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Virtues Education in Medical School: The Foundation for Professional Formation

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Background: Studies have shown that medical students have high rates of burnout accompanied by a loss of empathy as they progress through their training. This article describes a course for medical students at The University of Queensland-Ochsner Clinical School in New Orleans, LA, that focuses on the development of virtues and character strengths necessary in the practice of medicine. Staff of the Ochsner Clinical School and of the Institute of Medicine, Education, and Spirituality at Ochsner, a research and consulting group of Ochsner Health System, developed the course. It is a curricular innovation designed to explicitly teach virtues and their associated prosocial behaviors as a means of promoting professional formation among medical students. Virtues are core to the development of prosocial behaviors that are essential for appropriate professional formation. **Methods:** Fourth-year medical students receive instruction in the virtues as part of the required Medicine in Society (MIS) course. The virtues instruction consists of five 3-hour sessions during orientation week of the MIS course and a wrapup session at the end of the 8-week rotation. Six virtues—courage, wisdom, temperance, humanity, transcendence, and justice—are taught in a clinical context, using personal narratives, experiential exercises, contemplative practices, and reflective practices.

Results: As of July 2015, 30 medical students had completed and evaluated the virtues course. Ninety-seven percent of students felt the course was well structured. After completing the course, 100% of students felt they understood and could explain the character strengths that improve physician engagement and patient care, 100% of students reported understanding the importance of virtues in the practice of medicine, and 83% felt the course provided a guide to help them deal with the complexities of medical practice. Ninety-three percent of students stated they would use the character strengths for their own well-being, and 90% said they would change their approach to the practice of medicine as a result of this course. Overall, 92% of students rated the course as outstanding or good.

Conclusion: We developed a course to teach virtues and their associated prosocial behaviors that are important for the practice of medicine. After completing the course, students self-reported improved understanding of the virtues and their importance to the practice of medicine. We plan further studies to determine if participation in the course leads to less burnout and improved resilience.

Keywords: Burnout–professional, character, education–medical–undergraduate, empathy, ethics–clinical, faculty–medical, schools–medical, social values, students–medical, virtues

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INTRODUCTION

The complexities of the practice of medicine continue to increase in the current dynamic environment of healthcare. Changes in the financing, organization, and structure of healthcare delivery, as well as the rapid growth of science and technology, have contributed to a vast array of challenges facing the modern physician. The psychosocial work environment has, if anything, worsened in recent years

as demands on physicians have increased at the same time as autonomy and satisfaction with the profession of medicine have decreased. In a large multispecialty survey, 46% of practicing physicians reported at least one symptom of burnout.² Medical students are not spared the environment that leads to physician dissatisfaction and burnout. A 2011 study showed that 49% of medical students experience some signs of burnout by their fourth year.³ Another

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study indicated a significant loss of empathy among medical students during the clinical years.⁴ The fact that symptoms of burnout and lack of empathy occur during the critical years of professional formation is alarming. Unfortunately, the core values that entice many students into medical school are lost in medical school through the conflict between the students' explicit commitment to traditional values and the informal curriculum that tacitly promotes detachment and self-interest.⁵ Medical student burnout threatens these values and professional formation, leading to cheating and dishonest behaviors, decreased altruism, difficulty managing conflicts of interest, decreased empathy, and decreased personal accountability regarding impaired colleagues.⁶

Abraham Flexner, the father of modern medical education, actively advocated for the teaching of humanities in medical school with a focus on personal integrity, moral character, and service values. He was dismayed that his reform of medical education, while bringing scientific rigor and pedagogy to medical education, also led to a decrease in teaching of the humanities.7 The character strengths needed for the ethical and professional practice of medicine are reinforced and/or learned by the professional formation that Rabow et al defined as "the moral and professional development of students, the integration of their individual maturation with growth in clinical competency, and their ability to stay true to values which are both personal and core values of the profession."8 The goal of professional formation is to ground students in their personal principles and the core values of the profession and to help them navigate through conflicts that arise in training and practice.9

The faculty of Ochsner Clinical School and staff of the Institute of Medicine, Education, and Spirituality at Ochsner (IMESO), a research and consulting group at Ochsner Health System in New Orleans, LA, developed a course for medical students of The University of Queensland-Ochsner Clinical School to teach virtues as a foundation for professional formation. We report the development of the course, its integration into the medical school curriculum, and the students' evaluations of the course.

