

UC Irvine

UC Irvine Previously Published Works

Title

Socioeconomic status as a predictor of adherence to treatment guidelines for early-stage ovarian cancer

Permalink

<https://escholarship.org/uc/item/8mj9j937>

Authors

Hodeib, M
Bristow, RE
Randall, LM
[et al.](#)

Publication Date

2014-06-01

DOI

10.1016/j.ygyno.2014.03.403

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

383 - Poster Session B**Socioeconomic status as a predictor of adherence to treatment guidelines for early-stage ovarian cancer**

M. Hodeib, R.E. Bristow, L.M. Randall, F. Liu, J. Chang, A. Ziogas, H. Anton-Culver. *University of California at Irvine, Orange, CA, USA.*

Objectives: To investigate the impact of socioeconomic status (SES) and other demographic variables on adherence to National Comprehensive Cancer Center (NCCN) ovarian cancer treatment guidelines among patients with stage I/II disease.

Methods: Consecutive patients diagnosed with stage I/II epithelial ovarian cancer between January 1, 1999 and December 31, 2006 were identified from the California Cancer Registry. Univariate analysis and multivariate logistic regression models were used to evaluate for differences in surgical procedures, chemotherapy treatment, and overall care adherence to NCCN guideline care according increasing SES quintile (SES-1 to SES-5), other demographic variables, tumor characteristics, and hospital/physician annual case volume.

Results: A total of 5445 patients were identified. The median age at diagnosis was 54.0 years (range, 18–99 years); 72.5% of patients had stage I disease and 27.5% had stage II disease. With a median follow-up time of 4.9 years, the 5-year ovarian cancer-specific survival for all patients was 82.7% (SE = 0.6). Overall, 23.7% of patients received care that was adherent to NCCN guidelines. Compared to patients in SES-5, patients in SES-1 were significantly less likely to receive proper surgery (27.3% vs 47.9%, $P < 0.001$) and indicated chemotherapy (42.4% vs 53.6%, $P < 0.001$). There was a linear relationship between increasing SES and the likelihood of overall treatment plan adherence to NCCN guidelines: SES-1 = 16.4%, SES-2 = 19.0%, SES-3 = 22.4%, SES-4 = 24.2%, SES-5 = 31.6% ($P < 0.001$). Binary logistic regression analysis revealed that compared to SES-5, decreasing SES was independently predictive of a higher risk of nonadherent care: SES-4, OR 1.51, 95% CI 1.26–1.81; SES-3, OR 1.55, 95% CI 1.28–1.87; SES-2, OR 1.78, 95% CI, 1.44–2.20; SES-1, OR 2.01, 95% CI 1.55–2.62. Medicaid payer status (OR 1.30, 95% CI 1.04–1.62), low-volume hospitals (OR 1.58, 95% CI 1.35–1.86), and low-volume physicians (OR 1.24, 95% CI 1.04–1.48) were also independently associated with an increased risk of overall treatment nonadherence to NCCN guidelines.

Conclusions: Among patients with early-stage ovarian cancer, low SES and low provider case volume are significant and independent predictors of deviation from NCCN guidelines for surgery, chemotherapy, and overall treatment.

doi:[10.1016/j.ygyno.2014.03.403](https://doi.org/10.1016/j.ygyno.2014.03.403)