Introducing the Humanities into Medical Education:
Sharjah University College of Medicine’s approach

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Take Home messages

- There is still much discussion surrounding the place of the humanities within the undergraduate medical and health sciences curricula

- Various authors have tried to enhance the student learning within this domain by exploring the benefits of teaching the humanities in harmony with other standard teaching activities.

- Art would appear to have the capacity to stimulate the senses and immediately engage the brain; its effect is powerful, intense; it can bring to life the description and devastation of disease better than a set of data.

- The media of the arts appears to strengthen the consciousness of the young future healthcare professionals that art can not only be used efficiently to distract from illness, but also, even directed as a tool to cure and heal.
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Abstract:

There is still much discussion surrounding the place of the humanities within the undergraduate medical and health sciences curricula. Whilst a large amount of educational research focuses on the cognitive and psycho-motor domains of learning, seeking the most appropriate ways of teaching, learning and assessment, less attention is paid to the more difficult to define affective domain. Various authors have tried to enhance the student learning within this domain by exploring the benefits of teaching the humanities in harmony with other standard teaching activities.

This paper describes such an activity; an elective taught to groups of medical and health sciences students at the University of Sharjah, College of Medicine, UAE. The core objectives of the course are to develop the students’ awareness of the spiritual and humanistic components of healthcare, and through their exposure to the various media of the arts to explore and discuss the many aspects of the ethics of healthcare.

The short term evaluation of the course has demonstrated a sharpening of the students’ awareness that art represents a significant reflexive source of insight into patients’ and doctors’ experiences within the socio-cultural and historical of medical practice. It also appeared to strengthen the consciousness of the young future healthcare professionals that art can not only be used efficiently to distract from illness, but also, even directed as a tool to cure and heal.

A longer term evaluation is expected as the students progress further into their course, looking specifically how the course facilitated their learning in the affective domain.
Introduction:

More than a century ago, Oliver Wendell Homes concluded in his book, The Professor at the Breakfast Table (1883):

“The longer I live, the more I am satisfied of two things. First, that the truest lives are those that are cut rose-diamond fashion, with many facets. Second, that society in one way or another is always trying to grind us down to a single flat surface.” (Oliver Wendell Homes 1883)

This quotation illustrates that patients are not inanimate objects associated with single physical diseases; they are in fact complex individuals with complex feelings, thoughts and anxieties. The arts, through their variety, are capable of addressing this complexity of human beings while having a grand potential to provide professionals practicing medicine and health care with additional skills to improve the quality of life of those we look after. (Calman 2008) There is a considerable—to date largely unexploited—potential for inculcating the arts into medicine. Art, like medicine, demands great intellectual and psychological involvement. Art would appear to have the capacity to stimulate the senses and immediately engage the brain; its effect is powerful, intense; it can bring to life the description and devastation of disease better than a set of data. (Gillon 1997, Downie 1999, Macnaughton 2000; Yang et al. 2011)

The memory of an image endures, even more than the written word. When, on the other hand, a physician examines a patient, struggles with the conflicts of a diagnosis, implements a cure, he usually suffers with the patient. That is the art of a medical doctor; that is why we use art to suggest values, to hone the spirit of understanding, of compassion.

Up until the late 1960s, the focus of medicine and the health sciences education was largely given over to developing the students’ scientific knowledge and skills required of a doctor; it was
restricted to functionality and subordinated to rather utilitarian considerations. An authentically optimal allocation of human resources as well as a humane potential, though, goes significantly beyond materialistic schemes. (Flexner 1910, Cooke et al. 2006)

In 1993, The General Medical Council (GMC 1993) acknowledged that medical education needed radical rethinking, and in their document, Tomorrow’s Doctors, recommended a greater focus on a more modern approach to medical education, all of which directed towards a more holistic practitioner. This was later supported by other authors who referred to the more “humane” doctor with an holistic understanding, assisted by an interpretative ability, insight, and creative vision, ultimately governed by ethical sensitivity, to apply this scientific evidence and skills to the individual patient (Downie 1999, Macnaughton 2004).

As a relatively new field of research and teaching, Art and Medicine is situated at the intersection of the humanities, the arts, and healthcare. Distinguishing itself with an explicit anthropological focus from the more conventional study of a visually documented cultural history of medicine, it seeks to explore the role of the visual arts—painting, sculpture, film, performance, music, etc.—and concomitantly—the medical humanities. Creative, imaginative works of art increasingly find their place in medical education. (Charon 2000; Newell and Hanes 2003; Bolton 2005: Shapiro et al. 2006; Abella et al. 2009) An implicit rationale behind many of these efforts is to remind medicine—in an explicitly contextualized approach—of its humanistic roots.