METHODS

The course is based on 6 core virtues felt to be essential to the practice of medicine and their associated character strengths: courage, wisdom, temperance, humanity, transcendence, and justice. The goals of the virtues course are to (1) identify, teach, and create a common language to talk about the character strengths and prosocial behaviors that increase professional engagement and good patient care; (2) practice character strengths and prosocial behaviors that correlate to professional engagement and good patient-centered care; (3) create an environment in which the practice of character strengths and prosocial behaviors is the norm; and (4) increase the students' ability to recognize the relationship between the character strengths and prosocial behaviors they practice in their personal and professional lives.

The virtues course is integrated into a fourth-year required core course called Medicine in Society (MIS), an 8-week rotation that aims to teach medicine in the context of population groups and/or communities that face access

and equity challenges associated with health service delivery. Such challenges can be attributed to contextual factors such as geographic isolation, ethnicity, disability, socioeconomic status, and/or life circumstances. MIS exposes students to a professionally challenging population that requires the healthcare team to be confident, emotionally resilient, and self-reliant. Students are able to choose among different streams for their MIS rotation: rural family medicine, disadvantaged youth, palliative care and rehabilitation, geriatrics, or a global medicine rotation in Haiti.

Prior to beginning the virtues course, we identified physicians we believed consistently use virtues in their practice of medicine. We invited these physicians to attend a half-day faculty development course, taught by IMESO staff, during which they received training in the virtues and the associated character strengths and behaviors. The physicians in training then acted as participants in a simulated session on courage. They participated in the bonding exercise, the shared narratives, and other components of the course. These physicians became physician preceptors for the virtues course.

The virtues instruction consists of 5 sessions during the orientation week of the MIS course to help students prepare for their clinical experience. Each virtues session is 3 hours long and taught in interactive small group sessions of 12 or fewer students. The course is facilitated by a physician preceptor and a faculty facilitator from IMESO. Courage is covered on Monday, wisdom on Tuesday, temperance on Wednesday, humanity and transcendence on Thursday, and justice on Friday. During a wrapup session at the end of the 8-week rotation, students evaluate the course and review the reflective exercises they wrote in their journals about the practice of the virtues in medicine.

The first session of the virtues course begins with an overview of the virtues and their importance to the practice of medicine. The faculty facilitator then conducts a bonding exercise in which each student and faculty member take turns disclosing something about herself/himself that she/he believes the group doesn't already know. The exercise has 3 rounds, with each round getting more personal but only as personal as each student chooses.¹¹ This exercise helps to create a learning environment where students feel safe and comfortable by encouraging sharing and active listening and by showing respect for all opinions. Students and faculty agree that what is said in the room is confidential and does not leave the room. Following the bonding exercise is a 1-hour introduction to the study of the virtues and the prosocial behaviors and character strengths associated with each virtue. The faculty preceptor explains the importance of virtues to the practice of medicine and distributes the syllabus for the course. Finally, the session concludes with a discussion of the importance of gratitude, and the students are assigned the exercise of keeping a daily gratitude journal throughout the rotation.

