

The Association Between Depression and Headache Characteristics in Adults

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Introduction

Depression and headache disorders are among the leading causes of disability worldwide and frequently coexist. Previous studies suggest a bidirectional relationship between mood disorders and chronic headache conditions, particularly migraine and tension-type headache. However, the impact of depression severity on headache characteristics remains insufficiently explored in adult populations.

Aim

To evaluate the association between depression severity and headache frequency, intensity, and type in adults. **Methods**

- **Design:** Cross-sectional observational study
- **Participants:** 250 adults (18–65 years) recruited from primary care and neurology clinics
- **Assessments:**
 - Beck Depression Inventory-II (BDI-II)
 - Headache Impact Test-6 (HIT-6)
- **Diagnosis:**
 - Depression: DSM-5 criteria
 - Headache type: ICHD-3 classification

Statistical analysis:

Pearson correlation and multiple regression analysis (SPSS v26.0)

Results

- Depression severity showed a **significant positive correlation** with headache intensity and frequency ($r = 0.62, p < 0.01$)
- Individuals with **moderate to severe depression** had a higher prevalence of **migraine** compared to tension-type headache
- Higher depression scores were associated with **increased headache-related disability**, reflected by elevated HIT-6 scores
- Comorbid depression was linked to **reduced response to standard headache treatments**

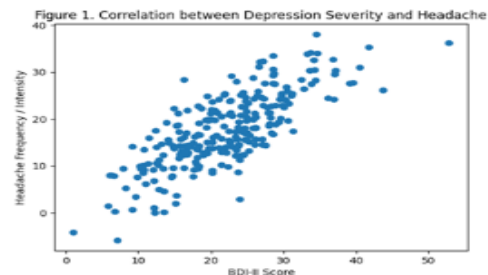


Figure 1. Correlation between BDI-II scores and headache frequency/intensity ($r = 0.62, p < 0.01$) **Figure 2.** Distribution of headache types by depression severity.

