

## Cardiovascular risk factors in Turkey

### *Türkiye'de kardiyovasküler risk faktörleri*

Dear Editor,

We have greatly enjoyed reading an article by Ünal et al. (1) published early online, entitled as "High prevalence of cardiovascular risk factors in a western urban Turkish population: a community-based study". The prevalence of cardiovascular risk factors in a large population living in Balçova, a western urban region of Turkey, was investigated. The study presented a good picture of cardiovascular risk factors for our country in which this kind of surveys are hardly conducted. However, some additional data should be discussed with this study.

Initially, we should mention the data about Turkey in 2012 World Health Statistics of World Health Organization (WHO). This report had been created with the data obtained from countries using web-based systems provided by WHO. It appeared in 2012 on WHO web-site but mostly the data in 2008. The organization estimated a value for any individual parameter in a country that no data could be obtained, based on the data in the other countries of the same region. This kind of data was notified in the report. For Turkey, certain values, not estimated, were presented (2). The prevalence's of cardiovascular risk factors presented by WHO as well as the study were shown in Table 1.

WHO published the data for all over the country while the present study was about for a western urban region of the country? Besides, the definitions were similar except for age limits, that is, over 25 in WHO and 30 in the present study. In spite of all, the trends of cardiovascular risk factors seemed to be similar in both reports (Table 1).

Tobacco use and hypertension should be taken special consideration. Tobacco use is a common bad habit in our country. The ratio of smoking has dramatically reduced with smoking ban as a governmental policy. Two million people were estimated to quit smoking since 2008 and, tobacco use decreased below 25% in general population. In addition, the hospitalizations because of tobacco-related diseases reduced approximately 20% (3).

Two important studies should be emphasized about hypertension. In the PatenT study supported by The Turkish Society of Hypertension and Renal Diseases, the prevalence of hypertension was investigated in 4910 people living in different cities in 2003. Total prevalence in the population over age 18 was 31.8%, while it was 27.5% in men, 36.1% in women (4). The HinT study aimed to determine the incidence of hypertension with the follow-up of PatenT study population for 4 years, the incidence was 21.4% in all ages and 43.3% age over 65. The predictors of hypertension was advanced age, alcohol use, obesity and living in countryside (5).

In conclusion, the study by Ünal et al. (1) provided valuable data even if it was related to a certain region. All presented data will help the reader to have clear opinion about the issue. We would like to congratulate all authors for their study and we hope that the data will provide significant contribution to preventive cardiovascular medicine.

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**Table 1. The prevalences of cardiovascular risk factors**

	WHO 2012 (%)		Present Study (%)	
	Men	Women	Men	Women
Raised blood glucose* (age ≥25)	10.1	9.8	14.6	12.6
Raised blood pressure (age ≥25)	24.0	24.9	39.8	41.8
Obesity** (age ≥20 yaş)	22.8	35.6	29.4	44.2
Tobacco (age ≥15) (2009)	47	15	38.6	26.8

WHO - World Health Organization, \*Blood Glucose ≥ 126 mg/dL, \*\*Body Mass Index ≥ 30 kg/m<sup>2</sup>

### References

1. Ünal B, Sözmén K, Uçku R, Ergör G, Soysal A, Baydur H, et al. High prevalence of cardiovascular risk factors in a Western urban Turkish population: a community-based study. *Anadolu Kardiyol Derg* 2013;13:9-17.
2. World Health Statistics 2012 of World Health Organization. Available from: [http://www.who.int/gho/publications/world\\_health\\_statistics/en/index.html](http://www.who.int/gho/publications/world_health_statistics/en/index.html).
3. Devi S. Turkey wins plaudits for tobacco control. *Lancet* 2012; 379: 1935. [CrossRef]
4. Altun B, Arıcı M, Nergizoğlu G, Derici Ü, Karatan O, Turgan Ç, et al. Prevalence, awareness, treatment and control of hypertension in Turkey (the PatenT study) in 2003. *J Hypertens* 2005; 23: 1817-23. [CrossRef]
5. Arıcı M, Turgan Ç, Altun B, Sindel S, Erbay B, Derici Ü, et al. Hypertension incidence in Turkey (HinT): a population-based study. *J Hypertens* 2010; 28: 240-4. [CrossRef]

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### Author's Reply

Dear Editor,

We read the letter to the Editor concerning our article titled "High prevalence of cardiovascular risk factors in a Western urban Turkish population: a community-based study" (1). We are grateful to the authors' interest in the subject and for their critiques.

Population based epidemiologic data on non-communicable diseases (NCD) and risk factors are rather scarce in Turkey. Available studies are mostly based on regional small samples. However the number, coverage and quality of studies are increasing in the recent years that may help to develop evidence based policies to respond increasing burden of non-communicable diseases. Specialty Associations including Turkish Society of Cardiology (2) or The Turkish Society of Hypertension and Renal Diseases (3) are key organizations that provided epidemiologic information on NCDs and risk factors in collaboration with the Ministry of Health of Turkey (MoH) in Turkey.

