



Association of Demographic and Burn-related factors to PTSD Pre-Screen Survey Results among Burn Patients

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Introduction

A burn injury can be a traumatic experience and many patients suffer physical, social, and psychological consequences. Stress disorders, including posttraumatic stress disorder (PTSD), have been reported to occur after burn injury in 18%-33% of cases, but knowledge about predictors of PTSD in burn patients is lacking. The objective of this study is to evaluate the demographic and burn-related factors in patients associated with screening positive or negative to be at high risk for PTSD.

Methods

All patients who met the inclusion/exclusion criteria were administered the 4-item Primary Care Post-Traumatic Stress Disorder screen (PC-PTSD) survey, and subsequently their charts were reviewed. High risk of developing PTSD was defined as a “yes” answer to three or more survey questions. Variables collected on each subject included gender, date of birth, age at time of burn, date of burn, race, ethnicity, insurance category, TBSA, burn location, and whether surgery was required for the burn. Wilcoxon rank sum test with continuity correction was used to compare patients with a positive screen to those without one. Fisher's Exact Test for Count Data was used to analyze the associations of gender and need for surgery to the positive or negative screening test results.

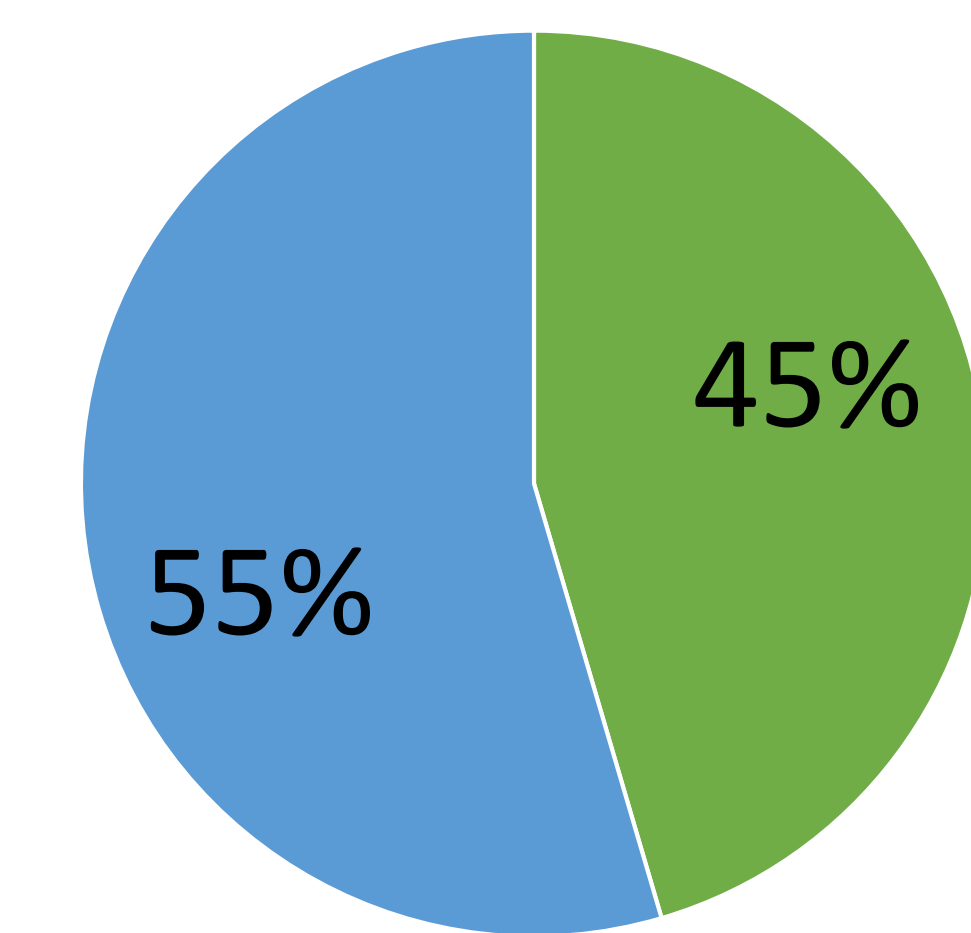
Results

Among the 121 patients who met inclusion criteria and had burn mechanism documented, 15 were excluded due to missing information or unclear burn mechanism. Among the 121 patients, 55 (45.5%) screened positive and 66 screened negative. The mean (median) TBSA percentage for the patients screening negative was 4.79 (3.0) and 11.35 (4.5) for the patients who screened positive (P=0.02). 51.8% of females had a positive screening test compared to 40% males (Fisher’s exact P=0.206). Of the patients requiring surgery, 49% of the patients had a positive screening test, compared to only 40% who did not require surgery (Fisher’s exact P = 0.365).

