

## عنوان مقاله:

Survival analysis of breast cancer patients with different chronic diseases through parametric and semi-parametric approaches

## محل انتشار:

مجله تحقیقات سرطان, دوره 2, شماره 1 (سال: 1396)

تعداد صفحات اصل مقاله: 7

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## خلاصه مقاله:

**Introduction:** There is a lack of information on the extent of dependency between chronic diseases and the survival rate of breast cancer. Until date, none of the models proposed has determined the impact of chronic diseases on breast cancer survival. This study, therefore, aimed to investigate the impacts of chronic diseases such as diabetes, blood pressure, and endocrine disorders on the survival of breast cancer patients through a comprehensive research. **Methods:** All (n = 1822) breast cancer patients treated in the three hospitals of Tehran from 2007 through mid-2016 were included in this study. A comprehensive study was conducted by focusing on the chronic disease data of the studied patients. The parametric and semi-parametric approaches, as well as non-parametric Kaplan-Meier analysis, were performed. This research proposes two models for analyzing breast cancer survival. A comparative analysis of the models was performed based on the Akaike criterion. **Results:** Chronic diseases have been found to affect the survival of breast cancer patients. This research considered 436 individuals, among the patients with chronic diseases including hypertension, diabetes, hypo- and hyperthyroidism, and heart problems at the frequencies of 12.38%, 11.69%, 8.71%, and 8.02%, respectively. This study indicated that the 5-year survival of breast cancer patients with chronic diseases was 72% and that it was 82% for other breast cancer patients. The statistical analysis and the two proposed models revealed that chronic diseases significantly affect the survival of the study patients. **Conclusions:** This comprehensive research evidence a significant difference in the survival rate of breast cancer patients with and without chronic diseases. The statistical analysis of the data indicated that chronic diseases can significantly affect the survival probability in breast cancer. Heart problems and the combination of chronic diseases have a major influence on the survival rate of breast cancer patients as compared to other cases.

## کلمات کلیدی:

Breast Cancer, Chronic Diseases, Survival Analysis

لینک ثابت مقاله در پایگاه سیویلیکا:

