PROFILE OF CHEMOTHERAPY TREATMENT IN BREAST CANCER PATIENTS AT MOEWARDI GENERAL HOSPITAL IN 2025

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ABSTRACT

Breast cancer is one of the most common types of cancer found in women, with a prevalence that continues to increase every year. Chemotherapy is one of the main therapies in the treatment of breast cancer, both as adjuvant therapy (after surgery) and neoadjuvant therapy (before surgery). Moewardi General Hospital, as a referral hospital in Central Java Province, provides chemotherapy treatment services for breast cancer patients with various drug regimens that have been proven effective. This study aims to analyze the chemotherapy treatment profile in breast cancer patients at Moewardi General Hospital in 2025. The data used in this study included the type of chemotherapy regimen, the number of patients using it, and the side effects experienced by patients. The results showed that the combination of Paclitaxel and Epirubicin was the main regimen used, with a percentage of patients reaching 30%. Common side effects include nausea, vomiting, fatigue, and a decrease in white blood cell count. Despite challenges in managing side effects, chemotherapy treatment at Moewardi General Hospital shows promising results with a high success rate. This study is expected to serve as a reference for improving the quality of breast cancer treatment at this hospital and provide insights for the development of chemotherapy therapy in the future.

KEYWORDS

cancer, chemotherapy, treatment regimen



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INTRODUCTION

Breast cancer is one of the most common types of cancer found in women worldwide, including in Indonesia. According to data from the World Health Organization (WHO), breast cancer accounts for about 25% of all cancers found in women (World Health Organization, 2020). In Indonesia, the prevalence of breastcancer continues to increase

every year, along with increasing public awareness of the importance of early detection and proper treatment (Agustina & Yuliani, 2018).

Breast cancer treatment involves various therapies, one of which is chemotherapy, which is used to kill cancer cells or inhibit their growth. Chemotherapy for breast cancer is usually given as adjuvant therapy (after surgery) or neoadjuvant therapy (before surgery) to reduce the size of the tumor and inhibit the spread of cancer (Popescu & Patel, 2019). Moewardi General Hospital, as one of the referral hospitals in Central Java Province, plays an important role in providing health services for breast cancer patients (Yuliana & Putri, 2021).

Moewardi Regional General Hospital, as one of the referral hospitals in Central Java Province, plays an important role in providing health services for breast cancer patients. Breast cancer treatment involves various therapies, one of which is chemotherapy, which is used to kill cancer cells or inhibit their growth. Chemotherapy for breast cancer is usually administered as adjuvant therapy (after surgery) or neoadjuvant therapy (before surgery) to shrink the size of the tumor.

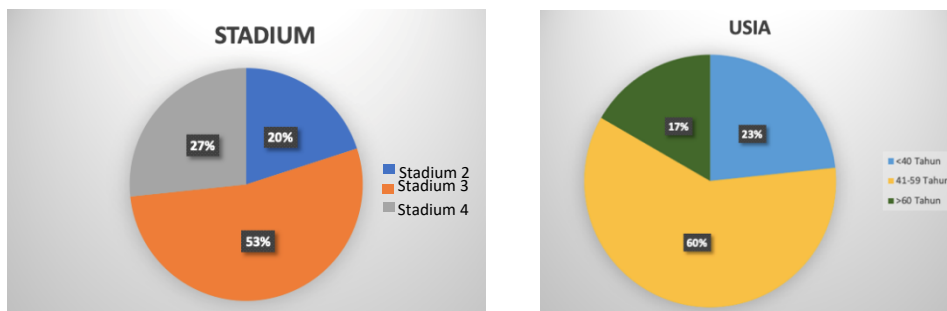
This article aims to provide an overview of the chemotherapy treatment profile of breast cancer patients admitted to Moewardi General Hospital in 2025. This profile includes the types of chemotherapy administered, the side effects experienced by patients, and the success rate of the therapy. By presenting this data and analysis, it is hoped that this study can provide useful insights and references for the development of oncology services at this hospital in the future.

RESEARCH METHOD

This study used a descriptive approach with secondary data analysis obtained from the medical records of breast cancer patients undergoing chemotherapy at Moewardi Regional General Hospital in 2025. The sample was obtained using total sampling technique, which means that all patients undergoing chemotherapy in that year were included in this study (Widodo, 2021). The data collected included information on the chemotherapy regimens administered, the number of drug doses, and the percentage of patients who used them. The data collected also included side effects reported by patients during and after undergoing chemotherapy. Data analysis was performed quantitatively to calculate the percentage of use of each regimen and the side effects that arose.

RESULT AND DISCUSSION

From the data obtained, there were various chemotherapy regimens applied to breast cancer patients at Moewardi Regional General Hospital, as follows:



The results showed that the majority of patients receiving chemotherapy at Moewardi Hospital were between 41 and 59 years old, totaling 18 patients (60%). This data

indicates that breast cancer is more commonly found in middle-aged to older women (Fitri & Darmawan, 2019). The incidence of breast cancer tends to increase with age, which is in line with findings that women over the age of 40 have a higher risk of developing breast cancer (Popescu & Patel, 2019). A total of 7 patients (23%) were in the <40 age group, indicating that although breast cancer in young women is relatively rare, it can still occur and is usually more aggressive (Agustina & Yuliani, 2018).

On the other hand, there were 5 patients (17%) aged >60 years, indicating that although the prevalence is lower, breast cancer in older adults still occurs and is often more difficult to treat due to higher comorbidity in older patients (Khurshid & Ahmed, 2020). Therefore, early detection in this age group is crucial to improve prognosis and provide more effective treatment options.

