

## Research Article

# Attitudes of Physicians to Their Own Migraine: Can we Really Treat Ourselves?

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### Abstract

**Objectives:** Despite its high prevalence and association with significant disability, up to half of individuals who fulfill the diagnostic criteria for migraine have never received a formal diagnosis from a physician. In this cross-sectional study, we aimed to examine physicians' approaches to their own headaches, treatment choices, and disability using a questionnaire.

**Methods:** The 27-item questionnaire collected data on demographic characteristics, migraine screening questions, number of migraine attacks per month, headache severity on a visual analog scale, preventive and acute treatments for migraine, number of days working when ill and days of missed work, and reasons for consulting a neurologist less than needed.

**Results:** Among 198 migraineurs, only 42 (21.2%) had a consultation with a neurologist at any time of their lives, and 76 physicians (48.7%) said that they lacked time for a neurology visit.

**Conclusion:** Migraine headache remains an under recognized and undertreated disease despite the availability of effective treatment options even among physicians.

**Keywords:** Headache, migraine, migraine among physicians

**Cite This Article:** Unsal MA. Attitudes of Physicians to Their Own Migraine: Can we Really Treat Ourselves?. EJMI 2019;3(1):37–40.

Migraine is one of the most prevalent and disabling medical illnesses in the world. The World Health Organization (WHO) ranks migraine as the third most prevalent medical condition and the second most disabling neurologic disorder in the world.<sup>[1, 2]</sup> Despite its high prevalence and association with significant disability, up to half of individuals who fulfill the diagnostic criteria for migraine have never received a formal diagnosis from a physician.<sup>[3]</sup>

The 1 year prevalence of migraine in the general population is reported as between 2.6% and 21.7%, with an average of ~12%, with variation between countries.<sup>[4–8]</sup> There are several studies showing the prevalence of migraine among physicians. In previous studies, the prevalence of migraine among general practitioners was found to be similar to that of the general population.<sup>[9–11]</sup> Migraine prevalence

in neurologists is 48.6%, higher than the general population.<sup>[12–19]</sup> Although there is no definite explanation for this fascinating finding, it is speculated that the prevalence of migraine is greater in the general population than studies suggest and neurologists are better able to self-diagnose.

In this study, we questioned the physicians in our outpatient clinic who self-diagnosed themselves as having migraine. This cross-sectional study aimed to examine physicians' approaches to their own headaches, treatment choices, and disability.

### Methods

This is a descriptive, cross-sectional type of study, which was conducted in our Department of Neurology from Jan-

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**Submitted Date:** December 12, 2018 **Accepted Date:** January 02, 2019 **Available Online Date:** January 28, 2019

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uary 2016 to June 2018. Ethical considerations were taken and prior ethical approval from the institute was obtained; informed consent was sought from every participant.

Physicians who have visited our outpatient clinic were asked whether they had a diagnosis of migraine and a questionnaire was administered to all who answered 'YES.'

The 27-item questionnaire collected data on: (i) the demographic characteristics (age, sex), (ii) characteristics of headache to understand whether participants' migraine diagnose was correct, (iii) migraine attacks per month, (iv) headache severity on visual analogue scale (VAS), (v) migraine preventive medications, (vi) triptans and other acute treatments for migraine, (vii) working when ill and days of missed work, (viii) reasons for consulting a neurologist less than needed.

### Statistical Analysis

Descriptive and analytic statistics were performed using the Statistical Package for the Social Sciences (SPSS) software for Windows, version 11.0 (SPSS Inc., Chicago, IL, USA). The participants were stratified according to sex, age, treatment patterns (preventive and acute treatments), head-

ache severity on a VAS, and number of days working when ill and work missed. The difference in mean values or the distribution among subgroups was compared using Student's t-test or the Chi-square ( $\chi^2$ ) test where appropriate. A P-value <0.05 was regarded as statistically significant.

### Results

Migraine was present in 198 physicians according to the diagnostic criteria for migraine from the International Classification of Headache Disorders - Second Edition (ICHD-2) of 206 physicians who reported that they had migraine. Of the 198 physicians, 185 were female and 13 were male. The mean age was 36.8 years. All variables of demographic and clinical characteristics were compared in both sexes and the p values are shown in Table 1. The female physicians were significantly younger than the male physicians ( $p=0.01$ ). Forty-two (21.2%) of the 198 physicians had applied to the Neurology outpatient clinic at least once in their lifetime or consulted a neurologist in the emergency room. The mean headache severity according to the VAS scores was 6.7 in both groups. There were 3 or more attacks in 88 physicians and less than 3 attacks in 110 physicians

**Table 1.** All variables of demographic and clinical characteristics were compared in both sexes and the p value is shown: Mean age, average number of days work loss per month, average number of working days when ill per month, previous Neurology consultation, headache severity on visual analogue scale, attacks number per month ( $\geq 3$ ;  $< 3$ ), attack treatment for migraine (triptan, triptan or/and NSAID, Paracetamol or/and NSAID), preventive treatment for migraine (no treatment, SSRI, SNRI, beta blocker, beta blocker or/and SNRI) difference in female and male physicians with migraine

