Medical Teacher, Vol. 28, No. 1, 2006, pp. 30–35

Taylor & Francis
Taylor & Francis Group

Teaching the art of doctoring: an innovative medical student elective

JOHANNA SHAPIRO[1], LLOYD RUCKER[2] & DANIEL ROBITSHEK[3]
[1]Department of Family Medicine; [2]Departments of Internal and Family Medicine; [3]Department of Medicine, University of California Irvine, College of Medicine, USA

ABSTRACT *The authors describe a longitudinal third- and fourth-year elective, 'The Art of Doctoring', introduced in an attempt to counteract perceived frustration and cynicism in medical students at their home institution during the clinical years. The course goals aimed at helping students to develop self-reflective skills; improve awareness of and ability to modify personal attitudes and behaviors that compromise patient care; increase altruism, empathy and compassion toward patients; and sustain commitment to patient care, service and personal well-being. These goals were accomplished through introduction and development of five skill sets: learning from role models and peers; on-site readings of works by medical student- and physician-authors; self- and other-observation; self-reflective techniques; and case-based problem-solving. The course involved regular in-class exercises and homework assignments, as well as a personal project related to improving personal compassion, caring and empathy toward patients. Students also learned to use a coping algorithm to approach problematic clinical and interpersonal situations. Class discussions revealed three issues of recurring importance to students: loss of idealism, non-compliant patients, and indifferent, harsh or otherwise unpleasant attendings and residents. Quantitative and qualitative student evaluations overall indicated a generally favorable response to the course. Problems and barriers included attendance difficulties and variable levels of student engagement. Future directions for this type of educational intervention are considered, as well as its implications for medical education.*

Introduction

Medical educators often express concern at the tarnishing of medical students' idealism and optimism during their clinical years (Marcus, 1999). Students themselves share these apprehensions (Lu, 1995), and research documents increased distress and cynicism (Newton *et al.*, 2000; Hojat *et al.*, 2002) as well as a deterioration in key communication skills (Prislin *et al.*, 2000) and a plateauing of moral development (Branch, 2000). Although some observers report a 'rebound effect' in the fourth year of training, in general the rise of pessimism, disillusionment and burnout among medical students as they proceed through training is cause for concern. These problems only seem to intensify during residency (Bellini *et al.*, 2002; Clever, 2002). It is imperative to identify knowledge, attitudes and skills that can counteract these disturbing tendencies (Klein *et al.*, 2003), and to impart these to learners so that they will be better prepared to cope with the demands and stresses of their professional education and future life.

Course description

At our home institution, students in the clinical years frequently reported high levels of frustration, anger, disillusionment, helplessness and even despair resulting from an environment often perceived as more abusive than supportive (Brody *et al.*, 1995). From a faculty perspective, there was insufficient opportunity in the curriculum to adequately discuss attitudes, strategies and skills for dealing with the many difficult situations that arose. Indeed, we were guilty of continually exhorting students to maintain compassion and composure while providing little actual training and practice in how to do so (Winefield & Chur-Hansen, 2000). The elective course described below was designed to remedy this deficit.

The Art of Doctoring was planned as a two-week third- and fourth-year elective, structured over an eight-month period (October–May). There were 25 small-group contact hours; an estimated 15 hours of reading; the remainder of the approximately 80 required hours was spent on completion of a variety of self-monitoring and writing assignments, as well as a personal project, and on application of course skills while in clinic and on wards. Despite certain inherent difficulties in a longitudinal format, this approach was chosen because it provided ongoing support and guidance, and created a caring group of peers. We opened the elective to third- and fourth-year students because we believed that this mix of perspectives might be beneficial to students in both years.

