EDUCATION

Conscientious refusal in reproductive medicine: an educational intervention

Carla S. Lupi, MD; Christopher M. Estes, MD, MPH; Monica A. Broome, MD; Nicolette M. Schreiber, MD

OBJECTIVE: This study evaluates an educational intervention focusing on the ethical reasoning and communication skills necessary in counseling patients about morally objectionable medical interventions.

STUDY DESIGN: All students on the core clerkship in obstetrics and gynecology at the University of Miami Miller School of Medicine participated in a structured workshop. Students completed anonymous surveys before and after the workshop. Associations between the participants' change in comfort level in providing nondirective counseling and measured demographic variables were analyzed.

RESULTS: Of 140 students, 37% (n = 52) positively changed their comfort level with nondirective options counseling; 10% (n = 14) negatively changed. Change in understanding of the physician's role was reported by 60% (n = 84). The exercise was rated as educationally valuable by 95% (n = 128), with 84% (n = 115) attesting that the workshop would help them "approach things differently."

CONCLUSION: Evaluation of multiple parameters demonstrated that this workshop heightened student awareness of the ethical and communications skills challenges posed by this clinical situation.

Key words: communication, evaluation studies, medical education, medical ethics, reproductive health services

Cite this article as: Lupi CS, Estes CM, Broome MA, et al. Conscientious refusal in reproductive medicine: an educational intervention. Am J Obstet Gynecol 2009;201:502.e1-7.

When health care providers find that participating in an indicated medical intervention presents a personal moral problem, they must confront the complexities of balancing their own moral integrity as individuals and as physicians with their ethical duty to provide high-quality health care. The core component of high-quality health care at greatest risk is respect for patient autonomy, which encompasses respect for the patient's moral position and integrity.

Whether the provider chooses conscientious refusal and how this is done may have a huge positive or negative impact on the patient-provider relationship and sometimes on health outcomes.[1-3]

Obstetrics and gynecology owns a substantive claim on the issue of conscientious refusal in medicine, with abortion, contraception, and infertility all in our domain of practice. Indeed, the majority of states have enacted "conscious clauses" protecting providers and/or institutions that refuse to participate in objectionable interventions, almost entirely in response to the public focus on abortion.[4] Whereas our major professional organizations have long supported the rights of patients to these services, these same organizations have only recently developed reasoned position statements on the ethical complexities posed by conscientious refusal of individual providers and institutions.[5,6]

In the only large survey of practicing physicians on this matter, significant minorities of the 1144 respondents did not believe that they were obligated to disclose information about medically available treatments they consider objectionable (14%) or to refer the patient to a provider willing to perform the intervention (29%). Extrapolating this minority response to the national physician workforce, the authors calculated that more than 40 million Americans may be cared for by physicians practicing with these perspectives.[7]

Whereas surveys of medical students over recent years demonstrate a majority supporting abortion in most legal circumstances, sizable minority groups remain opposed.[8-10] In an anonymous survey at the University of Minnesota, more than one-third of students disapproved of a woman's choice to terminate a pregnancy for financial, career, or educational reasons. Student disagreement with a patient's reasons for choosing an abortion significantly decreased the like-

From the Department of Obstetrics and Gynecology, Miller School of Medicine, University of Miami, Miami, FL.

Presented in abstract format at the Joint Annual Meeting of the Association of Professors of Gynecology and Obstetrics and the Council on Resident Education in Obstetrics and Gynecology, San Diego, CA, March 11-14, 2009.

Received Feb. 3, 2008; revised April 30, 2009; accepted May 28, 2009.

Reprints: Carla Lupi, MD, Department of Obstetrics and Gynecology, Miller School of Medicine, University of Miami, 1600 NW 10th Ave., RSMB Room 2173Am Miami, FL. clupi@med.miami.edu.

This study was supported in part by a Grant from the Arsht Ethics and Community Program of the University of Miami and with resources from the Association of Professors of Gynecology and Obstetrics/Solvay Educational Scholars and Leaders Program. This project emerged from participation by the primary author in the Association of Professors of Gynecology and Obstetrics/Solvay Educational Scholars and Leaders Program

0002-9378/$36.00 • • doi: 10.1016/j.ajog.2009.05.056

lihood to refer the patient to an abortion provider ($P < .001$).[11]

These findings argue powerfully for addressing conscientious refusal as a core component of ethics education in medical school. The questions then for educators are what are the necessary skills and which methods are available to teach them?

Recently, ethics educators have pointed out that practitioners must exercise strong communication skills to implement their ethical reasoning.[12,13] Yet there are no published models for teaching these competencies in an integrated fashion.

The teaching of conscientious refusal begs for such an instructional model. Because the ethical conflict here springs from the core personal values of the student and because patients seeking these services often present with emotional crisis, the learning of ethical reasoning, personal values clarification, examinations of bias, and well-honed communications skills must be integrated.[14] Most students, either for lack of clinical opportunity or unwillingness to participate in available opportunities, will not observe or participate in clinical encounters in which these skills will be modeled or practiced.[8,9] Therefore, a standardized interactive format is necessary.

The Association of Professors of Gynecology and Obstetrics (APGO) has highlighted the need for a teaching methodology for conscientious refusal by listing nondirective options counseling in the setting of unplanned pregnancy as a "shows how" skill,[15] in recognition that practitioners of many specialties may deliver to a woman the news of her unplanned pregnancy or less often confront a woman whose medical condition necessitates the consideration of abortion. To impose this competency on all students, some of whom may even object to participating in counseling or referral processes[16,17] without the formal opportunity to address the complexities of conscientious refusal, would not serve the educational interests of students or engage them in any real movement toward competency.

