Applied Survival Analysis in Breast cancer and Obtain Effective Factors On Breast Cancer In Ardebil Province

**Introduction:** Breast carcinoma is the most common cancer in women and the second leading cause of cancer-related mortality after lung cancer. In this study, we estimated breast cancer survival rate and evaluated some effective factors on it.

**Materials and methods:** Retrospective analytical study was carried on patients' records from 1382-1387, that have been recorded in the cancer registration center of Ardebil with the Kaplan-Meier method for determining the survival rate of patients with breast cancer. The effect of factors such as age, sex, morphology, residency place, and type of treatment might affect survival rate was studied.

**Results:** Mean age of breast cancer diagnosis was 45.5 years in Ardebil. Survival rate for 1 year was 83% for 2 years was 71% for 3 years was 67% for 4 years was 59% and for 5 years was 51%. Results showed that age, surgery, drug therapy, and residency place were associated with survival of breast cancer.

**Conclusion:** Mean age of breast cancer diagnosis in Ardebil was similar to other studies performed in Iran. In comparison with developed countries, it was 2 decades lower than 5-year survival in Ardebil was lower than in other places of Iran and other countries. Late diagnosis and lack of chemotherapy and radiotherapy sites may be causes of shorter survival in Ardebil. Therefore, education for early diagnosis in women must be considered, and these findings support the need for breast cancer screening programs.

**Key words:** Breast cancer, Survival rate, Kaplan-Meier.