

Impact of marital status on survival of gastric adenocarcinoma patients: Results from the Surveillance Epidemiology and End Results (SEER) Database.

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BACKGROUND: Greater longevity of married people as compared with unmarried persons has been demonstrated. However the impact of marital status on disease specific survival among patients with cancer has been controversial. In this study, we used the Surveillance, Epidemiology and End Results database to analyze the survival difference among different marital status in the United States.

EXPERIMENTAL DESIGN: The study population was based on the SEER cancer registry. We restricted eligibility to adults (aged 18 years or older) who were diagnosed with gastric adenocarcinoma (also including mucinous adenocarcinoma and signet ring cell carcinoma) from 2004 to 2012. We excluded cases without follow-up records (survival time code of 0 months), as well as lacking documentation on marital status and TNM stage. The 5-year cause specific survival (CSS) was our primary endpoint. Logistic regression model was used to identify factors related to no pathologic diagnosis. Multivariable Cox regression model identified potential prognostic factors. All statistical tests were two-sided. This study was deemed exempt from institutional review board approval by Sun Yat-sen University Cancer Center; informed consent was waived.

RESULTS: The study identified 29,086 gastric adenocarcinoma patients. Of these patients, 18,290 (62.88%) were male and 10,796 (37.12%) were female. Totally 17,854 (61.38%) of the patients were married and 11,232 (38.62%) were unmarried including 4,353 (14.97%) widowed, 4,151 (14.27%) single and 2,728 (9.38%) separated / divorced. Married patients had better 5-year CSS than those unmarried, 30.6% vs 25.7%, ($P < 0.001$). The survival difference persisted in both male and female patients. Married patients had more stage II/III diseases and more Asian origin. Patients in the widowed group were more frequently elderly women, more stage I disease in tumor stage and more well / moderate differentiated tumors compared with the other marital status subgroups, $P < 0.001$.

CONCLUSIONS: Our data revealed that married patients had a survival advantage both in male and female patients. Despite favorable clinicopathological characteristics, widowed patients were at highest risk of death compared with other groups. The relationship between marriage and survival can be explained hypothetically by psychosocial factors. Physicians caring for unmarried gastric cancer patients should be aware of the poorer prognosis and provide more social support as well as interventions to reduce the significant survival differences between married and unmarried gastric cancer patients. We recommended physicians to provide more social supports as well as interventions to the unmarried gastric cancer patients.