

GENDER DIFFERENCES ON THE HEADACHE-RELATED CLINICAL FEATURES

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Introduction Headache is one of the most common neurological disease with effects on working, social and economical environments of the affected people. Epidemiological studies have demonstrated that a such disease affects around 152 millions of people in Europe, with a man:woman ratio of 1:3 [1]. In Italy, the percentage of adult population affected by any form of headache is 46% [2]. The aim of the study was to investigate on the headache-related clinical differences between men and women.

	Female	Male	All
Chronic migraine	31	7	38
Tension-type headache	20	10	30
Migraine with aura	11	5	16
Migraine without aura	33	10	43
All	95	32	127

Table 1. Contingency table of gender per diagnostic category.

Material and Methods Migraine Disability Assessment Questionnaire (MIDAS) was used to assess disability caused by headache during daily activities [3]. Headache pain intensity was assessed by an 11-point pain scale (0-10, where 0 indicated no headache and 10 severe headache). We enrolled 127 subjects afferent to the Headache Unit of the IRCCS Centro Neurolesi Bonino Pulejo of Messina. The 74.8% of the sample were women, with a mean age of 43.5 ± 16.3 years, whereas the men (25.2%) had a mean age of 45.3 ± 17.6 years. In according to ICHD-II we divided the patients in four diagnostic categories: migraine with aura, migraine without aura, chronic migraine and tension-type headache (Table 1).

Results For all diagnostic categories, we did not find significant differences in clinical characteristics between men and women, as well as concerning the proportion of men and women in any disability degree (mild, moderate, severe). However, we found significant differences concerning the frequency of attacks and the related-migraine disability: in patients with a moderate level of disability, women had significant lower frequency of attacks than men ($p < 0.05$). Moreover, in patients with a low headache frequency (less than 10 days in a trimester), the intensity of the attacks were stronger in women than in men; on the contrary, in patients with a high headache frequency (larger than 30 days in a trimester), men declared higher intensity attacks than women ($p < 0.05$), as showed in Figure 1.

Discussion Although the female preponderance in our sample, the majority of the subjects were severely disables for both genders. We observed a gender-related discrepancy in the pain features, especially for headache frequency and intensity of the attacks. Gender impact on the headache characteristics should be integrated into the diagnostic criteria in support of the therapeutic treatment of the patients.

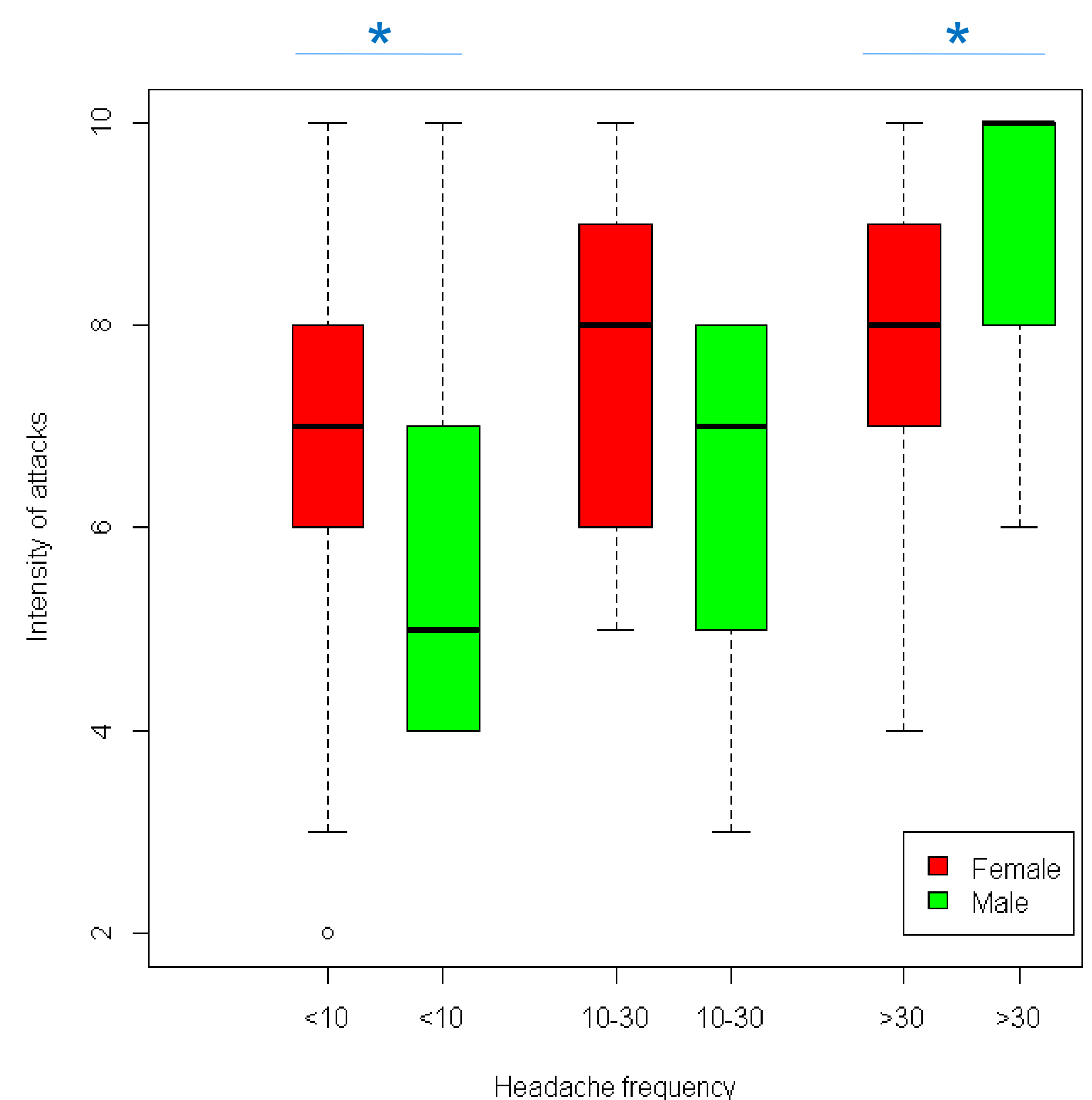


Figure 1. Representation by boxplot of the distributions of intensity of attacks per headache frequency.
* $p < 0.05$ means a significant differences between women and men.

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