Socioeconomic status and health insurance as predictors of access to high-volume hospital care for women with early-stage ovarian cancer

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**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. Multivariate logistic regression analyses were used to evaluate for differences in access to high-volume hospitals (HVH) (≥20 cases/year) and high-volume physicians (HVP) (≥10 cases/year) according to race, health insurance payer, increasing composite selected exempt service (SES) quintile (SES-1 to SES-5), and clinical characteristics. Kaplan–Meier analysis was used to assess disease-specific survival. A Cox proportional hazards model was fitted to evaluate the independent effect on survival of demographic, disease-related, and provider volume predictors.

**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. Overall, 977 patients (17.9%) were cared for at HVHs, and 869 patients (16.0%) were treated by HVPs. African Americans were less likely to receive care at HVHs (odds ratio [OR] 0.68, 95% CI 0.48–0.97). SES and payer status were significantly correlated with access to HVHs. Compared to the highest SES category (SES-5), patients with lower SES were significantly more likely to receive care at a LVH, with the lowest SES group (SES-1) having the highest risk (OR 1.74, 95% CI 1.32–2.30). Compared to managed care insurance (HMO/PPO), private/military/county-funded insurance (OR 1.61, 95% CI 1.29–1.99) and not insured status (OR 1.88, 95% CI 1.20–2.95) were independent predictors of LVH care. On multivariate analysis, LVH was associated with inferior ovarian cancer-specific survival compared to HVH (HR 1.24, 95% CI 1.02–1.49).

**Conclusions:** Among patients with early-stage ovarian cancer, treatment at an HVH is an independent predictor of superior ovarian cancer-specific survival, but access to HVHs is limited. Barriers to high-volume care for early-stage ovarian cancer are more pronounced for patients with low SES and non-managed care insurance.

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