Türkiye'nin Güneydoğu Bölgesinde İnme hastalarının risk faktörleri ile ilgili farkındalık düzeyleri

Awareness Levels of Stroke Patients About the Risk Factors in the Southeast Region of Turkey

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ÖZ

Giriş: İnme risk faktörlerinin erken dönemde saptanması ve tedavi ile kontrol altına alınması inme riskini azaltmaktadır. Tekrarlayan inme durumunda, sakatlık ve ölüm oranları önemli ölçüde artar. Bu çalışmadaki amacımız, inme hastalarında risk faktörlerini ve risk faktörleri farkındalığını değerlendirmektir.

Yöntem: Bu çalışmaya Harran Üniversitesi Tıp Fakültesi Nöroloji Anabilim Dalı'na Ekim 2017-Mart 2018 tarihleri arasında inme öyküsü ile başvuran 96 hasta alındı. Hastalara yaş, cinsiyet, risk faktörleri (hipertansiyon (HT), diabetes mellitus (DM), kardiyovasküler hastalık (KVH), atriyal fibrilasyon (AF), dislipidemi, ailede inme öyküsü), düzenli poliklinik takibi, ilaç kullanımı, komorbid hastalıklar, risk faktörlerinin farkındalığı ve hastalık hakkındaki bilgilerini sorgulamak için anket uygulandı.

Bulgular: Çalışmaya 96 inme hastası dahil edildi. Risk faktörleri olarak sırasıyla HT, sigara, DM, KVH, hiperlipidemi, ailede inme öyküsü ve AF belirlendi. Hastaların 48'i (%50) inme risk faktörlerinin farkında değildi, 42'si (%43,75) düzenli olarak nöroloji uzmanına kontrole gitmiyordu, 42'si (%43,75) düzenli inme önleyici tedavi kullanmıyordu. Hastaların 28'inin (%29,17) tekrarlayan inme atakları geçirdiği öğrenildi.

Sonuç: İnme riski yüksek olan hastaların eğitiminde sağlık profesyonellerinin daha aktif rol alması gerektiğini söyleyebiliriz. İnme semptomlarının hastalıkla ilişkisini, değiştirilebilir risk faktörlerinin tedavisine olan ihtiyacı ve hastaneye yatışta gecikmeleri önlemenin daha olumlu bir prognozla nasıl ilişkili olduğunu vurgulamak için farkındalık kampanyalarına ihtiyaç vardır.

Anahtar Kelimeler: inme, risk faktörleri, inme farkındalığı, inme eğitimi

ABSTRACT

Objective: Identifying the stroke risk factors and controlling them with treatment at an early stage reduce the risk of stroke. In case of recurrent stroke, disability and mortality rates increase significantly. Our aim in this study is to evaluate the risk factors and awareness of risk factors in stroke patients.

Method: This study enrolled 96 patients with a history of stroke, who presented to the Harran University Faculty of Medicine Department of Neurology between October 2017 and March 2018. A questionnaire was applied to question the patients' age, gender, risk factors (hypertension (HT), diabetes mellitus (DM), cardiovascular disease (CVD), atrial fibrillation (AF), dyslipidaemia, family history of stroke), regular outpatient follow-up, medication use, comorbid diseases, awareness of risk factors and the knowledge about the disease.

Results: 96 stroke patients were included in the study. HT, smoking, DM, CVD, hyperlipidemia, family history of stroke, and AF were determined as risk factors, respectively. Forty-eight (50%) of the patients were not aware of their stroke risk factors, 42(43.75%) did not go to a regular neurologist for control, 42(43.75%) did not use preventive treatment for stroke regularly. It was learned that 28(29.17%) of the patients had recurrent stroke attacks.

Conclusion: We can say that healthcare professionals should take a more active role in the education of patients with a high risk of stroke. Awareness campaigns are needed to highlight the relevance of stroke symptoms to disease, the need for treatment of modifiable risk factors, and how preventing delays in hospital admission is associated with a more favorable prognosis.

Keywords: stroke, risk factors, stroke awareness, stroke education

INTRODUCTION

Stroke is the second leading cause of death and one of the leading causes of chronic disability worldwide. One-half of stroke patients die in the first 5 years after the incident, and about a third of them become disabled (1,2). Identifying the stroke risk factors and controlling them with treatment at an early stage reduce the risk of stroke. Recurrent stroke dramatically increases disability and mortality.

While the incidence of stroke has decreased in developed countries in the last 40 years, on the contrary, it has been increasing in developing countries (3,4). Population growth, ageing, sedentary lifestyle and poor nutritional habits, and lack of information about stroke and related risk factors in society are considered the main reasons for increasing stroke incidence (5,6).

Although stroke prevalence and severity are high, knowledge of the disease in the general population is lower than other diseases such as acute coronary syndrome, cancer, or acquired immunodeficiency syndrome, even in patients with a history of stroke (7,8). Previous studies have shown that a significant proportion of patients at high risk of stroke are unaware of this risk (9,10).

In this study, we aimed to evaluate the risk factors of patients with a history of stroke and their awareness level about these risk factors.

MATERIALS AND METHODS

This study enrolled 96 patients with a history of stroke, who presented to the X University Faculty of Medicine Department of Neurology between October 2017 and March 2018. X University Faculty of Medicine Ethics Committee approved the study before its start (App. No: 74059997-050.04.04). Our study was designed in compliance with the criteria specified by the Declaration of Helsinki. Informed consent was obtained from all study participants. A questionnaire was applied to question the patients' age, gender, risk factors (hypertension (HT), diabetes mellitus (DM), cardiovascular disease (CVD), atrial fibrillation (AF), dyslipidaemia, family history of stroke), regular outpatient follow-up, medication use, comorbid diseases, awareness of risk factors and the knowledge about the disease.

