## Prevalence of cardiovascular risk factors in the population of women covered by health centers in Ardabil

## **Abstract**

**Background**: Cardiovascular diseases are one of the most important health problems and one of the most growing diseases. Today, these diseases are associated with a very high prevalence in both developed and developing countries and are considered as one of the most important causes of death. Identification of these risk factors can be effective in predicting the likelihood of advanced cardiovascular disease and its complications. Knowing the regional prevalence of these risk factors, appropriate measures to prevent the progression of these diseases and early treatment can be put on the agenda.

**Aim:** The aim of this study was to determine the prevalence of cardiovascular risk factors in the population of women aged 30 to 60 years covered by health centers in Ardabil.

Methods and material: A retrospective study of descriptive-analytical type and non-interventional primary epidemiological studies and field study. The statistical population of this study includes women aged 30 to 60 years covered by Ardabil Comprehensive Urban Health Service Centers. In the first stage, health centers in Ardabil were divided into five geographical areas and the population covered by each of the five areas was calculated. In the second stage, the number of samples is allocated as a quota in the regions, and in the third stage, by referring to all health centers in Ardabil, in proportion to the population covered by each center, the population of the share of the allocated sampling area and information from individuals They were registered electronically. Women with one of the conditions of pregnancy, lactation, history of kidney disease, known diabetes under medication, history of hepatitis, history of cardiovascular surgery, history of cancer, were excluded from the research process and continued data collection.

Finally, 1006 people entered the study. Data were analyzed by SPSS software and

t-test, one-way analysis of variance and Pearson correlation with a significance

level of less than 5%.

Results: The average activity of individuals per day was 24.42 minutes, the

average consumption of fruits was 1.9 units per day, vegetables were 2.1 units per

day, meat was 286.65 grams per week. The mean HDL levels were 43.6, LDL

101.28, TG 159.89, Cholesterol 185.99 and FBS 94.62 mg / dL. The mean

systolic and diastolic blood pressures of the subjects were 108.14 and 68.26 mm

Hg, respectively. The studied models, using the studied variables, can predict

41.8% of changes in systolic blood pressure and 39.6% of changes in diastolic

blood pressure.

Conclusion: The prevalence of overweight, general obesity and abdominal

obesity is high in the female population of Ardabil. Obesity and high triglycerides,

high cholesterol, HDL and LDL outside the proper range are the most important

factors and risk factors for cardiovascular disease in the population of women in

Ardabil, which is necessary in educational programs and health policies and

special attention to these factors. The demographic, behavioral, and laboratory

variables we studied demonstrated strong predictive power of cardiovascular risk,

which can be reduced over time in the population with proper planning to control

and reduce modifiable cases.

Keywords: Risk factor, Cardiovascular, Women, Ardabil