THE BIOPSYCHOSOCIAL DETERMINANTS OF QUALITY OF LIFE IN PATIENTS WITH BREAST CANCER: A MULTILEVEL LOGISTIC REGRESSION EVIDENCE FROM SURAKARTA, CENTRAL JAVA

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ABSTRACT

Background: A cancer diagnosis and its treatment can be expensive. So that cancer patients may suffer from mental and physical problems. Quality of life (QOL) is a major concern of patients with terminal cancer. This study aimed to investigate the biopsychosocial determinants of quality of life in patients with breast cancer.

Subjects and Method: This was a cross sectional study. A sample of 200 patients with breast cancer was selected by a simple random sampling. The dependent variable was quality of life. The independent variables were age, marital status, stage of cancer, chemotherapy, length of disease, coping strategy, family income, and modal social. Quality of life was measured by WHO-QOL-BREF. The other variables were collected by a questionnaire. The data were analyzed by a multiple logistic regression run on Stata 13.

Results: Strong modal social ($b = 2.52$; 95% CI= 0.82 to 4.22; $p = 0.003$), complete chemotherapy ($b = 1.65$; 95% CI= -0.05 to 3.35; $p = 0.057$), length of diagnosis ≥ 24 months ($b = 2.39$; 95% CI= 0.69 to 4.22; $p = 0.006$), family income $\geq$ Rp 5,600,000 ($b = 2.94$; 95% CI= 1.24 to 4.64; $p = 0.001$), and good coping strategy ($b = 1.70$; 95% CI= 0.11 to 3.29; $p = 0.036$) increased quality of life of patients with breast cancer. Late stage of cancer ($b = -2.09$; 95% CI= -3.78 to -0.40; $p = 0.015$) and depression ($b = -2.48$; 95% CI= -4.26 to -0.69; $p = 0.001$) decreased quality of life of patients with breast cancer. Age decreased quality of life ($b = -0.87$; 95% CI= -2.94 to 2.77; $p = 0.952$), but it was statistically non-significant. Marital status increased quality of life ($b = 1.32$; 95% CI= -0.35 to 2.99; $p = 0.123$), but it was statistically non-significant.

Conclusion: Strong modal social, complete chemotherapy, length of diagnosis ≥ 24 months, family income $\geq$ Rp 5,600,000, and good coping strategy increase quality of life of patients with breast cancer. Late stage of cancer and depression decrease quality of life of patients with breast cancer. Age decreases quality of life, but it is statistically non-significant. Marital status increased quality of life, but it is statistically non-significant.

Keywords: quality of life, breast cancer

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