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Sleep quality, anxiety and depression in women with breast cancer: A cross-sectional study in the São Paulo metropolitan area

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INTRODUCTION The bidirectional relationship between mental health and sleep represents a central clinical challenge in oncological care. In women with breast cancer, hypothalamic-pituitary-adrenal axis hyperactivation and increased pro-inflammatory cytokines from treatment impair sleep architecture and amplify anxiety and depressive symptoms. In Brazil, poor sleep quality prevalence ranges from 16.1% to 35.1% in the general population, while international oncology studies report rates of 67–90%. Despite this, national data on the joint prevalence of sleep disorders and mental health symptoms in outpatients remain scarce. **METHOD** Analytical cross-sectional study with 211 women in outpatient breast cancer treatment at state hospitals in the São Paulo metropolitan region. Three validated instruments were applied: PSQI-BR (sleep quality), Epworth Sleepiness Scale (daytime sleepiness) and HADS (anxiety and depression), alongside a clinical-sociodemographic form. Sample size by Wald method ($n=208$; 95% CI). Analyses in Stata 17.0: Pearson correlation, chi-square, multiple linear and logistic regression. CEP-FMABC: CAAE 90818825.2.0000.0082. **RESULT** Poor sleep quality ($PSQI \geq 5$): 78.7% (95% CI: 72.5–84.1). Excessive daytime sleepiness ($ESS \geq 10$): 23.2%. Anxiety symptoms in 38.9%; depressive in 25.6%. Anxiety was associated with poor sleep quality ($\chi^2=10.70$; $p=0.001$); depression with sleepiness ($\chi^2=4.16$; $p=0.041$). Logistic regression: anxiety was the only independent predictor of poor sleep quality ($OR=1.157$; 95% CI: 1.042–1.285; $p=0.006$; $AUC=0.734$). **DISCUSSION** Prevalence far exceeded that of the Brazilian general population, consistent with international oncology literature. Anxiety emerged as the main determinant, supporting the cognitive-emotional hyperarousal model. **CONCLUSION** Sleep disorders are strongly associated with anxiety in women with breast cancer, highlighting the need for systematic screening and integrated psychological management in outpatient oncological care.

KEYWORDS: Breast Neoplasms; Sleep Quality; Depression; Anxiety.