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Link: <https://www.mdpi.com/2076-3425/11/10/1323> (free download available)

Purpose of the review:

The purpose of this study was to investigate sex differences in the burden of migraine and tension-type headaches, specifically examining how headaches impact different aspects of patients' lives and whether these effects differ between men and women. Such impacts include differences in pain severity, anxiety, depression, and social effects. The researchers aimed to identify factors that may influence the burden of headache disorders, such as headache frequency, intensity, and psychological symptoms. Further, the study aimed to improve understanding of sex-related differences in headache disorders to support more individualized and targeted treatment approaches.

Methods used:

Study design: internet based cross-sectional study

Participants: individuals were recruited between March 2019 and March 2020 through online and print advertisements. They consented and completed an online questionnaire including demographic and headache related information.

Data collection: participants completed the EUROLIGHT questionnaire, a validated survey used to evaluate the burden of primary headache disorders

Variables measured: headache frequency & intensity, impact on social life & daily functioning, healthcare utilization (doctor visits, imaging), and psychological symptoms, measured using the Hospital Anxiety and Depression Scale (HADS)

Statistical analysis: chi-square tests, Mann-Whitney U tests, and binary regression models used to compare differences between men and women and determine factors contributing to headache burden

Key findings:

- Headaches are more common in women than men.
 - Migraine and tension-type headaches occur way more frequently in women, with primary headache disorders affecting a large portion of the adult population
- Women experienced a greater burden of disease from migraines.
 - Specifically, women reported more severe pain, more anxiety and depression symptoms, and greater impact on relationships and social interactions compared to men
 - Women with migraines also had higher scores for anxiety and depression
- Headache frequency was the strongest factor increasing disease burden in women.
 - Women who experienced headaches more frequently reported greater interference with daily life, social relationships, and emotional well-being

Contributing factors to increased burden/frequency of headaches in women compared to men:

- Biological factors: differences in sex hormones, particularly estrogen, may influence the pathophysiology behind headaches, pain perception, and the frequency or severity of attacks
- Social & behavioral factors: women may experience a greater burden because of social roles and responsibilities, such as caregiving or managing family responsibilities, making recurrent headaches more disruptive to daily life
- Healthcare interaction differences: women are more likely to seek medical care, which can influence how the burden of disease is reported

Application to my patient from H&P #3: 55 YOF with PMHx of HTN and HLD who presents with chronic headaches for over a year:

The study found that headache disorders are more common in women and often associated with a

greater disease burden. These findings help support the likelihood that my patient's symptoms may represent a primary headache disorder, such as chronic tension-type headache, which is consistent with her description of bilateral, dull, pressure-like headaches without associated neurological symptoms. Additionally, the article highlights the importance of evaluating headache frequency and psychosocial impact, which are important components of clinical assessment and management of patients presenting with chronic headaches in primary care.