The place of the humanities in the education of a doctor

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Introduction

My first intention in this lecture is to analyse the separation of science and the arts and to investigate what effect this has had on the training of doctors. I shall suggest that this training would be improved by incorporating into it some exposure to the humanities. Next I shall examine the place of narrative in the lives of patients and in the interrelationship between patients and doctors. I shall then outline and provide examples of what I see as various levels of interaction between medicine and humanities before proceeding to my conclusion.

Bridging the gulf

It was, I think, C P Snow who most prominently drew attention to the gulf between science and the arts in his 1959 book *The two cultures and the scientific revolution* and its sequel, *Second look*, published in 1964. He argued that the practitioners of either culture knew little, if anything, about the other and that communication between them is difficult if not impossible. He suggested that the dichotomy between scientists and technologists on the one hand and humanists and artists on the other caused a sharp disjunction of comprehension and sympathy.

My position is that there is no reason why an individual cannot have some understanding of the philosophy, values, and methods of both cultures. Surely our task, as we approach the millennium in an increasingly specialized society, is to encourage disciplines to build bridges between the two cultures, and in the medical discipline we now have a golden opportunity to build such a bridge. Consider this quotation:

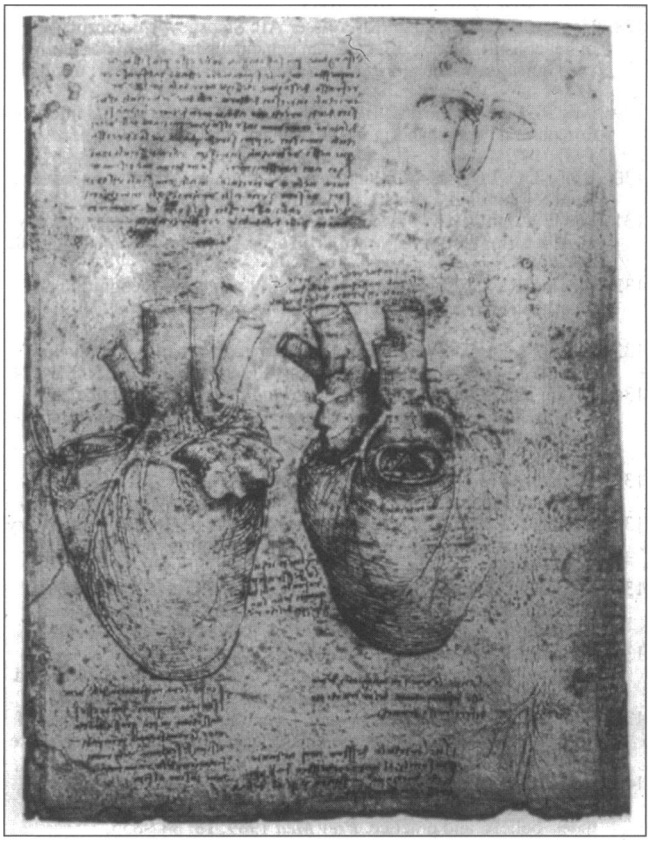
> Treatment must be intensely personal, and if sometimes it strays into the realm of mind, there the physician must follow it. But usually it is in that realm where mind and body mingle — where the mind affects the body and the body the mind — that is where untangling the relationship takes time and application and sympathy.

The source of this perceptive observation is the last novel of the Canadian writer Robertson Davies, a book entitled *The cunning man*.[1] The 'cunning man' is Dr Jonathan Hullah, the narrator of the book. From Hullah's boyhood encounter with an Indian medicine woman, the theme of healing runs through the novel.

Consider now the anatomical drawings of Leonardo da Vinci, dating from around 1490. Are they art or are they science, or is that an irrelevant and meaningless question? Are the boundaries between arts and science as strictly defined as some would have us believe? The study of science provides us with intellectual pleasure, excitement, and profound insights into the nature of reality and the eternal questions surrounding the meaning of life. It also reveals much beauty. In the study of the humanities there are equally profound insights into the human condition, which in essence hasn't changed much since the advent of *Homo sapiens*; the insights of great artists, writers, and composers, such as Tolstoy, Mozart, Leonardo da Vinci, and Shakespeare, are as valid and relevant now as they were when they were originally made.

