

LETTERS TO THE EDITOR

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# Clinical features and predictors of metabolic syndrome among obstructive sleep apnea patients

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To the Editor,

Kaddah and colleagues [1] in their recently released study, employed metabolic syndrome definition elements (MetSDE) of the International Diabetes Federation (IDF) to study MetS prevalence and its predictors in Egyptian patients with obstructive sleep apnea (OSA). They found that 66.3% of OSA patients exhibited MetS and the relevant MetS predictors were SPO<sub>2</sub> < 90%, body mass index, and neck, hip, and waist circumferences [1]. In addition to the few limitations addressed by Kaddah and colleagues [1], we present a noteworthy limitation, which is linked to MetSDE employed in the research. The optimum definition of MetS remains controversial. Over several years, numerous MetS definitions have been developed by scientific bodies. Though these definitions vary to some degree in their elements and threshold values, they generally endorse the essential parameters of the syndrome, notably abdominal obesity, dyslipidemia, hypertension, and insulin resistance. In research and clinical fields, numerous MetSDE are usually used such as IDF, American Heart Association (AHA), adult treatment panel-III (ATP-III), and finally joint interim statement (JIS). There is a significant conflicting agreement on the accuracy of these MetSDE for MetS characterization as noticed by numerous observational studies [2,

3]. Different results were obtained when measuring MetS prevalence among adult Egyptians using various MetSDE, namely 44.3% (IDF elements), 43.8% (AHA elements), 42.5% (ATP-III elements), and 41.5% (JIS elements with Egyptian cut-offs) [4]. To overcome the variations in estimating MetS prevalence by using different MetSDE, numerous nations have developed their diagnostic MetSDE and proved effective in yielding validated results in research and practice [5, 6]. The formulation of the Egyptian MetSDE is deemed critical as it can measure more readily MetS prevalence in OSA patients. Regardless of the study limitations, the recorded MetS prevalence in the studied OSA patients (66.3%) [1] is troublesome and it calls for the urgent implementation of strategic interventions to lessen the negative health effects of MetS, decrease healthcare visits and costs, and improve OSA patients' quality of life.

#### Abbreviations

IDF	International Diabetes Federation
OSA	Obstructive sleep apnea
MetS	Metabolic syndrome
MetSDE	MetS definition elements
AHA	American Heart Association
ATP-III	Adult Treatment Panel-III
Jl	Joint Interim Statement

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#### Author's contributions

MDA read the literature on metabolic syndrome and obstructive sleep apnea, wrote the manuscript, and approved it.

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## Declarations

### Ethics approval and consent to participate

Not applicable.

### Consent for publication

Not applicable.

### Competing interests

MDA states that he has no competing interests.

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