Commentary

The Medical Humanities: Reconnecting with the Soul of Medicine

Eng Koon Ong, [1,2]*MBBS, MMed, FAMS*, Devanand Anantham, [2,3]*MBBS, MRCP*

How The Humanities Are Integral to Medicine

The medical humanities are an interdisciplinary field where concepts, content and methods from art, history and literature are used to investigate the experience of illness and to understand the professional identity of healthcare providers.[1] The humanities—or "human sciences"—aim to increase self-awareness and improve humanistic care.[2] Humanism refers to professional attitudes and actions that demonstrate an interest in and respect for the patient.[3] The humanistic practice of medicine involves attentive communication, empathy and compassion, and the humanities strongly support the acquisition of these humanistic skills through critical analysis and development of values. The humanities are also distinct from biomedical ethics which is focused on the practical resolution of clinical dilemmas. Nevertheless, the humanities support ethics through philosophical analysis, sociological and psychological contextualisation as well as historical perspective.

Medical science continues to produce an ever-increasing range of diagnostic and therapeutic interventions in its battle against disease and disability. As the potential of life support, precision medicine, transplantation and minimally invasive surgery are being realised, public expectations also soar. Yet the disenchantment experienced by patients today has surprisingly never been more profound.[4] Instead of relishing the possibility of cure and improved survival, they are burdened by being disaggregated into component organs and tended to by specialists who delineate their work like sub-contractors engaged in some larger project. Additionally, commercial forces and depersonalisation have driven powerful wedges between the sick and those who care for them. Healthcare professionals are also increasingly grappling with the threat of being replaced by an advancing wave of artificial intelligence, block chains and robotics.[5] The value-added component of the human expert is being questioned when costly medical manpower is slowly replaced by checklists, decision-making algorithms and handheld devices.

Despite these disruptive changes, medicine is still defined by the application of biomedical expertise and the recognition of human needs and values. The modern version of the Hippocratic Oath, also known as the "Lasagna Oath" and penned by the late American physician Louis Lasagna in 1964, captures this perfectly: "I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug … I will remember that I do not treat a fever chart, a cancerous growth, but a sick human being, whose illness may affect the person's family and economic stability. My responsibility includes these related problems, if I am to care adequately for the sick."[6]

The renaissance of the humanities continues to promise hope for both healthcare and the professionals involved. It is a renaissance of sorts because it was commonplace for physicians in the early 20th century to have received an education in the liberal arts before they undertook medical training.[2] The subsequent exponential developments in the natural sciences and the power conferred over death and disease have diverted attention to a primarily biomedical model of disease. Nevertheless, eminent physicians since the time of the late William Osler had foreseen and warned against the dangers of this asymmetric approach.[7] Despite scientific and technological mastery, the practice of medicine cannot be diverted away from the care of individuals because of widely variable and complex biographies and emotions. By using the narrative experiences of both patients and caregivers through modalities such as art, drama and poetry, the humanities can provide perspectives and solutions to many of the challenges that healthcare faces.[8] We are driven to reflect on fundamental concepts such as the goals of medicine, how it should be practised, the values that define the professional identity of healthcare providers and how to make sense of deep emotions in the provision of care.[9,10]

Humanities in Clinical Care

Since the publication of the seminal paper by Enid Balint on "patient-centred medicine" 50 years ago,[11] there is

[1]Division of Supportive and Palliative Care, National Cancer Centre Singapore, Singapore
[2]Office of Medical Humanities, SingHealth Medicine Academic Clinical Programme, Singapore
[3]Department of Respiratory and Critical Care Medicine, Singapore General Hospital, Singapore
Address for Correspondence: Dr Ong Eng Koon, Division of Supportive and Palliative Care, National Cancer Centre Singapore, 11 Hospital Drive, Singapore 169610.
Email: ong.eng.koon@singhealth.com.sg

recognition that biomedical models which reduce patients to abnormalities and diseases in laboratory tests or radiographs have never been able to fully address the needs of the sick.[12] In this paradigm, disease remains a pathological phenomenon but illness is appreciated as the experienced reality that is both subjective and culturally sensitive. For example, dyspnoea and pain are neurophysiological entities, but suffering that is experienced from these symptoms is the perceived reality that patients are driven to seek treatment for.[13] Patient-centred and relationship-centred care advocates that patients have unique narratives of their illnesses and these must be understood together with their psychological experiences and social contexts.[14] The humanities can provide a glimpse into the lives of patients and their caregivers beyond their diseased organs through neutral and safe modalities that both patients and healthcare providers can appreciate and empathise with. A common ground that counters any knowledge asymmetry or power imbalance is then found, and a truly humanistic connection between the "healer" and the "being healed" is facilitated.[14]

Words and narratives provide particularly powerful tools to facilitate communication and mutual understanding between physicians and their patients. Terms such as "aggressive" and "salvage" chemotherapy are commonly used in the management of cancer when treatment options are discussed. Even national conversations about healthcare priorities use phrases such as "war on diabetes" and "overcoming obesity" to evoke the resolve to improve health. Books such as "Being Mortal" by Atul Gawande and "When Breath Becomes Air" by Paul Kalanithi have become best sellers because the honest and personal opinions of their authors on death and dying had resonated with the experiences of both patients and healthcare providers.

