

## 90112

**Determination of Factors Affecting Hypertension Awareness, Compliance to Treatment and Blood Pressure Control**

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**Background:** Hypertension is one of the most common chronic diseases and is a global public health problem. Hypertension is associated with conditions such as heart diseases, stroke, kidney disease, premature death and disability and creates a significant burden in the field of health and economy (1,2). According to the World Health Organization's hypertension data of Turkey, it was stated that 16.9 million people in the population of 2017 have hypertension and the awareness rate is 51.9% (3).

**Purpose:** This descriptive and cross-sectional study was conducted to determine the factors affecting hypertension awareness, compliance to treatment, and blood pressure control.

**Methods:** The population of the research consisted of individuals living X city in Turkey. Participants were reached at the information activity held in the city square as part of the Hypertension awareness day on May 17, 2017. In addition, it was said that those who want to participate in the study in their family/environment can apply to the Cardiology Polyclinic of XX University Hospital Heart Center. The research was completed on 30 October 2017 with 542 people. The data were collected with a questionnaire designed in line with the literature and the Hypertension Compliance Assessment Scale (4). The Cronbach  $\alpha$  value of the scale is 0.82. The descriptive statistics and multivariate linear regression analysis were used to evaluate of the data (5,6).

**Results:** The mean age of the participants was 62.66 ( $\pm 13.86$ ) years, 72.1% were male, 50.7% primary school, 22.5% is a high school graduate. The mean systolic blood pressure of the participants was 129.00 ( $\pm 19.83$ ) and diastolic blood pressure was 77.36 ( $\pm 12.45$ ) mmHg. It was determined that 26.5% of the individuals who did not have a known hypertension had a systolic blood pressure of 140 and above, and 15.8% had a diastolic blood pressure of 90 and above. While 31.1% (n=168) of the participants measure their blood pressure only when they are sick, 10.2% (n=55) measure their blood pressure every day.

It was observed that 83.7% (n=18) of the participants complied with hypertension treatment. The participants' compliance score for hypertension treatment was found to be 5.08 ( $\pm 2.32$ ).

In Table 1, the characteristics of the participants' lifestyles are presented.

In Table 2, Multivariate analysis findings related to compliance with hypertension treatment are given. The regression model applied for hypertension treatment compliance was found to be statistically significant (F:14.814,  $p < 0.001$ ). According to the model, 18% of participants' compliance with hypertension treatment is explained by the independent variables in the model.

**Conclusion(s):** Regular health check-ups and regular exercise are independent variables that affect treatment compliance in hypertension. It was found that the majority of individuals who did not have any known hypertension had systolic blood pressure above 140 mmHg.

**Table 1. Characteristics for Lifestyles**

Characteristics		n	%
<b>Smoking</b>	No	405	74,9
	Yes	136	25,1
	Total	541	100,0
<b>Alcohol</b>	No	523	96,5
	Yes	19	3,5
	Total	542	100,0
<b>Continuous Medication Use</b>	No	224	41,4
	Yes	317	58,6
	Total	541	100,0
<b>Type of Medication Used</b>	Blood pressure	141	26,01
	Heart	22	4,1
	Diabetes	51	9,4
	Anticoagulant	11	2,0
<b>Exercise</b>	No	279	51,6
	Yes	262	48,4
	Total	541	100,0
<b>Chronic Disease</b>	Heart disease	105	19,4
	Kidney Disease	17	3,1
	Diabetes	82	15,1
	Hypertension	141	26,01
	Cholesterol	42	7,7
<b>Hypertension Family History</b>	No	212	39,1
	Yes	330	60,9
	Total	542	100,0
<b>Diabetes Family History</b>	No	167	30,8
	Yes	375	69,2
	Total	542	100,0

**Table 2. Multivariate analysis findings related to compliance with hypertension treatment**

<b>Dependent Variable: Hypertension Treatment Compliance</b>							
<b>Independent variables</b>	<b>B</b>	<b>Standard Error</b>	<b>Standardized <math>\beta</math></b>	<b>t</b>	<b>p</b>	<b>Tolerance</b>	<b>VIF</b>
<b>Constant</b>	7,359	,521	-	14,130	<0,001	-	-
<b>Regular health check-ups</b>	-2,223	,544	-,411	-4,089	<0,001	0,995	1,005
<b>Regular exercise</b>	-1,055	,482	-,220	-2,190	<b>0,031</b>	0,995	1,005
<b>F:14,814, p&lt;0,001 Adjusted R<sup>2</sup> : 0,18</b>							
<b>Variables Excluded from the Model</b>							
<b>Variables</b>	<b>B</b>	<b>t</b>	<b>p</b>				
<b>Age</b>	-0,020	-0,193	0,848				
<b>Gender (Male)</b>	-0,076	-0,710	0,480				
<b>Education</b>	0,109	1,057	0,294				
<b>Smoking</b>	-0,076	-0,758	0,451				
<b>Alcohol</b>	0,044	0,434	0,665				
<b>Health Insurance Presence</b>	0,054	0,534	0,595				
<b>Continuous Medication Use</b>	-0,049	-0,467	0,642				
<b>Systolic Blood Pressure</b>	0,187	1,894	0,062				