Proper and ethical nutrition research is a human right

La investigación adecuada y ética en nutrición es un derecho humano A investigação adequada e ética sobre nutrição é um direito humano

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The human rights declaration, signed on the 10 of December of 1948, represents the world's goal to ensure the universal and effective recognition and observance of freedom and human's well-being. Human rights, health and clinical nutrition are inextricable linked since life without nutrition is not feasible, while life without health means no good living and well-being. In this regard, aware that malnutrition is the most prevalent condition⁽¹⁾ in the hospital setting, and that it negatively impacts the patients' morbidity, mortality, length of hospital stay, costs and readmissions⁽²⁾, the principle of human rights should be widely discussed. Furthermore, malnutrition in the community is also a burden associated not only with disease conditions but also economic factors. Therefore, delivering optimal nutrition care should be an effective strategy to reduce the global burden of malnutrition. A systematic review pertaining data from Latin America, published in 2017, showed that independently of the assessment tool, the rates of malnutrition were between 40% to 60%(1). According to epidemiologists, a prevalent condition is that with a rate above 10%. Despite its high prevalence, medical awareness regarding malnutrition is low, and the condition is undertreated, since less than 10% of the patients receive any type of nutrition therapy in the hospital $^{(3)}$.

Optimal clinical nutrition should be based on the patient's disease condition and presentation, the age, and the prognosis of the patient, and it is up to the medical team to decide upon these aspects. Optimal clinical nutrition starts in the kitchen of the hospital, facility

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or home and ends in the room where the patient is. It encompasses offering the patients adequate meals and nutrition therapy based on the disease condition, which is assessed by the nutritional therapy team. However, the practice of nutrition therapy, in many institutions, is still based on *ad hoc* practice⁽⁴⁾. It is also fragmented, which is a paradox that a therapeutic that impacts patients' outcomes can be against his/her well-being. Once again, justifying the principle of human rights, in guaranteeing the patient's right.

The patient and his/her rights are the center or the main goal of optimal clinical nutrition. All the professionals should work in an interdisciplinary mode to improve the patient's outcome. Therefore, providing adequate nutrition to those under food insecurity, decreased food intake, either at the household or individual level, at any stage in life, which may be influenced by psychological issues, should be a human rights foundation⁽⁵⁾.

The right to nutrition care is directly related to human dignity and ethical principles in which the duty-bearers as the state, policymakers, institutional managers, and caregivers have an important role. The content of scope is the right to benefit from the whole process of nutritional care, and the patient has the right to beneficiate from the right to be screened and diagnosed for disease related malnutrition, as well as to receive regular hospital diet, therapeutic diet, and evidence-based nutrition therapy⁽⁵⁾.

The right to nutritional care starts at hospital admission or at the first contact in primary care, when the patient should be screened for malnutrition. If at risk, the patient should be assessed and have the diagnosis of the nutritional status, and then based on the diagnosis the provision of a nutrition care plan should be tailored indi-

vidually according to the clinical condition of the patient. All these aspects must be supported by good evidence. In this regard, the practice of good science is also contemplated by the prerogatives of the human rights. In fact, the right to good science was first officially presented in the International Covenant on Economic, Social and Cultural (ICESC) rights, bound by 169 countries long ago⁽⁶⁾. However, the countries have never legally defined it, and many have also ignored its practice, therefore they have not implemented it.

In October 2018, The United Nations (UN) Committee on Economic, Social and Cultural Rights released a list of 29 questions related to defining the right to science, of which: What should be the relationship between the right to benefit from science and intellectual property rights?, how should government obligations under the right differ based on the available national resources?, what is scientific knowledge and how should it be differentiated, if at all, from traditional knowledge?⁽⁶⁾.

The reasons behind the rights to science is to empower individuals, strengthen communities and improve the quality of life of individuals. There is a call for the UN to reach a responsible and productive end, and for the right to science to be put into practice as was intended when it was first recognized by the United Nations in 1948. It is undoubtedly that science and scientists have contributed valuably in making human rights a reality for all in particular when it should be guaranteed the freedom to: engage in scientific inquiry by reporting findings without interference; have knowledge and skills to reveal truths about human rights violations and to the aid of colleagues under attack; carry out the forensic exhumation of mass graves such as in Argentina, the Balkans, and Rwanda as evidence of war crimes and crimes against humanity; use DNA evidence in order to identify victims of mass killings in Bosnia and to free wrongfully convicted prisoners in the United States; introduce information management techniques aiming to illuminate large-scale human rights violations from attacks on civilians in Kosovo; highlight the neglect of HIV/AIDS in South Africa; use satellite imagery to document the destruction of communities in remote locations around the world, such as the Kurds in $Iraq^{(7)}$. Therefore, the rationale for human rights and science is a good starting point to better understand human rights not as some vague set of aspirations but as specific obligations of governments. Such obligations include the social and economic rights essential to human well-being and the rights to health, food, a clean environment. This is

included in The Universal Declaration of Human Rights states a "share in scientific advancement and its benefits".

Poor medical research has been a matter of discussion since the pioneer paper by Altman in 1994 entitled "The scandal of poor medical research" (8). The author highlighted how poor medical Science is unethical and unacceptable, thus interfering in the well-being of the patients. John Ioannidis, in 2005, also showed that most published research findings are false, and the reasons are related to study power and bias, as many studies are not statistically adequate analyzed and most of them have small sample sizes (9).

Poorly conducted studies tarnish the literature and may harm patients⁽¹⁰⁾. Once again, this is against the principles of human rights. Considering deluge of papers that are currently published, with an increase of 4% per year, which means from 2008 and 2018 there was a growth from 1.8 million to 2.6 million, all the previous discussed information is even scarier and more troublesome. To make things more complicated, the social media impacts how papers are disseminated. A recent study, in the area of cardio-thoracic surgery assessed the impact of Tweeter on the number of citations and altmetrics of papers that were randomized to either be tweeted or not⁽¹¹⁾. Tweeted papers had increased altmetrics in percentiles and greater chance of more citations. The predictors according to a multivariate analysis were papers that were tweeted, had higher altmetrics, were open access and exposed in Tweeter with many followers.

Van Calster et al⁽¹⁰⁾ argue that the overall quality of medical research remains poor. Despite the criticisms, the scientific enterprise is business-like and undervalues methodology. Although, there have been great initiatives to improve quality, the progress is modest. The authors suggest there should be top-down actions from journals, funding agencies, universities, and governments. The key element is that the scientific enterprise is doing a major disservice to patients and society, thus impacting human rights.

The topic is of utmost importance and it is deemed relevant to be discussed. Despite all the efforts and "voices" we currently seem to live a "Dunning-Kruger effect" (12), which stands that those who are experts are aware of their limitations while those who know nothing are sure of their knowledge.

Health, science, and human rights are, then, overlapping fields, which continue to be contested and need to evolve to inform and expand the space within which ideas about the intersection can venture forth into the world. These principles need to be cited and criticized, to be debated and discussed and to be torn down and built up.

In conclusion, in my very simplistic reasoning, if freedom means supremacy of human rights, and health is a human right, clinical nutrition is an integral part of healthcare, then it is a human right. At the same time, if the right to science, which was incorporated in the ICESC, is also a human right (1966), proper and ethical nutrition research is a human right.



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