Conclusions

The incidence of in situ and invasive breast cancer is increasing, while the mortality rates remain stable. We observed an increase in the incidence of in situ cervical cancer and a decrease in invasive incidence rates during the study period, and we noted that the cervical cancer mortality significantly declined during the study period.

Background

Breast and cervical cancers represent a significant cause of morbidity and mortality among women. The purpose of this study was to analyse the survival and time trends in two of the most common female cancers in the Regional Health District (RHD) of Barretos, São Paulo, Brazil.

Methods

From 2000 through 2015, we calculated the breast and cervical cancer incidence and mortality rates per 100,000 women who were age-standardized to the world population. We obtained the time trends using the Joinpoint Regression software. We estimated the overall survival rates using the Kaplan-Meier methods.

Results:

The age-standardized rates (ASR) for incidence of breast cancer increased annually, with an average annual percentage change (AAPC) of 4.3 (95% Confidence Interval (CI): 2.4 to 6.3) for invasive breast cancer and 10.2 (95% CI: 6.1 to 14.5) for in situ breast cancer. The mortality rates for invasive breast cancer decreased with an AAPC of -0.2 (95% CI: -1.9 to 2.4). The ASR incidence of invasive cervical cancer showed an AAPC of -1.9 (95% CI: -4.7 to 0.9). For in situ cases, the ASR showed an AAPC of 9.3 (95% CI: 3.3 to 15.7). The ASR mortality for cervical cancer showed an AAPC of -5.3 (95% CI: -9.5 to -0.8). The Kaplan-Meier analysis indicated 5-year overall survival rates of 74.3% for breast cancer and 70.7% for cervical cancer.