Letter

Increasingly aware of the vulnerability of health practitioners who have become interest in other factors that require clinical attention. The metabolic syndrome is a means of assisting clinicians in recognizing and treating patients with multiple risk factors. It is noted that the syndrome itself conveys no urgency at a discussion of other important traditional cardiovascular risk factors that require ongoing monitoring such as blood pressure, lipid profile, and glucose. Furthermore, unlike most of the existing cardiovascular risk algorithms, the metabolic syndrome includes consideration of central obesity and serum triglyceride levels. Most psychiatrists are unlikely to calculate Framingham risk scores. Hence, the pragmatic value of the metabolic syndrome is not in studying pathophysiology per se or in designing clinical trials for those who rigidly meet its criteria, but rather the usefulness of the concept is in the ongoing education of practitioners and, ultimately, in the improvement of overall health care.

The Metabolic Syndrome: Time for a Critical Appraisal: Joint Statement From the American Diabetes Association and the European Association for the Study of Diabetes

Response to Kahn et al.

The joint statement from the American Diabetes Association and the European Association for the Study of Diabetes (1) takes issue with the entity of the metabolic syndrome, criticizing it on a number of levels, including the seemingly arbitrary selection of its component risk factors and their corresponding cutoff values, the lack of concordance between competing definitions of the metabolic syndrome, and, fundamentally, that the syndrome itself conveys no greater information than the sum of its component risk factors.

Unfortunately, these criticisms detract from the primary utility of the metabolic syndrome as a means of assisting the front-line practitioner in identifying risk factors that require clinical attention. This is especially pertinent for mental health practitioners who have become increasingly aware of the vulnerability of the seriously and persistently mentally ill in developing diabetes and cardiovascular disease and the potential impact of psychotropic medication on this risk (2). The initial focus of attention had been on monitoring for obesity, but body weight is only one of many parameters that need to be assessed on a routine basis. The concept of the metabolic syndrome allows for a discussion of other important traditional cardiovascular risk factors that require ongoing monitoring such as blood pressure, lipid profile, and glucose. Furthermore, unlike most of the existing cardiovascular risk algorithms, the metabolic syndrome includes consideration of central obesity and serum triglyceride levels. Most psychiatrists are unlikely to calculate Framingham risk scores. Hence, the pragmatic value of the metabolic syndrome is not in studying pathophysiology per se or in designing clinical trials for those who rigidly meet its criteria, but rather the usefulness of the concept is in the ongoing education of practitioners and, ultimately, in the improvement of overall health care (3).

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Response to Kahn et al.

An official and comprehensive analysis on the metabolic syndrome was recently published by Kahn et al. (1). Taking into consideration not only their own experience but also an impressive list of references, they express some critical ideas regarding the definition, the underlying pathophysiology, and the treatment of this condition. Although the demonstration of Kahn et al. seems very solid, we believe that their conclusions will produce many controversial reactions.

In our opinion, the problem of the metabolic syndrome will be significantly simplified if we renounce to consider it first as a cluster of specific cardiovascular risk factors. Otherwise, the debate becomes endless: why include only some cardiovascular risk factors and not include others?

The International Diabetes Federation marked an important progress in the pathophysiology and diagnosis of the metabolic syndrome, suggesting that the key element is central obesity (2). Unfortunately, in the report of Kahn et al., this very useful observation was minimized.

Generally speaking, all the components of the metabolic syndrome, from all the existing definitions, can be discovered in the picture of obesity. In particular, their concentration is higher in that special form of disease, named central or visceral obesity (3,4). Therefore, we can postulate that obesity represents the background of the problem or “the roots of evil”; central obesity is a complex and aggressive form of disease with a huge potential for cardiovascular and metabolic disorders. The metabolic syndrome is, in fact, a complication of this type of obesity. Eventually, we can consider it as a central obesity syndrome. Such a term seems more adequate, both from medical and semantic points of view (5).

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consider the definition of its elements and what additional information these elements, in combination, may contribute to the risk of cardiovascular disease. Hypertension and dyslipidemia as risk factors can perhaps serve as a model. Their independent contribution to the risk of cardiovascular events was first identified. Later, effective treatments were evaluated in large long-term clinical trials that defined the standards of care for high levels of blood pressure and cholesterol (3,4). The critical appraisal of Kahn et al. may be a turning point for the metabolic syndrome. Until this sort of high-quality effort is devoted to the metabolic syndrome, it is premature to introduce the current definitions of the metabolic syndrome into clinical medicine or public health practice. In the meantime, clinicians are well advised to appropriately treat the individual risk factors, many of which are improved by the nonpharmacologic approaches of diet, weight loss, and exercise.

References

Citrone et al. (1) seem to agree with our review (2) of all the shortcomings associated with the metabolic syndrome. Yet, they claim it is somehow still an aid in identifying risk factors and in the “ongoing education of practitioners,” both of which may improve health care. This seems perplexing because what must occur prior to making the “diagnosis” is knowledge of the components, and thus, a priori, the provider must be familiar with the cardiovascular disease (CVD) risk factors that comprise the concept and that the factors must be monitored. Moreover, many other CVD risk factors (e.g., LDL cholesterol, smoking, age, family history) do not require a phrase to prompt doctors to test, yet medical history taking and cholesterol testing do not seem to have suffered because of the absence of an associated syndrome.

Giugliano and Esposito (3) highlight a very important concept. That is, current definitions of the syndrome are “polluted by inclusion of patients with frank diseases.” We couldn’t agree more, and that error compounds the inability of the definition to serve a useful purpose. Unfortunately, although there are an innumerable number of articles describing CVD risk in metabolic syndrome patients who were not distinguished by the values

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Response to Kahn et al.

We have known for years that major cardiovascular risk factors such as obesity, high blood pressure, diabetes, and dyslipidemia tend to cluster. One of the names associated with that clustering—the metabolic syndrome—has recently become popular. The fine epidemiologic review by Kahn et al. (1) may enable us to gain new insight into its etiology, prognosis, and treatment. Like Gale (2), they challenge scientists studying the metabolic syndrome to