Statistical Analysis

Statistical analyses were performed using the "Statistical Package for Social Sciences for Windows version 20.0 (SPSS, Chicago, IL, USA)" software package. Descriptive statistics were expressed with mean, standard deviation, number, and percentage. The chi-square test was used to compare categorical variables. $P<0.05$ was considered statistically significant.

RESULTS

Fifty-eight (60.4%) of the patients were male and 38 (39.6%) were female. The mean age of the study population was 51 ± 9.46 years. There was a history of an ischemic stroke in 73% of patients and a haemorrhagic stroke in 27%. The identified risk factors are shown in Table 1.

Forty-eight (50%) patients were unaware of the risk factors; 42 (43.7%) of them did not attend regular neurology follow-up; 42 (43.7%) did not use protective stroke treatment; 54 (56.2%) did not attend regular

follow-up visits at other medical branches; 54 (56.2%) did not use regular medication; and 51 (53.1%) stated that they were not adequately informed by their physicians. Twenty-eight patients (29.1%) had a recurrent strokes. Of those with recurrent stroke, 5 (17.9%) patients did not use their medications regularly and did not attend regular follow-up visits. Out of 68 patients without recurrent stroke, 37 (54.4%) did not use their medications

regularly. The rate of regular medication use was significantly higher in recurrent stroke patients (p=0.001). Male patients than female patients and patients with recurrent stroke than those were significantly more aware of their risk factors (Table-2).

Table 1. Clinical and Demographic Characteristics of the Patients	
	N (%)
Gender **Woman** **Male**	38 (39.6) 58 (60.4)
Stroke **Ischemic** **Hemorrhagic**	70 (73) 26 (27)
Hypertension	80 (83.3)
Smoking	33 (34.3)
Diabetes Mellitus	27 (28.1)
Cardiovascular Diseases	24 (25)
Hyperlipidemia	22 (22.9)
Family history of stroke	21 (21.8)
Atrial Fibrillation	15 (15.6)

Table 2. Clinical Characteristics of Risk Factor Awareness			
	Aware of RF (%)	**Not Aware of RF (%)**	**P**
Gender (n %) **Woman**	47 (74.6)	11 (60.4)	0.000
Male	16 (24.4)	22 (39.6)	
Recurrent stroke	23 (82.1)	5 (17.9)	
Without recurrent stroke	40 (58.8)	28 (41.2)	0.023
RF: Risk Factors			

DISCUSSION

The results of this study indicate that there is limited awareness of stroke risk factors. Fifty per cent of the participants were not aware of the stroke risk factors. This finding was similar to that of Koçer A et al. reported in a Turkish patient population (11). Elevated blood pressure and smoking are the two risk factors most widely identified by other researchers (10,12-14). Recent studies have identified hypertension as the most common risk factor (15-17). In our study, hypertension was the most common risk factor, and smoking followed it. The majority of the participants were aware of hypertension as a risk factor for stroke.

Seeking help and presenting to a healthcare centre depends more on how a person takes the severity of symptoms seriously than on his/her knowledge of the disease [18]. Some researchers have emphasized that lack of knowledge further increased the delay in presenting to a healthcare centre (19). In our study 43.7% of patients did not attend regular follow-up visits with a neurologist; 43.7% did not use protective treatment against stroke regularly; 56.2% did not attend regular follow-up visits for follow-up of their risk factors at other medical branches; and 56.2% did not use regular medication for controlling risk factors.

In previous studies, only a few people have stated that physicians and nurses were their main sources of information about stroke. The majority of patients have stated that they obtain information from their personal or family life, or the media, especially television (18,20,21). Also in our study, 53.1% of patients stated that they were not adequately informed by their physicians.

In the case of recurrent stroke, the information that patients are provided with during hospitalization and at discharge is an important factor that enables them to identify symptoms compatible with a new event and take necessary measures (22-24). Seventeen point seven per cent of patients with recurrent stroke did not attend regular neurology follow-up visits or take medications regularly. This ratio was lower than that of the patient group without a stroke history (54.4%).

Although prior studies have related the female sex to the awareness of stroke risk factors, our findings indicated that men were better informed about stroke risk factors than women. Studies also report that there is no sex-based difference in the awareness of stroke risk factors (11,25). We suggest that our findings may be related to the educational level in our region.

The small number of participants were the main limitations of this article. Another limitation is that the relationship between education level, income or occupation, and awareness of stroke risk factors was not investigated. Future studies are needed to investigate the relationship between education level, occupation, age groups, income levels and stroke risk factors in a larger population.

Failure of patients to define their risk factors may lead to the continuation of an unhealthy lifestyle or poor compliance with medications. This should be considered in the efforts to prevent new stroke episodes. In light of these findings, we can say that healthcare professionals should assume a more active role, particularly in the education of patients at high risk of stroke.

Awareness campaigns are needed to highlight the association of stroke symptoms with the disease, the need for treatment of modifiable risk factors, and how preventing delays in hospital presentation is associated with a more favourable prognosis. Family physicians need to screen healthy individuals in primary health care services for stroke risk factors, provide preventive treatment for them, inform patients with stroke in terms of risk factors and follow them regularly to reduce the frequency and recurrence of stroke.

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