Migraine headache among underserved African American older adults

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Background

Migraine headache is a common chronic condition that ranks among one of the top ten causes of disability worldwide. Among underrepresented individuals, it remains underdiagnosed and associated with worse outcomes. Little data exist on migraine among underserved minorities, with literature primarily focused on White adults. This study examines correlates of migraine among a sample of underserved urban African American older adults.

Methodology

Our sample included 740 older African American adults from senior centers, senior housing centers, faith-based organizations, and apartment complexes in South Los Angeles aged 55 years or older, recruited through convenience and snowball sampling. All participants provided signed informed consent. CDU’s IRB approved study protocol. In addition to demographic variables, our survey included validated instruments, such as:

- Short-Form McGill Pain Questionnaire
- Geriatric Depression Scale
- Self-rated Health Status
- Health-Related Quality of Life Survey

Migraine headache incidence was based on self-reported data. Participants were asked “Have you ever been diagnosed with migraine by a health care provider?” Responses were yes or no.

Results & Discussion

Of the African American older adults (55 years and older) who participated in this study, 21% of males and 15% of females reported migraine headache. Having migraine was associated with three categories of outcomes:

1. higher level of healthcare utilization measured by i) emergency department admissions and ii) number of medications used
2. lower level of HRQoL and health status measured by i) physical QoL, ii) mental QoL, and iii) lower self-rated health
3. worse physical and mental health outcomes measured by i) higher number of depressive symptoms, ii) higher level of pain, iii) sleep disorder, and iv) level of disability

These findings are consistent with our current knowledge of migraine in underserved patients; lack of physician access, prohibitively, and standard migraine therapy, result in increased ED migraine care. Prescription drug use was higher in migraineurs (8) than non-migraineurs (5), while the number of over-the-counter medications was not significant. We anticipate that this is reflective of over-the-counter medications being primarily used for abortive measures and use may be limited by contraindications (kidney disease, liver disease). Additionally, a migraineur in need of abortive treatment may elect to utilize Emergency Department services, especially if a consistent patient-provider relationship has not been established. While there was scarce literature evaluating migraine’s impact on QoL and health status in older adults specifically, it is well known that migraine causes significant disability resulting in loss of function, absenteeism, healthcare costs, and negative impact on social activities. Strong associations were found with migraine and chronic pain, depression, and anxiety disorders.

Analysis

Controlling for relevant variables (age, gender, education, living arrangement, insurance type, satisfaction with and access to medical care, and number of major chronic conditions), the association between migraine headache and 1. healthcare utilization 2. Health-Related Quality of Life (HRQoL)and self-rated of health 3. physical and mental health outcomes and migraine headache were examined. Data analysis includes bivariate and 12 independent multivariate models.

Conclusion

Migraine headache significantly impacts quality of life, health care utilization, and many health outcomes of underserved African American older adults. Our findings show a much higher prevalence of migraine in African American older adults compared with the NHANES data for the same age group. Studies have found migraine to be severe, frequent, and more likely to be undertreated in African American patients. Management of migraine among this group requires multi-faceted interventions and coordinated efforts with EM clinicians, primary care clinicians, and neurologists/neurology PAs when referral is necessary. By providing accurate diagnoses, addressing comorbidities, especially identifying social determinants of health that may worsen migraine, and providing appropriate treatment, PAs are well poised to address the current gaps that may result in migraineurs seeking treatment in overcrowded EDs and to reduce race-related disparities associated with migraine identification and treatment in African American patients.