

BREAST CANCER BY STAGE OF DISEASE AT DIAGNOSIS, CENTRAL OKLAHOMA

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Introduction: The incidence of stage IV breast cancer among women aged ≥ 40 years is an indicator of lack of early screening. The objective of this study was to describe the risk factors associated with a stage IV breast cancer diagnosis as a means to identify populations with the greatest need of earlier screening.

Methods: We obtained 2007 and 1997-2005 breast cancer data from the Susan G. Komen for the Cure Central Oklahoma Affiliate and the Oklahoma Central Cancer Registry respectively. All analyses were ecologic in nature. Data were analyzed by age group, race/ethnicity, insurance status, family income, screening practices, ZIP code, year and stage of breast cancer at diagnosis by county.

Results: The distribution of breast cancer staging at diagnosis in the Central Oklahoma 10-county region was: 64% stage I, 28% stage II, 3% stage III and 5% stage IV (2007 data). The percentage of stage IV disease in African Americans was nearly double that in White and other races (7.8% vs. 4.2%, $p < 0.01$ and 4.1%, $p < 0.01$ respectively), with a strong correlation (Spearman correlation coefficient=0.61, $p = 0.04$) between the proportion of African American females and stage IV disease by county. The proportion of breast cancer stage IV diagnoses was significantly associated with percentage of African American females, uninsured women, families living below the poverty level, screening practices and females age 65+ years ($p < 0.05$).

Conclusion: Increased availability of breast cancer screening services needs to be targeted in Oklahoma and Logan Counties among African American, low income and uninsured females aged 40+ years.

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