Course assumptions, goals and objectives

The Art of Doctoring was rooted in the assumption that reflection and mentoring in a nurturing environment can enhance medical students' understanding of the physician–patient relationship and of their professional role (Fins *et al.*, 2003; Henderson *et al.*, 2003). The instructors further shared the belief that the qualities that make a good doctor are also important in being a good person, so that the boundary between 'doctoring' and 'living' is more porous than students might imagine. Although some feel that it is presumptuous or futile to try to make students better persons (Kopelman, 1999), we believed that attention to this area could nurture students' inherent professional and humane instincts and provide some protection from the cynical attitudes often expressed by house officers in teaching facilities. Our

Correspondence: Johanna Shapiro, PhD, Department of Family Medicine, University of California Irvine Medical Center, 101 City Drive South, Route 81, Bldg 200, Ste 512, Orange, CA 92868, USA. Tel: 949-824-3748; fax: 714-456-7982; email: jfshapir@uci.edu

ISSN 0142-159X print/ISSN 1466-187X online/06/010030–6 © 2006 Taylor & Francis
DOI: 10.1080/01421590600568348

Table 1. Art of Doctoring course objectives.

At the end of this course students will:

- Identify core personal values and how to maintain them in the practice of medicine
- Understand the usefulness of reflection and imaginative perspective in developing insight into how best to convey compassion, caring and empathy to patients, patients' family members, peers, self and others
- Be able to identify and assimilate compassionate, caring, empathic and respectful attitudes and behaviors modeled by positive physician and peer role-models
- Know how to develop attitudes of emotional equilibrium, attentive presence and mindfulness during stressful patient encounters and other difficult situations
- Be able to work through emotional responses of anger, frustration, defensiveness and detachment toward patients and others
- Know how to acknowledge, reflect on and forgive mistakes by self and others
- Know how to use reflective writing, reading and other humanities-based techniques to develop and maintain compassion and empathy
- Implement the above strategies to enhance student–physician/patient and student–physician/resident/attending communication, thereby improving patient care and enhancing their own career satisfaction

intention was to provide students with specific techniques to encourage reflection on, and subsequent modification of, their attitudes and actions. Course objectives are listed in Table 1.

Content

The basic content of sessions focused on a combination of case-based or situation-based discussions initiated by students; brief personal statements by visiting physician role-models, followed by a question-and-answer period; and sharing and review of homework assignments and personal projects. In addition, instructors presented brief mini-lectures to introduce various topics (Table 2—available on the *Medical Teacher* website: http://www.medicalteacher.org).

Techniques

The course conveyed five categories of methods to promote empathy, caring, respect and compassion. The first was *learning from role models and peers* about how these individuals sustained caring attitudes under difficult circumstances (Shapiro, 2002). A similar technique involved *in-class readings of works by medical student- and physician-authors* exploring their own efforts to maintain compassion and empathy.

Another technique involved *self- and other-observation* to learn about humanistic care. In these instances, we provided students with several self- and other-monitoring options. A fourth category we labeled *self-reflective techniques*. These included short breathing and centering practices to help students become more 'present' and mindful with patients; cognitive and meditative techniques; and the use of journaling and other reflective writing to explore situations and responses that interfered with goals of compassionate care. The final type of strategy used was *case-based problem-solving* on how to work most skillfully with situations involving time constraints, language barriers, punitive residents or 'difficult' patients.

Readings

Course readings were light—primarily short personal essays and poetry by medical students and physicians reflecting on their medical training, as well as occasional relevant research studies. We read several academic articles on empathy, altruism, spirituality and self-reflection. Instructors also sent students occasional emails addressing topics such as patience, equanimity, personal disclosure, deep listening and compassion.

Practice

One of the elective's underlying assumptions was the importance of practice. Just as students practice suturing to perfect a surgical skill or practice scales to learn how to play the piano, they should also be prepared to practice compassion and caring in order to improve the expression of these qualities towards patients and others. We conceptualized the course assignments as practice. For this reason, we describe these in some detail.

In-class exercises

During the first session, instructors asked students to list 'the qualities that make a good physician', then score themselves as either better, worse or the same compared to when they entered medical school. The purpose of this assignment was to have students actively identify within themselves the problems of emerging cynicism and disillusionment, so that we could make an explicit link between the goals of the course and students' own concerns. Predictably, students reported that their humanistic qualities had decreased while their competence qualities had increased.

