The Impact of Health Disparities on People Living with Migraine: Socioeconomic Status and Education

Social determinants of health have an important influence on health disparities that exist within our communities[1]

- The conditions in which we are born, grow, learn, work, live, and age have wide-ranging impacts on individuals' health, functioning, and quality-of-life outcomes and risks[1]
- Health disparities are differences in health that are closely linked with social, economic, and/or environmental disadvantage, discrimination, or exclusion[2]
- In the United States, people with migraine may face inequities in disease burden and barriers to healthcare based on socioeconomic status & education level, among other factors[2–4]

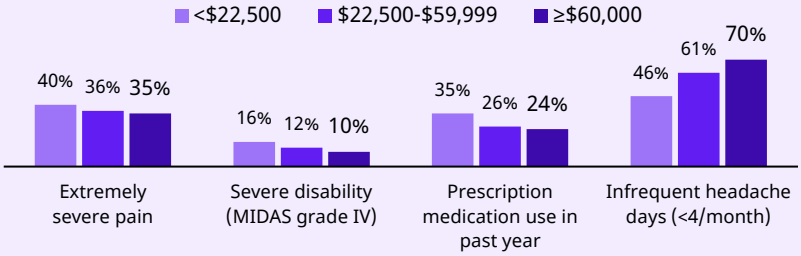
SOCIOECONOMIC STATUS:

People with lower socioeconomic status experience higher migraine frequency and burden than higher income groups[5–7]

Compared with higher income groups, those with an annual household income of <$22,500 in a large national survey were:[a,5]

- More likely to have extremely severe pain
- More likely to have severe migraine-associated disability
- More likely to have used prescription medications in the past year
- Less likely to have infrequent headache days (<4 days/month)

Migraine burden by annual income (patients, %)[5]



In the same survey,[a] people with high-frequency episodic migraine were **23% less likely to be employed** and **19% less likely to have an annual household income of ≥$60,000** compared with those with low or moderate-frequency episodic migraine[7]

EDUCATION

Low education level may have a negative impact on migraine outcomes, including increased risk of developing MOH[7,8]

▼ 24%

In a large US national study, people with **HFEM** were less likely to have a **4-year degree or higher** vs those with lower frequency episodic migraine[a,7]

4.9 vs **2.7** days

In a smaller observational study, **low education level** was associated with higher monthly **migraine attack frequency** vs high education level[b,8]

▼ -2.3 years

In the same observational study, patients with **MOH** were more likely to have a **shorter duration of education** compared with migraine alone[b,8]

Patient education initiatives and tools may help to improve migraine outcomes, including headache frequency, acute medication use, disability, and healthcare resource utilization, but evidence is limited[9–11]

Multifaceted action is needed to address health disparities in the headache field. Mitigation strategies encompass public and HCP education, advocacy, expanded access to health care, cultural sensitivity and competency training, addressing health literacy, and increasing representation of underserved groups in clinical research[3]

NOTE: Numerous health disparities affect people with migraine, of which only socioeconomic status and education are highlighted here. This is not intended to be a reflection of the importance of other disparities to affected individuals or groups.

Based on data from: a) the 2005 American Migraine Prevalence and Prevention (AMPP) household survey (N=11,603 respondents who met the criteria for migraine and provided sufficient data)[7]; and **b)** a retrospective observational study of patients with headache from a neurology outpatient clinic (2001–2003, N=107).[8]

Abbreviations: HCP, healthcare professional; HFEM, high-frequency episodic migraine; MIDAS, Migraine Disability Assessment; MOH, medication-overuse headache.

References: 1. Healthy People 2030. Social Determinants of Health. Available at: https://health.gov/healthypeople/ priority-areas/social-determinants-health (accessed August 2024); **2.** Healthy People 2030. Health Equity in Healthy People 2030. Available at: https://health.gov/healthypeople/priority-areas/health-equity-healthy-people-2030 (accessed August 2024); **3.** Kiarashi J, et al. Neurology 2021;97:280–9; **4.** Burch R, et al. Headache 2021;61:60–8; **5.** Stewart WF, et al. Neurology 2013;81:948–55; **6.** Winter AC, et al. Cephalalgia 2012;32:159–70; **7.** Buse DC, et al. Headache 2020;60:2340–56; **8.** Atasoy HT, et al. Headache 2005;45:25–31; **9.** Rothrock JFC, et al. Headache 2006;46:726–31; **10.** Young NP, et al. JMIR Form Res 2023;7:e48372; **11.** Beier D, et al. Cephalalgia. 2022;42:63–72.

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