



Letter to the Editor

Is the definition of malnutrition a Sisyphean task?



Dear Editor,

I have read with great interest the recently published original article 'Diagnosing clinical malnutrition: Perspectives from the past and implications for the future' by Levi M. Teigen et al. [1]. By giving key historical elements, the authors aim to contribute to move forward on an international accepted definition of malnutrition. The authors propose a shift of paradigm by putting, in the core of the research efforts, the emphasis on the identification of nutrition-related variables capable of predicting outcomes and responsiveness to nutrition intervention. In contrast to the authors, I propose a different approach based on a philosophical study of the emergent knowledge through the historical review (i.e. "historical epistemology") with a view to answer one fundamental question: is malnutrition a disease? In other words, what is the definition of the malnutrition's nature?

This question is inscribed in the fundamental and most long-standing debate in the philosophy of medicine: the basic concepts of health and disease [2]. Malnutrition and moreover the nutritional disorders (sarcopenia, obesity, etc.) could be considered as a kind of clinical condition or pathology that lack of consensus about its nature and can be an exemplary object of study. For example, D. L. Katz considers that obesity is not a disease and the misguided urge to pathologize obesity reflects society's failure to come to terms with the need for prevention [3].

Philosophical discussions in this field have traditionally been dominated by a debate between "constructivists" (also known as normativity theory) and "naturalist" [2,4]. According to the naturalist approach, diseases are purely descriptive objective concepts; they are natural facts that can be described and characterized by the natural sciences. The bio-statistical theory of the philosopher Christopher Boorse is still the dominant approach among naturalists, in which the central discipline on which theoretical medicine relies is physiology. Diseases are thus empirical (i.e. originating in or based on observation or experience), objective and value-free concepts. For the constructivist, on the other hand, diseases are irreducible to such facts: they are undesirable states that enjoin action and that we try to avoid; they are also reflective of cultural, social, biological values, etc. For constructivists, diseases are harms that we blame on some biological process because it causes the harm, not because it is objectively dysfunctional [4].

Attempts to define malnutrition are placed between the constructivist and naturalist conceptions of the disease. Thus, as shown by the historical description by Levi M. Teigen et al., malnutrition has been identified as a condition, risk factor, or a

pathology which has been disvalued and then linked etiologically to biological processes, for example, hypercatabolism, named "abnormal". At the same time, malnutrition as a concept, has been studied and classified (etiology based definition) in order to clarify what disease really is in order to try to give objectively criteria to define it. This naturalist approach implies the highest desire to obtain a single parameter capable of defining malnutrition as for example, a fasting blood glucose levels ≥ 7.0 mmol/l means a diagnosis of diabetes.

Consequently, we may raise the following question: are we facing a Sisyphean task? Defining malnutrition is essential since it has been shown before that malnutrition is what best defines the domain (a field or scope of knowledge and activity in science) of clinical nutrition [5]. This means that the main problem addressed by clinical nutrition is malnutrition. Therefore, a comprehensive understanding of malnutrition is necessarily linked to the development of the discipline.

In order to move forward on an international definition, what is important, in my opinion, is first to recognize the complexity of malnutrition, its multi-etiological and multi-systemic nature. Then, the ideal of an evidence based set of biological parameters to define malnutrition as pretended by the authors, could be of interest in the field of research. In the clinical practice, the identification of the nutritional risk by validated tools must be recognized as a great achievement and its practice must be promoted. The complete assessment of malnutrition by a holistic approach (body composition, biological, functional, psychological and sociological parameters) integrating subjective and objective parameters is still a good approach. Efforts to understand the pathophysiology of malnutrition using innovative technology (e.g. metabolomics, body composition assessment devices) will be important to improve the treatment and to develop new strategies to obtain better results.

Finally, malnutrition must be understood as the sum of adaptive responses and thus the challenge for research would be to find where to put the limit between the normal and the pathological, based on quantitative and qualitative criteria. Thus, skipping to a new paradigm is not the answer, but putting at the core of the research, for philosophers and scientists, the normative and axiological status of the concept of malnutrition.

Conflict of interest

None.

References

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