

Physician and patient preferences for oral anticoagulation therapy decision-making in atrial fibrillation: Results from a national best-worst scaling survey in Turkey (PREF-AF)

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Objectives:

Atrial fibrillation (AF) is the most common cardiac dysrhythmia and a common cause of ischemic stroke (1). Stroke prevention with oral anticoagulation (OAC) is the cornerstone of AF management (2). To date, there have been no studies aimed to understand patients’ preferences for specific OAC attributes in AF management nor to determine the factors that influence physicians’ decision-making in Turkey. The present study aimed to quantify the relative importance that patients and physicians in Turkey place on different OAC attributes when making treatment decisions.

Methods:

This was a national, descriptive, cross-sectional survey study of 230 patients with non-valvular AF, aged ≥50 years who were receiving OAC for stroke prevention, and 194 currently practicing cardiologists, including cardiology residents with a minimum of 2 years of experience. Object-case best-worst scaling (BWS) was used to assess the relative importance of 10 OAC characteristics, including stroke prevention, bleeding risks, need for monitoring, availability of reversal agents, and administration-related characteristics (3). Relative importance of each characteristic was expressed as a proportion of overall importance of all characteristics. Surveys were administered between October 2021 and February 2022.

Results:

Patient Respondent Demographics

A total of 230 patients (114 females, 116 males) aged 50 and over completed the survey (Table 1).

Table 1. Demographic and baseline characteristics of survey patients with non-valvular AF, aged ≥50 years and receiving OAC for stroke prevention in Turkey.

Participant Characteristics		Numbers	Percentage
Gender	Female	114	50%
	Male	116	50%
Age	50-59 years old	31	13%
	60-69 years old	63	27%
	≥70 years old	136	59%
Marital status	Single	5	2%
	Married	160	70%
	Divorced	65	28%
Working status	Employed	25	11%
	Unemployed	205	89%
Education status	University and above	42	18%
	High school	29	13%
	Primary and secondary school	114	50%
	No formal education	45	20%
Location	Istanbul	116	50%
	Ankara	52	23%
	Izmir	36	16%
	Other	24	6%
Socioeconomic status	A	14	6%
	B	19	8%
	C1	38	17%
	C2	59	26%
	D	72	31%
	E	28	12%
Comorbidities	Arterial hypertension	128	56%
	Diabetes Mellitus	56	24%
	Cardiac failure	54	23%
	Rheumatologic diseases	37	16%
	Chronic lung disease	24	10%
	Chronic kidney disease	13	6%
	Chronic liver disease	7	3%
	Previous stroke	11	5%
OAC use	Up to 2 years	76	33%
	3-5 years	57	25%
	6-10 years	26	11%
	11-20 years	34	15%
	More than 20 years	18	8%
	Did not recall	19	8%

Socio-economical (SEC) status defined by Turkish Researchers' Association.

Physician Respondent Demographics

A total of 194 physicians answered the survey questions (Table 2).

