Migraine, Migraine Disability, Trauma, and Discrimination in Sexual and Gender Minority Individuals

Nicole Rosendale, MD, Elan L. Guterman, MD, MAS, Juno Obedin-Maliver, MD, MPH, MAS, et al.

Cite as: Neurology® 2022;99:e1549-e1559. doi:10.1212/WNL.0000000000200941

Study Question
What are the migrainous headache frequency, severity, and access to care in sexual and gender minority (SGM) adults, and how does a history of trauma and discrimination affect migraine-associated disability?

What Is Known and What This Paper Adds
Very little is known about migraine in SGM adults. This study’s results show that migrainous headache is common, with most reporting moderate to severe headaches. Only a quarter of participants had used preventive medications, and a third of those seeking neurologic care experienced barriers to access. We also found that the association between moderate-severe migraine disability and prior trauma/discrimination lost significance after adjusting for depression, anxiety, or posttraumatic stress disorder (PTSD).

Methods
We performed a cross-sectional study of SGM adults in The Population Research in Identity and Disparities for Equality Study cohort. We developed a 68-question survey using validated measures for screening migrainous headache (ID-Migraine) and assessing disability (MIDAS). We assessed experiences of trauma (physical assault, intimate partner violence, and sexual assault) and discrimination (harassment in public or by police, unfair treatment in employment, housing, education, health care, or accessing services). The primary outcome was moderate-severe migraine disability (vs none-mild), defined as MIDAS ≥11. We compared frequency, severity, and care access in those with migrainous headache with those with nonmigrainous headache. We performed a logistic regression model to examine the association between moderate-severe disability and trauma/discrimination, controlling for (1) age, sex assigned at birth, gender identity, race and ethnicity, education, gender-affirming hormones, depression, anxiety, and post-traumatic stress disorder.

Results and Study Limitations
In total, 3,325 people completed the survey: 2,142 (64.4%) had a history of headache and 1,126 (33.9%) screened positive for migrainous headache. Most respondents with migrainous headache (93.7%, n = 1,055) reported a history of trauma and/or discrimination. A history of both trauma and discrimination was associated with moderate-severe migraine disability (Table), even after adjusting for sociodemographic and clinical factors. Significance was lost after adjusting for psychiatric comorbidities. Limitations of the study include the potential for misclassification with the use of ID-Migraine for screening and the limited generalizability due to nonrepresentative demographics of the sample (>80% White and >60% college degree or above).

Study Funding and Competing Interests
This study was partially funded through a Patient-Centered Outcomes Research Institute (pcori.org; PPRN-1501-26,848) to MRL. The authors reported no competing interests. Go to Neurology.org/N for full disclosures.
Migraine, Migraine Disability, Trauma, and Discrimination in Sexual and Gender Minority Individuals
Nicole Rosendale, Elan L. Guterman, Juno Obedin-Maliver, et al.
*Neurology* 2022;99:e1549-e1559 Published Online before print July 11, 2022
DOI 10.1212/WNL.0000000000200941

| Updated Information & Services | including high resolution figures, can be found at: [http://n.neurology.org/content/99/14/e1549.full](http://n.neurology.org/content/99/14/e1549.full) |
|-------------------------------|--------------------------------------------------------------------------------------------------|
| References                    | This article cites 47 articles, 6 of which you can access for free at: [http://n.neurology.org/content/99/14/e1549.full#ref-list-1](http://n.neurology.org/content/99/14/e1549.full#ref-list-1) |
| Citations                     | This article has been cited by 2 HighWire-hosted articles: [http://n.neurology.org/content/99/14/e1549.full##otherarticles](http://n.neurology.org/content/99/14/e1549.full##otherarticles) |
| Subspecialty Collections      | This article, along with others on similar topics, appears in the following collection(s):  
All Diversity, Equity and Inclusion (DEI)  
[http://n.neurology.org/cgi/collection/all_equity_diversity_and_inclusion](http://n.neurology.org/cgi/collection/all_equity_diversity_and_inclusion)  
Bias, prejudice, discrimination  
[http://n.neurology.org/cgi/collection/bias_prejudice_discrimination](http://n.neurology.org/cgi/collection/bias_prejudice_discrimination)  
LGBTQI  
[http://n.neurology.org/cgi/collection/lgbtqi](http://n.neurology.org/cgi/collection/lgbtqi)  
Migraine  
[http://n.neurology.org/cgi/collection/migraine](http://n.neurology.org/cgi/collection/migraine) |
| Permissions & Licensing       | Information about reproducing this article in parts (figures,tables) or in its entirety can be found online at:  
[http://www.neurology.org/about/about_the_journal#permissions](http://www.neurology.org/about/about_the_journal#permissions) |
| Reprints                      | Information about ordering reprints can be found online:  
[http://n.neurology.org/subscribers/advertise](http://n.neurology.org/subscribers/advertise) |