Medicine and the arts

There is a growing interest in the interaction between medicine and the arts, and this is reflected in a now considerable literature. The *Lancet* runs a regular series entitled Literature and Medicine, and has recently published an article by the Chief Medical Officer, Sir Kenneth Calman, entitled 'Literature in the education of the doctor'.[2] In the mid-1980s, Professor Calman (as he then was), Professor Downie (a moral philosopher in Glasgow University), Morag Duffy (a nurse tutor) and I organized a



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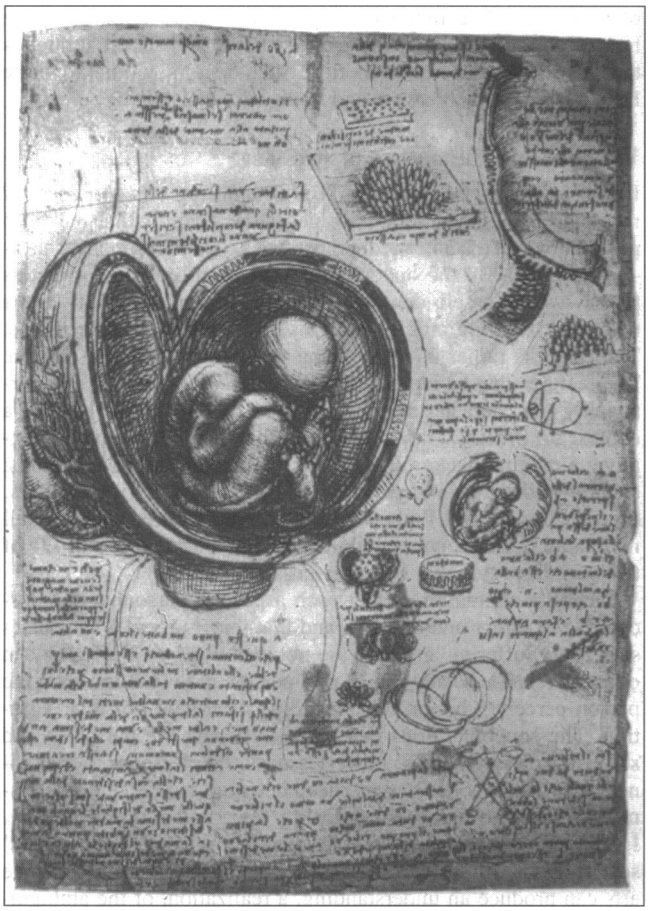

voluntary literature and medicine group for medical undergraduates at Glasgow University; this was one of the most stimulating and enjoyable experiences of my professional life. The group still meets, although it is now aimed at postgraduates and is attended by a varying selection of both medical and non-medical people.

The Royal College of Physicians and Surgeons of Glasgow is celebrating its 400th anniversary in 1999 by holding a major conference on medicine and literature. The Institute of Medical Humanities in the University of Texas is one of many American medical schools that have departments of medical humanities; these offer extensive curricula using poems, plays, short stories, novels, films, and paintings as the basis for teaching and discussing ethical aspects of medicine and the role of the doctor, in relation to both the patient and society. It is difficult to see how a doctor could not but benefit from this approach.

There seems to be a growing acceptance for the proposal that the education of a doctor should combine science and the humanities, and I would like to explain why I think this would be beneficial both to society and to our profession. I must emphasize that this lecture is not a diatribe against science. It is essential that doctors are thoroughly trained in diagnostics and therapeutics — patients expect to meet a doctor with these skills, and rightly so. I am arguing that the polarization of arts and science is artificial, that the dichotomy need not exist, and that cross-fertilization is both possible and desirable.

What this cross-fertilization can produce is a different sort of doctor: one who is richer and deeper as an individual; one who sometimes has to deliver the products of scientific advance that will transform peoples lives, but who also has the ability to relate to and communicate with people whose lives cannot be transformed but can be enhanced by support and the palliation of suffering.

Producing a doctor: training or education?

