# **HEALTH AND SOCIETY**







#### Letter to the editor

# The importance of encouraging scientific writing in medical education

A importância do incentivo à escrita científica no ensino médico La importancia de fomentar la redacción científica en la educación médica

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### Dear Editor,

The different ways of medical teaching are directly associated with the transformations of the health concept. Traditionally, the health perspective correlates intrinsically to a purely biological being, by consequence, the Medicine teaching and learning process were affected by the Flexner Report (1910) which induces to a mechanicized approach, in other words, the passive learner used to become an expert working by a reductionist model in which the human beings were dissociated from their biological, psychological and social aspects.<sup>1</sup>

The statement of the biopsychosocial model, in 1946, by the World Health Organization justifies the creation of the Unified Health System (UHS), as a result of the Alma-Ata Conference, prioritizing the Primary Health Care<sup>2</sup> and the access to universal healthcare guaranteed by the Brazilian Union, in which the person is rated by the influence of the health conditioning and determining factors.<sup>3</sup> Such guarantee is presented by the law N° 8.080, of september 19th, 1990, known as the Organic Law of Health<sup>4</sup>, as we will present next:

#### Quote 1

Art. 2° Health is a human fundamental right, and the Union must provide the indispensable conditions to its full prosecution.

#### Quote 2

Art. 3° The health levels express the country's social and economical organization, in which the health conditioning and determining factors are, among others, the feeding, housing, sanitation, environment, work, income, education, physical exercise, transportation, leisure and access to essential goods and services.

The change of the health concepts makes it possible to alter the acquisition of biomedical knowledge with the implantation of the new National Curriculum Guidelines for Undergraduate Medicine<sup>5</sup>, which emphasizes the medical student knowledge construction methodologies that favor through their active participation, based on problem-situations that involve sociocultural reality contextualized issues3.

This adaptation arises due to the need to expand medical skills and competences considering that professional qualifications were previously restricted to

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the technical character, as medical specializations and are currently undergoing an expansion process, also including the development of skills, competences and attitudes of a researcher. During graduation, scientific production is sometimes neglected due to the low remuneration arising from scientific research or the vehement need of the student to enter the labor market. However, the incentives for scientific initiation and the constant reaffirmation of the inclusion of scientific methodology subjects as a prerequisite in residency programs have encouraged students to seek a more critical profile<sup>6</sup>.

In academia, there is an exponential increase in available information related to university content. However, not all information translates into knowledge, being necessary a reflection on the pertinence, relevance and reliability of information, implying the formation of critical thinking<sup>7</sup>.

scientific Therefore. training medical in graduation should encompass the teaching of the scientific method and practical experiences, based on the pillar of higher education institutions based on Teaching, Research and Extension, enabling the professional for scientific reading and consequently, for professional updating in view of the changeability of the scientific truth. Thus, scientific disciplines are essential for training the ethical and critical sense in professional practice<sup>6</sup>. In this way, the practice of evidence-based medicine is encouraged. Therefore, the pillar of higher education supports that technical and practical knowledge developed at the university be replicated and propagated to the world as it is provided for in the Federal Constitution of 1988:

# Quote 3

Art. 207. Universities enjoy didactic-scientific, administrative and financial and asset management autonomy, and will obey the principle of inseparability among teaching, research and extension.

It is important to emphasize that scientific writing plays an unique part, while science writing goes far beyond the simple act of writing itself, it includes the ability to seek, analyze and attribute meaning to the discovery, making it possible to promote a substantiation to the registered ideas. By encouraging early scientific

writing, universities emphasize the ability to acquire new knowledge among students mainly because students of more advanced years in the medical course tend to disconnect from scientific projects due to the high workload from the fifth year of graduation<sup>10</sup>.

According to Stephani (2017)<sup>11</sup>, the main challenges for academic literacy, that is, the acquisition of academic genders, are the reading and the knowledge about Brazilian Association of Technical Standards rules, the lack of explanation and orientation on the approached gender- including elements and structures that constitute it- by the teachers and the failed feedback with limited corrections and without justification for the attributed grade, which impossibilities the learning process.

