Gender Differences in Emergency Department (ED) Patient Mechanical Fall Risk and Openness to Communication with Providers

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Objective

The CDC reports that among older adults (≥65), falls are the leading cause of injury-related death and rates of fall-related fractures among older women are more than twice those for men. We set out to determine ED patient perceptions (analyzed by gender) about their personal fall risk compared to their actual risk and their comfort level in discussing their fall history or a home safety plan with their healthcare provider.

Methods

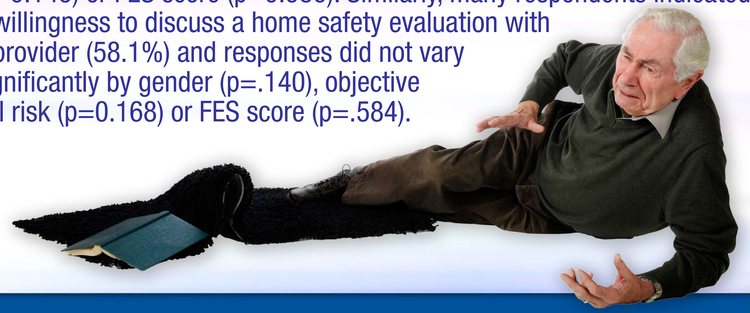
After IRB approval, a convenience sample of ED patients (50 years or older) was surveyed at a suburban Level 1 Trauma center with an annual ED census of approximately 75,000. The survey included demographics, the Falls Efficacy Scale (FES), and questions about fall risk. The FES is a validated survey measuring concern of falling. Analysis included descriptive statistics and assessment of fall risk and fear of falling by gender using chi-square and t-tests as indicated. Significance was set at 0.05.

Results

Of the 150 surveys collected, 149 indicated gender and were included in this analysis. Fifty-five percent of the sample was female (n=82); 45% (n=67) were male. Most (98%) were Caucasian and 22% reported living alone. There was no difference in the mean age of female participants 69.79 years (SD=12.08) versus males 68.06 (SD=10.36; p=0.355). See Table 1 for distribution of reported fall risk factors between genders. Collectively, these variables resulted in a mean risk of falling score of 3.37 (SD=1.62) out of 9. On average, female participants had a significantly higher objective risk of falling than did male participants (3.65 versus 3.02 p=0.018). Similarly, females also reported greater fear of falling than did males (FES score 12.33 versus 9.62; p=0.005).

Significantly more females (41.5%) than males (23.9%, p=0.037) reported having fallen in the past year. Of the 50 participants reporting past-year falls, only 19 (12 female and 7 male, p=0.793) sought treatment.

The correlation between actual fall risk and fear of falling were greater among females (p<0.001) than among males (p=0.005). The majority of patients (76.4%) were willing to speak to a provider about their fall risk. No significant difference was noted in willingness to discuss this topic with a provider based on gender (p=0.619), objective fall risk (p=0.145) or FES score (p=0.986). Similarly, many respondents indicated a willingness to discuss a home safety evaluation with a provider (58.1%) and responses did not vary significantly by gender (p=.140), objective fall risk (p=0.168) or FES score (p=.584).



Distribution of Fall Risk Factors Between Genders

Parameter	Overall N=149 # (%)	Female N=82 # (%)	Male N=67 # (%)	Chi-Square (df=1)	P
Cat or dog in home	63 (42.0)	30 (36.6)	32 (47.8)	1.46	0.226
Stairs in home	111 (74.0)	57 (69.5)	53 (79.1)	1.29	0.255
Blood thinner medication	93 (62.0)	56 (68.3)	36 (53.7)	2.72	0.099
Blood pressure medication	93 (62.0)	56 (68.3)	36 (53.7)	2.72	0.099
Daily pain or anti-anxiety medication	45 (30.0)	31 (37.8)	13 (19.4)	5.15	0.023
Past year fall (any)	50 (33.3)	34 (41.5)	16 (23.9)	4.35	0.050
Past year fall requiring medical treatment (any)	19 (12.7)	12 (14.6)	7 (10.4)	0.27	0.606
Risky alcohol use	7 (4.7)	3 (3.7)	4 (6.0)	0.08	0.784
Use of assistive device	32 (21.3)	23 (28.0)	9 (13.4)	3.84	0.031

Conclusions

In this study, female ED patients reported a greater fear of falling, had a significantly higher objective risk of falling, and had a higher correlation between their perceived risk and actual risk of falling than did males. The majority of both genders were amenable to discussing their fall risk and a home safety evaluation with their provider.