The inter- and more correctly multi-disciplinary attempt to propose a unifying perspective for the two ‘faculties’—of art and medicine—is based on both historical and modern approaches to their shared theoretical and practical features—cognitive, physiological, psychological, and phenomenological. Beyond the aesthetic notion of art as the creation of beauty is its curative
powers; it cannot be other than an integral part of medical training; by the same token, themes and concerns of medicine—both particular and general—should gain attention in the study of art history.

Aware of this distinguished multidisciplinary need in the curricular academic structure, the College of Fine Arts and Design and the Colleges of Medicine and Health Sciences at the University of Sharjah in the United Arab Emirates decided to collaborate in designing an elective course module that reflected the particular juxtaposition of arts and medicine at the intersection of the humanities.

In the integrated, problem-based, medical curriculum of the University of Sharjah, College of Medicine, the emphasis of the medical graduate’s profile is clearly defined not only within the realm of the physician’s role in medicine, which is related to achieving the higher hierarchical levels of the three learning domains (cognition, psychomotor and affective), but also in learning and sharing an individually unique element with their patients; their human qualities.

In 2010, after a year of inter-collegial preparations based on a discourse between an art historian and a physiologist, the “Arts and Medicine” course was established as an integral part of the medical student’s elective course system—under the guidance of two coordinators, versed in both fine arts and behavioral physiology. Positioned as an alternative to the “History of Medicine” course, the other humanities elective course that was established at the College of Medicine and Health Sciences in 2008. The course is taught jointly to medical students, dental students, pharmacy students and health sciences students. Offered conjunct by the College of Medicine and the College of Fine Arts and Design at the University of Sharjah, it raises
questions about the specific role of medicine in visual and other arts (painting, sculpture, performance and films); it furthermore emphasises and explores its curative relevance to modern medical practice and to common issues met by all health professionals, while focusing the key position arts (especially fine arts) hold within the medical humanities.

The course objectives:

Through exposing the students to the media of art, painting, sculpture, architecture, performance and drama, the course is designed to help the students interpret the art works related to medical issues structurally, on an individual basis and within a comparative analysis framework and by using the media of film, to bring certain ethical issues, such as behavior and attitude into a sharper focus. The course is expected to heighten the students’ awareness that art represents a significant reflexive source of insight into the patients’ and doctors’ experiences within the socio-cultural and historical aspect of medical practice. It is designed to strengthen the consciousness of young future health care professions that art not only can be efficiently used to distract from illness, but also, even directed as a tool to cure and heal, especially in the area of the psychosomatics.

The course structure:

The 3 credit hours course is given through an academic semester. The students meet twice a week, each for 1.45 hours. It includes, Lectures – to deliver the historical frame of artistic expressions related to medical and health sciences and outline contemporary innovations/corresponding shifts
of paradigm in both areas. **Discussion groups in team based learning activity** – to supplement the lectures through brief critical class discussions of a previously prepared text/reading and interpretation that implies and stimulates team-based learning as well as group dynamics and **Exams, term papers and presentations** – to support and improve creative written and rhetoric abilities, innovative analytical skills, self-directed studies and individual personality-development.

During 13 weeks, the course is divided into three parts:

**In part one** of the course (the first five weeks), topics introduce to the interpretable structure and substance of artworks in general. **In part two** (the following five weeks), these features are applied in interpreting selected artworks of medical relevance. **Part III** (the remaining three weeks) deals exclusively with the assignment “nearness and distance in doctor and patient-relations,” disabilities from the humanistic point of view which will be based on two selected movies.

50% of the final grade comes from Class assignments and continuous assessment:

- 10% Course participation, class activities
- 20% self-reflection Portfolio
- 10% Term paper (essay)
- 10% Power-Point/Seminar-presentations,

30% of the final grade comes from First and second mid-term examination which is based on individual and group presentation. 20% of the final grades comes from Final examination which is composed of essay based on humanistic and ethical themes previously discussed in the drama section and describing given paintings under the aspects of art work structure and the characteristics of the style-period reflected in the artwork.
The three corresponding consecutive parts:

1. **Principles of Understanding Arts**; offers a selection of twelve different evaluative tools with which different fields of expression in art, such as architecture, sculpture, painting, performance, and drama can be critically analysed on a comparative basis: Composition; colour and tone; light and texture; two-dimensional space; three-dimensional-space; representation, stylisation and symbolism; transformation; abstraction and non-figurative art; image, text and sound; total work of art.