Repeated cross-sectional studies using standardized methods based on a national representative sample are needed to monitor the trends in risk factors and NCDs. NCD control programs were developed

and organizational and structural changes were made in the health system of Turkey in recent years (4, 5). The impact of these changes should be evaluated using national data. Therefore a research strategy and priorities should be developed by the MoH in consultation with the stakeholders in NCD control. Ministry of Health of Turkey commissioned the Chronic Diseases and Risk Factors Survey in Turkey which was a population based cross sectional survey that was based on a random sample of over age 15 population of Turkey in year 2011(6). The analyses were finalized in 2012 and the report is in press.

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## References

1. Ünal B, Sözen K, Uçku R, Ergör G, Soysal A, Baydur H, et al. High prevalence of cardiovascular risk factors in a Western urban Turkish population: a community-based study. *Anadolu Kardiyol Derg* 2013; 13: 9-17.
2. Onat A. Risk factors and cardiovascular disease in Turkey. *Atherosclerosis* 2001; 156: 1-10. [CrossRef]
3. Altun B, Arıcı M, Nergizoğlu G, Derici Ü, Karatan O, Turgan Ç, et al. Prevalence, awareness, treatment and control of hypertension in Turkey (the PatenT study) in 2003. *J Hypertens* 2005; 23: 1817-23. [CrossRef]
4. Türkiye Kalp ve Damar Hastalıkları Önleme ve Kontrol Programı. Sağlık Bakanlığı, Ankara; 2010.
5. Türkiye Diyabet Kontrol Programı. Sağlık Bakanlığı. Ankara: 2011.
6. Chronic diseases and risk factors survey in Turkey. Editors Unal B, Ergör G. [http://www.asm.gov.tr/UploadGenelDosyalar/SubeDosyaları/Dosyalar/06\\_07\\_2011\\_08\\_14\\_24.pdf](http://www.asm.gov.tr/UploadGenelDosyalar/SubeDosyaları/Dosyalar/06_07_2011_08_14_24.pdf)

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## Appropriate methodology is essential for accurate conclusions

*Doğru sonuçlar için uygun yöntem elzemdir*

Dear Editor,

We read with great interest the article published in The Anatolian Journal of Cardiology by Özlü et al. (1) regarding the predictive value of mean platelet volume (MPV) in young patients with non-ST-segment elevation acute coronary syndrome's (NSTEMI-ACS). Özlü et al. (1) concluded that MPV was found to be elevated in NSTEMI-ACS patients compared with control subjects in young population. We admire their work but we have some concerns about the methodology of the study.

Relationship between elevated MPV and NSTEMI-ACS has already been demonstrated in previous studies (2, 3). Özlü et al. (1) hypothesized that an increased MPV predicts development of NSTEMI-ACS in young patients. Seventy-nine patients, younger than 45 years old, with the diagnosis of NSTEMI-ACS (41 NSTEMI, 38 USAP) were included in the study. The control group was comprised of 45 subjects, who were

younger than 45 years old with normal coronary arteries. The main findings of the study are reported as; increased MPV was found to be an independent predictor of NSTEMI-ACS in young patients and MPV of the young patients with NSTEMI-ACS was found to be significantly higher than the MPV of the subjects of control group.

The main problem of the study design is the control group. In order to show any difference in the "young patients" group, there must be an "elderly patients" group, but not a "young normal" group. So, the control group of the study had to be subjects who were older than 45 years old with the diagnosis of NSTEMI-ACS.

Another noteworthy issue is the low number of patients in the study, as the authors have already noted.

As a result, we believe that the methodology of the present study is inappropriate for the evaluation of the proposed hypothesis. A study including a proper control group is needed to reach a conclusion on this interesting topic.

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## References

1. Özlü MF, Öztürk S, Ayhan SS, Tosun M, Alçelik A, Erdem A, et al. Predictive value of mean platelet volume in young patients with non-ST-elevation acute coronary syndromes: a retrospective observational study. *Anadolu Kardiyol Derg* 2013; 13:57-61.
2. Lopez-Cuenca AA, Tello-Montoliu A, Roldan V, Perez-Berbel P, Valdes M, Marin F. Prognostic value of mean platelet volume in patients with non-ST-elevation acute coronary syndrome. *Angiology* 2012; 63: 241-4. [CrossRef]
3. Lippi G, Filippozzi L, Salvagno GL, Montagnana M, Franchini M, Guidi GC, et al. Increased mean platelet volume in patients with acute coronary syndromes. *Arch Pathol Lab Med* 2009; 133: 1441-3.

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## Author's Reply

Dear Editor,

We would like to thank the authors of the letter for their interest and criticism about our study published in The Anatolian Journal of Cardiology (1) on predictive value of mean platelet volume (MPV) in young patients with non-ST-segment elevation acute coronary syndromes (NSTEMI-ACS) (1). We hypothesized that an increased MPV predicts development of NSTEMI-ACS in young patients. Seventy-nine patients, younger than 45 years old, with the diagnosis of NSTEMI-ACS were included in the study together with 45 subjects, who were also younger than 45 years old without acute coronary syndromes with normal coronary arteries, as the control group. The main finding of our study is; increased MPV was found