

Literature and the Arts in Medical Education

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Editor's Note: In this column, teachers who are currently using literary and artistic materials as part of their curricula will briefly summarize specific works, delineate their purposes and goals in using these media, describe their audience and teaching strategies, discuss their methods of evaluation, and speculate about the impact of these teaching tools on learners (and teachers).

Submissions should be three to five double-spaced pages with a minimum of references. Send your submissions to me at University of California, Irvine, Department of Family Medicine, 101 City Drive South, Building 200, Room 512, Route 81, Orange, CA 92868-3298. 949-824-3748. Fax: 714-456-7984. jfshapir@uci.edu.

Paul Éluard and a Case of Descriptive Epidemiology

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It is a challenging task indeed when medical educators wish to reconcile the not always passionate interests of their students in the social and human aspects of medicine with the basic sciences many consider more important for their career development. In fact, even in these times, when substantial effort is devoted to incorporating studies from the humanities into the study of medicine, most students and their teachers are inclined to value reading about pharmacology and disease pathogenesis more than learning about human feelings, the global war against poverty, or the cultural importance of art.

Much of the pedagogical experience using examples of the arts in medicine, therefore, relates to efforts that might enhance a student's

ability to feel and communicate compassion, empathy, and understanding of a patient's suffering.^{1,2} Using elements from the humanities also allows medical educators and their students a means by which to address elements of the hidden curriculum,³ principally loss of idealism, adoption of a ritualized professional identity, emotional neutralization, change of ethical integrity, unquestioning acceptance of hierarchy, and other problematic attitudes and behaviors considered to impede good doctoring.

Film, for instance, has been widely used in the form of short clips to trigger discussions about particular practice situations and behaviors.⁴ Although we share this enthusiasm for movies and image-based discussion of medical issues, we fear that such practices contribute toward erasing the written word culture that generations of educators and students have built around literature and poetry. Loss of our ability to understand and

express the written word weakens our gift for abstraction and rational analysis of problems. The mind is stimulated, not from thought linked to an image on screen, but rather from the story we create with the help of the author, in our own imaginations. This concern has been well described by the Italian sociologist Giovanni Sartori⁵ and is further reinforced, at least in our institution, by the fact that many medical students, and perhaps even more young house officers, admit to not reading poetry or anything else of literary value during many years of their medical school and postgraduate training.

At the Instituto Lanari, a major teaching center of the University of Buenos Aires School of Medicine, we therefore sought to provide medical students and house officers with an opportunity to access recognized literature to become more aware of many of the social aspects of health care. Our hope was to remove some elements of

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their medical enculturation, the signs of which had suggested that art and literature were unimportant, and, as one student stated “had nothing to do with what I do or with who I am.”

A curriculum was designed to use poetry and short literary pieces as a foundation from which students could discuss specific clinical and epidemiological issues. As an example, we prepared a class called *Literature and the Medical Sciences* for a group of fifth-year medical students rotating on a clinical pulmonary service. Our first class was devoted to the study of the social impact of tuberculosis. A didactic lecture pertaining to the epidemiology of tuberculosis was first delivered. This 2-hour lecture covered methods of data collection, infection control, definitions of tuberculosis infection, risk factors, exposure, and meaning of a positive tuberculin reaction. A subsequent lecture was devoted to descriptive epidemiology of tuberculosis-related mortality. Mortality curves were presented to demonstrate how these curves had changed in between 1750 and 1950⁶ in Europe. Students were then asked to analyze curves generated from data collected between 1900 and 1990⁷, after which they were invited to identify specific periods during which a general decrease or increase in mortality had been noted.

This exercise presented them with the difficulty of interpreting scales of magnitude in the various epidemiological curves. After they had identified a major increase in tuberculosis-related mortality from 1940 to 1950 (as a peak interrupting the persistent trend toward decrease from 1900 to 1990) and qualified this change as epidemiologically relevant, students were invited to provide possible explanations. During a short, nonstructured discussion, students' hypotheses were documented. This was followed by a group reading of Paul Eluard's famous poem, “Courage”.

Eluard was a French poet and occasional leader of the Surrealist movement. He had contracted tuberculosis at the age of 16 and was sent to live in a sanatorium. Later in life, he became an active member of the French Resistance and was extremely critical of writers and artists who refused to stand up to the Nazi occupation. “Courage” was written in 1942. While it is a call for Parisians to resist German occupation, it is also a cry of optimism for the starving citizens of this great city. A simple English translation of the first few lines show poverty, hunger, and poor sanitation, often conditions associated with increased incidences of tuberculosis and other communicable diseases:

Paris is cold, Paris is hungry
Paris no longer eats chestnuts in
the street
Paris has worn old clothes from
the past
Paris sleeps standing without air
in the metro
More sadness again is thrown
upon the poor...

Students first read the poem in silence and in its original French. Many Spanish-speaking students read French, since it is frequently learned in grade schools in Argentina. Reading this poem resulted in a moving moment in the classroom because the lively and clamoring discussion of only a few minutes earlier was quickly replaced by total silence. The poem was then read aloud in Spanish while a PowerPoint slideshow in black and white, incorporating photographs that depicted the violence and human suffering of the Second World War in Europe, was silently projected.

Students were surprised that the emotional framework of Europe's social fabric, including the impact of war on disease, poverty, homelessness, and public health, as well as what it meant to be an

occupied country and the courage required of civilians to rise up to recover their freedom, could be so explicitly described with just a few well-chosen words. The direct relationship between poverty, poor sanitary conditions, diminished access to health care, and tuberculosis-related mortality had become obvious. The poem had given a face to human suffering.

Using the epidemiologic data from the earlier classes, students were then asked to construct, on their own and without faculty assistance, a short compendium describing the impact of war on a civilian population. They then identified and analyzed at home at least two other periods of the 20th century when tuberculosis mortality was greatly affected by social conditions and described how poverty might impact tuberculosis case rates and disease-related mortality. To assist them with this homework assignment, students were given copies of Federico García Lorca's poem “Preciosa y el Aire,” a short excerpt from Erich Marie Remarque's novel *All Quiet on the Western Front*, and a copy of the “Ballad of Mac the Knife” (the famous song in “The Three Penny Opera” by Bertold Brecht).

Comments elicited during the next day's class were exceptionally elaborate. Students provided thoughtful analyses of the social context during World War I, the Weimar Republic, and the Spanish Civil War. They presented information pertaining to political and economic climates during each of those periods and discussed new data regarding tuberculosis rates in Germany and Spain. Their insightful reflections about the relationship between political corruption, poverty, cruelty of war, political assassination of artists, and social impact of disease were debated. Most importantly, at least from this educator's viewpoint, is that students were able to honestly share whatever feelings they had after

reading the material and openly recognized that had it not been for this assignment, they might have never read these literary works.

Although prior investigators have shown that literature and medicine courses improve student understanding of patient experiences, enrich one's capacity for dealing with ethical issues, and deepen students' self-knowledge in clinically relevant ways,⁸⁻¹⁰ we have not yet tested whether using literature in our courses improves student cognition and affective skills. We suspect that our classes have a beneficial effect on our students' private lives and interactions with patients or colleagues. Feedback has been unanimously positive, and the enthusiasm, skill, and motivation demonstrated in this class was repeated in others. Most importantly, we witnessed that literature and poetry can be used together to help learn epidemiology,

enhance critical analysis, and allow students to discover the charm of literature in and of itself.

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