

BACKGROUND

- Arthritis is a common chronic illness and a major cause of disability, especially in older adults in the United States (U.S.)^{1,2}
- Approximately 53.2 million (21.2%) U.S. adults aged ≥18 years had been diagnosed with arthritis³.
- Nearly one-half of adults with arthritis (48.3%; 25.7 million) were aged ≥65 years.
- Studies show that racial and ethnic minorities with arthritis use healthcare services less often than non-Hispanic White (NHW) patients and encounter more barriers to these care⁴
- These variations in access and medications across racial/ethnic groups may lead to more unmet healthcare needs, lower quality of life, and higher healthcare expenses across these minorities⁴.

OBJECTIVE

- This study aimed to examine racial/ethnic disparities associated with health-related quality of life (HRQoL) among older adults with arthritis.

METHODS

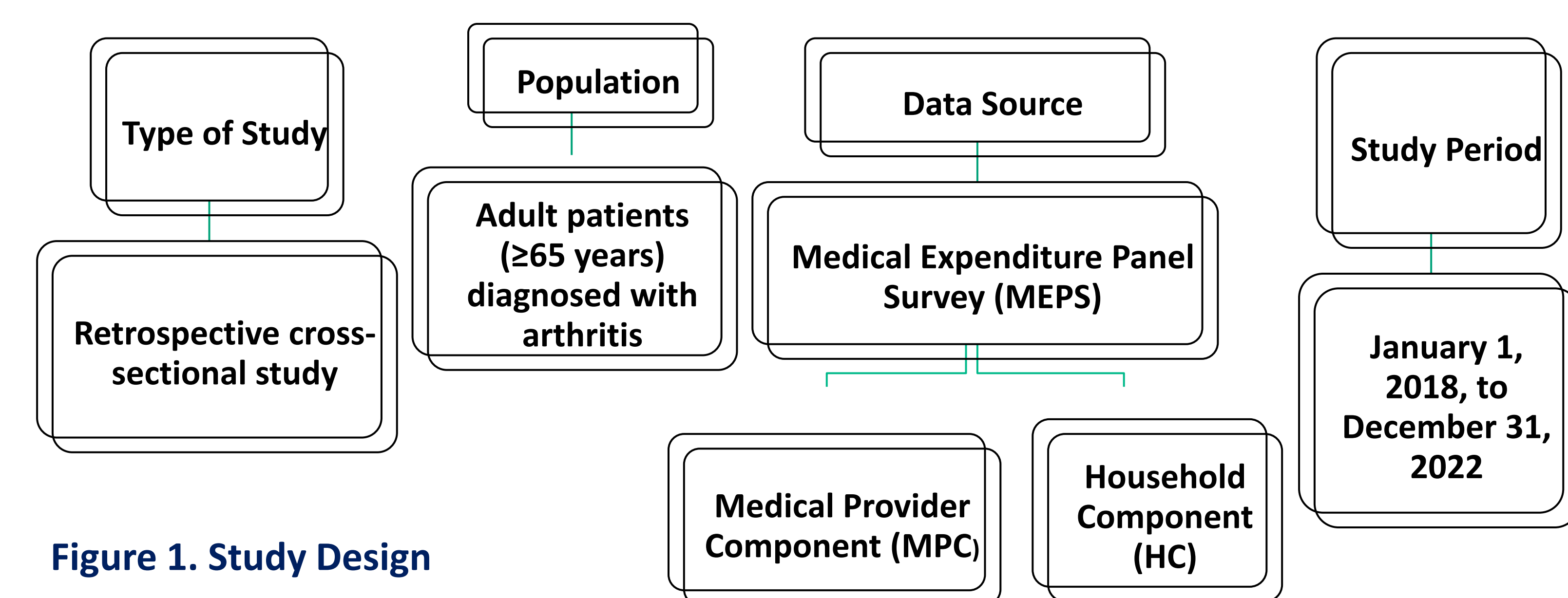


Figure 1. Study Design

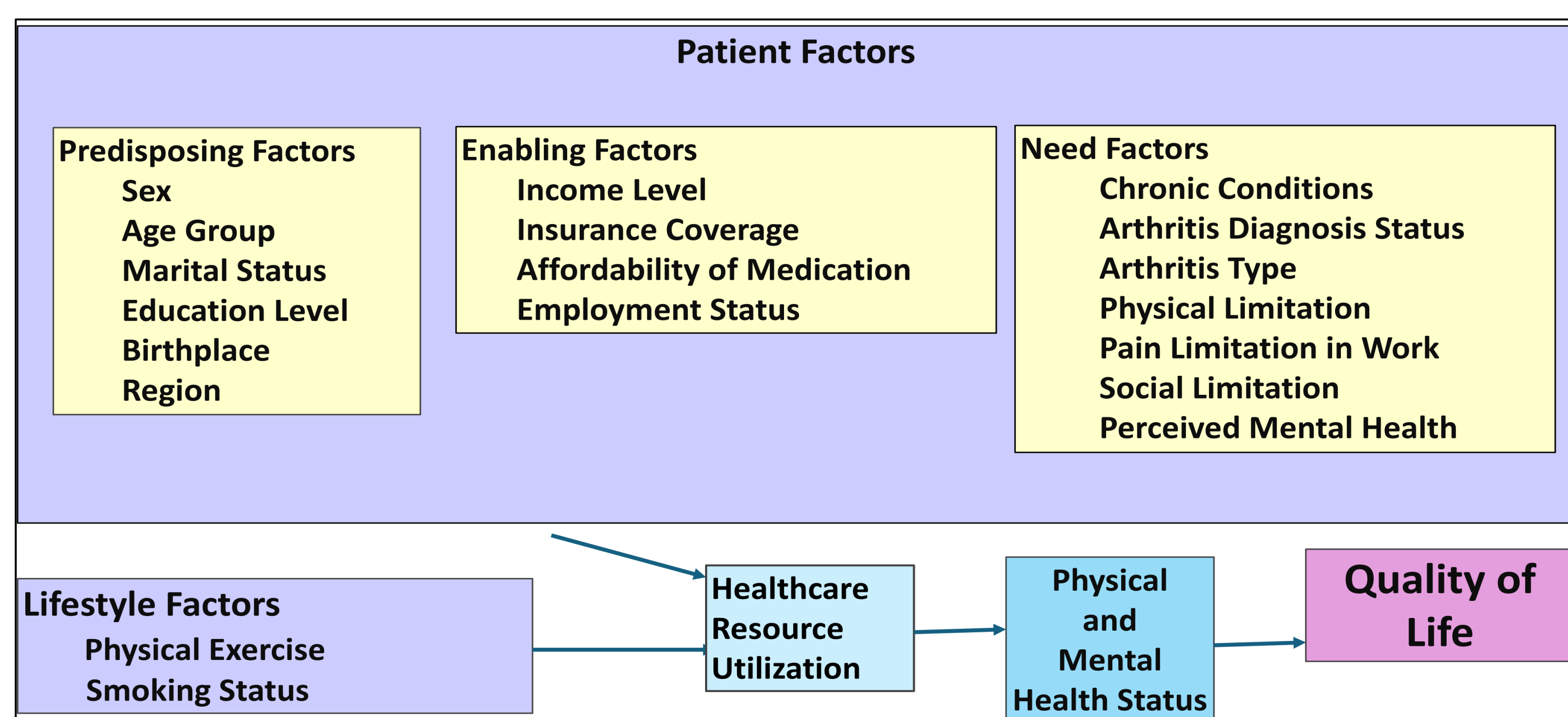


Figure 2. Proposed Conceptual Framework based on the Andersen Behavioral Model

Statistical Analysis

- In the Medical Expenditure Panel Survey (MEPS), health-related quality of life (HRQoL) was measured using a single-item scale that asked regarding their respective physical and mental health status, each on a 5-point scale (1=excellent, 2=very good, 3=good, 4=fair, and 5=poor)
- Scores were reverse-coded to represent higher to mean better physical and mental health status
- We used weighted descriptive analysis to compare patient characteristics across non-Hispanic whites (NHWs), non-Hispanic Blacks (NHBs), and Hispanics
