

# Sex Specific Analysis of the Vulnerable Elders Survey as a Predictor of Falls.

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# Sex Specific Analysis of the Vulnerable Elders Survey as a Predictor of Falls

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## BACKGROUND/OBJECTIVE

The Vulnerable Elder Survey (VES-13) is a validated screening tool used to assess health deterioration and functional decline. We set out to determine if VES-13 could serve as a predictor of falls among elder adults, and whether there is a difference in its predictive value between males and females.



## METHODS:

ED patients aged  $\geq 65$  were eligible for the study if they had a mechanical fall risk defined by either falling within the last year, worrying about falling, or feeling unsteady when standing or walking. After enrollment, a VES-13 screening was completed. A score of  $\geq 3$  was considered a positive screening score for vulnerability. Participants received a six week follow-up call six weeks later, and were queried about their fall history. Overall and sex specific fall outcomes were compared.

## RESULTS:

One-hundred-twenty-one subjects had six week data for analysis. The mean age of the participants was 74.3 years (standard deviation 7.5). A VES-13 score of  $\geq 3$  was reported in males 38.2% and 37.9% of females. Thirteen subjects (5 female, 8 male) reported at least one fall at phone follow-up. This group included 9.5% and 12.0% of the “vulnerable” males and females, respectively. On the other hand, 17.6% and 4.9% of the “not-vulnerable” males and females fell, respectively. A VES-13 score of  $\geq 3$  had a positive predictive value of 9.5% (CI 95, 0.017-0.237) for males, and 60% (CI 95, 0.175-0.926) for females for a fall. A score of  $< 3$  had a negative predictive value of 82.4% (CI 95, 0.775-0.991) for males and 63.9% (CI 95, 0.605-0.666) for females.



## CONCLUSIONS:

While there were some sex specific differences, subjects who had a VES-13 score of  $\geq 3$  were statistically no more likely to have fallen at 6 weeks than those with a score of  $< 3$ . Alternative screening methods for fall risk must be contemplated.

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