Promoting competence in undergraduate medical students through the humanities: The ABCDE paradigm

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Abstract
Stakeholders, including patients and employers, find that skills pertaining to professionalism, humanity, diversity, communication, and ethics are as important for patient care as the doctor’s ability to diagnose and treat illness. Practitioners should be able to demonstrate these skills in real time, yet they are not explicitly taught in the medical course – students are expected to learn them through observation of role models. Some students may never witness such role modeling. Research suggests that the creative instincts of medical students could be utilized through exposure to the humanities to explicitly develop these skills. Medical educators worldwide are examining newer ways to actively train and assess learners in professionalism and related competencies. Using Rudyard Kipling’s “Five Ws and One H” guide to writing a scientific paper, we propose the ABCDE paradigm and demonstrate why it is most appropriate to use the medical humanities to teach professionalism and humanism.

Keywords: Attitude; Behavior; Communication; Competency-based education; Cultural diversity; Empathy; Humanities; Education, medical

New entrants to the medical course are creative and enthusiastic; however, as they advance academically, emphasis on rote learning, a stacked curriculum, and other inherent difficulties of a career in medicine result in intellectual stifling and burnout.[1,2] They start off with idealistic feelings about their role as medical care-providers; but soon altruism and social-mindedness is replaced with cynicism and self-interest.[2,3] Researchers suggest that by providing opportunities through arts and humanities, the creative instincts of medical students can be utilized and honed to foster professionalism, humanism, respect for diversity, desirable change in attitude,
better communication skills, and ethical behavior.[4,5] These skills are not explicitly taught in the current curriculum; students are expected to imbibes them through exposure to role models.[6] To prescribe such a hit-or-miss method to the acquisition of competencies that are critical to holistic patient care seems inappropriate. Stakeholders, including patients and employers, find that these are the skills that they want a medical practitioner to demonstrate in real time;[7,8] they are as important for patient care as the ability to competently diagnose and treat illness.[9]

In view of the need expressed by stakeholders, medical educators worldwide are examining newer ways to actively train and assess learners in professionalism and related competencies.[1,5,10,11] Using Rudyard Kipling’s “Five Ws and One H” guide to writing a scientific paper,[12] we propose the ABCDE paradigm and demonstrate why it is most appropriate to meld the medical humanities to professionalism and humanism.

* I keep six honest serving-men (They taught me all I knew); Their names are What and Why and When And How and Where and Who. - Rudyard Kipling, The Elephant's Child

What is the ABCDE paradigm?

Box 1 shows the components of the paradigm. **Attitude** pertains to a mental or emotional dimension (feelings and beliefs) while **Behavior** is how one expresses oneself in action.[13] **Attitudes** often dictate behavior; for example, one who believes strongly in humanism may provide compassionate care across the board. Likewise, a person who is biased against a particular investigation or treatment may not prescribe it even if it is indicated. On the other hand, just as often, people may behave in ways that are not predicted by their attitude.[13] like the person who grew up a misogynist, yet practices medicine without a gender bias. That attitude and behavior can be discordant lends strength to our belief that educators should pay attention to both during the medical course. **Attitudes** develop through experience, education, and environment, and psychologists believe that they can be modified and reinforced, albeit slowly.[13] Medical educators should work actively to craft appropriate, analytical attitudes in learners in the hope that they will influence behavior; and to periodically strengthen them instead of allowing them to decay under the pressures of a stressful curriculum and an even more challenging career ahead.

**Behavior** too should be targeted. The Medical Council of India prescribes regulations on professional conduct, etiquette and ethics,[14] while the Indian Council of Medical Research provides guidelines for ethics in research.[15] Thus, broad competencies are already defined and educationists must be charged with actively training for the acquisition of ethical and professional behavior.

**Communication** is an essential skill since medical students are expected to communicate, orally and in writing, with patients and their relatives, with members of the health team, and with peers. In addition, it is a boon in scientific writing and during the oral presentation of research results. Opportunities should be created for learners to practice communication skills outside the routine course where communication is only attended to in passing.

