



## Risk of suicide in individuals with headache - preliminary data from a Brazilian cohort

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### Introduction

A meta-analysis demonstrated the increased risk of suicidal ideation and attempts in patients with migraine and neck/back pain, which could be explained by suicidal thoughts and behaviors leading to a modification in the opioid system.

### Objective

To verify the prevalence of suicide risk in patients with headaches. To verify whether there is an association between suicide risk and headache, and an association between suicide risk and the type of headache (episodic or chronic).

### Methods

An analytical and descriptive study from a cohort of live births (1978/79) in Ribeirao Preto/S.P. The variables of interest were the presence and frequency of headaches in the last 3 months. The Brazilian version of the Mini International Neuropsychiatric Interview questionnaire was applied. Suicide risk is determined as low risk (1-5 points), moderate risk (6-9 points) and high risk ( $\geq 10$  points).

### Results

1775 individuals attended this interview, with an average age of  $38.13 \pm 0.579$ , 52.3% of whom were female. Sixty-three percent ( $n=1113$ ) reported having had a headache in the last 3 months, with 16.3% of these having chronic headaches. Suicide risk was observed in 13.52% of individuals in general, with low risk in 66.5%, moderate risk in 5.4%, and high risk in 28% of individuals. Among individuals with headaches, the risk of suicide was observed in 16.3%, with low risk in 63%, moderate risk in 5.5%, and high risk in 31.5% of individuals. The risk of suicide occurred in 13.9% of individuals with episodic headaches and in 28.2% of individuals with chronic headaches. The association between suicide risk and headache [ $X^2(1)= 19.254$ ,  $p < 0.001$ ], and between suicide risk and chronic headache [ $X^2(1)= 22.771$ ,  $p < 0.001$ ] were observed. Considering individuals with headaches and suicide risk, an association was observed between moderate and high suicide risks and chronic headaches [ $X^2(2)= 6.552$ ,  $p < 0.038$ ].

### Conclusion

The prevalence of suicide risk in individuals with headaches and in those with chronic headaches was significantly higher than in the general sample, demonstrating an association between headache, chronic headache, and suicide risk. Among those with headaches and suicide risk, the presence of chronic headaches was associated with moderate and high risk of suicide.