- We used unadjusted analysis to compare the mean scores across the three groups.
- We then used multivariate Linear regression, adjusted for covariates, to evaluate racial/ethnic disparities in HRQoL.
- All analyses were performed using SAS V9.4.

RESULTS

Table 1: Patient Characteristics by Racial/Ethnic Groups

Variables	Total N (%) 15345 (100)	Hispanic N(%) 1598 (10.41)	Non-Hispanic Black N(%) 2252 (14.68)	Non-Hispanic White N (%) 11495 (74.91)	P value
Sex					
Male	5735 (39.20)	480 (30.04)	757 (33.61)	4498 (39.13)	0.0008*
Female	9610 (60.80)	1118 (69.69)	1495 (66.39)	6997 (60.87)	
Age					
65-74 years	8449 (54.93)	916 (57.32)	1333 (59.19)	6200 (53.94)	0.005*
75 and above	6896 (45.07)	682 (42.68)	919 (40.81)	5295 (46.06)	
Marital Status					
Never Married	945 (5.09)	83 (5.19)	282 (12.52)	580 (5.05)	<.0001*
Widowed/Divorced/Separated	6798 (41.01)	746 (46.68)	1211 (53.77)	4841 (42.11)	
Married	7228 (53.90)	705 (44.12)	694 (30.82)	5829 (50.71)	
Insurance status					
Public only	85488 (51.43)	1282 (80.23)	1522 (67.58)	5744 (49.97)	<.0001*
Private only	6772 (48.45)	298 (18.65)	729 (32.37)	5745 (49.97)	
Uninsured	25 (0.13)	18 (1.13)	1 (0.04)	6 (0.05)	
Elixhauser comorbidity					
None	1238 (9.28)	97 (6.07)	120 (5.33)	1021 (8.88)	0.0795
One Comorbidity	3036 (20.44)	271 (16.96)	458 (20.34)	2307 (20.07)	
Two Comorbidities	3112 (20.81)	314 (19.65)	444 (19.72)	2354 (20.48)	
Three comorbidities	2901 (18.91)	370 (23.15)	459 (20.38)	2072 (18.03)	
Four Comorbidities	2058 (13.27)	206 (12.89)	288 (12.79)	1564 (13.61)	
Five or More Comorbidities	2845 (17.29)	308 (19.27)	465 (20.65)	2072 (18.03)	

*= p values denote statistical significance at 95% CI (calculated using chi-square).