Therefore, it is evident that the writing of scientific knowledge never starts from a zero square, as it involves a whole acquisition of practice of scientific writing process, creation of a critical sense and reasoning information. It is a duty of all new scientific production to effectively contribute to science progress, considering that high scientific rigor and qualified content productions present more chances of getting published and cited by high impact periodics, which promotes recognition and visibility to their authors and respective institutions<sup>12</sup>.

## References

- Rodríguez CA, Neto PP, Behrens MA. Paradigmas Educacionais e a Formação Médica. Rev Bras Educ Med 2004 Set-Dez [cited 28 Oct 2020]; 28 (3): 234-41. Available from:
  - https://www.scielo.br/scielo.php?script=sci\_arttext&pid=S 0100-55022004000300234
- Paim JS, Almeida-Filho N. Saúde coletiva: uma "nova saúde pública" ou campo aberto a novos paradigmas?. Rev Saúde Pública 1998 Mai [cited 29 Oct 2020]; 32 (4): 299-316. Available from: https://www.scielo.br/scielo.php?%20pid=S0034-89101998000400001&script=sci\_abstract&tlng=pt
- 3. Moreira MB, Manfroi W. O papel da aprendizagem baseada em problemas nas mudanças no ensino médico no Brasil. Rev HCPA 2011 2011 [cited 01 Oct 2020]; 31 (4): 477-81. Available from: https://seer.ufrgs.br/hcpa
- 4. Brasil. Lei nº 8.080, de 19 de setembro de 1990. Dispõe sobre as condições para a promoção, proteção e recuperação da saúde, a organização e o funcionamento dos serviços correspondentes e dá outras providências. Diário Oficial da União. 20 set 1990; Seção 1:018055.
- Brasil. Diretrizes Curriculares Nacionais do Curso de Graduação em Medicina. Brasília, Ministério da Educação; 2001.
- Soares ACB, Ferreira IG, Carreira LB, Ribeiro TCS. Perfil científico de estudantes de Medicina em uma universidade pública. Sci Med 2017 [cited 28 Oct 2020]; 27 (2). Available

from:

https://dialnet.unirioja.es/servlet/articulo?codigo=597515 6

- Chehuen-Neto JA, Sirimarco MT, Vital LV, Balbi GGM, Marangoni MC, Oliveira VS, Ferreira RE. Fontes de estudo e pesquisa entre os estudantes de medicina. Rev Med Minas Gerais 2016 [cited 29 Oct 2020]; 26:e- 1787. Available from: http://rmmg.org/artigo/detalhes/2068
- Brasil. Constituição (1988). Constituição da República Federativa do Brasil. Brasília, DF: Senado Federal; 1988.
- Smith M. Research in residency: do research curricula impact post-residency practice? Fam Med. 2005 Mai [cited 29 Oct 2020]; 37(5):322-7. Available from: https://pubmed.ncbi.nlm.nih.gov/15883897/
- Resende JC, Alves RBS, Coutinho MS, Araújo CRF. Importância da Iniciação Científica e Projetos de Extensão para Graduação em Medicina. Revista Brasileira de Ciências da Saúde 2013 [cited 01 Nov. 2020]; 17 (1): 11-8. Available from:
  - https://pdfs.semanticscholar.org/bb71/ed9efd138daeb141 6ad88d6ddd8a435376d7.pdf
- Stephani AD, Alves TC. A escrita na universidade: os desafios da aquisição dos gêneros acadêmicos. Raído 2017 Jul-Dez [cited 28 Oct 2020]; 11 (27):529-50. Available from: https://ojs.ufgd.edu.br/index.php/Raido/article/view/5688 /0
- 12. Cáceres AM, Gândara JP, Puglisi ML. Redação científica e a qualidade dos artigos: em busca de maior impacto. J. Soc. Bras. Fonoaudiol. 2011 Dez [cited 28 Oct 2020]; 23 (4): 401-06. Available from: http://www.scielo.br/scielo.php?script=sci\_arttext&pid=S2 179-64912011000400019&Ing=en.

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