The prevention of burnout among healthcare professionals is another area where the humanities has special relevance. Data on physician burnout rates consistently demonstrate that the profession is struggling with falling empathy levels, depression and even suicide.[15-17] This trend has been attributed to a de-emphasis on humanism that causes lower job satisfaction and more depersonalised patient care. Electronic medical documentation can reduce the amount of human contact and team-based care can result in diffusion of ownership. Data suggest that doctors who find meaning in their work have higher levels of empathy, experience less burnout and provide care with better patient outcomes and satisfaction.[15,18-20] As doctors grapple with increasing expectations of their technical expertise, the consequences are an unfulfilled search for meaning in work and a sense of loss of accomplishment.[21] The humanities can help physicians rediscover the meaning of caring for the sick, re-establish relationships with their patients and reconnect with their highest ideals of healing the person rather than just correcting the pathophysiology.[22]

Humanities in Medical Education

Since 1999, professionalism is established as one of 6 core competencies of postgraduate medical education by the Accreditation Council for Graduate Medical Education. Patient-centred care still remains one of the pillars of that competency. Throughout the world, medical schools are integrating humanities into their curriculum to address the need to train compassionate and empathetic doctors by developing personal attributes such as integrity and respect.[23] The humanities also help us cope with the complexity and uncertainty that are inherent in clinical practice when options are rarely binary. Clinical solutions are more often about reaching a consensus on a negotiated middle ground with patients based on their psychosocial contexts. To hone communication skills, the humanities help to move physicians away from the use of rigid checklists and to inculcate the values needed for truly empathetic communication.

Within a framework based on epistemic functions in medical education, the humanities can be used to acquire expertise, facilitate dialogue or institute transformative change.[24] In the acquisition of expertise, the humanities are a tool to master clinical skills. The visual arts can help physicians learn body language and non-verbal cues in communication, thereby inculcating in them an awareness of patient distress. Drama and theatre can help them to improve their presentation skills. Art and photography can impart to them observational skills and history emphasises to them the importance of relationships as well as context (Fig. 1). These skills can even be formally assessed during training with the use of appropriate checklists.

The humanities are also used to facilitate dialogue, perspective-taking and understand relational interactions between parties. Drama, music and poetry provide insights into the experiences of patients (Fig. 2). The awareness of divergent and conflicting perspectives is heightened and

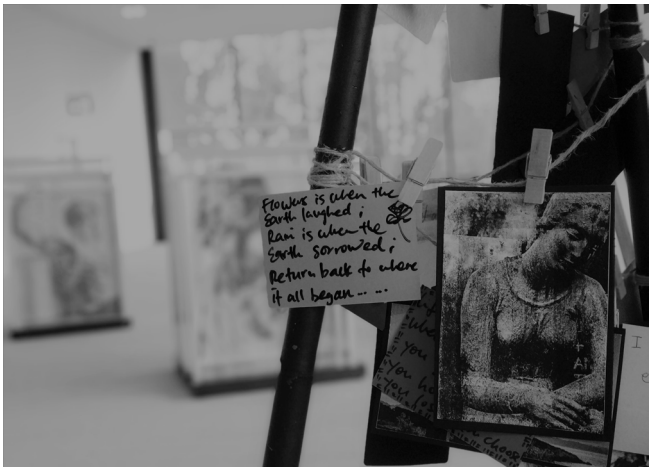

Fig. 1. The use of the visual arts to reflect on illness and suffering. (Reproduced with permission from the School of Humanities, Nanyang Technological University, Singapore)

Fig. 2. To exemplify the use of music as a means to facilitate dialogue and perspective-taking, healthcare professionals performed at the opening of the 23rd Annual Scientific Meeting of Singapore General Hospital in 2019.

the reflection that results can help to promote a holistic understanding of the circumstances of patients. Stigma can be reduced, stereotypes are challenged and diversity is tolerated when physicians develop cultural and social sensitivities.[25-27] Reflective writing is an assessment tool that can be useful to evaluate the quality of this type of training.[28]

Finally, as an agent for transformative change, the humanities are used to help trainees explore their emotions and to guide them in their self-discovery, personal growth and, ultimately, development of professional identity. These tools can be used to resolve professional lapses, especially in postgraduate training. Unlike shortcomings in clinical care, this is not a technical fix where a gap in knowledge is plugged and one moves on.[29] It requires adaptive learning or a new paradigm of thinking which in turn requires a growth mindset and an openness to change. The development of such a mindset can be difficult because professional lapses are often not viewed only as a developmental step in training, but are misinterpreted as a character flaw. The humanities can create a safe space to explore difficult topics such as mistakes, self-doubt and vulnerability.[30-31] Methods to assess transformative change may include self-reflection, multi-source feedback and semi-structured interviews.