At the beginning of each subsequent session, the virtue of the day is explained with its associated character strengths and prosocial behaviors. For example, courage is associated with bravery, perseverance, honesty, and zest. Then the preceptor physician tells the students 2 personal narratives, one describing a time in her/his medical career

Table. Medical Students' Evaluations of the Virtues Course (n=30)

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Answer
I had a clear understanding of the aims and goals of the course.	11	15	4			
The course was well structured.	12	17	1			
I understand and can explain the character strengths that improve physician engagement and patient care.	18	12				
I understand the importance of virtues in the practice of medicine.	23	7				
I will change my approach to the practice of medicine as a result of this course.	14	13	2			1
This course has provided me with a guide for handling the complexities of medical practice.	13	12	3	1		1
I will use the character strengths learned in the course for my own well-being.	20	8	2			

she/he practiced the virtue of the day and the second focusing on a time when the virtue was not practiced. Emphasis is placed on the consequences to the physician, the healthcare team, and the patient and the patient's family. The narratives are followed by a guided reflection, allowing students to explore the virtue in their own lives. After the reflection, students are led through a hypothetical case scenario that asks them to place themselves in the aspirational position of being an intern. The hypothetical case for courage is as follows:

You are an intern rotating in the intensive care unit and taking care of a patient on a ventilator who has end-stage chronic obstructive pulmonary disease. The patient has failed extubation twice. During rounds, the team discusses the need for palliative care, and they ask you to speak with the patient and the family about removing the ventilator and transitioning to comfort care. You have never led an end-of-life conversation and are uncertain if it is really time to transition to comfort care or to keep trying. You are uncomfortable with what is being asked. However, you are conflicted because you are interested in critical care as a career and have an immense respect for the attending physician. You don't want to admit you don't know how to lead an end-of-life conversation, and you don't want to ask the attending about his decision to withdraw because you fear being perceived as incompetent. After all, you are trying to impress the attending.

Hypothetical cases are used to discuss what the students would do in such scenarios. Students are asked to reflect on the following questions: "What virtues/character strengths apply and how do they conflict?" "What are the principles, values, and external considerations?" "How might one handle this situation?"

On Tuesday through Friday, the class begins with each student and faculty member stating something for which she/he is grateful. Students then share personal narratives about the virtue that was covered the previous day. For example, on Tuesday, each student must share a story of when she/he practiced the virtue of courage and when she/he failed to practice the virtue of courage. Students are encouraged to focus on the consequences of their actions. Students determine how personal they want to be with respect to their sharing.

To promote reflection and resilience, in addition to keeping the daily gratitude journal, the students are asked to record in their journals each week one example of when they saw a particular virtue being practiced and when they witnessed someone failing to practice a virtue. During the clinical rotation, students are asked to record at least one example of each virtue. The students' examples form the basis of the discussion during the wrapup session. At the end of the course, an executive assistant checks each journal strictly to determine that the student completed the assignments; the journals are not read by the faculty or the school administration staff. At the end of the course, students evaluate the course and the instructors with a Likert scale-based survey tool ranging from 1, strongly disagree, to 5, strongly agree.

RESULTS

Thirty students completed the course between October 2014 and July 2015. Overall, students have had a very positive perception of the course and its impact on the practice of medicine (Table). Ninety-seven percent of students felt the course was well structured. After completing the course, 100% of students felt they understood and could explain the character strengths that improve physician engagement and patient care, 100% of students reported understanding the importance of virtues in the practice of medicine, and 83% felt the course provided a guide to help them deal with the complexities of medical practice. Ninety-three percent of students stated they would use the character strengths for their own well-being, and 90% said they would change their approach to the practice of medicine as a result of this course. Overall, 92% of students rated the course as outstanding or good (Figure). Representative comments from the students about the course are provided in the sidebar.

DISCUSSION

The editors of the *Annals of Internal Medicine* recently published some very disturbing examples of unprofessional behavior by attending physicians and upper-level residents, along with the complicit behavior of learners in the room.¹²

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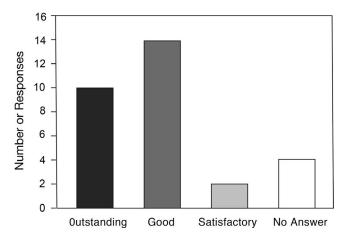


Figure. Medical students' satisfaction with the virtues course (n=30). Possible responses were outstanding, good, satisfactory, poor, and very poor.

