

INTERDISCIPLINARY LEARNING: AN INNOVATIVE USE OF A LITERATURE MODULE IN MEDICAL EDUCATION

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ABSTRACT

A Literature and Medicine module was designed echoing the recommendation by the Ministry of Higher Education, Malaysia to deliver interdisciplinary teaching. Medical students within this region have had little opportunity to explore disciplines other than the sciences until now. The specific focus of this paper is the Literature and Medicine module which was tailored for the learning needs of undergraduate medical students in International Medical University, Kuala Lumpur. The general aim of this educational initiative is to broaden medical students' education through literary studies and achieve learning outcomes that may augment the doctor-patient relationship. The purpose of this paper is to offer a contribution to the teaching and learning of literature to students in higher education pursuing a degree other than the arts by describing the key concepts taken into account in developing the module. The outcomes achieved through student performance in tasks further illustrate the value of this interdisciplinary initiative. This paper concludes by suggesting ways to advance the learning relationship between the arts and sciences.

Introduction

The call for interdisciplinary study to explore the depth and breadth of receiving an education by integrating disciplines from the sciences such as medicine, engineering and chemistry with the humanities and arts opens challenging avenues that may strengthen the quality of undergraduates in Malaysia (Ministry of Higher Education, 2007). Interdisciplinary studies have the potential to produce new forms of knowledge by drawing on the subject matter, theory or methodology of particular disciplines, to arrive at an education that nurtures the whole personality (Moran, 2002).

It is even more imperative for medical schools to heed this call which echoes Pellegrino's adage that "Medicine is the most humane of sciences, the most empiric of arts, and the most scientific of humanities" (Pellegrino, 1979, p.17). The Malaysian Medical Association states that one of its missions is "to embrace the principles of social justice and compassion for all and enjoin all physicians to be sensitive and responsive to the health needs of all" (Malaysian Medical Association, 1966, para. 2). Humane values and attitudes such as empathy, compassion, patience

and trust more often than not are learnt by medical students by role modeling their teachers or other doctors during clinical training in hospitals. Learning takes place informally through observation of the interactions between the doctors and patients and in discussions on patient cases, but these observations are often subdued in the clinical report (Baldwin et.al., 1998). In some medical schools, core subjects such as Ethics and Professionalism and Behavioural Sciences which touch on the theory of doctor-patient communication are delivered through lectures followed by interviews with simulated patients. More often than not, these students find the experience intimidating and go through the technicalities of the interview without reflecting on their behavior and attitude (Stewart, 1989).

As a contribution towards fostering skills required in doctor-patient communication, a Literature and Medicine module was designed to sensitize medical students to the humane side of medicine. By engaging with literary texts, insights on humane values take the forefront through opportunities to engage with characters in stories. This may evoke emotions in a less threatening manner coupled with the fact that students may also become more aware of behaviours and actions which may be detrimental to their profession. This paper purposes to describe the literature module and discuss relevant educative outcomes for doctors that can be achieved through interdisciplinary study.

The Role of Medical Humanities: A Survey of Initiatives in Medical Schools outside the Asian Region

Medical humanities have become part of the mainstream in medical education in North America and the United Kingdom for the past 30 years. Most recently in Australasia, it has been integrated into many medical curricula (Gordon, 2005). Medical humanities is an interdisciplinary programme. It is a systematic form of study concerned with recording and interpreting human experience (Evans, 2002). Although medical humanities encompass disciplines such as philosophy and history, most humanities curricula begin by focusing on literature. The educational benefits for including literature within the medical curricula as suggested by Evans are that it “supports: an education (as opposed to training), ethics and communication skills, the development of personal values and a sense of wonder at embodied human nature” (p. 509). Reading literature for aesthetic reasons also evokes feelings, attitudes and ideas and enables connections to be made with both emotional and intellectual faculties (Rosenblatt, 1978).

The implementation of the literature and medicine module in medical universities in North America is through liberal arts. Having established these curricula since 1972, to date, there are about 176 medical schools with Departments of Medical

Humanities (Goulston, 2001). Modules are delivered with the aim to develop cultural interaction, humanistic attitudes and reasoning (Gordon & Evans, 2007). In the United Kingdom, the General Council of Great Britain has made recommendations to diversify educational content through the “special study module” (1993). This has resulted in many medical schools offering humanities options, in particular, literature (Lazarus & Rosslyn, 2003). Modules have been designed and delivered using novels, poems, drama, art, music and philosophy. The thematic strand encompasses medical issues such as sexuality and gender, disability and handicaps, ethics and professionalism (Jacobson et al., 2004; Hampsire et al., 2001; Anderson & Schiedermyer, 2003; Lancaster et al., 2002). The University of Auckland has implemented a compulsory course in medical humanities covering the following: art, literature, classics, history, law, philosophy, political studies and sociology. The courses were designed governed by the decision that it must be delivered by lecturers with a basic degree in the discipline and secondly, that the content must be related to medicine (Grant et al., 2002).

