Abstract: Introduction: The metabolic syndrome (MS) is a major risk factor for chronic diseases. The metabolic syndrome was defined by the presence of three or more of the following components: abdominal obesity, hypertriglyceridemia, low HDL-C, high blood pressure, and high fasting glucose. MS and its components seem to be underlying factors for the development of atherosclerotic cardiovascular disease and type 2 diabetes. Statistics revealed that the prevalence of MS in Iran is higher than the developed countries (30% of adults in Tehran). There are few data available on possible association between perceived stress and metabolic syndrome. The aim of this study was to assess relationship between perceived stress and metabolic syndrome components.

Methods: This cross-sectional study was carried out in 200 metabolic syndrome subjects aged 30 to 75 years who underwent general health screening. Demographic, anthropometric and perceived stress data were assessed by questionnaire. HDL-c, Triglyceride (TG), fasting blood sugar (FBS) were measured enzymatically by colorimetric methods.

Result: There was significant association between negative perceived stress and TG ($r=0.52, P<0.01$), waist circumstance ($r=0.3, P<0.001$), FBS ($r=0.4, P<0.01$) and diastolic blood pressure ($r=0.5, P<0.001$). No association was found between HDL-c, with negative perceived stress. There was a positive association between total perceived stress and blood pressure ($r=0.4, P<0.001$), TG ($r=0.4, P<0.001$) and FBS ($r=0.23, P<0.01$).

Conclusion: Perceived stress was strongly associated with several of metabolic syndrome components. Waist circumstance, triglyceride, FBS levels and DBP were the major determinants. This could be attributed to association between stress and eating behaviors.