	Women (n=185)	Men (n=13)	Total (n=198)	p
Mean age (years)	36.4	42.4	36.8	0.01
Average number of days / work loss / month	1.73	1.15	1.7	0.003
Average number of working days when ill/month	1.64	0.53	1.57	0.005
Previous Neurology consultation				
Yes	38	4	42	NS
No	147	9	156	
Headache severity on visual analogue scale	6.7	6.7	6.7	NS
Attacks per month				
$\geq 3$	86	3	89	p=0.029
$< 3$	99	11	110	
Attack treatment				
Triptan	16	0	16	NS
Triptan or/and NSAID	20	2	22	
Paracetamol or/and NSAID	149	11	160	
Preventive treatment				
No treatment	171	13	184	NS
SSRI	4	0	4	
SNRI	6	0	6	
Beta blocker	2	0	2	
Beta blocker or/and SNRI	2	0	2	

P-value >0.05 is regarded as non-significant (NS).

per month. Sixteen physicians were using only triptan during the attacks, 22 physicians were using triptan and non-steroidal anti-inflammatory drugs (NSAIDs)- paracetamol alternately, and the number of physicians who preferred paracetamol and/or NSAIDs was 160. The number of physicians using migraine preventive treatment at any time for prophylaxis was 14. The treatment used were selective serotonin reuptake inhibitors (SSRIs) in 4 physicians, selective noradrenaline reuptake inhibitors (SNRIs) in 6 physicians, beta blockers in 2 physicians, and beta blocker-SNRI combination in 2 physicians. Although there was no significant difference between the total number of physicians using attack treatment in both sexes, the most commonly used treatment in the attack was paracetamol or/and NSAID in both groups ( $p=0.006$ ). Across the entire group, there was an average work loss of 1.7 days per month. Also, the number of working days when ill was 1.57 per month. When asked about the reasons for not consulting a neurologist, the responses of 156 physicians were, "I didn't think of it" ( $n=41$ ), "I did not need to visit" ( $n=39$ ), and "I can't find the time to visit" ( $n=76$ ), respectively.

## Discussion

Migraineurs lives are commonly negatively affected in many aspects by the condition, including social, emotional, family, academic, and working life. Daily work is affected by migraine in terms of absenteeism and less productive work days. Physicians consistently report that they were less effective when working with migraine symptoms. On average, a total of 19.55 annual work days per physician is estimated to be lost by this population because of migraine from absenteeism and diminished effectiveness.<sup>[20]</sup>

A Unites States population-based study by Osterhaus et al.<sup>[21]</sup> reported that adult physicians with migraine lost 2.2 workdays per month due to their migraines, worked 5.6 days with migraine symptoms, and were only 57% effective when working with migraine symptoms.

We report fewer days of absenteeism, and fewer days worked with symptoms. In this study, the average monthly number of work loss days was 1.7, and the average number of working days when ill was 1.57 across the entire group: this was significantly higher in women than in men in both groups (1.73 vs. 1.15;  $p=0.003$ ; 1.64 vs. 0.53;  $p=0.005$ ).

Despite its negative impact, migraine remains underestimated, under diagnosed, and undertreated. A substantial proportion of migraineurs who might benefit from preventive therapy, do not receive it.<sup>[3]</sup> The most interesting result in this study was that among 198 migraineurs, only 42 (21.2%) had had a consultation with a neurologist at any time in their lives. In response to a multiple-choice question

in our questionnaire, 76 physicians (48.7%) stated that they had no time for a neurology consultation. Considering the fact that these participants work in a hospital all day long, the reason for not visiting a specialist can be explained by underestimating their own disease. Previous studies have shown that physicians often self-prescribe medications, most practice self-treatment when they are sick, and many tend to avoid taking authorized sick leave during an illness.<sup>[22-24]</sup> In our study, there were no significant differences between the two sexes as to who had a previous neurologic consultation, and preventive and attack treatment. The average VAS score was the same in both sex groups. Although there was no significant difference between the total number of physicians using attack treatment in either sex, the most commonly used treatment in the attack was paracetamol or/and NSAID in both groups ( $p=0.006$ ). This may be interpreted that treatment such as triptans, SSRIs, and SNRIs legally require a medical prescription by a neurologist to be dispensed in our National Health System. Physicians in any profession can self-prescribe medications such as paracetamol or NSAIDs easily.

This study has some limitations that have to be pointed out. During the study, we noticed a missing question. We asked the participants about the number of monthly days of work loss and the number of working days when having migraine symptoms, but we did not question the effects of working when sick. Undoubtedly, as in previous studies, performances of physicians would be diminished, which may lead to serious consequences.<sup>[20]</sup>

## Conclusion

Even among physicians, migraine headache remains an under recognized and undertreated neurologic disease despite the availability of effective management options. The profession of medicine has a number of trigger factors such as intensive working hours, skipping meals, insomnia, stress, and shift work. These variables are triggers for acute migraine, and are also associated with more frequent and severe migraine and portends to a poorer headache prognosis.