The attitude and values of doctors derive largely from their training and are heavily influenced by the attitudes and the values of those who organize this training. Traditionally the curative model of medical care has been the predominant influence in the training of a doctor. This model of care produces students with a set of attitudes and values that are analytical and rational. Clinical encounters are seen as puzzles to be solved by the rational application of science and technology to produce a diagnosis of disease and, if currently available, a cure. Death is the ultimate failure in this concept of the medical transaction. Diagnosis is dependent on pathophysiology, and treatment on meta-analysis of measurable clinical outcomes, such as tumour size and survival time from diagnosis. Most subjective indices, such as the patient's perception of the quality of life, are of lesser importance in this scheme of thinking. The curative model of care tends to perceive patients in terms of their component parts: molecules, cells, and organ systems.

At the opposite end of the spectrum is the palliative model of care, the goals of which are in some ways antithetical to those of curative care. Indeed, the World Health Organization defines palliative care as 'the act of total care of patients whose disease is not responsive to curative treatment.' Failure to cure in this scheme of things is seen not as a failure but as an opportunity to alleviate suffering. In a curative model, the incurable patient is seen as untreatable, an attitude that is likely to promote in the patient a sense of worthlessness, of being ignored by the medical profession, of being beyond help. The palliative care model, on the other hand, strives to promote a sense of dignity and self-worth in the patient whose disease is not amenable to cure. It does not perceive patients in their component parts but as whole people

with psychological, social, cultural, and ethical dimensions; all of these must be considered, together with the patient's preferences and values, when planning the management of an illness.

These two models of care are at opposite ends of a spectrum and there are clinical presentations in which each is entirely appropriate. For a patient with an acute appendicitis, a fractured femur, or a pneumothorax, for example, the curative model is clearly appropriate. For a patient with metastatic malignant disease, the palliative model is the suitable one. To quote a recent article on this subject in the *Journal of the American Medical Association (JAMA)*: 'between the curative model and the palliative model lies an unnamed approach that supports all legitimate goals of medicine — health promotion, prevention, rehabilitation, life preservation, comfort and care and is willing to combine these in whatever manner best reflects the values of an individual patient.'[3] Such a model of care characterizes the general practice of medicine promoted by the Royal College of General Practitioners.

Over the past 30 years or so, the curative model has dominated the thinking of those organizing the training of a doctor, giving a specific scientific focus to that training. In the model I have just described, some exposure to the humanities would be considered valuable in the education, and not simply the training, of a doctor. Furthermore, in a climate in which the curative model of medical care has been a predominant influence in the training of a doctor, there is a tendency to admit students to medical school by focusing on science-oriented qualifications. It is arguable that this sort of educational system produces personality types geared towards setting problems and seeking solutions, and then places them in a profession in which (in our discipline at least) the tolerance of ambiguity and uncertainty is a keynote.

We live in a postmodern world, where the modern view that the essential truth of the world can be discovered by the rational application of scientific method has been replaced by the postmodern view, in which the underlying values are uncertainty, the recognition of many different experiences of reality, and the existence of multifaceted descriptions of truth. These ideas were aired in a thoughtful discussion paper in the *British Journal of General Practice* (*BJGP*) entitled 'General practice — a postmodern specialty?'[4] A suitable preparation for entry into a postmodern specialty is likely to include some exposure to the ambiguities and uncertainties of life; reflection on the humanities can provide this. In an article in the *Lancet* analysing the admission criteria by which medical students are selected to enter the University of Newcastle, New South Wales, the authors state: 'Combining previous study in both humanities and science before medical school entry was predictive of higher intern performance ratings.'[5]

It is this complementary combination of science and the arts for which I am arguing. Ranen Gillen makes this point effectively in an editorial in the *Journal of Medical Ethics*. He acknowledges the fundamental importance of medical science in the work of a clinician, but thinks that 'the science of medicine must, if it is to optimise achievement of its objective of improving the practice of healthcare, collaborate with the art of medicine, a central part of which is understanding of people, especially sick people,'[6] and that 'our understanding of the depth and variety of human experience, our ability to share in the experience of others, all can be enriched by good literature — by reading novels, stories, plays and poetry.'[6]

I repeat that this lecture is not critical of science, of the scientific method, or of evidence-based medicine. I am proposing that if you add to these concepts the stimulation and nurturing of the moral imagination through the use of the humanities, our medical schools will produce doctors who will have not only highly tuned clinical skills but also a more profound understanding of the human condition and of the psychological and moral subtleties that illness so often sets in motion. Such doctors will be, to quote Henry James, 'finely aware and richly responsible.'[7]

