

Is Metabolic Syndrome Truly Prevailing in Nondiabetic Libyan Women

Dear Editor,

I read with interest the study by El-Shareif^[1] published in January–June 2018 issue of *Libyan International Medical University Journal*. El-Shareif^[1] employed the National Cholesterol Education Program Adult Treatment Panel III (NCEP-ATPIII) criteria to estimate the prevalence of metabolic syndrome (MS) and its components among nondiabetic Libyan females. They found that the prevalence of the MS in the study group was 42.6%. The most common component was abdominal obesity (67.2%). Fasting blood sugar was ≥ 100 mg/dl in 47.5% and the prevalence of both hypertension and low high-density lipoprotein cholesterol was 45.9%. About 26.2% of the participants have serum triglycerides ≥ 150 mg/dl; all were MS patients.^[1] I presume that these results ought to be cautiously taken. This is based on the presence of many limitations that might cast some suspicions on the precision of the study results. These include the following: cross-sectional nature of the study, lack of controls, short study period (6 months), and small sample size ($n = 122$). Moreover, the following methodological limitation related to the MS definition criteria employed in the study is highly relevant. The impact of this limitation could be explained in two aspects. On the one hand, it is well known that there are many definitions criteria for MS. These include the following: NCEP-ATPIII; American Heart Association (AHA); International Diabetes Federation; and World Health Organization. Comparing the most frequently used definitions of MS showed that the prevalence of MS was significantly estimated higher on employing the AHA and IDF as compared to the NCEP-ATPIII definition and that AHA and IDF definitions were found more sensitive than that of NCEP-ATPIII in diagnosing MS.^[2] On the other hand, NCEP-ATPIII criteria employed in the study by El-Shareif^[1] is old dated back to 2005 and it is no more worthy.^[3] As many national associations have developed their own diagnostic MS criteria,^[4,5] I presume that constructing national Libyan MS definition criteria could better estimate the prevalence of MS. Despite the aforementioned limitations, the high reported MS prevalence (42.6%) in the study by El-Shareif^[1] necessitates implementing suitable interventions to reduce the future risk of cardiovascular morbidity and mortality.

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Conflicts of interest

There are no conflicts of interest.

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REFERENCES

1. El-Shareif HJ. Prevalence of metabolic syndrome and its components in nondiabetic Libyan females. *Libyan Int Med Univ J* 2018;3:20-5.
2. Mancia G, Bombelli M, Facchetti R, Casati A, Ronchi I, Quarti-Treviso F, *et al.* Impact of different definitions of the metabolic syndrome on the prevalence of organ damage, cardiometabolic risk and cardiovascular events. *J Hypertens* 2010;28:999-1006.
3. Grundy SM, Cleeman JI, Daniels SR, Donato KA, Eckel RH, Franklin BA, *et al.* Diagnosis and management of the metabolic syndrome: An American Heart Association/National Heart, Lung, and Blood Institute Scientific Statement. *Circulation* 2005;112:2735-52.
4. Yamagishi K, Iso H. The criteria for metabolic syndrome and the national health screening and education system in Japan. *Epidemiol Health* 2017;39:e2017003.
5. Xing Y, Xu S, Jia A, Cai J, Zhao M, Guo J, *et al.* Recommendations for revision of Chinese diagnostic criteria for metabolic syndrome: A nationwide study. *J Diabetes* 2018;10:232-9.

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