

Admissive evaluation and the headache diagnosis

Avaliação admissional e o diagnóstico de cefaleias

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ABSTRACT

Objectives: To question and to describe the headache prevalence in a population undergone admissive evaluation.

Methods: 607 individuals were undergone admissive evaluation, whose data were catalogued by the examiner neurologist. The questions "Do you have headache? Does headache interfere in your life quality?" were made to all patients, and the prevalence was compared with the literature.

Results: The sample was composed of individuals from 17 to 66 years old (27.72 on average), in which 98.35% were male. About 5% of the individuals answered YES to both questions, 0.65% answered YES to only the first question, and no female answered YES to both questions. **Conclusions:** The observed headache prevalence is smaller than in other studies of healthy populations. It is possible that the hopeful applicant omit this information during the admissive evaluation by fearing that this information would interfere negatively in their hiring.

Keywords: Headache; Prevalence; Disability; Employment

RESUMO

Objetivos: Questionar e descrever a prevalência de cefaléias em uma população submetida à avaliação admissional.

Métodos: Foram submetidos a uma avaliação admissional 607 indivíduos. Os dados eram catalogados pelo neurologista examinador. A todos os pacientes foi feito o questionamento: "Você tem dor de cabeça? A dor de cabeça interfere na sua qualidade de vida?". A prevalência encontrada foi comparada com a literatura. **Resultados:** A amostra foi composta de indivíduos com idades entre 17 e 66 anos (média: 27,72) sendo 98,35% do sexo masculino. Responderam SIM a ambas as perguntas cerca de 5% dos avaliados. Responderam SIM somente à primeira pergunta 0,65% indivíduos. Nenhuma mulher respondeu "sim" às per-

guntas. **Conclusões:** A prevalência de cefaléia observada é menor que em outros estudos de populações sadias. É possível que o aspirante a um emprego omita esse dado na entrevista de avaliação admissional pelo receio de que a informação tenha interferência negativa em sua contratação.

Palavras-chave: Cefaleia; Prevalência; Incapacidade; Emprego

INTRODUCTION

The employee's health and welfare are essential to a satisfactory productivity in the company where he or she works. Costs generated by unhealthy workers go beyond the direct costs with their health care. In addition, the effective workforce reduction from an enterprise for absenteeism, as well as the decreasing productivity from those who remain at the workplace with any inability, are also included.⁽¹⁻⁴⁾

Clinical admissive evaluations, periodic and dismissal, mandatory for all workers from the formal sector of the economy, consist the health monitoring at work. Admissive evaluation, particularly, infers if the applicant is able, in terms of physical and mental health, to take the applying position. The structure of this evaluation varies according to the applying position, to meet the particularities of each situation.⁽⁵⁾ Admission assessment has proved solidly effective in preventing physical injuries to the worker when properly performed.^(6,7) The headache, however, does not seem to

have its owing heed in the most of admissive evaluations, and its prevention starting from this evaluation is not well established.

Despite the large volume of admissive evaluations that are made daily, information like acquired data validity and data concerned to epidemiological profile of these evaluations has not been described in the current literature. Analysing whether this goal is being achieved satisfactorily is opportune if the objective of the admissive evaluation is, beyond promoting health and security to the worker, perfecting the productivity of the company, because according to Houghton and his contributors, most of the causes of absenteeism related to illness are not foreseen by the tracking of the admissive evaluation.⁽⁸⁾ Headache is an important cause of absenteeism and decrease on the productivity,⁽⁹⁾ and deserves a special heed during the interrogation in this type of evaluation.

The admissive evaluation permits workers, in theory, to be allocated in the positions befittingly to their health, which guarantees its preservation and individual productivity. Environmental situations, including work ones, have a decisive influence on manifestations of multi-symptomatic chronic illnesses, like headache, which influences on their life quality and productivity.⁽¹⁰⁾ Regarding headache, several crisis-triggering factors may be present at the workplace as threatens to those individuals predisposed to this pathology. Among these factors are worth mentioning: sleep deprivation, fatty and irregular feeding habits, exposure to excessive stress, noise and smell, and even postural factors.^(11,12) Raak e Raak⁽¹³⁾ estimated a 25% drop in effectiveness at work in patients with headache. The greatest loss is not in the absenteeism days, but in the reduction of the performance at worktime.⁽¹⁴⁾ Migraine, the headache type that generates more inability at work,^(15,16) has been considered more disabling than chronic diseases such as systemic hypertension, diabetes, back pain, osteoarthritis, and just as disabling as depression.⁽¹⁷⁾

About 12% of world population suffers from migraine.⁽¹⁶⁾ In Brazil, this number must be even higher.⁽¹⁸⁾ Other types of headache, mostly tensional, do not display a well-defined prevalence, since its presentation form, in general, is more variable.⁽¹⁶⁾ The high headache prevalence in population, and its chronic character makes this disease generator of very high costs in Brazil⁽¹⁹⁾ and in the world,⁽²⁰⁾ and one of the main causes of declining productivity in the workplace.^(9,21)

No study has been performed so far approaching headache during admissive evaluation. The objective of this study is to observe the headache prevalence in this

evaluation and to compare the data with prevalence in current literature in other healthy populations.

