

Developing Cultural Competences in Medical Curricula: a Literary Experience

Desarrollando Competencias Culturales en Currículos Médicos: una Experiencia Literaria

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ABSTRACT: The weakening and depreciation of reading, the still uncertain role of humanities in medical curricula and the need for contributing to solve both deficiencies are current realities. In this regard, a proposed extramural and multidisciplinary six-step literary reading approach based on information and communication technologies was applied to thirty-five second-year medical students assisting to the annual training course on Histology and Embryology. Taken into account some difficulties during its fulfilling, the students were also individually interviewed after ending their task. They stated that weaknesses were particularly focused in steps 1 to 4 included, rather complex for them, guessing that it could be essentially related with shortcomings in literary reading training brought from high school. Simultaneously, they highlighted several strengths making the approach hopeful towards the future since these prevailed over the registered and potentially surmountable weaknesses. To conclude, some timely reflections are added on the relevance of combining information and communication technologies and literary reading for developing related cultural competences in medical curricula.

KEY WORDS: literature, reading, medicine, curriculum, information and communication technologies.

INTRODUCTION

Benefits of reading are crucial in higher education for bettering professional development in the knowledge era since competencies required and obtained for and from it become crucial to face challenges dealing with medical learning, teaching, researching and practicing in a globalized world. Reading is also a fruitful tool not only for speeding up intelligence and stimulating cognitive development but for protecting from cerebral degenerative diseases in addition to increasing cultural background. As such, developed countries have encouraged reading to achieve high rates as a way to structure people wealth towards a high cultural threshold (Jaim, 2003).

At the same time, humanities promote medical capabilities by providing useful knowledge, improving humanitarian attitudes, generating renewed habits, fostering complementary values and refining special skills. By being essentially interdisciplinary and by enhancing interprofessional and interdisciplinary

awareness, humanities can break down power gaps inherent in health science professions helping to reconcile different world-views based on shared values (Halperin, 2010).

Given the simultaneous weakening and depreciation of reading when compared to the one existing in formerly less advanced technological times along with the still uncertain role of humanities curricula in medical education (Taylor *et al.*, 2017; 2018), thinking strategies employing current instruments, technical resources or suitable procedures may help.

Emphasizing the relevance of literature for developing cultural competences in medical education (Calman *et al.*, 1988; Hunter *et al.*, 1995; Shigley, 2013; Shapiro *et al.*, 2015; D'Ottavio, 2019) and contributing to surmount a local prejudice that many graduates lack general culture, this paper aims to encourage that development through this art and theory. In this regard,

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it reports results of a preliminary experience achieved after applying to a group of medical students an extramural and multidisciplinary six-step literary reading approach based on information and communication technologies (ICT).

MATERIAL AND METHOD

Thirty-five students (85 % females), coursing the second year in our medical school, were selected based on their curricular performance to fulfill the institutionally established quota for assisting to the annual optional training course on Histology and Embryology. All of them took part in the here described preliminary extramural experience during 2018, giving and signing the corresponding consent according the requirements of our medical school ethical committee.

This extramural and multidisciplinary literary reading approach had to be completed following a list of instructions, compatible with seen below, during two months maximum for not disturbing other curricular tasks.

Their initial challenge consisted in selecting a book in the web. In this regard, it is pointed out that the participants mainly chose medical novels written by physicians (*The Citadel* by Archibald Joseph Cronin and *Of Human Bondage* by William Somerset Maugham), journalists (*The Physician* by Noah Gordon) or philologists (*The Emperor's Doctor* by Tessa Korber) and best sellers as *Da Vinci Code* and *Inferno* by Dan Brown, among others.

Once the book was chosen in paper or electronic support, they were successively faced to the following six-step tasks: (1) knowing the author's biography and the historical, political, socio-economic and geographic context in what that book was written; (2) investigating the same context in which its narration took place; (3) incorporating the unknown words, their meanings and etymologies; (4) identifying rhetorical figures like comparison and metaphor (comparison uses the words like or as to contrast things and metaphor, do not), metonymy (designation one thing or idea with the name of another) and its variants: metalepsis, synecdoche and antonomasia, hyperbole (excessive increase or decrease in speech), anaphora (repetition of a sequence of words at the beginnings of neighboring clauses) and personification or prosopopeia (human attributes given to an idea or an animal); (5) employing

virtual maps to locate and access to sites mentioned in the book, and (6) viewing related on-line documentary films.

These tasks had to be subsequently summarized in an individual report in one duly signed A4 page, 2.5 cm margins, letter Times New Roman and simple line spacing.

Three physicians specialized in Spanish language, who also participate in Spanish courses for non-Spanish speaking students, evaluated each challenge as satisfactory or unsatisfactory putting special accent in the steps related with etymologies and rhetorical figures because of its particular difficulties.