This study tried to assess physicians' approaches to their own headaches, treatment choices, and disability. Despite the cross-sectional structure of the study, to our knowledge it is the first study to tackle this issue in Turkey.

## Disclosures

**Ethics Committee Approval:** The study was approved by the Local Ethics Committee.

**Peer-review:** Externally peer-reviewed.

**Conflict of Interest:** None declared.

## References

1. GBD 2015 Disease and Injury Incidence and Prevalence Collaborators. Global, regional, and national incidence, prevalence, and years lived with disability for 310 diseases and injuries, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet* 2015 (London, England), 388:1545–602.
2. GBD 2015 Neurological Disorders Collaborator Group. Global, regional, and national burden of neurological disorders during 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet Neurol* 2017;16:877–97.
3. Lipton RB, Bigal ME, Diamond M, Freitag F, Reed ML, Stewart WF. Migraine prevalence, disease burden, and the need for preventive therapy. *Neurology* 2007;68:343–9. [\[CrossRef\]](#)
4. Burch RC, Loder S, Loder E, Smitherman TA. The prevalence and burden of migraine and severe headache in the United States: Updated statistics from government health surveillance studies. *Headache* 2015;55:21–34. [\[CrossRef\]](#)
5. 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;41:646–57.
6. Merikangas KR. Contributions of epidemiology to our understanding of migraine. *Headache* 2013;53:230–46. [\[CrossRef\]](#)
7. Wang SJ. Epidemiology of migraine and other types of headache in Asia. *Curr Neurol Neurosci Rep* 2003;3:104.
8. Baykan B, Ertas M, Karlı N, Uluduz D, Uygunoglu U, Ekizoglu E et al. Migraine incidence in 5 years: a population-based prospective longitudinal study in Turkey. *The Journal of Headache and Pain* 2015;16:103. [\[CrossRef\]](#)
9. Waters WE. Migraine in general practitioners. *British Journal of Preventive & Social Medicine* 1975;29:48–52. [\[CrossRef\]](#)
10. Dalsgaard-Nielsen T, Ulrich J. Prevalence and heredity of migraine and migrainoid headaches among 461 Danish doctors. *Headache* 1973;12:168–72. [\[CrossRef\]](#)
11. Selmaj K, Lis Z. Incidence of migraine among physicians of the city of Łódź and their families (in Polish) *Neurol Neurochir Pol* 1980;14:621–6.
12. Alstadhaug KB, Hernandez A, Naess H, Stovner LJ. Migraine among Norwegian neurologists. *Headache* 2012;52:1369–76.
13. Donnet A, Becker H, Allaf B, Lantéri-Minet M. Migraine and migraines of specialists: Perceptions and management. *Headache* 2010;50:1115–25. [\[CrossRef\]](#)
14. Evans RW, Evans RE. A survey of neurologists on the likeability of headaches and other neurological disorders. *Headache* 2010;50:1126–9. [\[CrossRef\]](#)
15. Evans RW, Ghosh K. A survey of headache medicine physicians on the likeability of headaches and their personal headache history. *Headache* 2016;56:540–6. [\[CrossRef\]](#)
16. Evans RW, Lipton RB, Ritz KA. A survey of neurologists on self-treatment and treatment of their families. *Headache* 2007;47:58–64. [\[CrossRef\]](#)
17. Evans RW, Lipton RB, Silberstein SD. The prevalence of migraine in neurologists. *Neurology* 2003;61:1271–2. [\[CrossRef\]](#)
18. Gil-Gouveia R. Headache from the doctors' perspective *Eur Neurol* 2014;71:157–64. [\[CrossRef\]](#)
19. Lu SR, Wang SJ, Fuh JL. The practice pattern of migraine management among neurologists in Taiwan. *Cephalalgia* 2006;26:310–313. [\[CrossRef\]](#)
20. Gerth WC, Carides GW, Dasbach EJ, Visser WH, Santanello NC. The multinational impact of migraine symptoms on health-care utilisation and work loss. *Pharmacoeconomics* 2001;19:197–206. [\[CrossRef\]](#)
21. Osterhaus J, Gutterman DL, Plachetka JR. Healthcare resource and lost labour costs of migraine headache in the US. *Pharmacoeconomics* 1992;2:67–76. [\[CrossRef\]](#)
22. Rosvold EO, Bjertness E. Illness behaviour among Norwegian physicians. *Scandinavian Journal of Public Health* 2002. Vol 30, Issue 2, 125–32. [\[CrossRef\]](#)
23. Rosvold EO, Bjertness E. Physicians who do not take sick leave: hazardous heroes? *Scandinavian Journal of Public Health* 2001;29:71–5. [\[CrossRef\]](#)
24. Christie JD, Rosen IM, Bellini LM, Inglesby TV, Lindsay J, Alper A, et al. Prescription Drug Use and Self-prescription Among Resident Physicians. *JAMA* 1998;280:1253–5. [\[CrossRef\]](#)