Analysis of Hospitalized Cervical Cancer Patients from National Inpatient Sample 2022

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Received Apr. 18, 2025; Accepted for publication Apr. 18, 2025; Published online Apr. 21, 2025 https://doi.org/10.17161/kjm.vol18.23846

Introduction. Cervical cancer poses significant challenges, and understanding factors associated with mortality among hospitalized patients is crucial for optimizing care. This study aimed to identify demographic and clinical predictors of in-hospital mortality in patients hospitalized with cervical cancer.

Methods. We analyzed the 2022 National Inpatient Sample, identifying adult patients admitted with a cervical cancer diagnosis. Descriptive statistics and survey-weighted logistic regression were performed using STATA BE 18.0.

Results. An estimated 25,610 patients met the inclusion criteria (mean age 53.99 ± 0.24 years; 55.6% White, 17.2% African American, 27% Other). Approximately 35% resided in the lowest income quartile. Common comorbidities included protein energy malnutrition (19.9%), obesity (15.1%), and smoking (36.6%). Metastasis was present in 23.6%, and 14.8% received hospice care. The overall in-hospital mortality rate was 3.8%. Among hospice patients, significant mortality predictors included older age (OR = 1.03, 95% CI: 1.00, 1.05), elective admission (OR = 4.98, 95% CI: 2.31, 10.74), liver disease (OR = 2.28, 95% CI: 1.02, 5.09), and metastasis (OR = 3.06, 95% CI: 1.53, 6.15). For patients without palliative care consult, significant predictors included non-elective admission (OR = 0.09, 95% CI: 0.01, 0.68), protein energy malnutrition (OR = 1.90, 95% CI: 1.08, 3.35), and liver disease (OR = 2.84, 95% CI: 1.37, 5.87).

Conclusions. This study identified key risk factors for mortality among hospitalized cervical cancer patients, emphasizing the need for targeted interventions for older patients and those with specific comorbidities to improve outcomes in this high-risk population.

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