

ABSTRAK

Kanker payudara merupakan kanker terbanyak kedua di dunia dengan beban kejadian dan dampak finansial yang tinggi, sehingga diperlukan kajian farmakoekonomi berbasis ECHO model untuk mengendalikan biaya dan meningkatkan mutu layanan, mengingat tekanan finansial dapat menurunkan kualitas hidup dan *survival* pasien. Penelitian ini bertujuan menganalisis biaya medis langsung, luaran klinik, kualitas hidup (utility dan HRQoL), serta faktor-faktor yang memengaruhinya.

Desain penelitian ini adalah *cross-sectional*. Data biaya medis langsung diperoleh dari bagian keuangan rumah sakit dan dianalisis secara deskriptif, sedangkan luaran klinik (*3 years survival rate* dan hazard ratio) diperoleh dari rekam medis dan dianalisis menggunakan secara deskriptif, Kaplan-Meier, dan Cox Regression. Kedua data diperoleh secara restrospektif pada 214 pasien kanker payudara peserta JKN yang dirawat tahun 2017–2019 di RSUP Dr. Sardjito dan RSUD Kota Yogyakarta. Pengukuran kualitas hidup dilakukan pada 158 pasien rawat jalan (April–Desember 2021) secara *concurrent* di RSUP Dr. Sardjito, dengan *utility* diukur menggunakan EQ-5D-5L dan HRQoL menggunakan FACT-B+4 serta COST-FACIT yang telah melalui uji validitas konstruk dan reliabilitas Cronbach's alpha.

Hasil penelitian menunjukkan bahwa komponen biaya terbesar adalah obat di RSUD Kota Yogyakarta (Rp 31.663.066,-; 69,51%) dan radioterapi di RSUP Dr. Sardjito (Rp 21.939.233,-; 26,42%). *Three-year survival rate* masing-masing rumah sakit adalah 35,29 bulan dan 33,51 bulan, tanpa faktor signifikan yang memengaruhi *hazard ratio*. Rata-rata *utility index* adalah 0,439 ($\pm 0,017$) dan dipengaruhi oleh stadium kanker ($p=0,046$). Instrumen FACT-B+4 dan COST-FACIT terbukti valid dan reliabel, dengan HRQoL dipengaruhi oleh status menyusui ($p=0,013$), pendidikan ($p=0,008$), pekerjaan ($p=0,001$), dan pendapatan ($p=0,000$). Secara keseluruhan, penelitian ini memberikan bukti komprehensif mengenai beban biaya, luaran klinik, serta kualitas hidup pasien kanker payudara di Indonesia, sekaligus menghadirkan instrumen HRQoL yang valid dan reliabel untuk mendukung pengambilan keputusan berbasis bukti dalam evaluasi teknologi kesehatan.

Kata Kunci: Kanker Payudara, Biaya Medis Langsung, Luaran Klinik, Utility, HRQoL.

ABSTRACT

Breast cancer is the second most common cancer worldwide, with a high incidence and financial impact. Therefore, an ECHO-based pharmacoeconomic study is needed to control costs and improve service quality, considering that financial stress can reduce patient quality of life and survival. This study aims to analyze direct medical costs, clinical outcomes, quality of life (utility and HRQoL), and the factors influencing them.

This study design was cross-sectional. Direct medical cost data were obtained from the hospital finance department and analyzed descriptively, while clinical outcomes (3-year survival rate and hazard ratio) were obtained from medical records and analyzed using descriptive analysis, Kaplan-Meier regression, and Cox regression. Both data were obtained retrospectively from 214 breast cancer patients participating in the National Health Insurance (JKN) program treated between 2017 and 2019 at Dr. Sardjito General Hospital and Yogyakarta City Hospital. Quality of life measurements were conducted on 158 concurrent outpatients (April–December 2021) at Dr. Sardjito General Hospital. Sardjito Hospital, with utility measured using the EQ-5D-5L and HRQoL using the FACT-B+4 and COST-FACIT, which have undergone construct validity and Cronbach's alpha reliability tests.

The results showed that the largest cost components were medication at Yogyakarta City Hospital (Rp 31,663,066; 69.51%) and radiotherapy at Dr. Sardjito Hospital (Rp 21,939,233; 26.42%). The three-year survival rates at each hospital were 35.29 months and 33.51 months, respectively, with no significant factors affecting the hazard ratio. The average utility index was 0.439 (± 0.017) and was influenced by cancer stage ($p=0.046$). The FACT-B+4 and COST-FACIT instruments were proven valid and reliable, with HRQoL influenced by breastfeeding status ($p=0.013$), education ($p=0.008$), employment ($p=0.001$), and income ($p=0.000$). Overall, this study provides comprehensive evidence on the cost burden, clinical outcomes, and quality of life of breast cancer patients in Indonesia, while also presenting a valid and reliable HRQoL instrument to support evidence-based decision-making in health technology evaluation.

Keywords: Breast Cancer, Direct Medical Costs, Clinical Outcomes, Utility, HRQoL