

## LETTER TO THE EDITOR

### About the article entitled “Theory classes: a thing of the past in the teaching of basic sciences in Medical Schools?”

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Dear Editor:

We have read with interest the article entitled “Theory classes: a thing of the past in the teaching of basic sciences in Medical Schools?” <sup>(1)</sup> by Enrique Ruiz-Mori, published in the last volume of your journal. The article emphasizes the importance of keeping a balance between three axes for undergraduate teaching of Human Medicine: theory, practice and seminar. On this matter, from our undergraduate experience, we support such approach; however, we would like to highlight the significance of clinical simulation centers as a support to the practice axis in medical education. We would also like to highlight the little importance given to the study of the pathophysiology specific to the elderly in some undergraduate educational programs.

Currently, some medical schools in Peru have implemented environments called “clinical simulation centers” as a teaching tool for the practice axis of clinical courses. In these simulation centers, typical clinical cases pertinent to the course are presented. Given the demographic increase in the elderly population according to the Instituto Nacional de Estadística e Informática del Perú (INEI - National Institute of Statistics and Informatics of Peru) <sup>(2)</sup>, it is not surprising that the elderly make up an increasing percentage of clinic patients <sup>(3)</sup>. For this reason, Universidad Científica del Sur has deemed it necessary to implement the Geriatrics course as part of its undergraduate curriculum. Within the context of teaching, simulation practices focused on patients in this age group are conducted. For example, delirium, which has a rising incidence <sup>(4)</sup>, requires a timely diagnosis to avoid poor prognosis. Therefore, proper teaching, based on the aforementioned three axes, would help prevent the underdiagnosis of such pathology <sup>(5)</sup>. Clinical simulation centers, included in the practice axis, enable students to develop skills and abilities that will help them make appropriate, timely and safe clinical decisions in real situations.

In order to determine the percentage of Peruvian universities that include Geriatrics in their Human Medicine undergraduate curricula, a cross-sectional, observational and descriptive study was carried out. All accredited universities or those undergoing the accreditation process for Medicine undergraduate programs by the Superintendencia Nacional de Educación Superior Universitaria (SUNEDU - National Superintendency of University Education) were included. One of the researchers of this article reviewed each university's official website in search of the most updated Human Medicine curricula. These curricula were then categorized based on the inclusion of the Geriatrics course. Such table of results was validated by the other researcher to ensure accuracy. Subsequently, the data were tabulated (Table 1) and analyzed by absolute frequencies and percentages.

Out of the 47 Peruvian universities offering Human Medicine, only 38 % ( $n = 18$ ) include Geriatrics. This percentage is slightly lower in the capital, Lima, where out of the 19 universities offering this program, only 31 % ( $n = 6$ ) include such course (Table 1).

In conclusion, 62 % ( $n = 29$ ) of the universities do not offer the Geriatrics course. Graduates from these universities may lack adequate training in managing elderly pathologies, increasing the risk of not providing comprehensive care to patients in this age group. The implementation of this course in the curriculum should include the three axes, considering in the practice axis the activities conducted in the “clinical simulation center.”

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**Table 1.** Peruvian universities offering the Geriatrics course in the Human Medicine undergraduate program curriculum

Universities offering the Human Medicine undergraduate program	Geriatrics course in the undergraduate curriculum	Province
Universidad Peruana Cayetano Heredia	No	Lima
Universidad Científica del Sur	Yes	Lima
Universidad de San Martín de Porres	Yes	Lima
Universidad de San Martín de Porres	Yes	Chiclayo
Universidad Continental	No	Huancayo
Universidad Continental	No	Lima
Universidad San Ignacio de Loyola	Yes	Lima
Universidad Nacional Mayor de San Marcos	Yes	Lima
Universidad Católica de Santa María	No	Arequipa
Universidad Peruana de Ciencias Aplicadas	No	Lima
Universidad Privada de Tacna	No	Tacna
Universidad de Piura	Yes	Lima
Universidad Nacional de San Agustín	No	Arequipa
Universidad Nacional de Trujillo	No	Trujillo
Universidad Nacional Toribio Rodríguez de Mendoza de Amazonas	No	Chachapoyas
Universidad Privada Antenor Orrego	No	Trujillo
Universidad Privada Antenor Orrego	No	Piura
Universidad Ricardo Palma	No	Lima
Universidad Santo Toribio de Mogrovejo	No	Chiclayo
Universidad Nacional de Cajamarca	No	Cajamarca
Universidad Nacional San Cristóbal de Huamanga	No	Huamanga
Universidad Peruana Unión	No	Lima
Universidad Nacional del Altiplano	No	Puno
Universidad Nacional del Santa	No	Santa
Universidad Nacional de Ucayali	Yes	Ucayali
Universidad Andina del Cusco	No	Cusco
Universidad Nacional del Centro del Perú	No	Huancayo
Universidad Nacional de la Amazonía Peruana	Yes	Maynas
Universidad César Vallejo	Yes	Trujillo
Universidad César Vallejo	Yes	Piura
Universidad Nacional de San Martín	No	San Martin
Universidad Privada Norbert Wiener	Yes	Lima
Universidad Nacional de Tumbes	No	Tumbes
Universidad Privada San Juan Bautista	No	Lima
Universidad Privada San Juan Bautista	No	Ica
Universidad Privada San Juan Bautista	No	Chincha
Universidad Nacional de Piura	Yes	Piura
Universidad Nacional Daniel Alcides Carrión	Yes	Pasco
Universidad Nacional de San Antonio Abad del Cusco	No	Cusco
Universidad Señor de Sipán	No	Chiclayo
Universidad Nacional Federico Villarreal	No	Lima
Universidad Nacional Hermilio Valdizán	No	Huánuco

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Universities offering the Human Medicine undergraduate program	Geriatrics course in the undergraduate curriculum	Province
Universidad Nacional José Faustino Sánchez Carrión	Yes	Huaura
Universidad Peruana Los Andes	Yes	Huancayo
Universidad Nacional Jorge Basadre Grohmann	Yes	Tacna
Universidad Nacional San Luis Gonzaga	Yes	Ica
Universidad Nacional de Moquegua	Yes	Moquegua

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## BIBLIOGRAPHIC REFERENCES

1. Ruiz-Mori E. Clases teóricas, ¿cosa del pasado en la docencia de ciencias básicas en Medicina? *Horiz Med* [Internet]. 2023;23(1):e2198.
2. Instituto Nacional de Estadística e Informática. Situación de la población adulta mayor abril-mayo-junio 2021 [Internet]. Lima: INEI; 2021. Available from: <https://cdn.www.gob.pe/uploads/document/file/3094864/Situaci%C3%B3n%20de%20la%20Poblaci%C3%B3n%20Adulta%20Mayor%3A%20Abril%20-%20Mayo%20-%20Junio%202021.pdf?v=1652390310>
3. Gomez-Moreno C, Verdúzco-Aguirre H, Contreras-Garduño S, Perez-de-Acha A, Alcalde-Castro J, Chavarri-Guerra Y, et al. Perceptions of aging and ageism among Mexican physicians-in-training. *Clin Transl Oncol* [Internet]. 2019;21(12):1730-5.
4. Palmero J, Lassard J. Delirium: una revisión actual. *Aten Fam* [Internet]. 2021;28(4):284-290.
5. Carrasco M, Hoyl T, Marín PP, Hidalgo J, Lagos C, Longton C, et al. Subdiagnóstico de delirium en adultos mayores hospitalizados. *Rev Méd Chile* [Internet]. 2005;133(12):1449-54.

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