The Literature and Medicine Module

Tertiary schools in Malaysia have not fully ventured into interdisciplinary studies and even if there are integrations between the sciences and arts, using literature is limited to achieving language proficiency outcomes (Sivapalan et al., 2008). In International Medical University (IMU), a curriculum review committee sought to include one humanities elective out of four options; the other three being science-based, in the second year of medical undergraduate study. The Language, Communication and Culture department was assigned to develop a module for the elective. Having read extensively on the development of Medical Humanities in other parts of the world, the writer decided to develop a module that would be relevant to medical students in this region.

The four week Literature and Medicine module was first implemented in 2007 and on an average has received about forty five students during each cycle. The module aims to provide an appreciation of Literature in English; including short stories, poems and novels, and to use literary analytical tools to explore and discuss issues raised in selected texts, in relation to health and healthcare. The objectives are aligned to achieving two IMU learning outcomes; communication skills and critical thinking. Communication skills for medical students include among others, aspects of self-awareness, humane values and verbal skills. The module that is described below was designed for Malaysian medical students in terms of choice of text, method of delivery and assessment.

Selection of Texts

The selection of literary texts written in English, were based on recommendations made by the medical faculty and the writer's personal choices. The texts featured contemporary works from a variety of genres and authors, to expand on the students' reading interests. Texts also had to contain issues pertaining to health and healthcare to motivate and enable students to relate to real life experiences in dealing with patients. Many studies have proven that literature opens up discussion on ethical aspects of clinical practice. The value of using literature in this regard is that it challenges beliefs and value systems (Jones, 1997). As an example, the poem, *Distant Moon* by Rafael Campo, reveals a doctor's struggle to remain detached from his patient who is dying from AIDS. And the short story, *Farting Frank* by Colin Gan, depicts a doctor who succumbs to unprofessional conduct and ceases caring for a patient.

Method of Delivery

The module was structured to be robust and learner centered, enabling communication through face-to-face and e-learning sessions. For the face-to-face sessions, students were guided to understand and use the reader response literary theory (Rosenblatt, 1978) to analyse the text. Students had discussions and debates with peers on issues raised and even role-played the characters. Questions posed by the teacher led them into discussions which opened avenues for voicing opinions and critically commenting on opinions (Vethamani, 2007). Skills in analyzing a literary text in this manner can be transferred to medical practice as the patient can be epitomised as the text and students may be able to use the literary analytical tool to understand and empathies' with the patient (Charon, 2001). The e-learning sessions included e-forums which were uploaded on the IMU e-learning portal and aimed to increase interaction and knowledge assimilation. Discussions in these forums were based on the texts and were either new issues or a continuation of discussions from the face-to-face sessions.

Aligning Assessment with Outcomes

Each student fulfilled two individual tasks and one group assignment. Students reflected individually on three texts and through guided questions were required to identify a character and evaluate his/her actions and the implications of these actions on three levels, firstly to the self then to the profession and finally to society. Through these reflections, opportunities to critically elicit personal thoughts, beliefs and values and relate them to the larger role as a doctor and member of society were expected. A second assignment required students to employ critical analysis of material from any genre. The task required them to compare and contrast the

treatment of an issue from two different materials and relate it to medical practice for a broader understanding of various factors that contribute to health and healthcare. The variety of genres selected could range from written texts encompassing short stories, poems and novels to media including television drama and film. The final assessment called for original depictions of learning issues presented through various modes including drama, song, mime and interviews. Students were required to work together as a team, set goals and strategise on how to apply the issues to the Malaysian context. This assignment aimed to foster teamwork which is imperative in the medical profession and enable students to develop personal talents.

Student Reflections on Literary Texts

For this paper, the outcomes achieved through personal reflections on literary texts are presented. Quotations from selected reflections which exemplify communication skills which encompass self awareness and empathy, followed by feedback on the assignment are illustrated below.

- i. An example from a reflection on *Farting Frank*, a story of a social outcast:

When I look at my life, I can think of the times I unconsciously or silently discriminated the people around me, for reasons that are out of their control. I think we have to respect others the way we respect ourselves. There are minor differences between people and no one is perfect. No one is fated to be a social outcast therefore people like this should be accepted into society. Today I choose to see people as humans, worthy of love and care, no matter who they are or what they have done. As a doctor to be, I should never judge my patient and be professional in making the patient feel cared for.

