Literature in our medical schools

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SUMMARY

Despite many relevant benefits, the study of literature has been rejected by medical schools this century. However, the role of literature and the arts is coming to the fore again in many branches of medicine, including education, leading to a broader approach to medical practice than the purely scientific approach. This is likely to enrich the profession and individuals therein. As well giving as a wider general education, areas of medical training and practice that a literary education will benefit directly include critical reading and appraisal, communication skills, history taking, 'surrogate experience', understanding the role of the physician, ethics, and self-expression. Many of these are central to our understanding of good medical practice.

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> Bridges between literature and medicine would seem to be the most natural of passages, requiring no justification on the brink of the twenty-first century ... What other domains of human experience and the representation of that experience could be more naturally linked? GS Rousseau[1]

Despite this confident affirmation, there are many for whom 'non-scientific' literature represents an irrelevant, perhaps even uninteresting, aside to the practice of medicine. For them, the suggestion that our medical undergraduates should study English[2] is almost heretic, particularly because it would detract qualitatively and quantitatively from the study of 'real medicine', i.e. science. Yet the idea is not new. During the last century and the first part of this one, medical students were expected to be well acquainted with literary works that had a major contribution to both their society and their chosen profession. Hippocrates and Galen understood the importance of familiarity with contemporary drama, and Samuel Johnson was required reading at Johns Hopkins Medical School last century.[1] More recently, literature has been introduced to modern medical education[3-7] and is at a more advanced stage of development in the United States (the US) (where it is taught to some extent in a third of all medical schools)[6] than in the United Kingdom (the UK). Poetry has developed an important niche in two of the major medical journals, The *Journal of the American Medical Association* and, more recently, *The Lancet.* Poetry has also been found to have a role in postgraduate teaching.[8] In the UK, extra-curricular undergraduate literature courses have proven popular and successful.[9]

The role of the arts in medical education, was elucidated recently by Calman and Downie,[2] and the contribution of literature to clinical practice has been comprehensively reviewed by Charon *et al.*[5] Indeed, it has only been in the latter part of this century that a clear distinction between scientific and artistic, or literary, undergraduate study has become evident. Medicine has chosen to be dominated by the so-called scientific method of research and thinking, characterized by emotional detachment and repeatability of experimentation, resulting in conclusions based on direct observation.[10] This laudable approach has been at the expense of, rather than complementary to, the reflective method employed by the humanities,[11] where evidence from a wide range of sources is synthesized using logic and personal experience or involvement. This bifurcation is unfortunate, because, while the scientific paradigm is undoubtedly essential to basic medical advances, it is surely only a reflection on the implications of science along with the humanitarian application that will allow the development of good medical practice:

> ... subject matter, or kinds of things, do not ... constitute a basis for distinguishing disciplines. Disciplines are distinguished partly for historical reasons and reasons of administrative convenience ... and partly because of the theories we construct to solve our problems ... But all this classification and distinction is a comparatively superficial affair. We are not students of some subject matter but students of problems. And problems may cut right across the borders of any subject matter or discipline. Karl Popper[12]

In 1959, CP Snow, physicist and writer, famously demonstrated the division of society into 'two cultures', scientific and artistic, and deplored the 'destructive' influence of this split, the result of premature 'educational specialization'. He concluded that 'closing the gap between our cultures is a necessity in the most abstract intellectual sense, as well as in the most practical'.[13] Nearly 40 years later, there is little evidence of attempts to do this in our medical schools, though it is now interesting to note the increasing call for qualitative medical research, where personal narrative involvement is crucial to an understanding of the subject.

There is some evidence to suggest that medical students who have a background in the humanities and science, rather than in science alone, perform better in some important areas of practice after qualification.[14,15] Surely the broadest educational background possible is the most desirable.[16] Literature is a way of bridging from the heavily scientific terrain currently occupied by medicine and expanding into the fertile ground of the humanities — closing Snow's gap. How might the benefits of literary study be expressed in our medical schools?

