Shift work and primary headaches: a population study of the association of workers in the chemical industry

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INTRODUCTION: Today is known that exposure to certain occupational risk factors have a causal relationship with the onset of headache. However in the workplace is more important the exposure to non-causal factors of the disease who prepare and facilitate the emergence of a new attack in patients already suffering from primary headaches.

AIMS AND METHODS: Health surveillance and medical history questionnaires targeted 95 workers, 91 males and 4 females. The work in night shifts interest 50 workers (52.6%), while 45 workers (47.4%) worked in the round of daily work. The shift system was kind of anterograde and always performed on three shifts.

RESULTS: The form of primary headache with a higher prevalence, in both groups, is represented by migraine without aura (51.5% of all workers headache), followed by episodic tension headache (42.5%) and migraine with aura (6%). From the study of only male working population, the research data show an association, statistically significant between the prevalence of primary headache and outreach work night shift. Although numerically appreciable, the difference in prevalence of primary headache in the two groups of workers did not reach statistical significance considering the four female employees. However, because there are females in one group of workers on day shift and in the light of literature data documenting a significantly higher prevalence of migraine in females than males, the exclusion of the four female subjects from our study appears justified in view of the need to ensure maximum homogeneity of the two populations under study.

CONCLUSION: Considering only male workers, the prevalence of primary headache was 42% in shift workers and 22% among others. The study shows a significant association between the conduct of work in night shift and the onset of headache. Is documented in the scientific literature the negative effect that night work has on the subject has shown on various organs and systems of the human organism, and its ability to configure itself as an important etiological factor in undermining the state of mental and physical wellbeing of the worker. A possible negative effect of work at night as headache trigger seizures in people with acute primary headache has already been suggested in previous research. To date, however, are few studies that have shown an association between shift work and an increased risk of headache. The results of our work strengthens the hypothesis that the two events may be an association.