The excerpt above shows how future doctors can benefit from reflecting on a literary text as it requires students to self-assess their values and beliefs and consider if these may hinder doctor-patient communication. Doctors are required to be reflectors and constantly alert to their own biases when dealing with patients. Reflective writing is a means to foster these skills as learners are encouraged to record thoughts and feelings on the experience leading to a resolve to make a change for improvement.

- ii. An example from a reflection on *The Send-Off* by Sian Hughes, a poem written by a mother who has aborted her child:

Reading the poem has made me aware of the actual feeling a mother has to go through for choosing an abortion. We should realize that abortion is not merely a simple medical procedure but also a physical and mental torment on the mother's part. It is emotionally painful. This poem is indeed an eye opener to my inner self and evoked a sense of profound loss, that I have come to understand this mother

would feel. I have never given a thought to the emotions that a woman goes through in an abortion. It has made it possible for me to be more understanding to future patients who might be in a difficult position when advised to abort a child.

Another valuable skill required for the doctor-patient communication is empathy. The poem enabled the student to view people as an entity with mental, emotional and spiritual states, a perspective that is sometimes overlooked by doctors. Doctors are encouraged to feel with the patient as she/he narrates problems. Through this exercise, students are acquainted with the need to have a holistic approach in caring for patients and offer treatment beyond the physical plane.

Student Feedback

The assignment evoked feelings in the students and empowered them to communicate these feelings, as illustrated by a student “what I perceived as a difficult task at first became my favourite task. I could express my views and feelings through words and share them with my peers.” A noteworthy quote from a student says, “Literature has taught me to keep in touch with my inner self, evaluate the way I think and act and the reasoning behind such thoughts and actions. It made me realise what my values really are, and evaluate them, be it good or bad, applying the former and discarding the latter.” Another student said, “I realized the enormity of being empathetic and understanding to my patients. This is the key to curing my patients, not just science alone. Medicine is a form of art, an art which we must not only learn; but, mold carefully, embrace and weave into our personalities and apply and practice as future doctors.”

Implications of the Literature and Medicine Module

The experience earned from going through this module reveals that Malaysian medical students were similar to medical students internationally in indicating that the Literature and Medicine has broadened their perspective of life and enhanced the humanistic value of medicine; thus revealing the desire for variation and willingness to explore other disciplines to achieve a holistic education (Dmani, 2008). The module has been successful due to the mode of delivery that diverged from traditional lectures to face-to-face interactions and e-forums which engaged students in discussing and debating freely during and outside class time. Both these sessions encompassed learning through discovery to capitalize on the effectiveness of subjective reasoning.

Students, through the face-to-face sessions, had the opportunity to develop interpretive skills in understanding their own experiences and learn from the views of others based on their cultural make-up, ideologies and religious value thus broadening their understanding of society as a whole. Apart from making students think critically,

the sessions also provided a platform for vocal and bolder students to exercise their oral English language skills. However, equal opportunity was given to students who lacked interactive aptitude through the e-forum. Incorporating this technical avenue created the opportunity for students who perceived they had inadequate oral language skills and those with low self esteem to communicate with peers through written skills. In fact, the author identified five out of the top ten contributors to the e-forum as passive participants in the class discussions (DMani & Azman, 2008).

Some forms of evaluation that were effective and meaningful were reflective writing and group presentations. Reflective writing was a practical task as it encouraged self awareness and evoked empathy for the characters in the texts. The reflective assessment aimed to make students think and feel from various levels moving from inner to outer, to help the process of carefully drawing out character traits and delving into thoughts and feelings that may hamper the practice of medicine. Students engaged in questioning individual values and motives, understanding their role as doctors and viewing an issue as a member of society. The group presentations, on the other hand, encouraged team building and engaged students in creative explorations of ideas by combining skills in scriptwriting, acting, film making, music and dance. The success of the module also depended on the facilitators. Collaboration between staff from the medical sciences and the humanities was fostered to deepen and broaden the learning process.

Conclusion

Interdisciplinary study helps in understanding and valuing differences in reasoning as it complements rather than contends with opposing disciplines. This paper suggests that the Literature and Medicine module has considerable benefits as it helps unpack the complexity of health by integrating humane skills with scientific knowledge. The range of disciplines within the humanities offer different perspectives to the art of healing and are gateways to strengthen doctor-patient communication. The scope for exciting developments in interdisciplinary learning needs to be explored within the Asian region to ensure a synergized relationship between the arts and sciences.