METHODS

It was conducted an observational and cross-sectional study in which patients undergone admissive evaluation between September 2006 and September 2007 were included. These evaluations were conducted in an occupational medicine private practice in Aracaju, Sergipe, Brazil. All included patients were applicants in a job that required a neurological admissive evaluation and it was done by the same neurologist, fact that homogenized the questioning and headache registration obtained in these evaluations.

The neurological evaluation as part of the admissive evaluation follows an established pattern. It consists of an initial interrogation, followed by the execution of an electroencephalogram. The questions "Do you have headache?" and "Does headache interfere on your life quality" were done to all patients. The obtained data in the evaluation were immediately catalogued in a database by the examiner neurologist as well the headache record these evaluations. Besides, the patient was questioned about case histories of seizures, dizziness, severe head trauma and using of psychotropic drugs, such as tranquilizers, stimulants, energy drinks, benzodiazepines and anticonvulsants. It was analyzed the prevalence of patients who answered YES to the questions. Furthermore, the obtained results were compared to the prevalence of migraine obtained in other studies in healthy populations.

The work was sent to Ethis Committee from Federal University of Sergipe, Brazil (Comitê de Ética da Universidade Federal de Sergipe) and it was approved in August 7th, 2009, through CAAE - 0119.0.107.000-09.

RESULTS

Six hundred seven patients undergone admissive evaluation whose job required a neurological evaluation were analyzed. From these, 98.35% were male – the remaining percentage was formed by only 10 women in this evaluated group. The sample was composed of individuals with ages ranging between 17 and 66 years, with an average of 27.72 years. Upon hearing the questions "Do you have headache?" and "Does headache interfere on your life quality?", 5.1% of all interviewees answered YES to both questions. Only 0.65% answered YES to the first question. No woman answered YES to both questions.

Chart 1 - Complaints of headache in the admmissive evaluation

	Total	"Do you have headache?"	"Does headache interfere on your life quality?"
Male	597	35	31
Female	10	0	0

DISCUSSION

The information that only 5.1% from the 607 candidates evaluated reporting that the headache interferes in their life quality makes room for questions. When taken into consideration that these 5.1% covers all existing types of headache, migrainous and non-migrainous, primary and secondary, it can be affirmed that it is a prevalence considerably lower than that found in any other study about headaches, including those that has an object of study the healthy populations.

When looking at the population profile of the study, it was verified that this is a population of similar ages studied in other papers, unemployed, but almost exclusively male. It is not allowed, of course, to compare with the found prevalence in studies which observed a population in that the proportion of men and women is relatively equivalent. The fact that the studied population is predominantly male generates a lower prevalence, since women are more affected by headaches, particularly migraine. Analysing the available literature, however, the found prevalence would still be below description.

Only migraine, excluding all other types of primary headaches in males has a prevalence of about 8%, as the study of Hagen et al in 2000 displays. The prevalence of migraine in men and women was of 12%. In the same study, non-migrainous headaches displayed 26% of prevalence, 30% in women and 22% in men.⁽²²⁾ In Denmark, 37% of the interviewed population reported the presence of tension-typed headache several times a month.⁽²³⁾ In Hong Kong, another study found similar prevalence of recurrent headache, of 37.1%.⁽²⁴⁾ Added to this data, Brazil has already proved to have a prevalence of migraine above other Latin American countries such as Argentina, Venezuela, Colombia, Ecuador and Mexico, and above those found in some studies conducted elsewhere in the world: 17.4% in women and 7.8% in men.⁽¹⁷⁾ The attached chart displays the prevalence of migraine found in several studies around the world, summarized in a review article.⁽¹⁶⁾

Another possible bias would be the questioning method. However, the questions used would make room for an even higher prevalence, since it does not specifies

diagnostic criteria and headache classification; it just questions their existence and their impact on life quality of the applicant. Moreover, the questioning was conducted by the same neurologist, which homogenizes the interrogation. In a study in the state of Espírito Santo, Brazil, 52.8% answered YES to the question "Do you consider yourself a person who suffers from headache?". In addition, the study divides the population from unemployed ones and, in those, the headache prevalence was of 47.9%.⁽²⁵⁾

It is possible that the applicant omits this datum during the admmissive evaluation interview fearing that the information has a negative interference in its recruitment. Although admmissive evaluation theoretically may be conducted only after a concrete employment offer, in which the employer is subjected to legal proceedings in the case of further withdrawal without any explicit reason, in practice it may not always happen. It is conceivable that such information may be omitted by the applicant. Headache subdiagnosis in admmissive evaluation hinders designing even a preventive treatment for these employees, and including an adequate allocation for a position that befits their status and their individual characteristics.

The majority of patients with primary headaches never sought medical care for this complaint.⁽²⁶⁾ Perhaps the admmissive evaluation was the ideal moment to meet their pathology and control symptoms adequately. A prospective study with workers from New York proved that the combination of an educational program for employees to know headache, with adequate access to a trained professional is effective in reducing symptoms.⁽²⁷⁾

CONCLUSION

To achieve this, the first step is to adequately collect subjective information such as headache in admmissive evaluation, given the importance of this pathology in the worker's productivity decrease and spendings on health care. However, the instability that the employee lives in among the private sector of the economy and historical heritage of authority by the employer probably still exists as threatens to the sincerity at the moment of the admmissive evaluation.

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