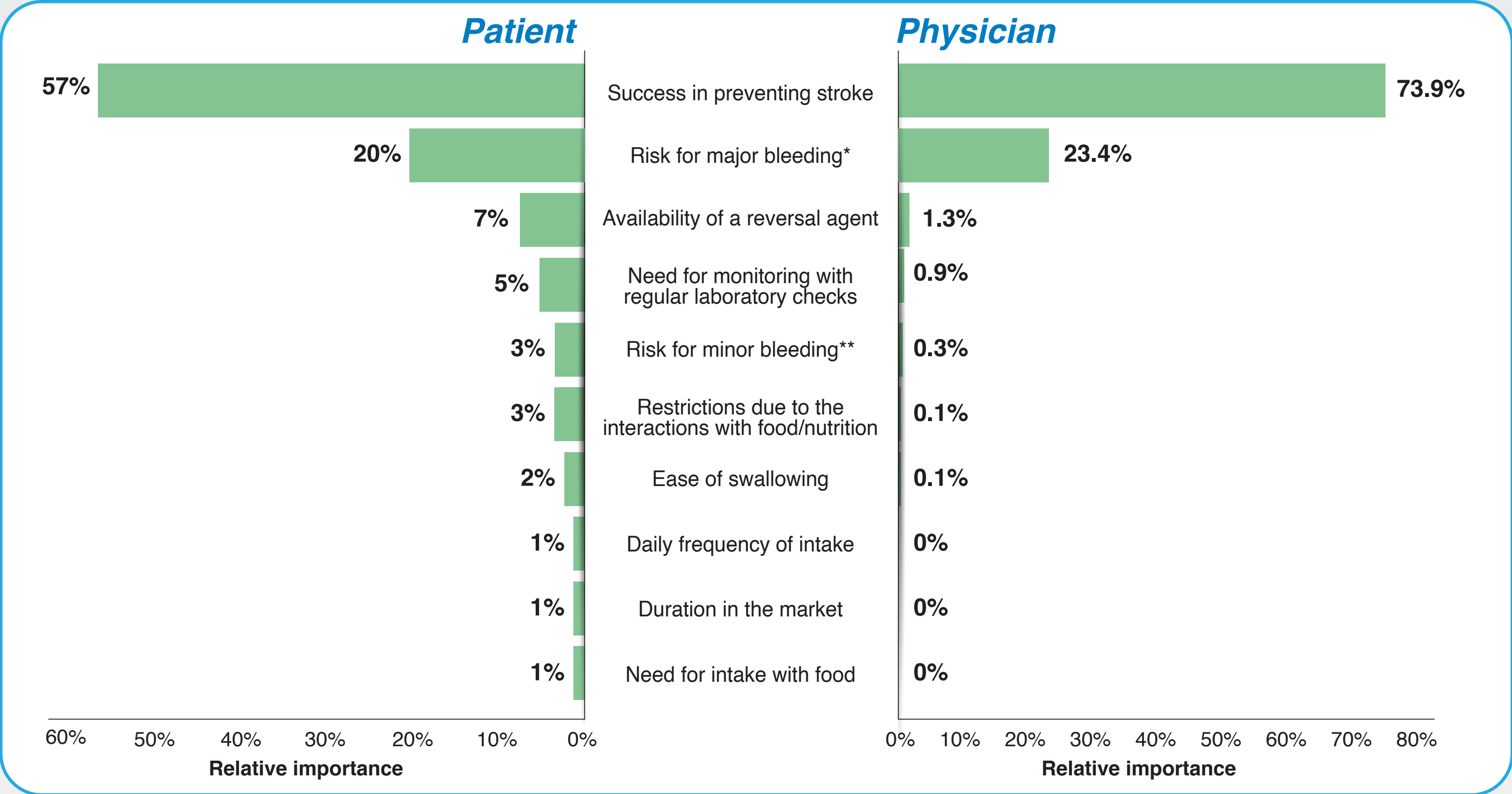
Table 2. Demographic, professional and geographical characteristics of survey physicians who are practicing cardiologists (including cardiology residents with a minimum of 2 years of experience) in Turkey (n=194).

Participant Characteristics		Numbers	Percentage
Gender	Female	50	26%
	Male	144	74%
Title	Professor	10	5%
	Associate professor	30	15%
	Assistant professor	8	4%
	Specialist	80	41%
	Clinical residents with minimum 2-year experience	66	34%
Institution Type	Research and Teaching Hospitals	105	54%
	University clinics	62	32%
	Private hospitals/clinics	19	10%
	State hospitals	8	4%
Location	Istanbul	110	57%
	Ankara	54	28%
	Izmir	16	8%
	Other	14	10%

Factors affecting patients' and physicians' preference for anticoagulation treatment

For patients, success in preventing stroke had the highest relative importance (57%), followed by risk for major bleeding (20%) (Figure 1).

Figure 1. Relative importance estimates of patients (n=230) and physicians (n=194) on anticoagulation treatment attributes in Turkey.