Thankfulness

Another in-class experiment asked students to engage in a 'thankfulness exercise' by expressing gratitude for one professional and one personal aspect of their life. Most were able to identify at least one event or person for which they could be thankful. Personal items mentioned had to do with family and good health. Professional items ranged from gratitude toward patients to thankfulness for finishing call. Subsequently, we opened several class sessions with a quick circle of thankfulness.

Setting an intention

This term refers to the practice of consciously identifying a particular attitude or behavior, then concentrating on expressing it during the rest of the day or week. Student-generated examples of such intentions included (1) developing more 'artful' interactions with patients; (2) being 'patient' with patients and attendings; (3) trying to connect emotionally with every patient encountered; (4) bringing caring to each patient encounter, even non-continuity ones; (5) seeing things from the patient's perspective. The purpose of this exercise was to help students see the utility of focusing attention and will on generating certain desired behaviors and attitudes.

Self-nurturance

In this in-class exercise, students were asked to mention one thing they had done recently to take care of themselves. Although initially no one could think of anything, eventually students mentioned several activities such as rollerblading, hiking and walking in nature, going to dinner and a movie, reading a good book, doing photography, going dancing. The group noticed how many of the activities mentioned shared the capacity to help participants 'shift perspective' and transpose them into a 'different world.'

Values-consistent and values-discordant encounters

Our first written assignment asked students to write down on a daily basis one situation in which they behaved consistent with their values and sense of professionalism, thereby making a positive difference in someone else's life; and one situation that, on reflection, they think they could have handled differently and more compassionately. This assignment provided many rich examples for group discussion. Students concluded that it was important to be true to personal values regardless of environment or situation, as this is what made them satisfied in their work. Several students commented that, although they found writing about such situations difficult, writing had superior value to merely 'thinking about' them because it was less ruminative, clearer, more focused and brought them closer to underlying issues.

Emotional equilibrium

The next assignment grew out of a concern expressed by many students that they were 'too caring' toward patients, and that this sensitivity would result in their being emotionally overwhelmed and drained. Over a three-day period, we asked students to record their level of emotional connection during each patient encounter on a 1–7 continuum from emotional detachment to emotional over-involvement. Student examples generated a worthwhile discussion on how to recognize and maintain a balance between 'emotional steadiness' (steadfastness in the face of another's suffering) and 'emotional tenderness' (the ability to be moved by another's suffering) (Coulehan, 1995).

Student/attending role-plays

The third writing assignment also resulted from process within the group. Instructors were unprepared for the high level of negativity and disillusionment expressed by some students toward supervising residents and attendings. Group discussions became both heated and divisive, with 'Panglossian' students always managing to put a positive cast on their clinical teaching encounters, while the 'Cynics' seemed alienated from their training, and expressed only disdain for their teachers. We suggested students from each 'camp' work together to write skits demonstrating problematic encounters with an attending or resident, then generate alternative 'endings' that would suggest other options. The performance of these skits, several of which were quite humorous, both brought polarized students together and resulted in insightful and ingenious problem-solving approaches.

Coping with frustration and powerlessness

We also asked students to brainstorm additional ways of working with the frustration and powerlessness that arose when they encountered a difficult attending, resident or patient. The students' list is summarized in Table 3 (available on the *Medical Teacher* website: http://www.medicalteacher.org).

As a follow-up, students chose one of these strategies, practiced it for a week, and reported back to the group on its effectiveness. Students often related using a strategy with which they were not familiar (i.e. one student tried keeping a journal, another tried to adopt the point of view of difficult attendings), and generally reported positive outcomes.

Wisdom sayings

A fifth homework assignment focused on the concept of 'wisdom sayings', first having students identify one or two personally meaningful sayings, then writing a paragraph noting how the saying helped them get through the day and was useful in dealing with problematic patient or educational situations. This was a well-liked exercise that resulted in a broad range of responses.

Positive physician role-models

The sixth homework assignment asked students to write a paragraph about a positive physician role-model, describing what attributes and communication/interaction skills were responsible for the physician's successful relationships with patients and students. In general, students noted such qualities in their chosen role-models as taking time with patients and students, listening carefully and patiently, extending themselves in small ways to ensure the patient's comfort and understanding, being reinforcing and encouraging toward patients and students, and seeming to love their work.