India is a land of **Diversity** – not only in terms of language, economy, caste and culture, but also from the standpoint of

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**Box 1: The ABCDE Paradigm in Medical Humanities**

An integrated, inter-disciplinary medical humanities approach to teach medical students 
**Appropriate, analytical Attitude** 
**Ethical and Professional Behavior** 
**Effective Communication** 
**Respect for Diversity** 
and **Empathy**

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abilities. To communicate efficiently and treat effectively, medical students must appreciate and respect these differences. Respecting beliefs that are contrary to one's own may help foster the therapeutic relationship.[16] Doctors could tailor care to make it inclusive and socially relevant, thereby helping to reduce health inequities and improve health outcomes of marginalized groups and under-served communities. It is important for doctors to be culturally competent; a case in point is the relative ‘blindness’ of the medical community to people with disabilities and transgenders.[17]

Finally, Empathy is the ability to put oneself in the patient's shoes; of being moved by the patient's story. Unfortunately, medicine also teaches detachment so that informed, unemotional patient-care decisions can be made.[18] Doctors often find themselves torn between detachment and empathy; for some, detachment wins to the patient's disadvantage. A detached empathy is perhaps desirable, one in which the doctor's attention is on the patient but where the mind is not distracted by sharing the patient’s emotions. The doctor can focus on body language and signs of distress while listening to the patient's story, a strategy found to elicit more details than just questioning them impassively. Medical students should be exposed to strategies that convey empathy and that improve communication.[3]

Why use medical humanities to teach the ABCDE paradigm?

Training in the medical humanities serves to focus students' attention on the patient as a whole and not just on the symptoms of disease.[10,19] Exposure to art, films, theatre and literature on illness from the patient's or care-giver's perspective helps develop students’ observational and analytical skills, and hones self-reflection.[20] Both the artist and the viewer are provoked to reflect – an example may be found in an article published earlier in this journal, where an artist who also practices medicine reflects on suffering and the helplessness of one who is sick.[21] By providing insight into human suffering, use of media may enhance empathy, imagination, and respect for diversity.[22] Media has also been used to make students aware of ethical aspects of medicine, their responsibilities to self, colleagues and patients, and to inculcate professionalism. Street theatre, Theatre of the Oppressed, and Forum theatre have been used as problem-solving techniques in some communities including the medical.[23,24] Our experience with diverse forms of theatre have been reported earlier;[20,23,25] we have found it a useful tool to encourage self-expression, build empathy, and explore the experience of illness.

Medical biographies are an important source of role-models; biographies of physicians can inspire students in humanizing their medical practice.[26] Through the writing of reflections and narratives, students hone communication skills, reflective practice, empathy and professionalism.[11] During a Narrative Medicine course (UNarMed) at this Institution, our experience was enlightening. The stories narrated by students were richly embellished with themes pertaining to ethics, professionalism and humanism; narratives, clearly, can be a goldmine in achieving the ABCDE paradigm.

Anthropology, by exposing learners to the study of society and cultures, not only hones cultural competency, but can also be used to remind students about the ancient tradition of mentoring – from Kautilya and Chandragupta to doyens of music and dance – more accomplished ‘gurus’ have been mentoring learners for centuries, helping them develop various competencies.[27] Our experience with near-peer mentoring reveals that it can be used effectively to celebrate diversity, and to hone humanism.[28]