Wisdom and the nature of suffering

In his wonderful book *The nature of suffering and the goals of* medicine,[8] Cassell describes some of the features that make up personhood. We cannot reduce persons to their component parts — that is exactly the opposite of what I am arguing for in this paper — but Cassell identifies these parts in order to analyse the nature of suffering and its relationship to the goals of medicine. The effect is rather like producing a cubist portrait of a person. The features that he identifies each person as having include personality and character; a past with life experiences that provide a context for illness; a family with ties that may be positive or negative; a cultural background; a variety of roles and relationships; a body and a self-image of that body; a secret life of fears, desires, hopes, and fantasies; a perceived future; and, Cassell maintains, a transcendental dimension (that is some sort of life of the spirit, however that is expressed).

Cassell's contention is that each aspect of personhood is susceptible to injury and damage, and that this injury is what causes suffering. Suffering and pain are not synonymous. Suffering can occur in relation to any aspect of a person and it occurs when the person perceives his or her impending destruction or disintegration. The sort of injuries that cause suffering are the death and suffering of loved ones, powerlessness, helplessness, hopelessness, the loss of a life's work, deep betrayal, isolation, homelessness, memory failure, unremitting fear, and physical agony. Ignorance of these many facets actively contributes to patients' sufferings, and I am arguing that reflection on literature and the arts can produce an understanding, a realization, of the ambiguities and complexities that characterize each life.

Sir Theodore Fawkes observed prophetically in 1960 that 'more and more as the years go by a person who devises and performs new miracles is going to be concerned with things rather than people; and the growth of scientific medicine makes it imperative that he should be balanced by someone who is concerned with people rather than things.'[9] James McCormick quotes this in a *Lancet* essay entitled 'Death of the personal doctor', in which he observes that 'in many instances knowing the person who has the disease is as important as knowing the disease that person has.'[10] To my mind, 'knowing' here means more than 'having a continuing acquaintance with'. It means that the doctor brings some understanding and insight to the patient's condition. Feinstein puts similar concepts slightly differently:

> Until the methods of science are made satisfactory for all the important distinctions of human phenomena, our best approach to many problems in therapy would be to rely on the judgements of thoughtful people who are familiar with the total realities of human ailments.[8]

My basic thesis is that it is extremely unlikely that the methods of science will ever satisfactorily explain all human phenomena and that, while the scientific evidence base in medicine is necessary, indeed essential, it is not by itself sufficient to inform and explain all transactions between doctor and patient, especially in the context of general practice.

The importance of narrative

The first duty of a general practitioner, or indeed of any doctor in a consultation, is to listen. To what are we listening? We are listening to a story — the patient's story of his or her illness — and it is widely recognized that listening intently to that story, or tak-

ing an accurate history (a phrase that places us doctors in a much more important light), is the key discriminator in diagnosing illness in general practice. So, narrative plays a crucial role in the diagnostic process.

From Hippocrates to the relatively recent past, story-telling has played an important role in the teaching of medicine; until the advent of randomized controlled trials and meta-analyses, the case history dominated medical thinking and medical literature. 'Anecdotal' is now the ultimate pejorative term for evidence in medical thinking. But, as Howard Brody observes in his excellent *Stories of sickness*, 'stories are essential as a means of how scientific knowledge, in its generality, can be applied to individuals, in all their particularity.'[12] As my Glasgow colleague Jane McNaughton has observed in a *BJGP* editorial entitled 'Anecdotes and empiricism',[13] the audience in a scientific meeting tends to sit up and take notice when a speaker illustrates a talk with an example (an anecdote, dare I say) of a patient whom he or she has treated. So, narratives have a place in the teaching of medicine.