2. Dialoguing Medicine (respectively Health Sciences) and Visual Culture which firmly builds upon the previously acquired fundamental Principles of Understanding Arts and in which students are guided to discover, establish and explore linkages between the medical and health sciences and the visual arts;

3. Empathy—Nearness and Distance between Health Care Professionals and their patients using films allowing the students to explore and reflect on a wide range of humanistic and ethical themes

**1. Principles of Understanding Arts**

The main goal of this introductory section of the course is to familiarise students who have none or little previous knowledge of or exposure to the visual arts and its history, with the rich and varied production of images and objects throughout cultural history. By offering a selection of twelve different evaluation tools with which different fields of expression in arts, such as architecture, sculpture and painting can be critically analysed on a comparative basis: composition, color and tone, light and texture, two-dimensional space;
three-dimensional-space; representation, stylisation and symbolism; transformation; abstraction and non-figurative art; image, text and sound; total work of art. In doing so, it also introduces students at the same time to a wide range of style- and time-periods of Eastern, Middle Eastern and Western civilisations from pre-history to the present. The aims of this short but concise part of the course are to familiarise undergraduate students of all disciplines to the rich and varied production of images and objects throughout cultural history and to develop a historical and critical sensibility about artistic and cultural production in general. Primarily, it introduces to the way art structures reality in its struggle to achieve a likeness. By means of its interpretative framework, this section prepares students for the core part of the course, the actual contextualisation of medicine and art.

2. Dialoguing Medicine and Visual Culture

As opposed to an ordinary introduction to the cultural history of medicine, this course-section raises questions such as: What is the specific role of medicine in the arts? What is the specific role of arts in the medical humanities? To what extent is art really capable of providing a *catharsis* of its creator or granting a curative impact on its beholder?

Through reflection to the answers, this part of the course presents, by the help of selected examples, a comparative analysis of the art, and architecture of Eastern and Western civilizations from the time-period of the Renaissance up until Modernism, Postmodernism, and contemporary times. The instructors and their students explore the challenges cultures
and subsequently, artists and individuals concerned with the health sciences, have been confronted with and exposed to. Particular attention, though, is given to the implicit and/or explicit representation of medicine in the arts of each time- and style-period, regarding its aesthetic emotional standards, human anatomy and ergonomics, anthropology, evolutionary theory, consciousness, the mind, behavioral physiological implications and connotations of man’s symbols.

Especially dedicated to these visual cultural aspects of the medical humanities, the synopsis spans from topics such as the interrelatedness of human anatomy, medical research with art & design, self-images of artists as patients, identification and empathy, patient-experience, physiognomy, facial expressions and personality to war (implying exterior and interior battlefields), psycho-social medicine as well as melancholy, depression, and despair as sources and blockades of artistic creativity.

3. **Empathy – Nearness and Distance between Health Care Professionals and their Patients**

In the third part of its trilogy on medicine and art, the course proceeds with the genre “drama” to a specific medium, for, among the art disciplines, drama has been particularly efficient in creating understanding, respectively empathy and has therefore been successfully used in medical education.

Using films which dramatically depict complex ethical, psychological and/or clinical problems will help to engage a generation of medical students in reflections and discussions on a wide variety of crucial issues in contemporary health care. Students are
confronted with and exposed to two movies, “The Elephant Man,” directed by David Lynch in 1980 and “The Doctor”, directed by Randa Haines in 1991, which they are expected to analyse. Here, importance is given to the identification and connection of doctors with their patients’ illness—to the delicate balance between nearness and distance. After viewing the movies individually (and preliminarily discussing these in their groups), the students debate in class the impact of genetic diseases and disabilities on the patients’ physical and psychological attitude. It is expected that they will be enabled to determine their own ethical position towards people with disabilities.

**Early evaluation:**

**Examples of student reflections**

“This course made me believe that medicine and art can be truly integrated together. I always used to doubt if medicine would kill the innovation inside of me, but the truth is art can be part of my life and I have the ability to make medicine innovative and with no boundaries; the way the art is.”

“I love art. I love painting and anything to do with art. So this course was made for me, and for people like me who love art but are studying medicine or anything else.”