Coping algorithm

The seventh written assignment had students apply the 'Challenging Situations' *coping algorithm* (see Appendix on Medical Teacher website: http://www.medicalteacher.org) to a clinical or supervisory encounter. The algorithm was designed to give students a more coherent method for responding in difficult patient care, supervisory or other interpersonal situations. Students first identify the challenging situation, including mindful observation of all cues that notify them they are in difficulty. The next step, *before taking automatic action*, is to briefly re-center, then analyze the source or location of the problem, and determine whether they will try to change or accept the problem. If an active change approach is selected, students then identify proactive strategies, such as exploring constructive personal and interpersonal alternatives. If an acceptance approach is decided on, again students employ appropriate strategies, such as forgiving self and/or other, seeing difficult people as teachers, and finding ways of remaining true to key personal values within difficult systems.

Personal projects

Halfway through the course, each student formulated a personal project. Students first identified a particular focus: 'I want to do less of [behavior], I want to do more of [behavior].' Behaviors had to be related to empathy, compassion, caring and other humanistic values, but also had to be measurable or observable. Students were then instructed to monitor the behavior for a week to establish a baseline. Subsequently they developed their own intervention strategies to increase or decrease their behavior. They reported periodically to the group on their progress, and ultimately on the success or failure of the project. In general, students reported a high degree of success. Most students found the projects valuable and rewarding. Projects are summarized in Table 4 (available on the *Medical Teacher* website: http://www.medicalteacher.org).

Physician role model presentations

Because research suggests that learners learn most about professionalism from observing role models (Brownell, 2001), students were asked to identify positive role models, then invite them to speak to the class. Three such presentations occurred, and were considered a highly enjoyable and worthwhile aspect of the class. These individuals emphasized issues such as acquiring personal knowledge about patients, cultivating humility and avoiding compassion fatigue through self-care and appropriate boundaries.

Decline of idealism

At several sessions, students expressed discouragement that they had retreated from their earlier idealistic goals, such as doing international, Third World medicine or dedicating themselves to a career in poverty medicine. Some students felt that these goals were 'naïve' or 'impractical'. This dismissal of previously cherished idealism led to our trying to identify root values embedded in perhaps quixotic visions (i.e. beneath international health might be the desire to dedicate a certain amount of one's energy toward serving those who are marginalized or disadvantaged). Students subsequently were able to identify more attainable values-based commitments such as 'doing one's best with patients on a daily basis', 'understanding how to help people make lifestyle changes' and 'saving one person, rather than a country'.

'Non-compliant' patients

There were also several discussions on 'non-compliant' patients, who did not seem to listen to doctors' advice and apparently did not care about their health. Several students found such patients extremely frustrating and 'a waste of time'. By carefully exploring these judgments, students discovered the underlying assumptions that produced them. For example, if a non-compliant patient is perceived as disrespectful, that 'justifies' and probably increases feelings of frustration and willingness to 'dismiss' the patient. Students concluded that by becoming more aware of their own emotions, they would be more likely to keep the doctor–patient relationship intact, regardless of the degree of compliance, so that when the patient was 'ready' and motivated to engage, they would also be ready.

Medical education

Instructors underestimated the levels of frustration, anger, futility and helplessness some students reported regarding their educational experience. The locus of these feelings was variable but tended to cluster around the continual evaluation process to which students were subjected; the poor treatment of uninsured or indigent patients, and other systemic inadequacies; and the callous and sometimes brutal way that residents and attendings treated both patients and medical students. Student vulnerability and limited knowledge were offered as the main reasons they would not intervene in problematic situations. Class discussions examined strategies that could empower students to discuss such issues with supervisors by taking steps to create an atmosphere of mutuality, clear communication and safety.