The medical curriculum is packed; at first glance, addition of new content might appear to be overwhelming; however, the study of medical humanities is generally found to be pleasurable.[10] A paradigm that avoids didactic teaching, and concentrates instead on encouraging medical students to use their imagination and creativity is less likely to be found burdensome. It is this context that inspired us to propose the use of the medical humanities to hone students’ humanitarian and professional skills. The Table suggests how the humanities can be used to achieve the competencies set out by the MCI in its Vision 2015 document.[38]
<table>
<thead>
<tr>
<th>Suggested teaching-learning tool*</th>
<th>How the humanities are being used in this institution in each specific context</th>
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<tr>
<td>Health-care perspectives from non-medical experts (for example anthropologists, sociologists, economists, historians, linguists)</td>
<td>Confluence lecture series[29]</td>
</tr>
<tr>
<td>Exposure to dance, music and movies</td>
<td>SPIC-MACAY (Indian classical music and dance)[30] Student societies</td>
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<td>Reflective writing: Narrative medicine</td>
<td>UCMS Narrative medicine program (UNarMed)[30] Medical Humanities journal (RHIME)[31]</td>
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<td>Creative Writing: Poetry and fiction</td>
<td>Medical Humanities Workshops RHIME[31]</td>
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<td>Mentoring</td>
<td>Faculty-supervised Near-Peer Mentoring[28,34] Student societies</td>
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<td>Exposure to theatre</td>
<td>Theatre of the Oppressed Workshop with Forum Theatre[25] Street Theatre[35]</td>
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<td>Disability studies</td>
<td>Infinite Ability &amp; Enabling Unit[22] Blind with Camera workshop and exhibition[36] Interaction with a role model with disability[37]</td>
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<tr>
<td>Workshops:</td>
<td>Compassionate care workshop for health care workers[30] Medical Humanities workshop for faculty</td>
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<td>History of Medicine</td>
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<tr>
<td>Case studies / News report analysis / Incident analysis of situations expressing adherence or non-adherence to principles of ethics, professionalism and humanity</td>
<td>Theatre of the Oppressed for health care workers</td>
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<tr>
<td>Graphic Medicine</td>
<td>Comicos – Graphic Medicine group[30] RHIME[31]</td>
</tr>
<tr>
<td>Advocacy studies</td>
<td>Inclusion of Persons with Disabilities into the National HIV response[32]</td>
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*Competencies to be achieved
Each of these teaching-learning methods is expected to hone most components of ABCDE: Analytical attitude, Ethical and Professional Behavior, Communication, Diversity, and Empathy.
Based on extensive review of the literature, we anticipate strengthening of the five competency domains suggested in the MCI Vision 2015 document viz. Clinician, Leader and member of the health care team, Communicator, Lifelong learner, and Professional.
Box 2: Suggested schedule of the Humanities elective

Seeing the plethora of humanities-based teaching-learning methods available, institutions could choose to adopt whichever they desire and as many as are feasible, and for which expertise is available.

1. To start with, institutions could approach SPIC-MACAY and Centre for Community Dialogue and Change (Theatre of the Oppressed) as they already have the infrastructure and offer their services to the medical community.

2. Rather than offer the Humanities elective for a fixed period in a certain semester, it could be offered longitudinally throughout the medical course, say 3-4 events every year with students being required to attend a predetermined type and number of events in that year in order to qualify as having completed the elective.

3. A student could be allowed to take the Humanities elective at any time during the medical course (subject to first come first served so that the number of students is manageable). This would result in vertical integration leading to a mixed class – from first years through to final years, all students who choose a Humanities elective could participate together.

When should the ABCDE paradigm be applied?
When learned and assessed longitudinally throughout the duration of the medical course, professional, ethical and empathetical behavior is more likely to be incorporated into practice.[2,9] Thus introducing the ABCDE paradigm early, soon after students join the course and reinforcing it periodically is likely to be advantageous. The foundation course offered by the MCI in its Vision 2015 document, and the electives it prescribes, can be utilized for this paradigm (Box 2).

How should the ABCDE paradigm be applied? How should it be assessed?
The course should ideally be an elective one since art, theatre, music and literature may not move everybody in the same way;[23] however, educators suggest that if courses are to be taken seriously, they must be compulsory and they must be assessed.[39,40] Perhaps a via media can be found – some critical components may be compulsory for all students; for example, one of the mandatory components could be the writing of narratives, since they involve reflection, written communication, and may evoke empathy, ethics and professionalism, these being desirable attributes of a doctor.