The majority of breast cancer patients receiving chemotherapy treatment at Moewardi General Hospital are between 41 and 59 years old. This shows that breast cancer is more commonly found in middle-aged to older adults. The age range of 40 to 59 years is the most vulnerable period for breast cancer, and this is consistent with the literature stating that the incidence of breast cancer increases with age in women. Although breast cancer can occur at younger or older ages, the higher prevalence in this age group highlights the importance of early detection in women aged 40 years and above.

Most patients receiving chemotherapy treatment at Moewardi General Hospital were in stage 3, with 16 patients (53%). This indicates that breast cancer in this hospital is often found at an advanced stage, where the cancer has spread to the lymph nodes or surrounding tissue, but has not yet reached other organs (Khurshid & Ahmed, 2020). At this stage, chemotherapy is very important to reduce the size of the tumor and prevent further spread (Yuliana & Putri, 2021).

There were 8 patients (27%) in stage 4, which is a condition where breast cancer has spread to other organs in the body. Treatment at this stage focuses more on controlling the disease and improving the patient's quality of life, with the main objectives being to reduce symptoms and prolong life expectancy (Popescu & Patel, 2019). On the other hand, there were 6 patients (20%) in stage 2, indicating that treatment can be carried out with the main goal of completely removing the tumor through surgery, followed by adjuvant chemotherapy to prevent recurrence (Agustina & Yuliani, 2018).

Table 1. Breast Cancer Chemotherapy Regimens

Regimen	Number	Percentage
Cisplatin + Epirubicin	1	3,3
Cyclophosphamide + Epirubicin	3	10,0
Cyclophosphamide + Doxorubicin	1	3,3
Cyclophosphamide + Doxorubicin + Docetaxel	1	3,3
Docetaxel + Carboplastin	3	10,0
Docetaxel + Epirubicin	6	20,0
Epirubicin + Viborelbin	1	3,3
Eribulin	2	6,7
Navelbine + Zometa + Tamofen + Taceral	1	3,3
Paclitaxel + Epirubicin	9	30,0
Paclitaxel + Carboplastin	2	6,7
Total	30	100%

Based on the results of the study, most patients (30%) received a combination of Paclitaxel and Epirubicin as their primary regimen. This regimen has been proven effective in treating various types of breast cancer, especially in more advanced stages (Khurshid & Ahmed, 2020). In addition, the use of Docetaxel was also significant, used by 20% of patients. This regimen is often used in patients with advanced breast cancer and has been proven effective in reducing the spread of cancer cells (Popescu & Patel, 2019).

There are various chemotherapy regimens applied to breast cancer patients at Moewardi General Hospital. Most patients receive a combination of Paclitaxel and Epirubicin, which is used in 30% of patients (Khurshid & Ahmed, 2020). This regimen has been proven effective in treating breast cancer, especially in more advanced stages (Khurshid & Ahmed, 2020). In addition, the use of other regimens such as Docetaxel is also quite significant, with 20% of patients using it (Popescu & Patel, 2019). This regimen is often used for patients with more advanced stages of cancer and has more manageable side effects compared to other drugs (Fitri & Darmawan, 2019).

Chemotherapy treatment administered to breast cancer patients at Moewardi General Hospital is dominated by a combination of Paclitaxel and Epirubicin, which is used in 30% of patients. These two drugs are the primary choice because they have been proven effective in treating various types of breast cancer, especially in more advanced stages. In addition, the use of Docetaxel is also quite significant, with 20% of patients using it. This indicates that Moewardi General Hospital tends to use drug combinations that have been proven to be effective based on the latest scientific evidence.

The most commonly reported side effects of chemotherapy are nausea, vomiting, fatigue, and a decrease in white blood cell count. Some patients also experience hair loss and skin problems, which are generally the main challenges in managing chemotherapy treatment (Yuliana & Putri, 2021). Moewardi General Hospital has provided supportive therapy to reduce these side effects, such as administering anti-nausea medication and closely monitoring patients' conditions during and after treatment (Anggraini, 2020). This is expected to improve patient comfort during chemotherapy (Harris & John, 2017).

Although the side effects of chemotherapy cannot be completely avoided, good management can help patients continue their treatment and improve their quality of life (Yuliana & Putri, 2021). Moewardi General Hospital has implemented various measures to minimize these side effects, including close monitoring of patient conditions and the administration of supportive medications to reduce symptoms (Fitri & Darmawan, 2019).

Overall, the results of chemotherapy treatment at Moewardi General Hospital are quite good with promising success rates. However, the main challenge remains the side effects that can reduce patients' quality of life. Therefore, evaluation and development of more effective and safer chemotherapy treatments need to be continued.

CONCLUSION

This study shows that chemotherapy treatment for breast cancer patients at Moewardi General Hospital in 2025 has yielded positive results. The combination of Paclitaxel and Epirubicin is the primary choice, used by 30% of patients, and is effective in more advanced stages of cancer. Side effects such as nausea, vomiting, and decreased white blood cell count are often reported, but good management with supportive therapy can minimize their impact.

Most patients are in the 41-59 age group and stage 3, requiring intensive treatment. Overall, chemotherapy treatment at Moewardi General Hospital offers good prospects, although managing side effects and developing safer therapies remain major challenges. This study can serve as a reference for improving the quality of oncology services in Indonesia.

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