An Assessment of Cancer Survival in Virginia (2001-2016)

Shuhui Wang, M. S.
Virginia Cancer Registry
Virginia Department of Health

INTRODUCTION

Cancer survival data and related outcome analysis is necessary to assess cancer treatment programs and to evaluate the Virginia Department of Health’s Comprehensive Cancer Programs.

In 2018, The Virginia Cancer Registry (VCR) completed Site-Specific Data Item (SSDI) and National Death Index (NDI) matches for the first time. Data is now complete to evaluate cancer survival in Virginia. This is the first time the VCR has been able to analyze Virginia’s cancer survival rates.

METHODS

The data was obtained from the VCR’s live database with approximately 460,000 patients from 2001-2016. (data from 2001-2011 was used to calculate 5-yr survival rates), excluding Death Certificate Only (DCO) cases. Descriptive statistics were calculated.

The association between survival time and sociodemographic factors such as race, sex, age group, and stage at diagnosis was analyzed using Cox regression and Lifetest procedure in SAS®.

Each patient was counted using the first diagnosis information. Any information on recurrence was excluded from the analysis.

RESULTS

5-Year Survival Rate Overall

- The observed five-year overall survival rate was 61.5%.
- The highest 5-year survival rate in Virginia was 95.8% for thyroid cancer while pancreatic cancer, which only had 6.3% survival rate, ranked the lowest of all cancer sites.
- Cox regression showed that the survival rates are associated with diagnosis at an older age, late stage disease, and being African American male.

CONCLUSION

- The results demonstrate that cancer survival in Virginia is relatively lower than the national average, for example, female breast cancer was 85.1% for Virginia and is lower than the national average of 91% in 2007-2013.1
- Cancer stage and patients’ demographic disparities have a huge impact on cancer survival rate.
- We hypothesize that this is due to low level of awareness, lack of screening programs and subsequent late access to treatment.
- These results are visualized in tables, charts and graphs and are publicly available on the VCR website. Local hospitals, clinics, state and local agencies/ programs, and researchers are encouraged to use this information as a tool for cancer surveillance, program planning, outreach, and promoting screening and early detection.

REFERENCES

2. Data Source: Virginia Cancer Registry, VA 2001-2016