Medico-Legal Education: A Pilot Curriculum to Fill the Identified Knowledge Gap

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Abstract

Purpose We sought to determine if a medico-legal educational curriculum designed to increase physicians' familiarity with the legal system in a nonthreatening environment—a didactic and interactive educational seminar—would positively influence learners' knowledge base and self-awareness.

Methods Because neither the Accreditation Council for Graduate Medical Education nor its Residency Review Committees specifically addresses medico-legal liability education, we designed a 2-day intensive medico-legal educational curriculum and piloted it in 2007 and 2008 at a large academic tertiary-referral medical center. Postcurriculum evaluations and precurriculum and postcurriculum testing were used to identify areas of common and/or persisting knowledge deficit.

Results A total of 50 graduating residents, fellows, and community practitioners participated in the course. Common areas of knowledge deficit were "privilege," "discovery," statutes of limitations, and basic legal procedure. Discordance in physician interpretation of patient perspective and misunderstanding among physicians of the impact of the legal suit were evident.

Conclusions Concentrated legal education at selected times during medical training may support physicians' motivations to improve the assurance of quality and continuity of care. We continue to revise the curriculum to address issues of lecturer style, lecture content, and overall attitudinal values related to clinical practice, legal education, long-term impact on practice patterns, job satisfaction and its effect on attention to quality and continuity-of-care issues, and health care provider attitudes about the provider's role within the legal system and the community. We plan to conduct follow-up of participants to assess retention and subsequent use of this knowledge.

Introduction

The impact of medico-legal liability on the health care system is clear: cases of alleged medical negligence have brought about much-needed changes related to residency work-hour regulation and patient safety. The Joint Commission (formerly the Joint Commission on Accreditation of Healthcare Organizations), the federal Occupational Safety and Health Administration, the American Association of Medical Colleges, and the Accreditation Council for Graduate Medical Education (ACGME) have indicated that health care providers exert their greatest influence on the system by controlling commission of medical errors. In turn, health care systems have responded through the evolution of their processes for error prevention, error recognition and disclosure with compensation, and adverse-event investigation; these processes have evolved without provider education on implementation.

Meanwhile, the negative impact of a lawsuit can be overwhelming for the practitioner, the patient, the patient's family, and potentially the local and national communities. Consequences include increased implementation of defensive practices by physicians (ie, ordering unnecessary tests), increased cost of care (through unnecessary tests, legal fees, and rising insurance premiums), decreased physician confidence in the medical and legal systems, and physician burnout and attrition in high-risk specialties and/or regions. These effects may stem in part from unfamiliarity with the legal system and its inherent culture and rules. Nearly every physician can expect to be impacted by a lawsuit, yet only a few publications address the need for programmatic development.[1–3]

There is no clear precedent for formal educational guidelines provided by the ACGME specifically addressing

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medico-legal liability education. Residency training programs are, however, required to address the "core competencies": patient care, medical knowledge, practice-based learning, professionalism, interpersonal and communication skills, and systems-based practice.

In 1997, Kollas[4] produced a comprehensive review of literature in support of medico-legal education and reported surveyed data assessing the knowledge base and attitudes of internal medicine residents nationwide. This demonstrated that despite prior calls for medico-legal education and despite resident opinions that medico-legal education was valued, academic curricula were generally underdeveloped and residents still felt unprepared. In 1999, Kollas[5] implemented a medico-legal academic curriculum for internal medicine residents, and study thereof suggested education was indeed needed and well incorporated into the knowledge base by residents. He led a call for universal programmatic development to benefit trainees and their careers.

Yet the American Academy of Pediatrics[6] published data from a 2007 survey of graduating pediatrics residents specifically addressing the extent of medico-legal education they received during training that demonstrated a large knowledge deficit and a willingness and/or interest to fill that deficit. Only one specialty supports "intensive" resident legal education: obstetrics and gynecology, and reports of the adequacy of this training come from program directors, not program participants.[2] There is one report of medical and legal partnerships for patient care,[7] suggesting a case-by-case education for health care practitioners as it applies to their patients, but the work by Kollas to develop a curriculum for education continues to stand as a model in relative isolation, with little evidence that there have been any significant changes to nationwide training requirements.

The overarching goals of the academic work presented in part in this pilot program are to determine if concentrated medical education about the legal system, at the appropriate time in training, has the capacity to (1) support physicians' motivations to improve the assurance of quality and continuity of care, (2) result in adoption of practices that decrease the cost of health care delivery, (3) foster practices that strengthen the patient-physician relationship, (4) decrease practitioner anxiety surrounding the unfamiliar culture of the legal process for a diminished psychological impact, and (5) empower physicians to become active within their communities. With this pilot study, we sought to determine whether using our 2-day didactic and interactive educational curriculum, one similar to the Kollas model[4,5,8] (C. D. Kollas, personal communication regarding tool validation, July 2009), would positively influence learners' knowledge base and self-awareness.

