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Avicenna Aspect of Cardiac Risk Factors

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Dear Editor-in-Chief

During the last decade, the term " Acute risk factors" was used commonly to describe some activities and events which increase the risk of acute cardiac diseases (1) include: meteorological stress (2, 3), emotional stress (1, 3), overeating (1, 3), nicotine abuse (2), different tensity of physical activity (3), especially heavy physical activity(1,3), sexual activity (1,3), during sleep (2), cold or heat exposure (1), coffee or alcohol consumption (1), and cocaine or marijuana use (1). There are some studies which have directly or indirectly studied cardiac risk factors according to gender (4-6), blood group (7) and even among unhealthy people such as patients with metabolic syndrome (8,9).

Avicenna, ancient Iranian scientist (980 – 1037 AD) in third book of his masterpiece, the Canon of Medicine, has described heart diseases. According to his teaching, heart is the source of innate heat and is considered as a chief organ in body; factors which destroy innate heat may result in heart weakness and then heart diseases (10).

In the first book of Canon, Avicenna said that there are some causes which may make innate heat weak through different mechanisms include: Overindulgence in exercise, sleepless-

ness, emotional stress, prolonged persistence in bath specially too warm bath, excessive defecation of humors and fluids from body through severe diarrhea and/or bleeding, overeating and drinking, overindulgence in sexual activity, puffy body morphology, emotional states such as too preoccupation, too sadness, too exhilaration, and too pleasure, everything change body temperament such as some drugs, warm weather, inhaling rotten air or poisonous air, pain specially in stomach, fever, excessive perspiration, severe starvation. The weakness of the heart, sometimes other organs play a role; for example, diseases in some organs such as pleura, meninge, lung, liver, and specially stomach, may result in heart weakness (9). Of course, four factors are more important than others include: exercise overdoing, emotional stress, overdoing of sexual activity and sleeplessness (11, 12).

Letter to the Editor

As a conclusion, Avicenna never used the term "Acute risk factors" or "External triggers" but he explained nearly twenty factors that may change normal status of heart some of which are very similar to external triggers of acute myocardial infarction. More studies about heart enfeebler factors according to Avicenna's view, is recommended.



References

- Čulić V (2007). Acute risk factors for myocardial infarction. Int J Cardiol, 117(2): 260-269.
- 2. Mirić D, Eterović D, Giunio L, Dujić Z, Fabijanić D, Hozo I, et al. (1997). Triggers of acute myocardial infarction regarding its site. *Int J Cardiol*, 60(1): 67-71.
- Čulić V, Eterović D, Mirić D (2005). Metaanalysis of possible external triggers of acute myocardial infarction, *Int J Cardiol*, 99(1): 1-8.
- Abbasi SH, Ponce De Leon A, Kassaian SE, Karimi AA, Sundin Ö, Soares J, et al (2012). Gender Differences in the Risk of Coronary Artery Disease in Iran. *Iranian J Publ Health*,41(3):36-47.
- Esmailnasab N, Moradi G, Delaveri A (2012). Risk Factors of Non-Communicable Diseases and metabolic Syndrome. *Iranian J Publ Health*, 41(7):77-85.
- Kashani H, Forouzanfar MH, Aghaei Meybodi HR, Larijani B, Aalaa M, Mohajeri-Tehrani MR, et al (2012). Waist Circumference, Weight, and Body Mass Index of Iranians based on National Non-Communicable Disease Risk Factors Surveillance. *Iranian J Publ Health*,41(4):35-45.

- Abdollahi AA, Qorbani M, Salehi A, Mansourian M (2009). ABO Blood Groups Distribution and Cardiovascular Major Risk Factors in Healthy Population. *Iranian* J Publ Health, 38(3):123-126.
- Karami M, Khalili D, Eshrati B (2012). Estimating the Proportion of Diabetes to the attributable Burden of Cardiovascular Diseases in Iran. *Iranian J Publ Health-*, 41(8):50-55.
- Zhou H, Guo Zr, Hu Xs, Yu Lg, Xu Bh, Wu M, et al. (2012). An Exploratory Analysis of Dynamic Change of Metabolic Syndrome in Relation to the Risk of Developing Cardiovascular Disease in a Chinese Cohort. *Iranian J Publ Health*, 41(4):26-34.
- Avicenna (2005). Canon of Medicine. Eds, Shams I. 1st ed. Alamy Le- Al-Matbooat institute, Lebanon, Pp: 5-29.
- Avicenna (2005). Canon of Medicine. Eds, Shams I. 1st ed. Alamy Le- Al-Matbooat institute, Lebanon, Pp: 158-159.
- 12. Chashti MA (2004). *Exir-e azam*. Research Institute for Islamic and Complementary Medicine, Tehran University of Medical Sciences, Tehran, pp: 271-272.