Evaluation

Eleven of 26 students completing the course (42.3%) submitted anonymous written evaluations (Table 5—available on the *Medical Teacher* website: http://www.medicalteacher.org). An additional seven participated in a final debriefing session (total = 69.2%). A summary of the quantitative evaluation indicated that course teaching was regarded as excellent, and readings were also evaluated as excellent in terms of quantity and quality. In terms of the content, the course was rated as doing an excellent job of developing self-reflective practices, maintaining compassion and caring toward patients and family members, learning to explore difficult personal feelings, and identifying positive physician role-models. The course was considered to be fairly successful in increasing empathy for patients, self-understanding, ability to accept limitations and mistakes, forgiveness of self and others, and feelings of gratefulness and appreciation for the opportunity to be physicians. The least successful aspects of the course were increasing empathy

for attendings and residents, and helping students deal with complexity and uncertainty.

In the final debriefing sessions, students commented that they liked the assignments and projects, in contrast to 'just reading things'. Certain students stated that the skills they learned in the elective provided an important foundation for the future. Although they did not feel they would be able to use all of these skills in residency, they remarked that they now had a baseline to help anchor them even in very stressful situations. Several confirmed that they felt less alone by coming to the sessions and hearing what other students were experiencing. Students felt the course evolved from gripe sessions in which they aired their grievances to incorporating a focus on personal struggles on the clerkships, to ultimately sharing feedback with each other and developing group solidarity.

Problems and limitations

Attendance was an ongoing challenge. Although we communicated with all clerkship directors requesting their cooperation in excusing students, in practice it was often very difficult for students to leave early to attend elective sessions. The variable level of cooperation we received from different clerkships negatively affected course continuity and also resulted in disruptive late arrivals.

Another problem was the variability of student commitment to the course as measured by assignment completion. Although we strongly encouraged students to fulfill the assignments, doing so did not factor into successful course completion. As a result, some students meticulously executed every assignment; some attempted some of the assignments; and a small minority appeared not to have made the effort to complete any of the assignments. The quality of the assignments was also variable. We think this problem could be easily solved by making completion of assignments part of the course requirements. In our opinion, based both on our observations of classroom discussions and the highly positive evaluative comments and scores, the lack of consistent effort on the part of some students did not imply a lack of interest in or appreciation of the course. Rather, it represented the strategic decision-making and priority-setting of overworked medical students who are often overwhelmed by clinical responsibilities, frequent examinations and long work hours.

Finally, who enrolled in this course might be considered a limitation. Although only 14.4% of eligible third- and fourth-year students participated in this non-traditional elective, that number is not unusually low given the number of elective options available (200) and the fact that very few third year students at our institution enroll in any electives at all. In fact, 20% of the graduating class participated in the Art of Doctoring, a fairly respectable percentage. Of more concern was the comment frequently made by students themselves that our course was 'preaching to the choir'. Students noted that their peers 'most in need of' the course were not interested in taking it. However, from the perspective of instructors we did not aspire to designing a course that would on its own effectively transform students uninterested in practicing humanistic medicine into enthusiastic converts. Instead, we had the more realistic goal of reinforcing and building upon the existing humanism of already motivated students; and helping to prevent or reduce burnout and isolation in this idealistic subset. In this task, we believe overall that we succeeded.

Conclusion

For medical educators, taking an interest in the moral development of medical students is not necessarily either an act of hubris or an act of futility. Approached as a matter of developing certain moral knowledge, attitudes and skills, it can become a process of growth and occasionally transformation for educators and learners alike. When students are given the time and guidance to attend to the process as well as the content of medicine, they report becoming more empathic, compassionate and caring, more self-aware, and better able to learn from their ongoing clinical experience. Courses like this convey the importance of the art of medicine to students, and provide ballast to the emphasis in the clinical years on scientific knowledge and technical skill. Reflection, close observation of self and others, intentionality, careful attention to positive role models, incorporating a decisional paradigm guiding action and acceptance, and case-based problem-solving are useful techniques to include as part of clinical training. Ideally, courses emphasizing these attitudes and skills should be part of a culture of medical education (and medicine) that consistently values, supports and models the practice of humanistic medicine.

Acknowledgment

Development of this course was supported by Predoctoral Training in Primary Care, HRSA, Grant #D56HPooo14–05–00 (Elizabeth Morrison, MD, MS.Ed, principal investigator), by the UCI–SOM Office of Education, and by the Departments of Medicine and Family Medicine.