Methods

The educational curriculum under study was based on an educational seminar originating with a mentor's experience with a medico-legal liability suit; content is similar to that described in the Kollas model at Geisinger Health System and was developed with the endorsement of the mentor. The curriculum was administered at the same institution for 2 years, 2007 and 2008, and it was evaluated with postcurriculum evaluations to determine appropriateness of lecture content and lecturer style. In 2008, it was evaluated also with precourse and postcourse testing to evaluate knowledge gains and to highlight areas of common or persistent knowledge deficits.

Our Institutional Review Board informed us that an approved protocol was not required to compile these pilot data, since our project met both of the following criteria:

1. Research was conducted in established or commonly accepted educational settings, involving normal educational practices, such as (1) research on regular and special education instructional strategies or (2) research on the effectiveness or comparison of instructional techniques, curricula, or classroom management methods.
2. Research involved the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior.

Curriculum Development

The model seminar was designed for 5 graduating subspecialty fellows at a specialty medical center in a major metropolitan area recognized for its high litigious rates and for its large dollar awards to plaintiffs. The format was a 4-day seminar, 8 hours each day, with a small-group, primarily didactic format. This was complemented by reading passages from a current nonfiction book written by a psychologist caring for a physician who was impaired by her involvement as a defendant in a case of alleged medical negligence. The seminar included a study of a single case's details, one-on-one practice with mock depositions, and a field trip to the county courthouse to speak with an expert medical-liability judge.

Curriculum Design

One physician (A.E.) and one lawyer (D.R.) organized and provided the educational curriculum in 2007 and 2008. The format was a 2-day seminar, 8 hours each day, at a major primary and tertiary care academic medical center in a region known for its "effective plaintiff's bar" (ie, its very powerful association of lawyers working on behalf of patients in cases of alleged medical negligence) and for its lack of "tort reform" (ie, relative absence of change to the laws regarding the requirements for eligibility of a case to proceed, discoverable and/or presentable evidence/information, and methods for determining award sums in favor of the plaintiff). Course material followed the model format and was intended to address the core academic curriculum of graduate medical education: patient care,

professionalism, and interpersonal and communication skills. Additionally, these programs reinforce the need to continuously update medical knowledge and develop clinical practice skills steeped in practice-based learning and systems-based practice.

Learners were recruited to the seminar through their residency/fellowship program directors' offices and relieved of clinical duties during the seminar. The 2007 group included 25 graduating residents and fellows in surgical specialties. The 2008 group was recruited similarly and also through the Office of Continuing Medical Education at Wake Forest University School of Medicine (WFUSM), and it included local seasoned practitioners, totaling 17 participants. The educational style was primarily didactic with question-and-answer sessions at the conclusion of each lecture. It was supplemented with the same reading selections as the model course, a case for presentation in a mock deposition, a field trip to the county courthouse, and a luncheon with practitioners who had personal experiences in medico-legal liability.

Course materials for 2007 and 2008 included the following:

- ***Course Preparatory Readings*** Selected readings from *Delivering Doctor Amelia: The Story of a Gifted Young Obstetrician's Error and the Psychologist Who Helped Her* by Dan Shapiro.
- ***Homework*** Significant case materials from a settled alleged medical-negligence suit provided for study and presentation through the mock deposition. (This material, although a matter of public record, was redacted for anonymity.)
- ***Additional Readings*** The syllabus contained recommended readings on relevant topics, such as the American College of Surgeons' *Statements on Principles*.

Curriculum Evaluation

The students (residents, fellows, and seasoned practitioners) of the 2 curricula completed evaluations of lecture material, lecturer style, and open-ended commentary. In 2008, a 20-question pretest was completed by course registrants. The same test was administered at the end of the course as a posttest to assess integration of the new material. This test was reviewed for face validity by the Office of Continuing Medical Education at WFUSM by an expert in medico-legal liability at the Wake Forest University School of Law, and by the author of the only previous report on a similar educational strategy for residents in internal medicine, Chad Kollas, MD.[7]

Results

Course Evaluations

Course evaluations for both courses were completed by all participants (25 in 2007, 17 in 2008) at the end of each day before the class concluded. Each of the lecturers was rated as outstanding, averaging their ratings at 4.77 (2007) and 4.69 (2008) on a scale of 1 to 5. The lecture content was evaluated for relevance and results were also outstanding, rating at 4.56 (2007) and 4.61 (2008) on a scale of 1 to 5.