The central theme of Kleinman's seminal work *The illness narrative: suffering healing and the human condition* is that illness has meaning, and that 'to understand how it obtains meaning is to understand something fundamental about illness, about care and perhaps about life generally.'[14] Furthermore, Brody asserts that suffering can be alleviated by attaching meaning to the experience, and that the primary mechanism for attaching meaning to human experiences is to tell stories about them. One of the components of attaching meaning to an illness experience is to enable the patient to achieve some sense of control over that experience. When the physician has a scientifically based cure to offer for the illness, the sense of mastery or control is easily achieved, but even when no cure is available the ability to give a prognosis, to 'tell the story' of the future of the illness, can help maintain a sense of control. So, narratives have a place in healing.

On the broadest scale, each person's life is a narrative. All of us could tell the story of our lives. This narrative can be interrupted by illness. If the illness is amenable to cure, the doctor is a fringe character in the narrative, soon to leave the story, although there is a possibility of reintroduction later on. If the illness produces a significant disability, the doctor becomes temporarily a co-author, helping the patient to replan future chapters in the light of these developments. If the illness is a chronically progressive disabling condition, the doctor plays a more important role in the narrative, becoming a central character in the story. Finally, and perhaps most importantly, if the illness is terminal, the doctor helps the patient write the last chapter of the narrative.

So, at a variety of levels, listening to and telling stories plays a fundamental role in the practice of medicine.

The influence of the arts on health care

The arts generate moral questions; for example, by dramatizing an episode literature can challenge the attitudes of both reader and society to health problems. For example, Ibsen's play *An enemy of the people*[15] concerns the duty of a public health physician, Dr Stockman, who finds that the water supply of a town is contaminated, but who knows that the prosperity of the town depends on its public baths. In *Ghosts*,[16] another play by Ibsen, one of the themes is the effect of congenital syphilis on a family. The arts can also extend our imagination and deepen our sympathies by allowing us a vicarious particpation in situations that we have not experienced ourselves, and perhaps never will experince. *Love in the time of cholera*,[17] by Gabriel García Márquez, is a brilliant study of the psychology of ageing for those of us who are still in the foothills of that inexorable ascent. Paradoxically, in addition to extending our range of experience, reflection on the arts can assist us in our inner journey and deepen our self-awareness and self-perception.

Remember the dictum of Socrates: 'the unreflective life is not worth living.' We all bring a lot of personal baggage to our consultations as a result of the various influences in life that have moulded our attitudes (which may change as years pass). This sort of personal baggage is inevitable. What is important is that we are aware of these attitudes, and I believe that literature can assist in this self-knowledge. We all recognize the importance of communication in medicine, and literature can help to focus attention on language, on the subtle and sometimes unintended effects that words can have.

At a fundamental level, medicine and the arts are each concerned with healing. This point is made by Dr M T Southgate, a physician and former deputy editor of *JAMA*:

> Medicine and art have a common goal: to complete what nature cannot bring to a finish... to reach the ideal... to heal creation. This is done by paying attention. The physician attends to the patient, the artist attends to nature. If we are attentive in looking, and in listening and in waiting, then sooner or later something in the depths of us will respond. Art, like medicine, is not an arrival, it is a search. That is why perhaps we call medicine itself an art.'[15]

Interaction between medicine and the arts

There are many interactions between the disciplines of medicine and the arts, and I wish to look at four of these:

- The doctor as artist
- The patient as artist
- Areas of direct medical interest in art and literature, for example *The death of Ivan Illich* by Tolstoy (a superb analysis of the psychology of terminal illness)
- The deepening understanding of human motivation, attitudes, and emotion that a knowledge of the arts can produce — this is most important and underpins the whole lecture.

[The next section of the lecture contained both visual and written examples of these four interactions between medicine and the humanities. Unfortunately, it has not been possible to reproduce this section in full owing to lack of space. As examples of direct medical interest in art, Dr Sweeney chose paintings of a cat by the schizophrenic artist Louis Wain, 'The scream' by Edvard Munch, and the Isenheim altarpiece by the sixteenth century German artist Matthias Grünewald. To illustrate the doctor as artist, he used two short stories by Anton Chekhov[19,20] and three poems by Dannie Abse.[21-23] As an example of the patient as artist he read 'Death of a son' by John Silkin[24], and referred to *The bell jar* by Sylvia Plath,[25] 'On his blindness' by John Milton,[26] Damon Runyon's late short stories,[27] and *The diving bell and the butterfly* by Jean-Dominique Bauby.[28]]

