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Perceived Mechanical Fall Risk and Openness to Communication with Providers

Marna R. Greenberg DO, MPH, FACEP
Lehigh Valley Health Network, marna.greenberg@lvhn.org

Michael Nguyen MD
Lehigh Valley Health Network, Michael_C.Nguyen@lvhn.org

Brian Stello MD
Lehigh Valley Health Network, Brian.Stello@lvhn.org

Robert D. Barraco MD
Lehigh Valley Health Network, robert_d.barraco@lvhn.org

Arnold R. Goldberg MD
Lehigh Valley Health Network, Arnold_R.Goldberg@lvhn.org

See next page for additional authors

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Authors
Marna R. Greenberg DO, MPH, FACEP; Michael Nguyen MD; Brian Stello MD; Robert D. Barraco MD; Arnold R. Goldberg MD; Colin L. Donnelly DO; Benjamin R. Preiss DO; Bernadette Gl-Porter BS; Anita Kurt PhD, RN; and Bryan G. Kane MD

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Perceived Mechanical Fall Risk and Openness to Communication with Providers

Marna Rayl Greenberg, DO, MPH, Michael C. Nguyen, MD, Brian Stello, MD, Robert D. Barraco, MD, MPH, Arnold Goldberg, MD, Colin L. Donnelly, DO, Benjamin R. Preiss, DO, Bernadette G. Porter, BS , Anita Kurt, PhD, RN, Bryan G. Kane, MD

Lehigh Valley Health Network, Allentown, Pennsylvania

Background:

The CDC reports that among older adults, falls are the leading cause of injury.

Study Objective:

We aimed to determine subjects' perceived fall risk compared to their actual fall risk, and comfort in discussing their fall risk and a having home safety evaluation with a healthcare provider.

Methods:

This prospective study surveyed a convenience sample of subjects (≥50 years old) at three settings: A Level 1 Trauma Center with an ED census of 75,000 per year; a community health expo; and in a family practice setting (FP). The survey included the Falls Efficacy Scale (FES), the Vulnerable Elders Survey (VES) and fall risk questions. The FES and VES are validated surveys measuring fall concern and functional decline. Other variables--environmental living conditions, participant behaviors, and number of falls--were compared to self-perceived fall risk.

Statistical Methods:

Analysis included descriptive statistics, chi-square, random effect logistic regression and t-tests. Significance was set at 0.05.

Table 1. The cross-classification of perceived fall risk with participant demographics, fall risk factors, behaviors and perceived health status.

			Perceived Falls Risk		
Variable	Coding	Overall n=416	Low n=308	High n=108	P-value
Live alone	No	329 (79.1)	256 (83.1)	73 (67.6)	
	Yes	87 (20.9)	52 (16.9)	35 (32.4)	0.001
Have pets	No	255 (61.4)	179 (58.3)	76 (70.4)	
	Yes	160 (38.6)	128 (41.7)	32 (26.6)	0.027
Stairs	No	93 (22.4)	53 (17.3)	40 (37.0)	
	Yes	322 (77.6)	254 (82.7)	68 (63.0)	<0.001
Use Assistive Device	No	358 (87.1)	298 (97.1)	60 (57.7)	
	Yes	53 (12.9)	9 (2.9)	44 (42.3)	<0.001
Falls in Previous Year	0	275 (66.1)	233 (75.6)	42 (38.9)	
	1	64 (15.4)	44 (14.3)	20 (18.5)	
	2+	77 (18.5)	31 (10.1)	46 (42.6)	<0.001
VES	<3	295 (68.8)	264 (89.5)	31 (29.0)	
	3+	129 (31.2)	31 (10.5)	76 (71.0)	<0.001
ETOH Consumption	None	285 (68.8)	191 (62.4)	94 (87.0)	
	At least 1 drink	129 (31.2)	115 (37.6)	14 (13.0)	<0.001
Perceived Health Status	Poor	19 (4.6)	4 (1.3)	15 (13.9)	
	Fair	96 (23.3)	45 (14.8)	51 (47.2)	
	Good	143 (34.7)	115 (37.8)	28 (25.9)	
	Very Good	118 (28.6)	106 (34.9)	12 (11.1)	
	Excellent	36 (8.7)	34 (11.2)	2 (1.9)	<0.001
Survey Administration Location	Emergency Dept.	149 (35.8)	103 (33.4)	46 (42.6)	
	Family Practice	106 (25.5)	91 (29.5)	15 (13.9)	
	Community Expo	161 (38.7)	114 (37.0)	47 (43.5)	0.005

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Disclosure Information:

The authors have no financial conflict of interest to disclose.

Results:

Four-hundred-and-sixteen subjects (38% males, 62% females) with a mean age of 67.6 years were enrolled; 26% perceived themselves (as measured by FES), to be at high risk for falling. See Figure 1 for differences in the perceived high and low risk groups. Regression analysis identified previous year falls (p=0.002), use of assistive device (p<0.001), having at least one ETOH drink per week (p=.043) and poor or fair perceived health status (p<0.001) as having the biggest impact on perceived risk. Expo respondents were more willing than FP patients to discuss falls (84.9% versus 73.1%, p=0.025). The difference was not significant between the expo and ED (84.9% versus 76.9, p=0.11). Expo subjects were more willing than FP patients to have a home safety inspection (68.9% versus 45.9%, p<0.001). The difference was not significant between the expo and ED (68.9% versus 58.5, p=0.09).

Conclusion:

There is a correlation between subjects' perceived and actual fall risk. The majority of subjects are willing to discuss their risk and a home safety evaluation with their provider. Subjects in the ED setting were as willing, or more willing, to have these discussions as in other settings. This suggests a meaningful opportunity for fall risk prevention in the ED.

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