The Prevalence of Pre-hypertension and Hypertension in an Iranian Urban Population

OBJECTIVE:

To determine the prevalence of hypertension and pre-hypertension and its determinants in the ٤٠-٦٤ year old population of Shahroud in the north of Iran.

METHODS:

The blood pressure of ٥,١٩٠ of the ٤٠-٦٤ year old people participating in the first phase of Shahroud Eye Cohort Study was measured using the standard method. Sampling was done in ٢٠٠٩ using a random cluster approach. The prevalence of hypertension and pre-hypertension was determined by age and sex, and we used a multi-nominal logistic regression model to calculate the odds ratio (OR).

RESULTS:

The prevalence of pre-hypertension was ٣٧.٢ % in men and ٣٠.٩ % in women, and the prevalence of hypertension was respectively ٣٧.١ % and ٣٩.٠ %. In both sexes, there was an increase in the prevalence of hypertension and a decrease in the prevalence of pre-hypertension with age. Older age, male sex, higher body mass index, blood glucose higher than ١٤٠ mg/dl were found associated with hypertension and pre-hypertension. Also, diabetes increases the odds of hypertension (OR = ١.٤) and a history of smoking was correlated with a decreased odds of having hypertension and pre-hypertension.

CONCLUSION:

According to the criteria of Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure, the prevalence of hypertension and pre-hypertension was high in the studied population, and considering the epidemiologic transition of diseases in Iran, it can be concluded that a high percentage of the population are at risk of cardiovascular diseases.