Notes on contributors

Johanna Shapiro is a professor in the Department of Family Medicine and director of the Program in Medical Humanities & Arts. Her areas of scholarly interest are the doctor–patient relationship and how exposure to literature and the arts can increase medical students' empathy for patients.

Lloyd Rucker is Professor of Medicine and Associate Dean of Curricular Affairs. His interests include enhancing student, resident and faculty teaching skills; physician–patient communication; humanities and medicine; evidence–based medicine; and medical education curricula.

Daniel Robitshek is Associate Professor of Medicine and an attending physician in the hospitalist program. He is also Medical Director, Progressive Care Unit at UC Irvine Medical Center as well as the director of the Curriculum in Spirituality and Healthcare. His interests focus on the role of spirituality in medicine.

References

Bellini, L.M., Baime, M. & Shea, J.A. (2002) Variation of mood and empathy during internship, *Journal of the American Medical Association*, 287, pp. 3143–3146.

Branch, W.T. Jr. (2000) Supporting the moral development of medical students, *Journal of General Internal Medicine*, 15, pp. 503–508.

Brody, H., Squier, H.A. & Foglio, J.P. (1995) Commentary: moral growth in medical students, *Theoretical Medicine*, 16, pp. 281–289.

Brownell, A.K. & Cote, L. (2001) Senior residents' views on the meaning of professionalism and how they learn about it, *Academic Medicine*, 76, pp. 734–737.

Clever, L.H. (2002) Who is sicker: patients—or residents? Residents distress & the care of patients, *Annals of Internal Medicine*, 136, pp. 391–393.

Coulehan, J.L. (1995) Tenderness and steadiness: emotions in medical practice, *Literature and Medicine*, 14, pp. 222–236.

Fins, J.J., Gentilesco, B.J., Carver, A., Lister, P., Acres, C.A., Payne, R. & Storey-Johnson, C. (2003) Reflective practice and palliative care education: a clerkship responds to the informal and hidden curricula, *Academic Medicine*, 78, pp. 307–312.

Henderson, E., Hogan, H., Grant, A. & Berlin, A. (2003) Conflict and coping strategies: a qualitative analysis of student reactions to significant event analysis, *Medical Education*, 37, pp. 438–446.

Hojat, M., Gonnella, J.S., Mangione, S., Nasca, T.J., Veloski, J.J., Erdmann, J.B., Callahan, C.A. & Magee, M. (2002) Empathy in medical students as related to academic performance, clinical competence, and gender, *Medical Education*, 36, pp. 522–527.

Klein, E.J., Jackson, J.C., Kratz, L., Marcuse, E.K., McPhillips, H.A., Shugerma, R.P., Watkins, S. & Stapleton, F.B. (2003) Teaching professionalism to residents, *Academic Medicine*, 78, pp. 26–34.

Kopelman, L.M. (1999) Values and virtues: how should they be taught?, *Academic Medicine*, 74, pp. 1307–1310.

Lu, M.C. (1995) Why it is hard for me to learn compassion as a third year medical student, *Cambridge Quarterly of Health Care Ethics*, 4, pp. 454–458.

Marcus, E.R. (1999) Empathy, humanism, and the professionalization process of medical education, *Academic Medicine*, 74, pp. 1211–1215.

Newton, B.W., Savidge, M.A., Barber, L., Cleveland, E., Clardy, J., Beeman, G. & Hart, T. (2000) Differences in medical students' empathy, *Academic Medicine*, 75, p. 1215.

Prislin, M.D., Giglio, M., Lewis, E.M., Ahearn, S. & Radecki, S. (2000) Assessing the acquisition of core clinical skills through the use of serial standardized patient assessments, *Academic Medicine*, 75, pp. 480–483.

Shapiro, J. (2002) How do physicians teach empathy in the primary care setting?, *Academic Medicine*, 77, pp. 323–328.

Winefield, H.R. & Chur-Hansen, A. (2000) Evaluating the outcome of communication skill teaching for entry-level medical students: does knowledge of empathy increase?, *Medical Education*, 34, pp. 90–94.