Free-text comments on the course included the following: "Excellent." "Great lectures, information, and service. Thank you very much." "Great experience. Would offer to all residents." "Would love to get Risk Management lectures." "Wonderful class. Overall, this weekend was *extremely useful*. Thanks for putting it together." "A+. A must for all finishing residents and new faculty." "(I) feel it was a great experience."

When asked how the material was clinically applicable to the students' medical/surgical practices, their comments included the following: "Be more aware of the risks that residents pose on attending service." "Continue to work on handwriting." "I'll be more careful with documentation." "I won't necessarily *change* what I've been doing; however, this course certainly makes me more aware of the pitfalls and expands my scope of medical legal liability (knowledge) tremendously." "I certainly feel more prepared."

Pretest

We instituted a pretest with the 2008 curriculum, which 3 of 17 students completed. These were all physicians in practice, not residents or fellows-in-training. Questions frequently missed are listed in TABLE 1.

Posttest

With the 2008 curriculum, 8 of the 17 students completed the posttest. These were practicing physicians as well as residents and fellows-in-training. Questions frequently missed are listed in TABLE 2.

Discussion

Although not a truly novel approach to medico-legal education, this curriculum remains relatively novel in implementation because of the lack of development of such programs over the last 13 years since the publication of Kollas' work. The format follows the basic evidence-based academic approach to education, which remains the preferred approach to implementation and evaluation of a large core of "new" material within graduate medical education.

Interpretation of the Utility of the Curriculum as Designed

This study amassed preliminary data from a medico-legal liability education seminar to examine its value to the course participants. It also examined student pretest and posttest performance based on a primarily knowledge-based assessment tool specific to medico-legal liability education and reviewed for face validity.

The overall course and lecturer grading and commentary was uniformly positive. This feedback suggested that there is a need for this type of education among health care

TABLE 1 **Questions Frequently Missed in the Pretest (N of Respondents = 3)**

Question No. in Survey	Question	Incorrect Answers Given	Responded Incorrectly (N / Total)
10	Physicians see the primary reason for preventable medical errors as...	Overwork, stress and fatigue	2 / 3
13	The statute of limitations for "wrongful death" of an adult is...	5 years	1 / 3
		10 years	1 / 3
14	The statute of limitations for a "retained foreign body" is...	Multiple incorrect answers	3 / 3
15	A civil lawsuit does not include...	Multiple incorrect answers	3 / 3
16	A defendant surgeon's comments are discoverable if they are made to...	Multiple incorrect answers	3 / 3
20	Physicians who have been sued are more likely to do which of the following than their non-sued colleagues?	Work longer hours	2 / 3

professionals. This reflects, in a broader group of health care providers, the same findings described by Kollas and Frey,[5] and Donn.[6] Our experience also suggests that, in a nondefensive, nonthreatening situation, health care professionals are interested in learning more about the legal system and in improving health care delivery.

When course participants were asked about applicability of the material to clinical practice, the commentary was directed and pertinent. This feedback suggested that the students could draw clear conclusions from the material that would continue to support their best habits and modify their worst habits.

Common areas of misunderstanding persisted. The most commonly missed questions involved determining which conversations would be legally protected or "nondiscoverable." This feedback is disheartening, as it suggests that many physicians could find themselves in a situation of total isolation during a suit, resulting in a personal crisis, or could inadvertently disseminate discoverable and damaging information.

Interpretation of the Incorrect Answers to the Pretest/Posttest

Based on the pretest and posttest answers to question 10 (reasons for medical errors), physicians and patients see a different set of problems as the causes of medical errors. Physicians' responses suggest they do not understand the patients' perspectives or impressions of physicians and their environment.

Based on the pretest and posttest responses to questions 13 and 14 (statutes of limitations for wrongful death and retained foreign body), statutes of limitations are not well understood by physicians and are hard to clarify. Although it would behoove each practitioner to understand their

TABLE 2 **Questions Frequently Missed in the Posttest (N of Respondents = 17)**

Question No. in Survey	Question	Incorrect Answers	Responded Incorrectly (N / total)
10	Physicians see the primary reason for preventable medical errors as...	Lack of communication between professionals	4 / 8
		Overwork, stress and fatigue	2 / 4
13	The statute of limitations for "wrongful death" of an adult is...	1 year	4 / 8
		5 years	2 / 8
		10 years	1 / 8
14	The statute of limitations for a "retained foreign body" is...	Various incorrect answers	4 / 8
15	A civil lawsuit does not include...	A summons	3 / 8
16	A defendant surgeon's comments are discoverable if they are made to...	Multiple incorrect answers	6 / 8
18	Your prior medical-legal liability history can be used against you in a court of law: true or false?	True	6 / 8
20	Physicians who have been sued are more likely to do which of the following than their non-sued colleagues?	Work longer hours	4 / 8

personal statutory risk because it directly influences choices for liability insurance coverage, the reality is that there are many ways to interpret the various state-dependent statutes. Therefore, determining when a statute of limitation expires is not a straightforward matter.