General education

Modern medical education has tended to concentrate on training rather than education,[17] and this has 'dehumanized' medicine.[11] All higher education, including medical education, should include, as an important aim, the production of an ethically and intellectually well-rounded individual.[18,19] At present, few medical schools can claim to do this. Literature in all its forms has always been a major influence on society, and omission of its study must therefore leave one exposed. Furthermore, its study provides insights into many aspects of historical and contemporary life, experiences, and emotions, and can have a great positive effect upon quality of life.[3] The recommendation by the General Medical Council[20] to introduce Special Study Modules in medical curricula, particularly those that will concentrate on breadth of general education, will provide impetus and opportunity for this to take place. A proposal exists to teach literature specifically in this context.[7] Nonetheless, there will be those who

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may be unhappy at the submission of significant components of the medical course to 'non-medical' subjects. Can literature contribute directly to medical education?

Medical education

Critical reading and appraisal

These are fashionable words in medicine but are generally assumed to relate to the scientific literature. This confinement would be limiting, and it is important to read critically everything that might contribute to our knowledge and understanding. It is difficult to envisage better preparation for this than the formal study of literature, including reflection and criticism. Some methods of literary criticism are of direct use to the practising physician[5] and can teach important skills to medical students. These include reader–response criticism and deconstructionism. In the former, involvement of the reader with the text, leading to an interactive interpretation, mirrors the doctor–patient discussion. In the latter, analysis of written and verbal communications gives an insight into the background and motives of the participants. These techniques are complex scholarly tools in the same way as clinical interpretation is, and they both require the same attention.

Evidence-based medicine

Evidence of use to doctors is again assumed to be almost wholly scientific,[21] but this need not be exclusively so.[22] Stories, both fictional and factual, can provide insight into medical practice that science never can,[23,24] and there is a role for their inclusion as admissible evidence in determining management if considered with sufficient reflection.[25]

Communication

Written communication forms a vital component of medical practice, yet there is currently little opportunity for medical students to practise either the art or its interpretation. A brief survey of most sets of medical records will highlight some of the deficiencies this leads to. Patient records are not the only written work with which we are to be competent. In most branches of medicine, doctors must frequently write reports, argue a case, write patient-information booklets, and so forth. In these instances, the ability to write well is highly advantageous. Study of the great written communicators can only serve to improve these skills and therefore the basis of much practice. If this study occurs at the time of learning the profession, that is in medical school, the two will become inseparable.

Case histories

In medicine we are constantly dealing with stories, and there may be little substantial difference between a case history, a biographical account of illness and a fictional account of illness in a novel. For educational purposes they amount to the same — a demonstration of one possible course of events followed by an illness or series of illnesses.

> What is a novel if not a conviction of our fellow men's existence strong enough to take upon itself a form of imagined life clearer than reality and whose accumulated verisimilitude of selected episodes puts to shame the pride of documented history. Joseph Conrad[26]

Surrogate experience

No physician, can experience even a fraction of the illnesses he or she is expected to understand and treat during a professional lifetime. We can understand diseases by reading the scientific literature and texts, but illness, which includes the emotional and contextual responses, does not submit to such impersonal study.[10,22,27] 'We read many books because we cannot know enough people', said TS Eliot.[28] Certainly, novels and biographical accounts of illness provide a view of some of the possible effects and courses of illness.

While this view must be imperfect and dependent upon precisely which works are read, its very imperfection highlights the highly individual and unique event which is every illness and which is experienced by every patient and carer. In many cases this form of 'clinical experience' is more perceptive than a case history drawn from the hospital ward, because the 'patient' is a writer, used to translating experience into narrative with inclusion of detail and personal meaning. There are many examples of such stories, and some have been anthologized recently in a book specifically designed for such study, *The healing arts* by RS Downie.[29] In the introduction, Downie claims that we learn from literature by 'imaginative identification with situations or characters depicted, and by having our imaginations stretched through being made to enter into unfamiliar situations or to see points of view other than our own'. This surrogate experience will encourage the development of empathy and, therefore, humane practice.[11]

Dealing with emotions

A singularly detached approach to scientific study forbids emotional consideration of patients, yet this is important, probably at all times[27,30] and certainly in particular crises. A doctor who can only face death or birth with a cold equanimity cannot pretend to practise medicine humanely.[11,31] Only by understanding the patients' and families' responses to these and other events can a doctor manage them as he or she is expected to. Yet for many young doctors the first time death is faced is with real patients on real wards. Previous reflective reading of the vast literature dealing with these aspects will arm the otherwise unprepared doctor to some extent.