“I have always wanted to study arts but I did not have time with all the studying and so I did not have much information about my hobby”
‘from the drama part of this course, the most interesting thing I learned was sympathising with a patient is one thing and empathising is another. Sympathising is understanding the patient’s feeling while empathising is sharing the patient’s feelings. We should not emphasise with a patient because we would become attached to them and that would interfere with our objectiveness in treating them. We should only sympathise with our patients.”

Students evaluation (Summary of 2 years of arts and Medicine elective course)

Results / Evaluation by students

At the end of the course, a structured questionnaire was given to the students to evaluate the different 3 sections of the course. It included 16 items to be evaluated on a 4 point Likert scale, where 1 indicated average, 2 good, 3 very good and 4 excellent. Out of the total of 104 students who were enrolled in the course over 4 consecutive semesters, 92 completed the evaluation form (response rate was 88%). The internal consistency reliability of the students responses was high as measured by Cronbach’s Alpha ($\alpha = 0.957$). For the sake of analysis, responses 2, 3 and 4 on the Likert scale were clustered into one group called “good and above”. Seventy six percent (n=70) of students considered the outline, objective and organisation of the course to be well-defined clearly at the beginning of the course. In addition, 70% (n=64) reported that the course was well organised and followed the course outline. Sixty five percent (n=60) of students considered the delivery techniques used in the course to be appropriate. Sixty-seven percent (n=62) and 73% (n=67) of students thought that the course material was clearly presented and assignments were clear and helped in their self-directed learning respectively. Three quarters of the students (75%, n=69) considered the evaluation methods in the course to be appropriate in
assessing students learning. In evaluating the course instructors, 64% (n=58) and 67% (n=60) of respondents rated them as good and above in adhering to the objectives of the lectures and in enforcing the attendance policy of the university respectively. Moreover, 71% (n=65) of students rated the instructors as good and above in expressing their ideas effectively, and 70% (n=64) thought that the instructors were objective and fair in setting course requirements and evaluating students. Out of the total respondents, 78% (n=72) evaluated the overall quality of the course to be good and above. Moreover, 74% (n=68) assessed the overall performance of the instructors to be good and above.

- Students complete a narrative evaluation of the course at the end of semester, including areas in the course which needed improvement, which part of the course they enjoyed most and any further suggestions. Examples of their comments:

  Which part of the course did you enjoy most?
  
  - The class discussion that allowed us to hear other viewpoints and ideas of students especially with drama.
  - The second part where they mixed both arts and medicine.
  - Working in groups and group assignments.
  - Learning from drama, this was the most meaningful learning experience I have ever had so far.

  Areas in the course that need improvement and further suggestions:
  
  - Basics of understanding arts in the first part needs to be short.
The course needs more time.

The time allocated to drama should be more.

Including visits to museums.

I would like to have another elective course with arts and medicine.

Conclusion:

The purpose of any health professional undergraduate curriculum is to produce a “fit for purpose” graduate who can provide a quality service to the society they serve; a society that continues to expect more from its healthcare providers.

There is little doubt that medical and healthcare professionals education has developed enormously over the last two decades, with the development of innovative teaching and learning and assessment methodologies. Educational organisations are confident that these new methods have produced new and purposeful graduates.

A large element of this change in medical education has developed from the need to produce a more holistic practitioner; emphasis has moved away from the “scientific” individual to one that learns through a more bio-psycho-social structure; to one that deals with patient as a human being, first and foremost. Academic papers abound with innovation in the cognitive and psychomotor domains of learning, but are perhaps more scarce in the affective domain, specifically when it comes to assessment. Confidence is relatively strong in teaching and learning, but in the assessment of the affective domain we are less sure; constantly battling between what the students say they do in comparison
with what they actually do or will do in the real world; the dichotomy of real and apparent professionalism.

One answer to this issue is perhaps to promote and engender the values, feelings, beliefs etc. of the affective domain early on in the students “career”, perhaps not through didactic input but through exploration of other alternative methods which encourage deeper thought and ownership within the student. We believe and hope that by combining the arts and humanities with other more traditional elements of the medical curriculum, we can go some way further in producing this more holistic practitioner.

The proof of course will lie within the final product. Hence we will continue to follow our students, to monitor their progress and assess how this elective period affects their future studies

Acknowledgment:

We would like to thank Mrs. Amal Hussein for her assistance with statistical analysis
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