94 ONLINE MANAGEMENT OF METABOLIC SYNDROME AND CARDIOVASCULAR RISK FACTORS: A SIMPLE METHOD FOR AWARENESS AND ACTIONS

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Background and aims: Metabolic syndrome is a major public health problem in worldwide and Iran. It is argued that metabolic syndrome is the most responsible risk factor for developing the disease People with metabolic syndrome has 1.5- to 3-fold increase in the risk of coronary heart disease and stroke. The prevalence of metabolic syndrome in Iran is very high. Consistent with the Adult Treatment Panel III (ATP III), diagnostic criteria for metabolic syndrome include: Abdominal obesity determined by increased waist circumference, raised triglycerides, reduced HDL, elevated blood pressure, and raised plasma glucose. When 3 of 5 of the characteristics are present, a diagnosis of metabolic syndrome can be made. The internet is a relatively new and effective method of delivering strategies to detecting high risk people with metabolic syndrome and helps them adopt healthy behavior. The aim of study is delivering an online interactive method for metabolic syndrome detection among general population in Tehran.

Methods: The study web page (http://www.Heartresearch.ir) is designed in order to increase awareness of visitors about prevention of cardiovascular diseases and metabolic syndrome risk factors. Metabolic syndrome components are designed and implement on the study Homepage as interactive calculator tool. Users could use the calculator tool then receive their own risk signs and feedback about each risk factor for metabolic syndrome that they have. Participants were invited for clinical assessments of metabolic syndrome in Tehran Heart Center.

Results: In total, 1,437 individuals registered on the study website. Of these, 815 records were excluded because registrants were living outside Tehran (n=356), had a waist circumference <90 cm (n=392), or had incomplete information (no telephone number; n= 67). In total, 317 individuals were invited to clinical assessments. Of these, 229 were able to attend clinical assessments and were scheduled for a baseline visit, finally 171 had metabolic syndrome.

Conclusion: Effective and affordable strategies to control the syndrome could benefit the at risk population. The integration of interactive e-health programs to primary health care practices such as prevention of cardiovascular risk factors offers possibilities for on- time interaction with the target group. The use of web-based approaches is a great interest in the management of patients at high cardiovascular risk, especially in a scenario where the prevalence of obesity, metabolic syndrome and diabetes is increasing.