



## Prevalence of pain in other topographies in individuals with headache - preliminary data from a Brazilian cohort

Fabiola Dach, Marcelo de Almeida Pinheiro, Eloisa Bettiol, Viviane Cunha Cardoso, Marco Antônio Barbieri

University of Sao Paulo, Sao Paulo, Sao Paulo, Brazil

### Introduction

Studies show the existence of comorbidity between headaches and other painful conditions. Patients with headaches are twice as likely to report musculoskeletal pain than those without headaches. Another study showed that 83% of headache patients have neck pain, with high frequency and moderate intensity. The factors involved in the comorbidity between painful conditions are obesity, physical inactivity, anxiety, depression, stress, occupational factors, and genetic factors.

### Objective

To verify the prevalence of pain in another topographies (PAT) in individuals with headache, whether there is an association between PAT and the presence/frequency (episodic/chronic) of headache, and to check if there is correlation between the frequencies of headache and PAT.

### Methods

An analytical and descriptive study from a cohort of live births (1978/79) in Ribeirao Preto/SP. The variables of interest were: presence/frequency of headache in the last three months. PAT and the place of greatest pain considering the last three months. The regions were separated: cervical, dorsal, lumbar, upper limbs, lower limbs, abdomen, thorax and pelvis.

### Results

1775 individuals attended this interviewed (average age:38.13±0.579, 52.3% female). Sixty three percent reported headache in the last 3 months (16.3% chronic headaches). Among patients with headaches, 51% had PAT. Among patients with headache and PAT, pain in the cervical region was observed in 12.1%, dorsal region in 8.7%, lumbar region in 37.4%, upper limbs in 8.7%, lower limbs in 24.6%, abdomen in 3.2%, chest in 0.9% and pelvis in 4.4%. There was an association between headache and PAT [ $X^2(1)= 21.743$ ,  $p= 0.001$ ], with the cervical (82.9% versus 17.1%) and dorsal (79% versus 21%) regions being more prevalent among individuals with headache [ $X^2(7)=17.778$ ,  $p=0.013$ ]. There was an association between PAT and chronic headache [ $X^2(1)= 5.079$ ,  $p= 0.024$ ]. There was no correlation between the frequencies of headache and PAT ( $r_s= 0.165$ ,  $p< 0.001$ ).

### Conclusion

In individuals with headaches in the last three months, the prevalence of PAT was 51%. An association was observed between headaches and chronic headaches with PAT. Pain in the cervical and dorsal regions was significantly more prevalent in individuals with headaches. There was no correlation between the frequencies of headache and PAT.