The caduceus

I have already alluded to Robertson Davies, the Canadian novelist who died in December 1995. In a recently published collection of his non-fiction writings, there is a lecture he delivered in one of the most famous medical schools in North America, the Johns Hopkins Medical Institution in Baltimore. The lecture is entitled 'Can a doctor be a humanist?' (in which 'humanist' is used in the sense of one well-versed in the humanities). In it Davies suggests that he should have entitled the lecture 'How can a doctor possibly be a humanist in a society that increasingly tempts him to be a scientist?'[29] Davies suggests that the greatest evil, the greatest current pervasive malaise of mankind is not

cancer, not AIDs, not even smoking tobacco — it is stupidity, which he says 'lays its blighting hand on every aspect of social, professional, political and cultural life.'[29] He suggests that it is the duty of physicians to fight off this threat, and the first step is for physicians 'to assure [their] complete inoculation against the plague by massive daily applications of art, music and literature.'[29]

Davies discusses the meaning of the caduceus, the staff of Mercury with intertwined serpents that has become the symbol of the medical profession, and suggests that the two serpents are science and the humanities, or knowledge and wisdom. Knowledge, he states, 'is an extroverted element which a doctor acquires during his long and demanding education in order that he may direct it outwards upon the patient. But wisdom is an introverted element in the doctor's psyche; it has its origin within; and it is what makes him look not at the disease but at the bearer of the disease. It is what creates the link that unites the healer with his patient and the exercise of which makes him a true physician, a true healer. It is wisdom that tells the physician how to make the patient a partner in his own cure.'[30]

I cannot think of a better definition of a good doctor than this — and isn't it interesting that it comes not from the medical profession but from a wise and thoughtful novelist? I suggest that the two serpents of the caduceus represent the twinned professional values with which members and fellows of this College are familiar: *scientia* and *caritas*.

Conclusion

I hope that I have given you some idea of the fascinating interaction between medicine and the arts. Among the many other areas that could be considered are the question of madness in art and the effect of profound disabilities on the style and content of an artist's work (for example the effect of Beethoven's profound deafness on his music, of Goya's deafness on his art, and of Dostoevsky's epilepsy on his writings). We could also discuss the healing properties of art for the artist: some artists use their work to transform and reshape the pain of experience into wholeness and harmony; many of the world's great artists were fully aware that they lived with neurosis, depression, and obsession, and had to struggle constantly to maintain an equilibrium. James Joyce, for example, scoffed when Carl Jung offered to psychoanalyse him. He wrote to a friend about 'Dr Jung the Swiss Tweedle Dum, not to be confused with the Viennese Tweedle Dee, Dr Freud.' Joyce called psychoanalysis a form of blackmail. In short, the arts provided an inexhaustible supply of interest and enrichment.

In an article in the *British Medical Journal*'s 'Personal view' series, a lay brother in an order of monks wrote about his reactions to the news that he had motor neurone disease. He made a comment that is very simple but striking: 'We must remember that a patient is simply a human being in the care of his fellow human beings.'(Personal recollection.) That, to me, conveys the essential privilege of being a doctor: a person to whose care our fellows entrust themselves. When they come to us they are often worried, in pain, frightened, and insecure, and we owe it to them to develop an insight into their feelings and emotions so that we can more fully empathize with them, understand their predicament, and consequently help them. My contention is that reflection on the humanities can deepen this empathy and insight.

In her superb *Mystery of general practice*, Iona Heath wrote that 'all aspects of human existence are legitimate concerns for the general practitioner provided that they are presented as a problem by the patient.'[31] A good general practitioner is one who listens, understands, and analyses effectively the problems presented. But in our understanding, we are inevitably confined by our conceptual framework. It follows that the greater the expansion of our conceptual framework, the deeper our understanding of the problems presented by our patients. There will always be a need for wisdom and judgement in general practice, and I contend that the attainment of this wisdom can be enhanced by including some teaching on the humanities, as well as on the scientific basis of diagnostics and therapeutics, in the medical undergraduate curriculum.

Voltaire, the eighteenth century French philosopher, writer, satirist, and noted anti-establishment figure, stated: 'Men that are occupied in the restoration of health to other men by the joint exertion of skill and humanity are above all the great of the earth.' A consoling thought.

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