Based on the pretest and posttest answers to question 15 (civil lawsuits), respondents were unclear about the basic components of the civil suit, and the process is not common knowledge. This puts physicians at an increased risk of violating legal codes of conduct even before entering the courtroom. Even after detailed review in the course material, it remained unfamiliar to the students and clearly needs emphasis in future courses.

Pretest and posttest answers to question 16 (discoverable comments from a surgeon) varied, reflecting lack of understanding about rules of information privilege and a failure to gain a working knowledge of the distinctions. "Privilege" of information refers to the ability of information to remain "nondiscoverable." "Discoverable" means that information must, under any and all circumstances, be provided to the court under penalty of perjury. This difficulty experienced by the physicians in determining with whom they can safely discuss a case has serious implications to the practitioners' futures. The answers reflected an errant understanding that they could speak freely with colleagues in casual settings but could not consult freely for academic, clinical, or social support with their spouse, their lawyer, or their minister of religion. Moreover, it was misperceived that morbidity and mortality conferences were discoverable, whereas they are currently and universally not discoverable, the primary purpose being to promote collegial discussion of the "root-cause analysis" or the origin of errors or the breakdown in the systems.

Interestingly, the posttest answers to question 18 (permissibility of prior medico-legal liability history in court) reflected additional misunderstanding of admissible evidence with respect to civil suits. Of 8 respondents, 6 thought that a prior medico-legal liability history was admissible evidence.

Finally, pretest and posttest responses to question 20 (characteristics of sued versus non-sued physicians) varied tremendously, but most respondents erroneously assumed that physicians who had been sued would choose to work longer hours. Studies published by the American Bar Association demonstrate that this is rarely the outcome.

Limitations

There were a total of 42 students in the 2 courses. However, precurriculum data were only available for 3 participants, so interpretation of the baseline level of knowledge is limited. Preliminary data were not obtained regarding students' legal academic experience (eg, prior degree in jurisprudence, prior work as a paralegal, prior seminars attended). These factors are hypothesized to influence learners' experiences and motivation levels, and this could be important to data interpretation.

Standardized lecture outlines regarding important topics for lecture, discussion, and repetition did not exist prior to this study. These now have been developed and can be used to reinforce important concepts in future curricula. Additionally, subsequent test material was redesigned to address attitude shifts in addition to knowledge gains.

Conclusions

This pilot work supports the concept that concentrated legal education at selected times during medical education can improve physicians' knowledge base regarding medico-legal interactions. We continue to refine the curriculum to address issues of lecturer style, lecture content, and overall attitudinal values related to clinical practice and legal education, as well as long-term impact on practice patterns, job satisfaction, and attention to quality and continuity-of-care issues. Universal testing through an electronic platform is under development.

References

1 Jamieson T. Medical students need more medico-legal education. *Acad Med*. 1999;74(5):463.
2 Moreno-Hunt C, Gilbert WM. Current status of obstetrics and gynecology resident medical-legal education: a survey of program directors. *Obstet Gynecol*. 2005;106(6):1382–1384.
3 McAbee GN, Deitschel C, Berger J. Pediatric medico-legal education in the 21st century. *Pediatrics*. 2006;117(5):1790–1792.
4 Kollas C. Exploring internal medicine chief residents' medicolegal knowledge. *J Leg Med*. 1997;18(1):47–61.
5 Kollas CD, Frey CM. A medico-legal curriculum for internal medicine residents. *J Gen Intern Med*. 1999;14:441–443.
6 Donn SM. Medico-legal education of pediatric residents remains inadequate. *AAP News*. 2008;29(7):16.
7 Paul E, Fullerton DF, Cohen E, Lawton E, Ryan A, Sandel M. Medical-legal partnerships: addressing competency needs through lawyers. *J Grad Med Educ*. 2009;2:304–310.
8 Thomas P. Medical education curricula: where's the beef? *J Gen Intern Med*. 1999;14:449–450.