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MedEst|2026 | Vol.6: e592 | ISSN: 2789-7567 |RNPS: 2524| LETTER TO THE EDITOR

Hyperbaric Medicine in the Plan E of Medical Studies: a necessary elective course

Medicina Hiperbárica en el Plan E de estudios de Medicina: una asignatura optativa necesaria

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Dear Director:

Hyperbaric medicine constitutes a medical specialty that uses hyperbaric oxygen therapy (HBOT) —administration of 100% oxygen at pressures above atmospheric within a hyperbaric chamber— for the treatment of various diseases with proven scientific evidence. (1) In Cuba, its development dates back to 1966, when underwater medicine was incorporated into the National Health System, and since 1986 hyperbaric oxygenation as a program approved by the Ministry of Public Health (MINSAP). Ministerial Resolution 173/1991 created the National Commission for Hyperbaric Oxygenation and recognized the Hermanos Almeijeiras Hospital as the National Reference Center, after more than 20 years of training all the human resources that sustain the national network of services. Cuba is internationally recognized as the Latin American country with the greatest development in this specialty. (1,2)

However, despite this solid infrastructure and scientific tradition, hyperbaric medicine does not appear in the Plan E curriculum of the Medicine degree approved in July 2019 by the Ministry of Higher Education. (3) The plan, whose objective is to train a general physician with a solid scientific culture and competent for professional performance, includes disciplines such as Legal Medicine, Pharmacology, Medical Psychology, and Defense Preparation, but completely omits training in hyperbaric therapies.

This omission is particularly problematic given that HBOT constitutes a therapeutic tool of proven efficacy in pathologies of high incidence in the Cuban context. Among its main indications are: decompression sickness, gas gangrene, carbon monoxide poisoning, ischemic diabetic foot, refractory osteomyelitis, radiation necrosis, thermal burns, and idiopathic sudden hearing loss, among others. (1,2)

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Diabetic foot and lower limb ulcers represent frequent conditions in Cuban hyperbaric medicine services, where HBOT has been shown to significantly reduce the amputation rate and accelerate healing of ischemic tissues. [2] Therefore, the absence of content on HBOT deprives the future general physician of essential knowledge to identify these indications and promptly refer patients.

According to the Cuban Statistical Health Yearbook 2023, Cuba has 13 universities of medical sciences and 29 faculties of medical sciences distributed throughout all provinces, with a total enrollment of 34 824 medical students in the 2024 academic year. [4] This broad training network constitutes the ideal setting to incorporate hyperbaric medicine as an elective course, taking advantage of the existing infrastructure in the national territory.

Plan E provides for the possibility of including elective subjects to be determined by each Center for Medical Studies (CEMS), which suggests as examples: Fundamentals of Pedagogy or Communication Skills. [2] Therefore, the authors of this letter consider that hyperbaric medicine deserves a place in this elective offering.

International experience shows that hyperbaric and underwater medicine achieved recognition as a subspecialty of Preventive and Emergency Medicine in the United States since 2000. [5] In Cuba, there is also a postgraduate certification ladder that includes an introductory course, diplomas, and a master's degree [2,6], which evidences the academic maturity of the field. However, undergraduate training remains absent, generating a discontinuity between consolidated care practice and the preparation of the graduate.

The authors consider that Plan E, by promoting comprehensive training and the link with employing organizations —with MINSAP being the real training setting— offers the ideal framework to incorporate hyperbaric medicine as an elective course. This modality would allow the student, from the intermediate years of the degree, to become familiar with the physiological foundations of pressure, therapeutic indications, safety protocols, and the organization of national services, without overloading the compulsory curriculum. Furthermore, it would strengthen student research.

The creation of this elective course would align Cuban medical training with international standards and respond to the specialization policy outlined by MINSAP, where the general physician constitutes a transition toward specialization. Given the inherent danger of the method —which requires strict compliance with safety standards— and its proven clinical and economic efficacy, early training is imperative to guarantee safe and grounded practice.

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CONFLICT OF INTERESTS

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