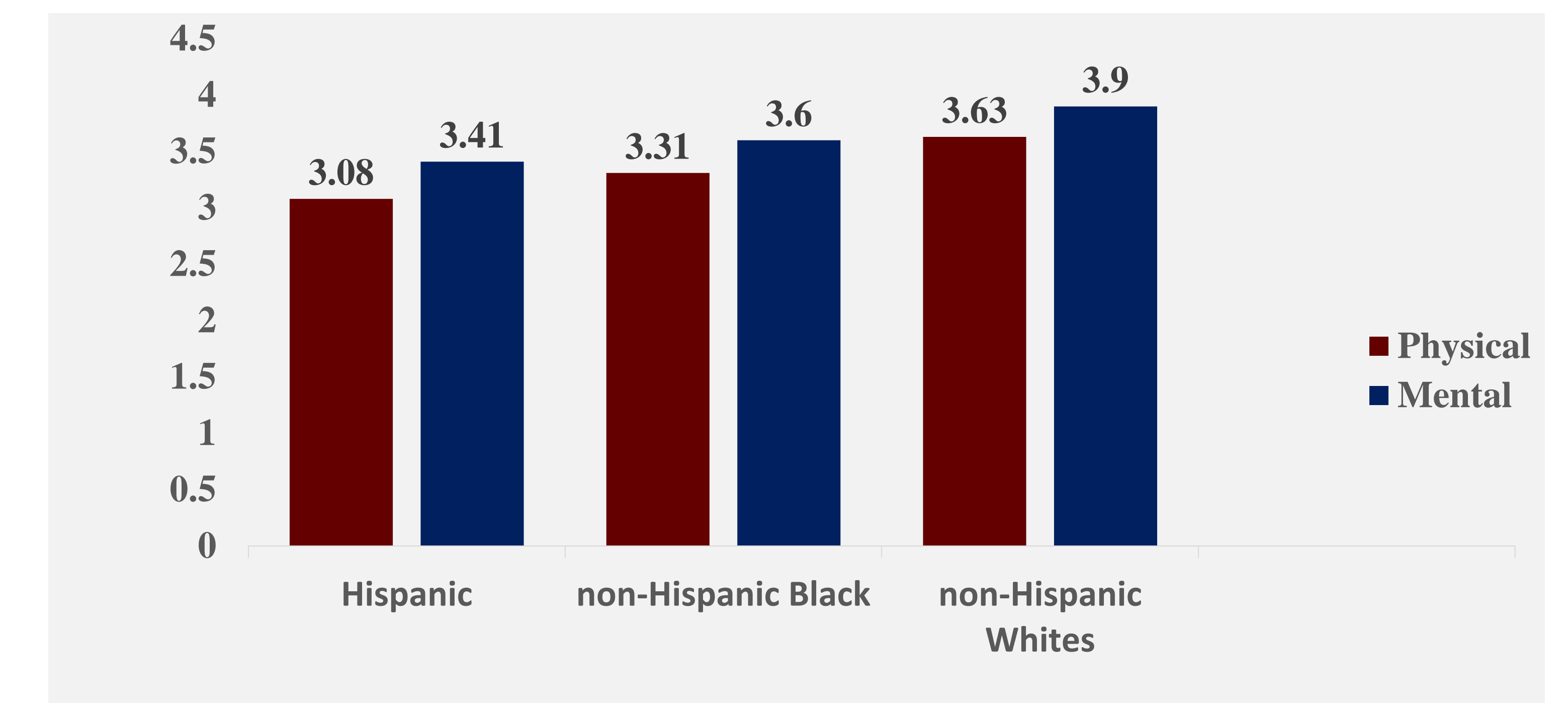


Figure 3: Unadjusted Mean Physical and Mental Health Scores in Older Adults by Racial/ Ethnic Group.

Table 2. Multivariate Analysis of Physical and Mental Health Scores by Racial/Ethnic Groups

Race/Ethnicity	Physical Health Estimate	P-Value	Mental Health Estimate	P-Value
NHW	Reference			
Hispanic	-0.31	<.0001*	-0.28	<.0001*
NHB	-0.20	<.0001*	-0.06	0.3025

NHW= Non-Hispanic Whites, NHB= Non-Hispanic Blacks

*= p values denote statistical significance at 95% CI (calculated using chi-square).

CONCLUSIONS

- The study highlights significant racial and ethnic disparities in physical and mental health among older adults with arthritis, with NHWs having the highest scores and Hispanics the lowest for both physical and mental health status after adjusting for covariates.
- Equitable access to pain medications and prescriptions may help improve the physical and mental health status of patients in these minority groups, thereby improving their quality of life.

REFERENCES

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