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## Introduction

- Allostatic load (AL), as an assessment of the body's physiological response to stress, both chronic and acute.
- Frequency of migraine changes across a woman's lifetime with the most attacks seen:
  - Early follicular or late luteal phase of a menstrual cycle
  - First trimester of pregnancy
  - During the perimenopausal period

## Public Health Significance

- To examine the influence of predictors of higher allostatic load in perimenopausal migraineurs
- To identify potential modifiable risk factors that could reduce the burden of the disease for women going through menopause

## Materials

- Data from the Study of Women's Health Across the Nation (SWAN)
- A multisite prospective study of women's health through menopausal transition
- Baseline assessment 1996/1997 10 waves of subsequent annual assessment
- Used 2,881 women from the first wave.
- Population size for analysis 2428

## Methodology

### Allostatic Load

It is an assessment of our body's physiological response to stress both chronic and acute.

It is presented as a score from 0-12.

It is commonly described as a measure of the 'wear and tear' go through in the face of stressors

Higher score means less optimum health

- Descriptive Analysis comparing migraineurs to controls
- An ordinal logistic regression was fit to assess the effect of migraine on AL score

## Conclusion

- Migraineurs have higher AL Score compared to non migraineurs
- Menopausal status, income, BMI and sleep disturbances are all associated with high AL score.

## Disclosures

The authors have no conflict of interest to disclose

## Results/Tables

### Baseline Characteristics of Patients

Characteristics	Migraineur N = 403	Control N = 2,025	p -Value
Age (mean ± SD years)	46.9 ± 2.81	46.9 ± 2.71	0.59
Race (n, %)			0.01
Caucasian	224 (55.5%)	931 (45.98)	
Black	103 (25.6%)	528 (26.1%)	
Hispanic	32 (7.94%)	149 (7.36)	
Asian (Japanese/Chinese)	44 (10.9%)	471 (20.59)	
BMI (n, %)			<0.09
Normal	127 (34.4%)	685 (39.48%)	
Overweight	109 (29.5%)	459 (26.46%)	
Obese	128 (34.9%)	566 (32.62%)	
Underweight	5 (1.36%)	25 (1.44%)	
Income (n, %)			0.42
<\$19,999	45 (12.61%)	171 (10.23%)	
\$20,000-\$49,999	110 (30.81%)	517 (31.1%)	
\$50,000-\$99,999	141 (39.50%)	754 (38.7%)	
\$100,000 or more	61 (17.09%)	362 (18.6%)	
Menopausal status (n, %)			0.04
Premenopausal	77 (23.91%)	444 (27.91%)	
Early perimenopause	231 (71.74%)	1050 (66.00%)	
Late perimenopause	11 (3.42%)	72 (4.53%)	
Postmenopausal	3 (0.93%)	25 (1.57%)	
Sleep problems (mean ± SD)			
Trouble falling asleep	2.4 ± 3.43	1.6 ± 2.75	<0.01
Waking up during sleep	4.1 ± 4.19	3.2 ± 3.87	<0.01
Waking up early	2.5 ± 3.69	1.9 ± 2.92	<0.01

Effect	Ordinal Logistic Regression models with AL on Migraine		
	OR	95% Confidence Limits	
<b>MIG vs CTRL</b>	1.374	1.058	1.784
<b>Asian vs Caucasian</b>	1.718	1.258	2.346
<b>Black vs Caucasian</b>	2.08	1.64	2.638
<b>Hispanic vs Caucasian</b>	2.033	1.323	3.122
<b>overweight vs normal</b>	2.382	1.781	3.186
<b>underweight vs normal</b>	0.851	0.284	2.551
<b>income1 2 vs 1</b>	1.005	0.718	1.406
<b>income1 3 vs 1</b>	0.828	0.587	1.168
<b>income1 4 vs 1</b>	0.863	0.577	1.292
<b>earlyPERI vs PreMEN</b>	1.248	0.988	1.575
<b>latePERI vs PreMEN</b>	1.48	0.913	2.398
<b>postMEN vs PreMEN</b>	2.474	1.162	5.27