In the accompanying editorial, the editors discuss why they felt it was important to publish the shocking narratives and specifically note the absence of virtues, including courage and forgiveness. 13 What is not overtly stated is the absence of humanity, justice, and transcendence in those involved. These narratives explicitly demonstrate the consequences of the lack of virtues in the practice of medicine and the harm caused not just to the patients but also to the learners. If physicians are courageous enough to reflect honestly on their training and medical careers, they will all recall times when they failed to practice a virtue or witnessed other physicians doing the same. We feel the first step in trying to change this harmful culture is to identify and teach a common language to talk about the virtues and prosocial behaviors that help us practice medicine with the professionalism that patients, the healthcare team, and physicians deserve.

The lingering distress on students and faculty caused by witnessing the behaviors in the narrative published in the Annals of Internal Medicine is evident. 12 Mistreatment and observed unprofessional behaviors by the healthcare team lead to conflicts with a student's own value systems and stated reasons for becoming a physician. When physician role models do not practice the virtues, the result is traumatic and stressful experiences during medical school that negatively impact students' professional formation. Discordance between the virtues that led students to the profession of medicine and the tacit competing messages in the culture of healthcare can lead to cognitive dissonance.8 Cook et al surveyed third-year medical students who reported a 10% prevalence of repeated mistreatment by faculty and a 13% incidence of repeated mistreatment by residents. 14 As students observe these unprofessional behaviors by their role models, the informal curriculum teaches them that these behaviors are acceptable, which may explain the high level of mistreatment of students by residents noted above. A prospective study of third-year medical students demonstrated an association between student mistreatment and/or observing poor role modeling by faculty and higher posttraumatic stress disorder and depression symptoms. 15 These experiences during medical training damage the professional formation of physicians at a time when they are most vulnerable, contributing to the high level of burnout among medical students, residents, and physicians. These symptoms can lead to a spiral of unprofessional behaviors as burned-out students exhibit less professional behaviors, leading to more conflicting feelings and so on. This is the spiral to the "dark side." 13

All American medical schools offer classes in medical ethics as required by the Liaison Committee on Medical Education, Some offer electives in humanities, spirituality, or integrative medicine that address some aspect of professional formation with limited outcomes data.¹⁷ The George Washington Institute for Spirituality & Health developed a robust course to teach spirituality in medicine. 18 Columbia University, the University of Rochester School of Medicine, and the University of Massachusetts Medical School offer courses on mindfulness. 19-21 The white coat ceremony and the Gold Humanism Honor Society of the Arnold P. Gold Foundation also contribute to positive professional formation.²² The Healer's Art, developed at the University of California, San Francisco, is a well-established program that has been adapted by medical schools throughout the world.²³ The course uses experiential, contemplative, reflective, and narrative learning techniques to engage students in shared core values of medicine. Students are able to reflect on and clarify the lifelong values that have brought them into medicine and to commit to developing and preserving them. The Indiana University School of Medicine has a program aimed at changing the culture of the entire healthcare system to promote professionalism.²⁴ The changes have buy-in from the service staff up to the faculty and dean. The program includes formal training in the history of professionalism in medicine and each person's role as a professional. Participants use reflective practice by journaling about professionalism issues encountered on their clinical rotations and debrief after internal medicine, surgery, and psychiatry rotations.^{24,25}

Changing the learning environment and supporting professional formation require positive role models among the faculty. However, very few faculty members have received formal training in professional formation. Emory University developed a faculty development program that improved humanistic teaching among the faculty.²⁶ McGill University developed a faculty development program to enhance the teaching and evaluation of professionalism.²⁷ Experiential learning, reflective practice, and valuescentered medical education are elements of these successful programs, and they use facultywide workshops to teach content and examine teaching and evaluation strategies to promote reflection and self-awareness. One of our aspirational goals is to offer the virtues course to all of our clinical educators. Expanding the reach of the course would be a large leap towards transforming the clinical learning environment to promote virtues and professional formation.