RESULTS

Although they received previous simulator training, all the students revealed particular difficulties in fulfilling steps 1 to 4 included. Therefore, they were also individually interviewed asking each one to list strengths and weaknesses.

All of them repeated that weaknesses were particularly focused in steps 1 to 4 included following this difficulty sequence: 4-3-1-2 in thirty of the thirty-five students. They perceived those items as tasks rather complex and guessed that it could be essentially related to shortcomings in literary reading, history and geography training during high school.

Conversely, they rescued as strengths that this kind of exercise, not restricted to the narration itself, allowed them: (a) to contextualize the author's life, as well as the plot and his/her creation, incorporating, recovering and integrating previous isolated and/or absent knowledge about history, geography and other disciplines; (b) to increase the quantity and quality of lexicon and speech figures, learning also some etymologies and avoiding some barbarisms and solecisms too, and (d) to foster virtual journeys or related on-line documentary films. For instance, the student who read Dan Brown's novel *Inferno* told that, by employing Google maps, she could virtually travel with the protagonists along the Florentine gardens of Boboli, whereas the student who chose *The Citadel* stated that he searched in YouTube documentary films on the author, the novel and other people's remarks about both.

Finally, all of them stated that the strengths satisfactorily prevailed over the potentially surmountable weaknesses.

DISCUSSION

This communication proposes an extramural and multidisciplinary six-step literary reading approach based on ICT intending to solve the challenge of developing cultural competences in medical undergraduates from a literary viewpoint whose relevance was opportunely emphasized by Calman *et al.*, 1988; Hunter *et al.*, 1995; Shigley, 2013; Shapiro *et al.*, 2015 and D'Ottavio, 2019. Calman *et al.*, 1988 described the employment of books, plays and poems related with medical and non-medical themes in medical students and referred not only that students enjoyed the course and particularly welcomed the non-medical components but that the staff learned at least as much as the students, as occurred in our case. However, the remaining authors center their contributions in general proposals without doing any particular experience like this.

Going beyond it, some final reflections on the relevance of combining ICTs and literary reading for medical humanization may be timely. Firstly, no bibliographic references were found linking the issues here treated. Secondly, ICT offers varied and current possibilities (Agámez *et al.*, 2009).

Furthermore, unlike the past when the employment of encyclopedias and many texts along with hours to gather and combine such multidisciplinary information were needed, today's ICT enables the same task more efficiently, practically and retentively (Agámez *et al.*).

Thus, cultural gathering will offer more powerful tools for a fruitful personal learning; more enjoyable teaching; more creative scientific-technological research and a richer daily life since literary reading foster and enhance each other and, last but not least, enrich reading, writing and speaking.

To conclude, the objective of this paper may be considered achieved since the here presented extramural and multidisciplinary six-step literary reading approach based on ICT revealed highlighted strengths which make it hopeful towards the future.

Finally, as a final thought, two quotations rescued by D'Ottavio: 1. Because of its relevance in developing cultural competences and in humanizing Medicine, this kind of challenges demands, as minimum: reiteration and diversification from the beginning to the end of the medical career, professional teachers and taking advantage of any corresponding teaching-learning situation existing in medical curricula. 2. Literary reading, for those people working in the health area, makes possible to overcome the unforgettable aphorism from the nineteenth century Catalan anatomic-pathologist D. Joseph of Letamendi and Manjarrés: "The physician who knows only medicine, not even knows medicine".

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RESUMEN: El debilitamiento y la depreciación de la lectura, el rol aún incierto de las humanidades en los currículos médicos y la necesidad de contribuir a resolver ambas deficiencias constituyen una realidad actual. En ese sentido, se aplicó un diseño de seis pasos de lectura literaria, extramural, multidisciplinaria y basada en tecnologías de información y comunicación, a treinta y cinco estudiantes de segundo año de Medicina asistentes al curso anual de entrenamiento en Histología y Embriología. Considerando algunas dificultades detectadas durante el proceso, también se hicieron entrevistas individuales tras finalizar la labor. Ellos afirmaron que las debilidades se focalizaban en los pasos del 1 al 4 incluidos, lo que les resultó particularmente complejo, suponiendo que esto se atribuye a deficiencias del material literario traído de las escuelas secundarias. Simultáneamente, percibieron la experiencia como esperanzadora hacia el futuro ya que las fortalezas adjudicadas prevalecían sobre debilidades detectadas y que pueden superarse. A modo de conclusión, se realizan algunas reflexiones oportunas sobre la combinación entre la lectura literaria y las tecnologías de información y comunicación para desarrollar competencias culturales relacionadas en los currículos médicos.

PALABRAS CLAVE: literatura, lectura, medicina, currículo, tecnologías de información y comunicación.

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