

# Relationship between self-reported mental health and characteristics of United States (US) adults (age ≥50 years) with pain and documented opioid treatment

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## BACKGROUND

- Studies have shown associations between pain and mental health status among patients with opioid use.<sup>1-3</sup>
- However, the individual characteristics associated with mental health status among older adults with pain and documented opioid use is poorly understood.

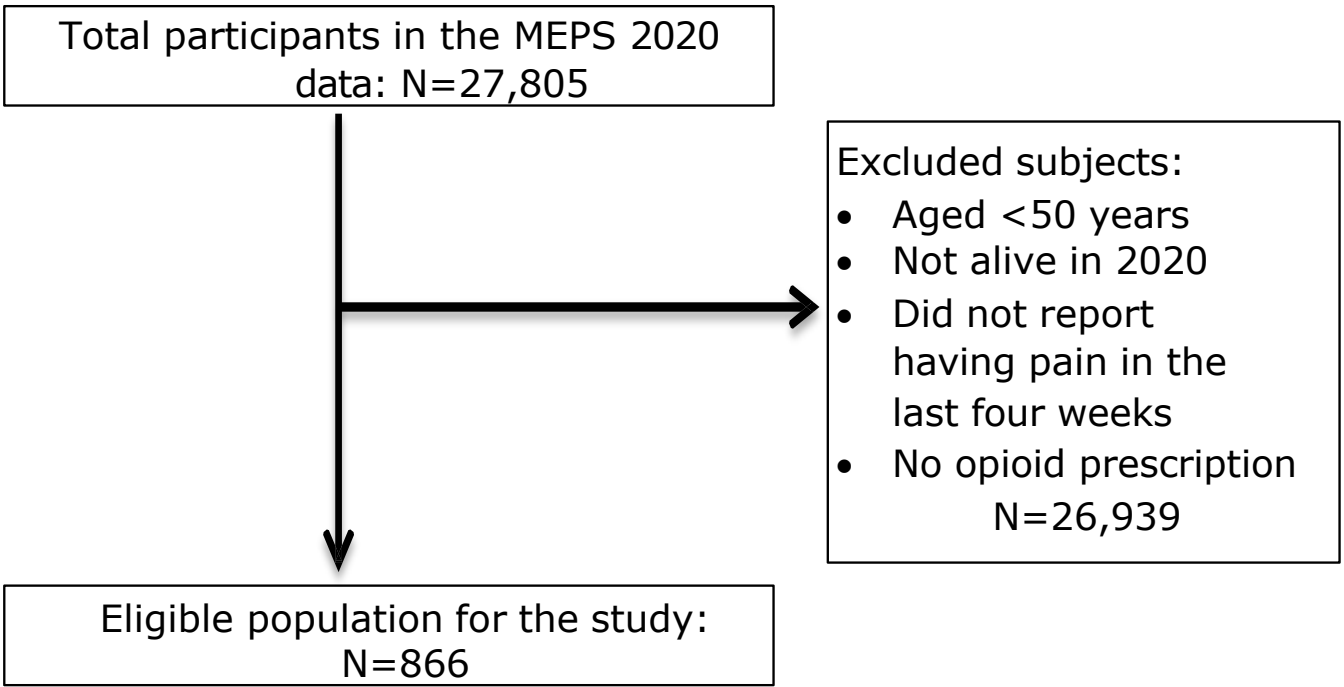
## OBJECTIVE

- To assess the predictors mental health status among older United States (US) adults (≥50 years of age) with pain and documented opioid use.

## METHODS

- Analysis population was derived from the 2020 Medical Expenditure Panel Survey (MEPS) data.
- A multivariable logistic regression model was developed to assess the association between variables and mental health status in the eligible population.
- A weighting variable was used to derive nationally representative estimates. Analyses were done using the SAS University Edition (SAS institute Inc., Cary, NC, USA)

## FIGURE 1. Study Subject Eligibility Flowchart



**TABLE 1. Select Characteristics of US Older Adults with Pain who use Opioids**

Variables	Good Mental Health (Weighted N=8,482,566)	Poor Mental Health (Weighted N=2,119,480)	p
	Weighted % (95% CI)	Weighted % (95% CI)	
Age ≥65 years	45.8 (40.7, 50.8)	52.4 (42.6, 62.1)	0.2327
Female	61.3 (57.0, 65.6)	57.5 (47.8, 67.3)	0.4830
Non-Hispanic	94.2 (92.1, 96.4)	92.5 (88.0, 96.9)	0.4259
White	82.6 (79.2, 86.0)	80.9 (73.9, 88.0)	0.6719
>high school education	54.0 (50.1, 57.9)	42.8 (32.4, 53.3)	0.0454
Unemployed	67.1 (62.6, 71.5)	90.6 (85.3, 95.8)	<0.0001
Married	52.1 (47.6, 56.6)	42.1 (32.3, 52.0)	0.0819
Middle/high income	66.8 (62.4, 71.3)	46.5 (36.5, 56.6)	0.0002
Uninsured	0.3 (0.0, 0.7)	0.6 (0.0, 1.7)	0.0044
Little/moderate pain	61.4 (57.1, 65.7)	26.3 (17.4, 35.2)	<0.0001
≥2 chronic conditions	87.6 (84.5, 90.6)	94.8 (89.5, 100.0)	0.0878
Good perceived health	71.4 (67.0, 75.8)	15.4 (8.9, 21.9)	<0.0001
No activity limitation	33.9 (29.3, 38.5)	8.6 (3.7, 13.5)	<0.0001
No exercise	60.1 (55.4, 64.8)	81.0 (73.9, 88.0)	<0.0001
Non-smoker	87.1 (84.3, 89.9)	76.1 (67.2, 83.0)	0.0014
Normal body mass index	25.1 (20.6, 29.5)	19.7 (12.2, 27.3)	0.2464
West census region	18.1 (14.3, 21.9)	14.8 (8.7, 20.8)	0.8325

**TABLE 2. Variables Associated with Good Mental Health Status in Adjusted Logistic Regression**

Variables	Adjusted Odds Ratio (95% CI)
Age 50-64 vs. ≥65 years	0.897 (0.537, 1.499)
Male vs. female	0.809 (0.473, 1.384)
White vs. other race	0.543 (0.285, 1.035)
Hispanic vs. non-Hispanic	1.152 (0.473, 2.803)
Married vs. other marital status	1.511 (0.865, 2.639)
≤High school vs. ≥high school education	1.101 (0.670, 1.808)
Employed vs. unemployed	<b>2.673 (1.184, 6.037)</b>
Low income vs. middle/high income	0.660 (0.383, 1.136)
Private insurance vs. uninsured	1.583 (0.226, 11.066)
Public insurance vs. uninsured	1.985 (0.312, 12.648)
Northeast vs. West census region	0.471 (0.196, 1.134)
Midwest vs. West census region	0.803 (0.354, 1.819)
South vs. West census region	0.961 (0.431, 2.144)
<2 vs. ≥2 chronic conditions	0.707 (0.211, 2.371)
Good vs. poor perceived health	<b>11.180 (6.885, 18.155)</b>
Exercise yes vs. no	1.373 (0.777, 2.426)
Smoker yes vs. no	0.809 (0.434, 1.505)
Overweight/obese vs. normal weight	0.657 (0.361, 1.196)
Any limitation yes vs. no	0.594 (0.261, 1.354)
Little/moderate vs. quite/extreme pain	1.678 (0.955, 2.947)

## CONCLUSION

- Perceived physical health and employment status were associated with good mental health among older US adults with pain and documented opioid treatment, which should be considered when formulating approaches to better manage mental health among this population.

## REFERENCES

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