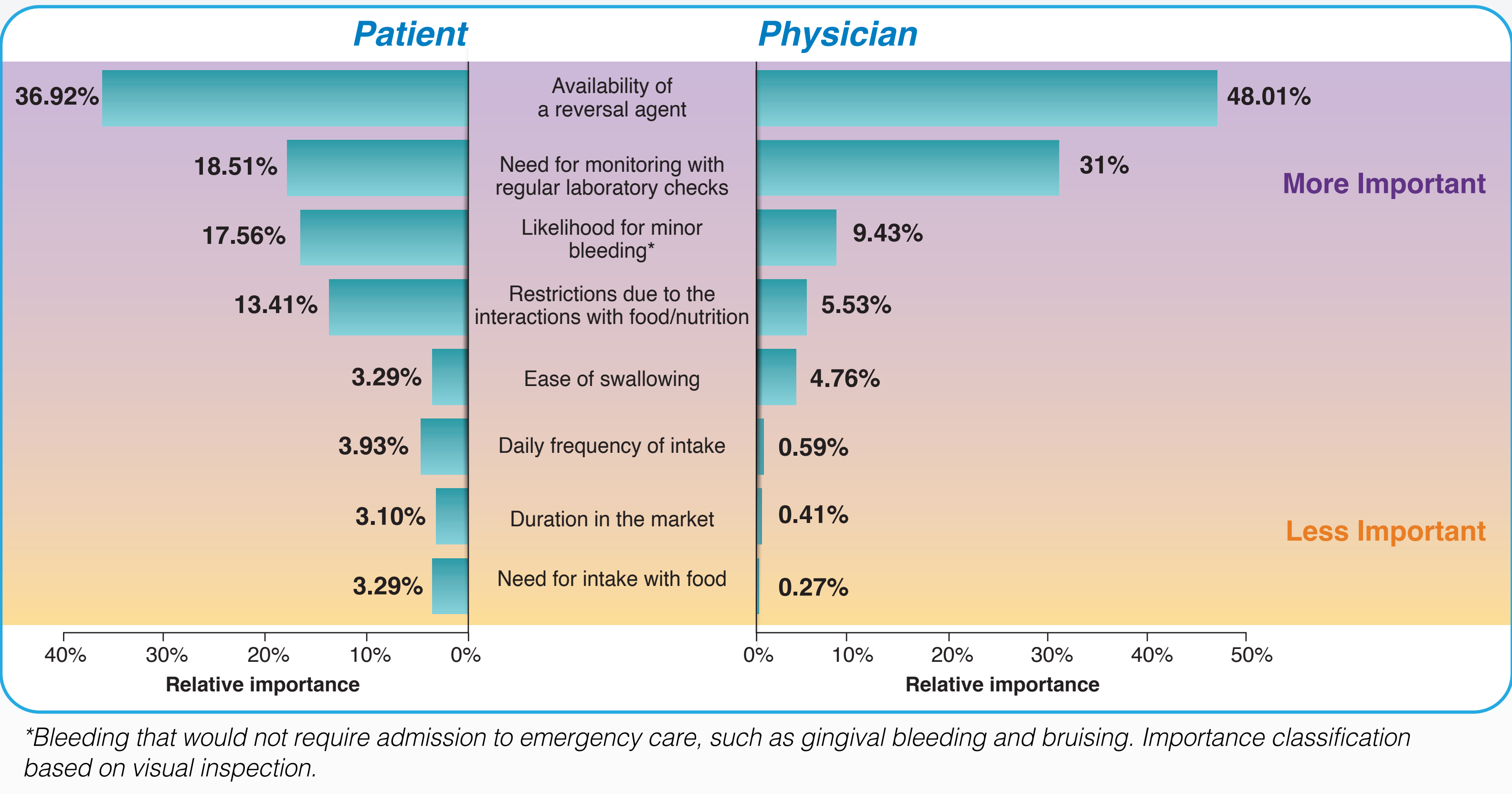
* Bleeding that would require admission to emergency care ** Bleeding that would not require admission to emergency care, such as gingival bleeding, and bruising.

Because two attributes dominate decision-making for OAC treatment, a follow-up analysis was conducted to specifically understand the relative importance of other attributes, assuming “success in stroke prevention” and “major bleeding risk” were equal among alternative OAC options. In this secondary analysis, “availability of a reversal agent” was found to be the most important factor among the remaining attributes, with a relative importance of 36.92% (Figure 2).

The success of preventing stroke was the most important factor affecting physicians’ treatment preference. The risk for major bleeding had the second highest estimate of relative importance. These results were consistent with the estimated patient preferences (Figure 1).

Following the analysis of the patient data, a follow-up analysis was conducted to specifically understand the relative importance of other attributes, assuming “success in stroke prevention” and “major bleeding risk” were equal among alternative OAC options. In this secondary analysis, “availability of a reversal agent” and “need for monitoring” were the most important attributes, with estimated relative importance of 48.01% and 31%, respectively (Figure 2).

Figure 2. Relative importance estimates of patients (n=230) and physicians (n=194) on anticoagulation treatment attributes in Turkey, assuming the relative importance of “success in stroke prevention” and “major bleeding risk” were equal.



*Bleeding that would not require admission to emergency care, such as gingival bleeding and bruising. Importance classification based on visual inspection.

Conclusions:

For both physicians and patients, “success in stroke prevention” and “major bleeding risk” were found to be the most important attributes to OAC choice in AF. These attributes accounted for 77% and 97.3% of overall importance for patients and physicians, respectively. Certain other treatment considerations, especially reversal agent availability and monitoring, appear to be more important to patients than to physicians. This is the first study conducted in Turkey to inform decision-making by addressing the data gap regarding patient and physician preferences for OAC treatments in AF.

Disclosure:

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