References

- Anderson, R., & Schiedermayer, D. (2003). The art of medicine through the humanities; an overview of a one-month humanities elective for fourth year students. *Medical Education*, 37, 560-562.
- Baldwin, D.C. Jr., Daughtery, S.R., & Rowley, M.D. (1998). Unethical and unprofessional conduct observed by residents during their first year of training. *Academic Medicine*, 73, 1195-1200.
- Campo, R. *The Distant Moon*. Retrieved November 18, 2007, from <http://litmed.med.nyu.edu/poems/the.distant.moon.rc.html>.
- Charon, R. (2001). Narrative medicine. A model for empathy, reflection, profession and trust. *JAMA*, 286(15), 1897-1902.
- DMani, S., & Azman, A. (2008). Perceptions of a Literature in Medicine e-learning platform through the analysis of usage patterns: the IMU experience. *Proceedings of the IASK International Conference, 2008*, 755-59.
- DMani, S. (2008). Literary Appreciation for medical students at International Medical University, Kuala Lumpur: the learner's experience. *Medical Humanities*, 34, 88-92.
- Evans, M. (2002). Reflections on the humanities in medical education. *Medical Education*, 36, 508-513.
- Gan, C. (2006). *Farting Frank*. In *Silverfish New Writing 6*. Dipika Mukherjee (Ed.) Kuala Lumpur: Silverfishbooks.
- General Medical Council. (1993). *Tomorrow's doctors: recommendation on undergraduate Medical education*. London: General Medical Council.
- Gordon, J. (2005). Medical Humanities: to cure sometimes, to relieve often, to comfort always. *Medical Journal of Australia*, 182(1), 5-8.
- Gordon, J.J., & Evans, H.M. (2007). *Learning medicine from the humanities*. Edinburgh: Association for the Study of Medical Education.
- Goulston, S.J.M. (2001). Medical Education in 2001: the place of the medical humanities. *Internal Medical Journal*, 31, 123-127.
- Grant, V.J., Jackson A., & Suk, T. (2002). Courses, content, and a student essay in medical humanities. *Journal of Medical Ethics: Medical Humanities*, 28, 49-52

- Hampshire, A.J., & Avery, A.J. (2001). What can students learn from studying medicine in literature? *Medical Education*, 35, 687-690.
- Hughes, S. *The Send-off*. Retrieved November 13, 2007 from <http://www.arvonfoundation.org/p75s324.html>.
- Jacobson, L., Grant, A., Hood, A., Lewis, W., Robling, M., Prout, H., & Cunningham, A.M. (2004). A literature and medicine special study module run by academicians in general practice: two evaluations and the lesson learnt. *Medical Humanities*, 30, 98-100.
- Jones, H. (1997). Literature and medicine: narrative ethics. *Lancet*, 349, 1243-46.
- Lancaster, T., Hart, R., & Gardner, S. (2002). Literature and medicine: evaluating a special study module using the nominal group technique. *Medical Education*, 36, 1071-1076.
- Lazarus, P.A., & Rosslyn, F.M. (2003). The Arts in Medicine: setting up and evaluating a new special study module at Leicester Warwick Medical School. *Medical Education*, 37, 553-559.
- Malaysian Medical Association. (1966). *Constitution*. Retrieved February 14, 2008 from <http://www.mma.org.my/AboutMMA/Background/tabid/60/Default.aspx>.
- Ministry of Higher Education Malaysia. (2007). *National Higher Education Action Plan 2007-2010*. Retrieved May 15, 2008 from http://www.mohe.gov.my/webkpt_v2/transformasi.php?m=&lang=ENG.
- Moran, J. (2002). *Interdisciplinarity*. New York: Routledge.
- Pellegrino, E.D. (1979). *Humanism and the physician*. Knoxville: University of Tennessee Press, 19
- Rosenblatt, L.M. (1978). *The Reader, The Text, The Poem*. Carbondale, IL: Southern Illinois University Press.
- Sivapalan, S., Idrus, H., Bhattacharyya, E., & Mordin S.M. (2008). Engineering students' perception of the influence of young adult literature on developing appreciation for reading. *The English Teacher*, 37, 27-39.
- Stewart, M.A., & Roter, D. (Eds.) (1989). *Communicating with medical patients*. Newbury Park, CA: Sage Publications.
- Vethamani, M.E. (2007). Reading literary texts. *The English Teacher*, 36, 20-33.