

Beyond biology: Impact of Marital Status and Socio-Economic-Index on Outcomes of Spinal Cord Tumors, Analysis from A National Cancer Registry.

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Introduction

The impact of marital-status and living arrangement on health through modified health behaviours and social networks has been well-established in the literature with many experts claiming a “protective” effect that married life confers to individuals. Herein, we sought to study the impact of marital and socio-economic-status(SES) on outcomes of spinal-cord tumors.

Methods

Surveillance, Epidemiology and End Results (SEER) program was utilized for abstracting patients with spinal cord tumors between 2004 and 2014. Patients were grouped into 4 groups based on their marital status: single/never married, married/living together, divorced/separated and widowed. Socio-economic status was calculated using a validated methodology. Kaplan-meier curves and multivariable logistic and cox regression were used to investigate the relationship between marital and socio-economic status and mortality rate of patients with available follow-up information.

Results

A total of 1188 patients with spinal tumors were identified, of which 683(57.5%) were female and 505(42.5%) were male. Patients were categorized into four groups: 241(20.3%) single patients, 732(61.6%) married patients/patients with domestic partner, 109(9.2%) divorced/separated patients, and 106 (8.9%) widowed patients. Compared to married patients, divorced/separated and widowed patients had a higher mortality rate (HR:1.76, 95% CI:1.1 to 2.9, p= 0.02 and HR:2.01, 95% CI:1.3 to 3.1, p= 0.001 respectively). Male patients, compared to female patients, were associated with lower survival (HR: 1.42, 95% CI:1.03 to 1.9, p=0.03). Lastly, patients belonging to higher SES were found to have a lower mortality rate (HR: 0.77, CI 0.55-1.08, p=0.143).

Conclusions

Consistent with other studies, unmarried and widowed patients, patients belonging to lower SES, and male patients were found to have a higher risk of mortality. Thus, these factors should be accounted for while tailoring the treatment plan for such patients.

Learning Objectives

By the conclusion of this session, participants should be able to:

- 1) Discuss the potential of using a national cancer registry to study outcomes of common tumors.
- 2) Discuss the role of marital status on outcomes of spinal cord tumors

References