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Distribution of “Brazilian headache specialists” – Analyses of Brazilian Headache Society members

Distribuição dos “especialistas brasileiros em cefaléias” – Análise dos membros da Sociedade Brasileira de Cefaléia

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ABSTRACT

Objective: Two important barriers that hinder the adequate care of patients with headache are the inadequate learning of the disorder in Medical Schools and the relative lack of headache specialists. Here we report the results of a survey on the distribution of headache specialists in Brazil. **Methods:** The inclusion of specialists was done through visual inspection of the 2004-2005 Directory of the Brazilian Society of Headache. Inclusion was determined based on society affiliation. Non-physician members were excluded from the analysis. The specialists were distributed by absolute and relative numbers (professionals/regional population ratio) for each Brazilian state, and were aggregated in geopolitical regions. **Results:** Two hundred and forty-three headache specialists are distributed over 22 states. The state with the highest absolute number of headache specialists is São Paulo (n = 86); however, when the HS/population ratio was analyzed, Rio de Janeiro has the highest figure – 0.003/1000 inhabitants. **Conclusions:** This study provides the distribution of headache specialists, with the higher densities of physicians with special interest in headache concentrated in the south and southeast regions. An ideal density of such professionals is yet to be determined. A special effort should be made towards a better density and distribution of headache specialists in Brazil. Public policies should be taken in order to reduce the burden of headaches in the general population.

Keywords: Headache; Specialties, medical; Population; Brazil

RESUMO

Objetivos: Duas importantes barreiras que se impõem ao adequado cuidado de pacientes com cefaléias são o ensino insatisfatório desse

tema no meio acadêmico e a relativa escassez de especialistas em cefaléias (EC). Neste trabalho expomos a distribuição dos especialistas em cefaléias no Brasil. **Métodos:** A inclusão dos especialistas foi realizada por meio de inspeção visual do diretório dos membros da Sociedade Brasileira de Cefaléia no período de 2004-2005. Os especialistas foram distribuídos pelo número absoluto e relativo (profissionais/população regional) para cada estado da federação e agregados nas regiões geopolíticas. **Resultados:** Duzentos e quarenta e três especialistas em cefaléias encontram-se distribuídos em vinte e dois estados. O estado com maior número absoluto de EC é São Paulo (n = 86); entretanto, quando analisamos a relação especialistas em cefaléia/população, o estado do Rio de Janeiro passa a ter a maior relação, com 0,003/1.000 habitantes. **Conclusões:** Este estudo mostra a distribuição de médicos com interesse especial em cefaléias com densidades maiores nas regiões sudeste e sul do país. A determinação de uma densidade ideal ainda deve ser estruturada. Um esforço para que a densidade e distribuição dos especialistas seja mais equilibrada deve ser feito. Políticas públicas devem ser realizadas para que o impacto das cefaléias seja reduzido na população geral.

Descritores: Cefaléia; Especialidades médicas; População; Brasil

INTRODUCTION

Headache is one of the most common reasons for medical visits. It is a public health problem, with huge economic losses, be them direct or indirect, at an approximate annual cost of US\$ 13 billion in the United States, only for migraine⁽¹⁾. Migraine is listed among the 20 most incapacitating disorders of the world and its adequate

Study carried out at the Brazilian Society of Headache, Rio de Janeiro (RJ), Brazil.

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diagnosis and treatment would reduce its impact on the population quality of life⁽²⁾.

Two important barriers that hinder the adequate care of patients with headache are the inadequate learning of the disorder in Medical Schools (undergraduate and graduate courses) and the relative scarcity of headache specialists (HS)⁽²⁾. Recently, the World Health Organization launched an international campaign to decrease the burden of headaches in the general population⁽³⁾, but there are no data in the world literature establishing what the adequate density of specialists would be. In Brazil, the distribution of such specialists is unknown, as well as possible regional needs specific for the presence of such professionals. Public policies for the management of headaches are required to reduce their burden on the population. Further data concerning density and distribution of specialists in our country are needed.

OBJECTIVE

On this article we show the distribution of HS in Brazil, aiming to enable an analysis on the possible needs of training a larger number of such specialists and of a more equitable distribution.

METHODS

The inclusion of specialists was done through visual inspection of the 2004-2005 Directory of the Brazilian Society of Headache (SBCe)⁽⁴⁾. Non-medical members were excluded of our analysis. The population of each state was taken from the year 2000 population census⁽⁵⁾. Data were plotted and exposed by geopolitical region as relative frequency and, by State, as absolute frequency and its relation with the number of inhabitants.

RESULTS

Two hundred and forty-three HS are distributed over 22 states (table 1). The southeastern, southern and northeastern regions have the largest absolute and relative numbers of HS (figure 1). In the South and Southeast, all states have similar relative values, whilst the largest discrepancies are seen in the Northern and Northeastern regions (table 1).

Five Brazilian states do not have HS registered as members on the directory of the Brazilian Headache Society (Acre, Alagoas, Amapá, Roraima and Tocantins), four of them being in the North and one in the Northeast. The state with the highest absolute number of HS is São Paulo, with a total of 86 specialists, but when we analyze the ratio HS/population, the state of Rio de Janeiro has the highest ratio 0.003 HS/1,000 inhabitants.



