

DO CORRELATES OF FALL-RELATED INJURIES VARY BY BODY MASS INDEX?

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Background

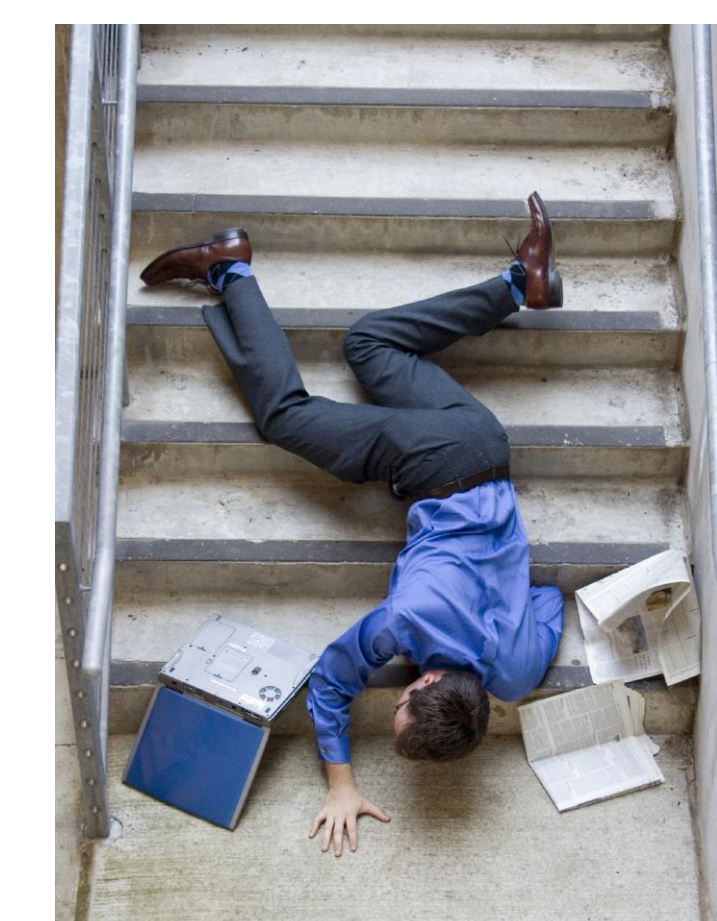
- Socio-demographic correlates of fall-related injuries among aging population are not well understood.
- Even less is known about the role of obesity in the relationship between socio-demographic factors and fall-related injuries.

Method

- Texas BRFSS (2012) data (N=1688) were examined to identify the socio-demographic determinants of fall-related injuries among obese versus non-obese groups.
- The dependent variable was fall-related injuries that limit an individual's regular activities for at least a day or require them to go see a doctor.
- The study sample consisted of 45 years and older.
- Logistic models were developed.

Results

- In Texas, about two-fifth (39.5%) of falls resulted in injuries in 2012.
- Preliminary analyses indicated that sex, employment status, and income are associated with injuries.



Multivariate Logistic Models

Fall Injury	BMI >=30				BMI <30			
	Odds Ratio	P>t	[95% Conf. Intv]		Odds Ratio	P>t	[95% Conf. Intv]	
Black	1.93	0.230	0.66	5.64	0.93	0.867	0.40	2.18
Hispanic	0.48*	0.034	0.24	0.95	0.74	0.419	0.36	1.54
Other	0.06*	0.010	0.01	0.51	2.79	0.137	0.72	10.82
Age	0.99	0.737	0.95	1.04	1.00	0.942	0.97	1.03
Female	2.01*	0.009	1.19	3.40	1.90*	0.004	1.23	2.95
Fall age (60+)	0.57	0.213	0.23	1.38	0.55	0.122	0.26	1.17
Unmarried	0.72	0.272	0.40	1.29	1.09	0.721	0.69	1.72
HS Graduate	1.21	0.658	0.52	2.84	0.65	0.286	0.29	1.44
Some College	1.60	0.330	0.62	4.13	0.80	0.559	0.39	1.67
College Graduate	1.45	0.460	0.54	3.88	0.85	0.665	0.40	1.79
Unemployed	1.52	0.179	0.82	2.82	1.55	0.111	0.90	2.68
Income \$25K - < \$75K	0.44*	0.014	0.22	0.85	1.15	0.615	0.66	1.99
Income \$75K+	0.30*	0.010	0.12	0.75	0.73	0.318	0.39	1.36
Cons	1.35	0.821	0.10	17.91	0.60	0.565	0.10	3.46

*Significant

Results..

Among those with BMI > 30:

- Hispanics and individuals classified as "Others" race category were less likely to report injuries compared to Whites [OR = 0.48, 95 % CI (0.24 - 0.94); and 0.06 (0.01 - 0.5)] respectively.
- Women were more than twice likely to report injuries compared to men (OR=2.01, 95% CI, 1.19 – 3.39), and,
- Individuals with income more than \$25,000 were less likely to report injuries compared to those with income less than 25k.

Among individuals with BMI < 30:

- Only sex was the significant predictor of injuries where women were nearly twice more likely to report injuries compared to men.

Conclusion

- Correlates of fall-related injuries differ by the BMI status.
- Interventions aimed at preventing fall-related injuries among obese individuals may consider race / ethnicity, gender and income status, while injury prevention interventions aimed at non-obese individuals should consider gender differences.