The teaching-learning tools are detailed in the Table; they could include, among others, a judicious mix of case studies, narratives, student reflections, movies from history (eg. World War II), role play, group discussions of situations expressing adherence or non-adherence to principles of ethics and professionalism, book and poetry readings followed by group discussion, news report analysis, incident analysis, Theatre of the Oppressed and Forum Theatre, standarised patients, workshops, and research projects.

Assessment could include multiple methods and employ a continuous approach (Box 3). While all levels of Miller's pyramid of clinical competency would require to be assessed, much would depend on the semester under study. Thus, for senior students, the focus could be more on the ‘Does’ level, and to a lesser extent, the ‘Shows how’, ‘Knows how’ and ‘Knows’ level.[41] Medical Education Units could train interested faculty in order to prepare them for the use of medical humanities in teaching and assessment.

Where will the ABCDE paradigm be suitably applicable?
The paradigm would be most appropriate in undergraduate medical education, and possibly in other health professionals education as well. Refresher courses during postgraduate education and throughout practice could help reinforce learning.

Who should teach the ABCDE paradigm?
Ideally, medical humanities should be taught using a trans-disciplinary approach.
Box 3: Suggested method to assess achievement of ABCDE

1. For students who have opted for the humanities elective:
A portfolio comprising a mix of written reflections, essays, narratives, poems, and a humanities research project

Assessments to be made by faculty voluntarily dedicated to the humanities elective. Grades or marks to be used in two ways – one, to indicate successful completion of the elective; and two, to be added to the internal assessment for that year.

2. For all students, longitudinally, during formative assessments, in every semester:
   Theory
   Quiz
   Multiple choice questions
   Short structured questions
   Clinical
   Viva-voce
   Objective Structured Clinical Examination
   Bedside discussion
   Workplace-based assessment
   Standardized patients
   Standardized patients with disabilities

   Students’ acquisition of ABCDE to be assessed by specialty faculty during routinely scheduled formative assessments in that specialty

Involving non-medical experts from the humanities stream.[40] We have enlisted non-medical, non-institutional experts in our lecture series, ‘Confluence’ to expose students to issues pertaining to disability, diversity, and to perspectives outside the purely medical.[29] Within the medical faculty, the ABCDE paradigm should utilize an integrated, inter-disciplinary approach. One faculty member from each specialty department may voluntarily commit to administer and assess the course. The Medical Education Unit should train such volunteers in the teaching and assessment of the course. The humanities course should be the responsibility of the institution, with active support from the Medical Education Unit, all specialty departments, and other health care professionals like nursing and paramedical staff. Stakeholders like patients and employers can also play a pivotal role by providing multi-source feedback.[42]

To strengthen the acquisition of competencies through the ABCDE paradigm, institutions should encourage medical faculty to teach new content, and to act as role models for students. An institutional culture that recognizes the need for humanism and professionalism in medical education is beneficial in the long run.[43] Educators should be tangibly rewarded, with excellence in teaching being given the same recognition as excellence in research.[19] Once faculty is incentivized to change practices, students may acquire not only knowledge and skills, but also develop appropriate attitudes, behavior and values.[10,44]

To conclude, we propose the ABCDE paradigm with the broad goal of preparing medical students for professional, humanistic and ethical challenges in the practice of modern medicine and in keeping with the competency domains set out in the MCI’s Vision 2015 document. Further research is invited on ways to develop this paradigm with the provision that it cannot and must not be etched in stone.[23] Each institution could develop its own formula keeping in view regional socio-cultural context and local resources, interests, and needs.


29. Confluence: Lecture series. [Internet]. Medical Education Unit, University College of Medical Sciences, Delhi, India. [cited 2015 May 13]. Available from: http://medicaleducationunit.yolasite.com/confluence-lecture-series.php


31. Research and Humanities in Medical Education. RHIME [Internet]. 2015 [cited 2015 Jun 3]. Available from: http://rhime.in/


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