Figure 1. Regional distribution of Brazilian headache specialists

Table 1. Distribution of Brazilian headache specialists per state

States	Absolute number	Relative number	Population	Per 1,000 inhabitants
Acre	0	—	557,526	0
Alagoas	0	—	2,822,621	0
Amapá	0	—	477,032	0
Amazonas	3	1.2	2,812,557	0.001
Bahia	4	1.6	13,070,250	0.0003
Ceará	7	2.8	7,430,661	0.001
Distrito Federal	5	2	2,051,146	0.001
Espírito Santo	7	2.8	3,097,232	0.002
Goiás	4	1.6	5,003,228	0.0008
Maranhão	3	1.2	5,651,475	0.0005
Mato Grosso	2	0.8	2,504,353	0.0008
Mato Grosso do Sul	1	0.4	2,078,001	0.0005
Minas Gerais	32	12.8	17,891,494	0.002
Pará	2	0.8	6,192,307	0.0003
Paraíba	2	0.8	3,443,825	0.0006
Paraná	12	4.8	9,563,458	0.001
Pernambuco	7	2.8	7,918,344	0.0009
Piauí	2	0.8	2,843,278	0.0007
Rio de Janeiro	44	17.6	14,391,282	0.003
Rio Grande do Norte	4	1.6	2,776,782	0.001
Rio Grande do Sul	10	4	10,187,798	0.001
Rondônia	1	0.4	1,379,787	0.0007
Roraima	0	—	324,397	0
Santa Catarina	9	3.6	5,356,360	0.001
São Paulo	86	34.8	37,032,403	0.002
Sergipe	2	0.8	1,784,475	0.001
Tocantins	0	—	1,157,098	0
Total	243	100	169,799,170	0.001

DISCUSSION

The official entity that determines medical specialties in Brazil is the Federal Medical Council, which does not recognize “headache specialist”. In Neurology, only three areas are recognized: child neurology, clinical neurophysiology and pain. Since it is not considered a medical specialty, up to this moment there are no defined criteria to determine whether a physician is or not a “headache specialist” or “migraine specialist”⁽⁴⁾.

We decided to use as inclusion criteria on the study the affiliation to SBCe because we believe that, in the absence of formal criteria to define a HS, the fact of the person being affiliated to a society with specific objectives shows his/her interest on the matter.

There are obvious limitations to the method, since physicians who thoroughly study the subject may not, for some reason, be affiliated to SBCe. On the other hand, individuals who are affiliated may have interest in the area but not proper training. Usually the members are neurologists who are more interested in the study of this type of problem, what does not mean that other specialists, such as general practitioners, geriatrists and pediatricians cannot be considered HS. Although conducted by members of the research committee of SBCe, this study does not represent a determination of the society on the criteria for specialists. Besides, this is not the scope of the study, since we only use a methodology to show the distribution of professionals who are interested in the study of headaches⁽⁴⁾.

There are no studies proving the ideal density of HS. Thus, the analysis of our data is difficult. We do think, though, that the densities of HS we see in our country should be greater, considering that the problem is huge. Further studies are necessary, applying more adequate methodologies, not yet defined, with a consensus definition of HS, as well as researches on how much

interest neurologists, general practitioners and other specialists would have in the area⁽³⁾.

This study may also be a model for that same analysis in other areas of health, for a better planning in public policies. Another relevant discussion is the need to involve general practitioners in the treatment of headaches, since it would be impossible to treat all headaches by headache specialists. A better management of care is needed, with well defined criteria to determine when a patient should be seen by general practitioners, family doctors, gynecologists, pediatricians, psychiatrists, neurologists or headache specialists.

CONCLUSION

Planning on headache management is mandatory for a decrease in the burden of this problem in our country. In this study we show that an effort should be made towards a more balanced density and distribution of specialists in our country. Public policies should be formulated in order to reduce the burden of headaches in the general population.

REFERENCES

1. Lipton RB, Stewart WF, Diamond S, Diamond ML, Reed M. Prevalence and burden of migraine in the United States: data from the American Migraine Study II. *Headache* 2001; 41(7): 646-57
2. Levav I, Rutz W. The WHO World Health report 2001 new understanding - new hope. *J Isr Psychiatry Relat Sci.* 2002; 39(1): 50-6.
3. Martelletti P, Haimanot RT, Lainez MJ, Rapoport AM, Ravishankar K, Sakai F, et al. The global campaign (GC) to reduce the burden of headache worldwide. The International Team for Specialist Education (ITSE). *J Headache Pain.* 2005; 6(4): 261-3.
4. Sociedade Brasileira de Cefaléia [sítio na Internet]. Rio de Janeiro: SBC; c2003. Disponível em: <http://www.sbce.med.br/associados/associados.asp>
5. Instituto Brasileiro de Geografia e Estatística [sítio na Internet]. São Paulo: IBGE; c2001. Disponível em: <http://www.ibge.gov.br/censo/default.php>