

Assessing the Association of Various Characteristics with Multimorbidity Status Among Adults with Self-Reported Opioid Use in the United States

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Pharmacy

EPH144

Background

- The proportion of Americans with multimorbidity aged >65 years is 81% and among those aged 45-65 years is 50%.¹
- One-third of elderly patients with multimorbidity take analgesics regularly or as needed.² Opioid use in those with multimorbidity rose from 22% to 30% from 2000-2010 in Americans aged <65 years.³
- This study aimed to assess the association of various characteristics with multimorbidity status among older adults with self-reported opioid use in the United States (US).

Methods

- This retrospective cross-sectional study used Medical Expenditure Panel Survey (MEPS) data and included individuals who were alive in 2019, aged ≥50 years, and self-reported pain in the past four weeks.
- Differences between multimorbidity status (≥2 chronic conditions versus <2 chronic conditions) were compared using chi squared tests.
- Multivariable logistic regressions models, weighted to produce nationally representative estimates, were used to determine variables significantly associated with multimorbidity status.

Figure 1. Selection Flowchart

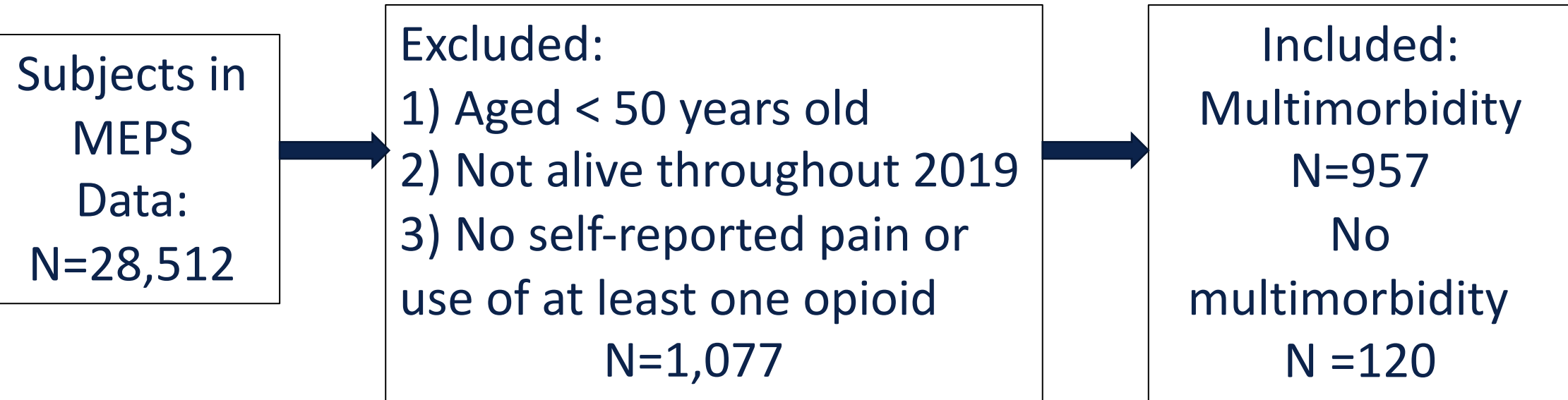


Table 1. Select characteristics of study participants

Variables	Multimorbidity	No Multimorbidity	P-value
	Weighted N=10,671,315	Weighted N=1,438,387	
	Weighted % (95% CI)	Weighted % (95% CI)	
Demographic Characteristics			
Age ≥65 years	54.5 (50.7, 58.3)	33.1 (23.8, 42.5)	<.0001
Age 50-64	45.5 (41.7, 49.3)	66.9 (57.5, 76.2)	
Hispanic	6.6 (4.6, 8.6)	12.4 (6.3, 18.5)	0.0314
Non-Hispanic	93.4 (91.4, 95.4)	87.6 (81.5, 93.7)	
Health Status Characteristics			
Physical limitations	69.6 (65.8, 73.3)	58.2 (47.5, 69.0)	0.0354
No physical limitations	30.4 (26.7, 34.2)	41.8 (31.0, 52.5)	
Excellent, very good, or good perceived physical health	59.0 (55.5, 62.5)	74.1 (64.5, 83.6)	0.0073
Fair or poor perceived physical health	41.0 (37.5, 44.5)	25.9 (16.4, 35.5)	
Active	35.8 (31.7, 39.9)	53.2 (42.2, 64.2)	0.0033
Non-Active	64.2 (60.1, 68.3)	46.8 (35.8, 57.8)	
Economic Characteristics			
Unemployed	71.5 (68.1, 74.8)	48.4 (37.8, 59.1)	<0.0001
Employment	28.5 (25.2, 31.9)	51.6 (40.9, 62.2)	

Table 2. Characteristics associated with multimorbidity in adjusted logistic regression

Variables	Adjusted Odds Ratio (95% CI)
Demographic Characteristics	
Age ≥65 vs. 50-64	0.472 (0.292, 0.763)
Hispanic vs. non-Hispanic	0.460 (0.228, 0.929)
Health Status Characteristics	
Exercise yes vs. no	0.552 (0.327, 0.932)
Economic Characteristics	
Employed vs. unemployed	0.516 (0.292, 0.913)

*Only statistically significant characteristics were reported in this table

Conclusion

- This study indicated that age, ethnicity, employment status, and exercise status were associated with lower odds of having multimorbidity among older US adults with pain and opioid use.
- Further research is needed to understand the clinical implications of these factors.

References

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