Applicability to Practice

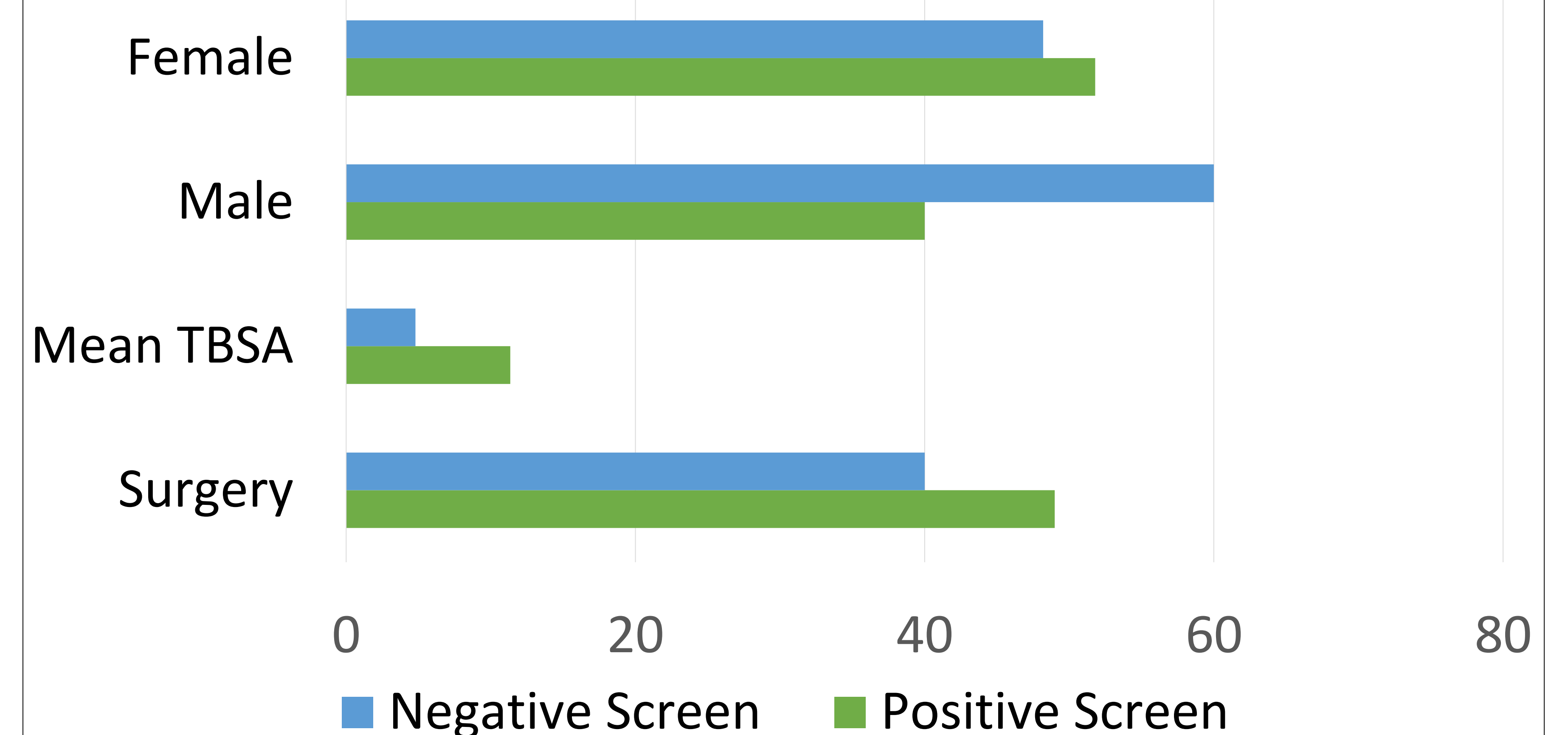
All patients with burns should be screened for PTSD, but particularly those with greater than 11% TBSA. Resources should be given to burn patients at discharge to follow up on the results of their PTSD screening.

Patients with PTSD Screening (n=121)



■ Positive ■ Negative

Positive vs. Negative Screening



Conclusion

In analyzing these survey results it was clear that burn patients with a higher TBSA are significantly more likely to develop PTSD than those with a smaller TBSA, with the mean TBSA for patients developing PTSD being 11.35%. Probable association was found between developing PTSD and female gender. The need for surgery was also correlated with a slight increase in PTSD, though this was not statistically significant. More research is necessary to determine other factors in burn patients that may be associated with PTSD.