

## Financial burden and financial toxicity in cancer patients: A sub-analysis from a Brazilian prospective cohort.

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**Background:** Financial toxicity during cancer treatment can impact patients' quality of life (QoL), adherence, and survival. Identifying subgroups with financial vulnerability among cancer patients is important to reduce disparities and develop equity-certified policies. Our study assesses financial burden (FB) and financial toxicity (FT) across different cancer types from the patient's perspective. **Methods:** This is an unplanned sub-analysis of four prospective, observational studies about real-world QoL in patients with breast (BC), prostate (PC), colorectal (CRC), and lung cancer (LC) treated at two private healthcare facilities in Brazil. We analyzed responses to Question 28 of the EORTC QLQ-C30 questionnaire. Patients reporting financial difficulties at baseline and six months were categorized as experiencing FB. Those with worsening or newly reported issues were classified as FT. FB and FT were analyzed as binary variables (any grade vs. none). Associations with clinical and epidemiological variables were assessed using univariate and multivariate logistic regression models, with a 5% statistical significance. Analyses were conducted using R software, version 4.4.1. **Results:** Between March 2015 and May 2024, 1,343 patients met the inclusion criteria: 56 with CRC, 387 with BC, 638 with PC, and 262 with LC. Most patients were male (60%) and white (77%), with a median age of 62.2 years. Only 15% had metastatic disease. At baseline, 23% reported FB, rising to 25% at six months, with 16% developing FT during treatment. Greater financial difficulties were found in women with breast cancer (FB 33%, FT 20%), while the lowest was seen in men with prostate cancer (FB 20%, FT 13%). Univariate analysis identified mixed-race ethnicity (OR 1.42;  $p=0.024$ ), younger age (OR 0.96;  $p<0.001$ ), and female gender (OR 0.55;  $p<0.001$ ) as FB risk factors, but only age remained significant in the multivariate model (OR 0.97;  $p=0.003$ ). Univariate analysis also linked age (OR 0.97;  $p<0.001$ ), gender (OR 0.63;  $p=0.002$ ), and comorbidities (OR 0.71;  $p=0.034$ ) to FT, but only age remained significant in the multivariable model, with a 2% reduction in FT for each additional year (OR 0.98;  $p=0.016$ ). This study is ongoing and the impact of FB and FT on survival outcomes will be analyzed and reported in future work. **Conclusions:** This study highlights the impact of FT on cancer patients in Brazil treated in private health centers. Younger age emerged as an independent risk factor for both FT and FB after six months of treatment. Further research is needed to better understand FT within the Brazilian population, particularly in the public health system, and to develop strategies to mitigate its effects and improve patient outcomes. Research Sponsor: None.