Barriers to Acceptance

When educators tried to teach empathy in medicine, they were criticised for not being able to adequately quantify clinical relevance.[32-36] Additionally, the use of the humanities as a learning tool requires personal engagement and deep reflection and these may feel excessively personal and intrusive.[37] Not every faculty or learner will feel comfortable discussing and examining their uncertainty and vulnerability in their daily work.

Three common threads have surfaced from complaints.[1] First, in terms of content, students do not see the relevance of the arts in medical practice and are frustrated by their inability to, for example, relate the appreciation of a poem to an improvement in clinical outcome. Second, in terms of the trustworthiness of educators, students feel that non-clinicians such as humanities experts cannot comprehend the intricacies of clinical practice. As such, doubts arise because most medical knowledge is currently imparted as objective solutions. Third, as far as placement within the curriculum goes, students feel that the humanities are introduced either too early—when they are unaware of clinical realities—or too late when they are burdened by examinations.

Any effort to implement the humanities in medical education must consider the needs of both faculty and learners. The theory of self-determination states that when learners acquire competency, preserve autonomy and appreciate the relevance of a subject, they can be motivated to pursue personal growth and performance in the subject.[38] This can be used as a model for the development of humanities in medical education.

Research in The Medical Humanities

The humanities add interpretive knowledge to our understanding of medicine and complement the empirical data provided by the sciences, and they also help us explore and understand the concept of value to humans.[39] If we do not attempt to understand the concept of value in terms of the human experience, then all value may be judged in monetary costs, waiting times, lengths of stay and cold physiological numbers such as "HbA1c", "LDL" or the like. Although such targets are important, the question that remains is how much real meaning, if any, these numbers have on the aspirations of our patients. Additionally, preliminary results from exploratory neuroscientific studies have already linked empathetic responses to pain when the dopamine-related reward cortical centres in the human brain are activated.[40]

In medical education, qualitative research has also demonstrated how the study of the humanities is equally valid compared to traditional, positivist quantitative research methodologies.[41] The use of conceptual frameworks from both medical and non-medical disciplines such as philosophy and psychology have shed light on how the humanistic skills of doctoring can be learnt and taught. The theory of reflective practice is one example of how learners develop skills by starting with "reflecting-on-action" before they progress to "reflecting-in-action".[42] The former involves a review of an event after it has happened to evaluate behaviour, gain perspectives and guide future plans of action. The latter involves reflection during the decision-making process in the midst of a clinical encounter to arrive at an appropriate action. This development can be facilitated by narrative medicine[43-44] whereby the lived experiences of patients and their caregivers are explored via their stories to gain better

recognition, absorption and interpretation of their unique circumstances and psychosocial needs.

In the assessment of outcome, traditional quantitative methods run the risk of oversimplifying the data collected on experiences in medical education.[41] While the prevalence of attitudes and attributes may be measured using quantitative measurements and scales, qualitative research methodologies such as narrative inquiry can elicit rich and substantial details of the experiences of participants.[45] A shared space within the humanities can unveil formerly shrouded interactions and it can help to capture meanings that learners infer from their clinical experiences.[37]

The Way Forward

The humanities are increasingly being embedded in medical education and practice. In 2016, the National University of Singapore (NUS) Medicine Literature Society was founded as a student interest group. The NUS Centre For The Arts is also collaborating with NUS Yong Loo Lin School of Medicine to develop and display on-campus events and resources such as the NUS Museum and NUS Arts Festival. Over at the Lee Kong Chian School of Medicine in Nanyang Technological University, the humanities have been incorporated into the undergraduate curriculum.

In SingHealth Duke-NUS Academic Medical Centre, the Office of Medical Humanities was set up under the auspices of the Medicine Academic Clinical Programme to oversee initiatives such as movie screenings and poetry readings to engage staff in the campus and they have already begun to take root in clinical practice. In the Division of Supportive and Palliative Care at National Cancer Centre Singapore, literature is used to facilitate small-group discussions with junior doctors to explore topics of personhood, patient-centred care and empathy. All these educational activities and programmes promote awareness of the humanities in healthcare and develop research and data collection in this exciting field.

Conclusion

Without humanistic ethics and values, the practice of medicine will remain amoral, unfeeling and utilitarian. Instead of celebrating every scientific accomplishment, we will inadvertently feed unrelenting expectations and fuel growing dissatisfaction. The ward will resemble a laboratory and patients will become subjects whose damaged biology needs repair. The medical humanities have the potential to improve patient care, develop the professional identity of physicians and reconnect them with their aspirational ideals of patient-centred care. In medical education and research, there are promising methods to implement novel curriculum, data collection and analysis. The cynic may continue to dismiss the humanities as intangible and lacking scientific rigour. However, the desire to reconnect with the soul of medicine and a yearning for a type of practice that may have been neglected give ample reason to retort this cynicism. In the words of the late physician William Osler, "The good physician treats the disease; the great physician treats the patient who has the disease."

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