

Influence of Marital Status on Stage at Presentation and Disease-Specific Survival in Sebaceous Carcinoma

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Background

- **Sebaceous carcinoma (SC)** is an uncommon, highly aggressive form of skin cancer¹
- Originates from the **adnexal epithelium of sebaceous glands**
- Previous studies exploring the impact of marital status on other cutaneous malignancies have revealed **poorer survival outcomes among unmarried individuals**²
 - Mycosis Fungoides³
 - Merkel Cell Carcinoma⁴
- There is a paucity of literature examining the **impact of marital status on stage at diagnosis and disease-specific survival (DSS)** in patients diagnosed with SC, which is explored herein

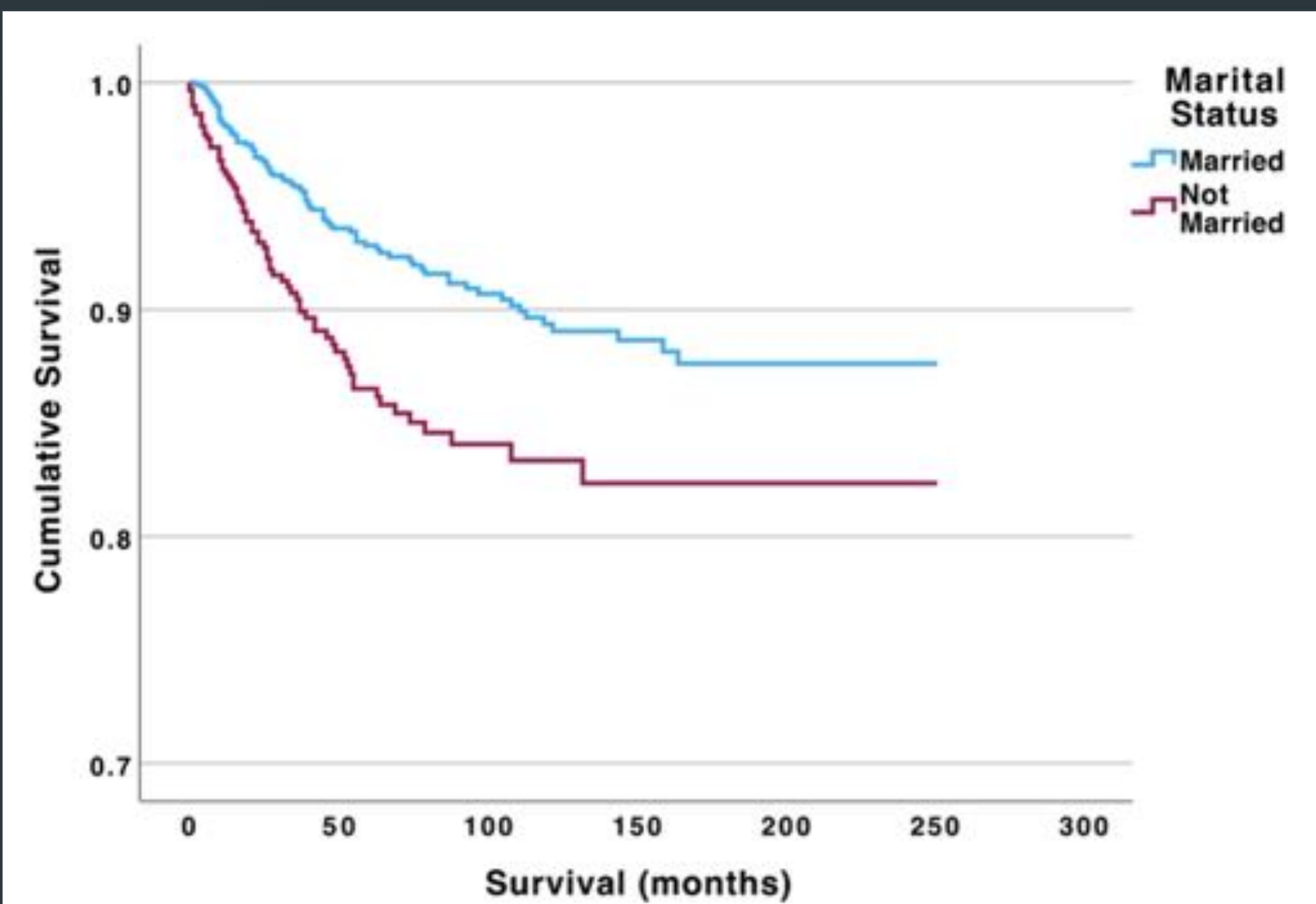


Figure 1. Univariate Kaplan-Meier analysis demonstrating enhanced DSS in married SC patients compared to unmarried individuals.

Methods

- The **Surveillance, Epidemiology, and End Results (SEER) database** was queried to identify biopsy-proven cases of cutaneous SC
- Timeframe **2000-2020**
 - **ICD-O-3 histology code** 8410/3
 - **Primary site codes** C44.0-44.9
- Statistical analysis was conducted using **SPSS version 29.0** and included:
 - Chi-squared
 - Binary logistic regression
 - Kaplan-Meier with log-rank
 - Multivariate Cox proportional hazards
 - Statistical significance was set to **p<0.05**

Results

- A total of **4,466 patients** were identified:
 - Male (61.9%)
 - White (81.1%)
 - 80+ years of age (31.2%),
 - Married (62.2%)
 - Localized stage (90.9%)
 - Head and neck (73.2%)
- **Binary logistic regression:**
 - Unmarried patients at higher odds of being diagnosed with regional/distant disease than married individuals (**Table 1**)
 - **OR:** 1.50 (p=0.007)
- **Univariate Kaplan-Meier analysis:**
 - Married individuals had better DSS (p<0.001) (**Figure 1**)
 - **Married:**
 - 5-year: 92.0%
 - 10-year: 87.0%
 - **Unmarried:**
 - 5-year: 85.0%
 - 10-year: 82.0%
- **Multivariate analysis** adjusting for confounders showed increased mortality risk in unmarried patients
 - **aHR:** 1.61 (p=0.027)

Table 1. Binary logistic regression examining variables associated with regional/distant disease

Characteristic	Odds Ratio	95% CI	p-value
Age at diagnosis			
<50 years		Reference	
50-75 years	0.61	0.37-1.00	0.051
75+ years	0.66	0.40-1.08	0.657
Race and Ethnicity			
White		Reference	
Black	0.62	0.24-1.59	0.319
AIAN	0.64	0.08-5.19	0.68
API	2.18	1.37-3.47	<0.001
Hispanic (any race)	1.18	0.76-1.84	0.461
Sex			
Male		Reference	
Female	1.20	0.89-1.60	0.230
Marital status			
Married		Reference	
Unmarried	1.50	1.13-2.03	0.007
Annual Income			
\$80k+		Reference	
\$65-75k	1.37	0.93-2.03	0.111
<\$65k	1.71	1.25-2.34	<0.001
Primary tumor site			
Lower extremity		Reference	
Trunk	0.72	0.20-2.58	0.618
Upper extremity	1.60	0.42-6.07	0.494
Head and neck	2.83	0.87-9.19	0.083

Discussion

- Our findings underscore the potential role of support social structures in shaping cancer trajectories and highlight the importance of considering broader socioenvironmental factors in cancer care
- Highlight the need for further research to elucidate the mechanisms driving these associations and to explore targeted interventions aimed at addressing social determinants of health in comprehensive care

References

