

Conference Workshop Abstract

Surveillance, Epidemiology, and End Results (SEER) data for monitoring cancer trends

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Background: Monitoring cancer trends allows evaluation of the effectiveness of cancer screening or detection methods and determination of priorities in cancer control programs. Government officials and policy makers also use information on cancer trends to allocate resources for cancer research and prevention. Although data from the Surveillance, Epidemiology, and End Results (SEER)-affiliated cancer registry are accessible to the public, there is a shortage of published research describing cancer incidence rates for White, Black, and other residents in Georgia. The objective of this research is to provide an overview of how to use SEER data through analysis of the incidence rate for cervical cancer.

Methods: Cervical cancer cases (ICD-O-3/WHO 2008 = 'Cervix Uteri', corresponding to C530-C539) were obtained from the SEER18 database. It includes the largest geographic coverage compared to SEER 9 and SEER 13 data. The incidence and incidence rates for cervical cancer were obtained, stratified by year (2000-2012), sex, race/ethnic groups, and region (Georgia and US). Age-adjusted incidence and incidence rates (to the 2000 US standard population) were calculated using SEER*Stat software, which is available, free of charge, on the SEER Web site: <http://seer.cancer.gov>.

Results: Age-adjusted incidences and incidence rates in Georgia and the US from SEER 18 data were created by SEER*Stat. The incidence rates were stratified by age variable (5-year category), sex, race/ethnicity, and other socio-demographic variables. Annual percent changes (APC) and 95% CI were also obtained to characterize trends in cancer rates over time. The trends for age-adjusted incidence rates for regions (Georgia and the US) and race (white, black, others) were compared using APC. Furthermore, age-specific incidence and incidence rates for cervical cancer for Georgia and US for recent five years (2008-2012) were reported.

Conclusions: The Surveillance, Epidemiology, and End Results (SEER) program provides cancer researchers a convenient and intuitive system for viewing individual cancer records and producing statistics useful in studying the impact of cancer on a population.

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