Virtues are the scaffolding of professional formation. They provide a foundation for us to maintain our humanism as we navigate the increasing complexity of medical practice. When physicians are distanced from themselves and from virtues such as honesty and altruism, patient safety may suffer. This potential impact is one of the reasons we structured our course around the key virtues of courage, wisdom, temperance, humanity, transcendence, and justice. With inadequate training in the virtues, we believe the

students run the risk of learning the wrong lessons from the informal curriculum as they encounter corporate medicine and negative role modeling. Sacrificing foundational meaningful values creates a loss of moral identity and self-trust. To quote Rabow et al, "Our expertise makes us competent, but our values make us trustworthy."

Our course teaches self-reflection and promotes positive coping mechanisms that are characteristics of resilient individuals.²⁹ We use challenging personal narratives from our trained faculty to promote reflection and growth in the context of the moral complexities associated with medical practice. The use of challenging scenarios has been an integral part of ethics teaching for some years.³⁰ Students also need to be aware of the systems and hierarchies within which they work and how to participate in and engage with them. We provide a safe environment for learners to explore these moral complexities and a foundation on which they can base their decisions and behaviors.

The course uses experiential, contemplative, reflective, and narrative learning techniques and engages students in a discovery model focused on virtues and their importance to their personal lives and the practice of medicine. Our goals are those Amanda Howe and colleagues proposed in teaching medical students professionalism:³¹

- Make them think—about professional challenges, difficult relationships, where things go wrong, what they could do differently.
- Make them reflect on themselves, on how they work in teams and with patients, and on what their strengths and weaknesses are.
- 3. Make them safe—as much as possible—so they can experiment with challenging situations before they are exposed to them in medical practice.
- 4. Encourage a **virtue** ethic: work with *why* and *how* they want to help, rather than when they think they should, and be open to exploring areas they dislike.

CONCLUSION

The professional formation of medical students is important for the development of well-adapted, resilient, and engaged physicians. One of the goals of the virtues course we developed for the Ochsner Clinical School is to counter the negative aspects of the informal curriculum in medicine and to help students experience a greater sense of well-being and fulfillment in their professional and personal lives. We demonstrated that it is feasible to develop and implement a course to teach professional formation based on the understanding and practice of virtues. The majority of students felt the course helped them understand and explain the character strengths that improve physician engagement and patient care, helped them understand the importance of virtues in the practice of medicine, and provided them with a guide for handling the complexities of medical practice. They felt the course was worthwhile and said they would use the character strengths they learned for their own well-being. Students learned the value of reflection and will hopefully maintain compassionate presence in every interaction. In the future, we plan to evaluate the impact of the course on promoting resilience and decreasing burnout among medical stu-

Medical Students' Comments on the Virtues Course

"It reintroduced words that we've been taught over the years with a new perspective and provided new meaning into the practice of medicine."

"Personal narratives from physicians were very helpful. The ethical/hypothetical situations-like what to do when staff comes in drunk, these are good things to talk about and learn because as students we won't know the answers."

"Very helpful to reflect on all the things that will make us better physicians; I liked that they encouraged everyone to share in a safe environment."

"I loved the fact that the setting was so open and so informal. I usually don't participate in class, but this class made me interested and wanting to participate. It was a very comfortable platform to communicate, and I loved the topics."

"At first, I hated having to come up with a personal story to share but I think it was great sharing experiences and hearing from my peers and the faculty. It really let me see other perspectives."

"The positive aspects of the course were the faculty sharing their stories, the amount of work and preparation that went into the course, the amount of encouragement to students to talk and share; great discussions."

"The doctors' narratives were EXCELLENT."

"It's important to discuss virtues to remind us why we entered into medicine. I liked having a different physician every day and having a range of specialties and perspectives. I was uncomfortable about sharing personal information at first, but now I feel like it was positive because I got to know my classmates and the course coordinators very well."

"Proved me wrong in my initial thoughts that this course was a waste of time."

"Gratitude journal was helpful and I loved the physician stories."

"I think the anecdotes from each other were really beautiful. Helped us all learn more about each other."

"The course got me to think about things I haven't thought about ever and helped me become more self-aware."

dents. To quote one of the students who completed the course, "It's important stuff, these virtues."

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