Self-expression

Closely related to the handling of patients' emotions is the handling of the physician's own emotions. As humans we are necessarily emotional beings unless we are psychopathic, yet there is often a denial of these emotions when we are faced with them in our work. Undoubtedly this is a coping mechanism which has been developed for survival in the face of a daily onslaught of potential emotional extremes, but eventually these may take their toll, resulting in a stress-related illness, alcohol misuse, broken marriages and families, and loss of morale.[32-34]

Expression through the arts is a recognized alternative method of managing these emotions, which may be therapeutic (by 'catharsis') as well as satisfying, and the literary arts represent an accessible format. Furthermore, the wealth of experience that a physician necessarily meets in the course of a professional life places him or her in a particularly strong position to write knowledgeably and deeply.[35] This, of course, requires a reflective approach to practice, and this approach, together with the writing skills, can be engendered as part of undergraduate literary study.

Creative writing has been taught successfully to medical students (e.g. by the poet, John Burnside, at Dundee University) and to doctors[36] with these thoughts in mind. Keats, Chekhov, Arthur Conan Doyle and William Carlos Williams are all well-known physicians who were writers. More recently Miroslav Holub and Danny Abse combine the two activities successfully.[37] There are many lesser and unknown writers within the profession. In 1990,

Apollo[38] was published as an anthology of doctor poets, and an anthology of physicians' creative writing is in preparation in Sheffield (G Bolton personal communication).

The role of the physician

The physician is a popular character in fiction and drama, and a study of the relevant works will be illuminating for medical students who may join the profession with a particular notion of their prospective role in society. Whether the object of study is Dr Lydgate in *Middlemarch* by George Eliot, Dr Hullah in *The Cunning Man* by Robertson Davies, or Dr Kildare, the view of this role will be expanded by this study.[39] The experience may be a positive one or a negative one, but the increased self-awareness will be useful in students' subsequent approaches to patients.

Ethics

Literature is a useful tool for the teaching of ethics.[5,6,10,40] Through portrayal both of ethical dilemmas and of their resolution (satisfactory or unsatisfactory), students of these literary works can explore the implications of a particular ethical stance. Furthermore, a reader has the opportunity to experience empathically, through one or more characters in a novel or play, a viewpoint which may be contrary to his or her own. Without necessarily being forced to agree with this viewpoint, its existence and arguments are important, and this is one of the important lessons of ethical education.[19] Literature, through the ages, contains an important history of every major ethical debate, without which the modern context must be difficult to appreciate.

Putting theory into practice

Given the number of different roles that literature has been shown to have in medical education, it would be inappropriate here to prescribe one specific means of its introduction to the medical curriculum — there are at least as many ways of teaching it as there are benefits to be gained. Teachers in the UK and US have described extra-curricular courses[9,41] and argued that their success lies in the enthusiasm of the students. Others in the US describe distinct humanities programmes,[4] with the advantage of specialists teaching all students. *Tomorrow's doctors*[20] will find the new Special Study Modules particularly adaptable to previously ignored areas such as literature, and a detailed proposal for such a module, including a suggested reading list and means of assessment, has been published recently.[7] Perhaps, though, such specialized elements miss much of the reality, which is that medical education and literature are inseparable, and that there is potential for bridging the gap between the two domains at many points. There is a call for creative course design.

Conclusion

I have suggested not only that literature has a role in medical education, but that this role is crucial. It is not a complete answer to any medical education problem, but neither is a course in pathology or in evidence-based medicine. Its introduction in the UK would require a certain shift in current educational thinking and funding, but there is a suggestion that this shift is taking place. Just as pathology must be taught by pathologists and ethics by philosophers, so must a literature course be taught by experts in literature. This in itself will require a re-fashioning of the 'university paradigm', bringing in Departments of English and writers-in-residence and crossing traditional academic boundaries. Medicine is a multidisciplinary specialty.

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