We report the evaluation of a module to teach the ethical and communications skills of conscientious refusal that combines the educational techniques used in ethics education with communications skills curricula to provide opportunity for discussion of ethical reasoning, observation, practice, and reflection.

Materials and Methods

Different components of the workshop were piloted with intermediate-sized groups of third-year medical students on the core clerkship in obstetrics and gynecology during the fall of 2007 and winter of 2008. Evaluation of the project received exempt status from the University of Miami Institutional Review Board as research on instructional strategies.

The workshop was run once with each core clerkship group over 11 blocks, with a total of 187 students. The final version contributing to the complete response pool reported here was administered over 7 blocks with 140 students The module was conducted jointly by 2 faculty, a gynecologist (C.S.L.) and an internist specializing in communication skills training (M.A.B.).

The educational module consists of trigger skits and discussion,[18,19] scene selection and values clarification, and helping trios role play[20] and final discussion. Students completed numerically linked anonymous surveys immediately before and after the workshop, which are designed for reflection on positions and values as well as workshop evaluation. Standard demographic information and self-reported and validated religiosity parameters[21] were included.

Introducing the workshop, the facilitator reiterates the American College of Obstetricians and Gynecologists (ACOG) position[5] that ethical medical care requires personal conscience on the part of physicians and that the workshop does not aim to undermine that conscience or focus on the abortion controversy.

The 2 brief trigger skits are enacted by faculty or shown on video. The first depicts a doctor who refuses to discuss the option of abortion with a young mother faced with an unplanned pregnancy and a dissolving marriage. The second skit involves a resident who tries to influence a pregnant teenager against pregnancy continuation. Faculty then facilitate a group discussion of the impact of the physician's moral bias on his or her communications skills, the physician's delivery of the news of pregnancy, the patient-physician relationship, and the quality of care. The facilitator draws on scripted questions when necessary to ensure delineation and consideration of the 4 limits to conscientious refusal as defined in the ACOG committee opinion:[5] the potential for imposition and violation of patient autonomy, the potential for negative effect on patient health, the potential to violate scientific integrity, and the potential for discrimination.

Students review 1-sentence descriptions of 8 prewritten scenarios in which a patient may need or does need abortion, infertility treatment, or contraception. Each student selects 1 that creates a significant moral discomfort for him or her and then privately records answers to 6 questions about the personal values and attitudes underlying this discomfort and assumptions about the patient. Scenarios include abortion for maternal disease, minor fetal anomaly, and sex selection; repetitive use of abortion over other means of contraception; fertility services to secure wealth; early-adolescent contraception; fertility services for a human immunodeficiency virus-positive couple; and provision of anesthesia for second-trimester abortion. Students are informed that some of the scenarios are not typical but have been developed to challenge those students who have a high degree of comfort in more common situations.

The facilitator organizes students into groups of 3 to minimize repetition of a single scenario within each group. Facilitators distribute to each group 2 small notebooks, 1 containing paragraph descriptions of the physician and the second containing paragraph description of the patient. The student plays the physician in the scenario he or she selected earlier as creating moral discomfort, whereas 1 of the other 2 takes the role of the patient to that physician. Students are directed to read only the paragraph pertaining to their individual role. The third student serves as the observer, who

does not read the background information on the "patient" or "the physician." Communication skills training is further highlighted with the observer and "patient" giving formative feedback on communications skills to "the physician" immediately after the interview concludes. Each group performs a succession of 3 role plays so that each student has a turn as physician, patient, and observer. The facilitator times each round to a total of 7-10 minutes for each role play and feedback, based on averaging of observations for effective student engagement in role play with these scenarios during the piloting phase.

Returning to the intermediate-sized group of 18-24, students discuss their internal reactions in the roles of patient and physician, the impact of the physician's moral position and judgment on his or her ability to communicate openly, the positive and negative consequences of physician disclosure of his or her own moral position to the patient, and the effect of refusal to provide and referral on the physician-patient relationship. In this discussion the facilitator prompts consideration of the remaining 2 issues in the ACOG Committee Opinion:[5] the institutional- and organizational-level responsibility to ensure access and protect individual provider conscience and the duty of providers who deviate from standard practice to provide prior notice to potential patients.

Data were analyzed using SAS (version 9.1; SAS Institute, Cary, NC). Associations between the participants' change in comfort level in providing nondirective counseling and measured demographic and religiosity variables were analyzed using Fisher exact or χ^2 tests.

RESULTS

Demographics and measures of religiosity in the participants are presented in Table 1. Compared with US medical school graduates in 2007, this sample had 4-5% fewer white non-Hispanic and Asian students, double the percentage of Hispanics, 2% fewer African American/black students, and 8% fewer women.[22]

Effect of the workshop on self-reported comfort ratings in providing nondirective options counseling to a young mother facing an unplanned pregnancy for reasons of difficult life circumstances shows 80% (n = 114) as comfortable or somewhat comfortable prior to the workshop and 89% (n = 125) after the workshop (Table 2). This increase was significantly associated with participation in the workshop ($P < .001$, χ^2).

Within the aggregate data, heterogeneity in individual movement on comfort ratings emerged, with 37% (n = 52) reporting change toward more comfort

TABLE 1
Demographics and measures of religiosity

Variable	Response	n	%
Sex	Male	83	59.3
	Female	57	40.7
Race	Black, non-Hispanic	6	4.3
	White	81	57.9
	Asian	23	16.4
	Hispanic/Latino	18	12.9
	Other	12	8.6
"I try hard to carry my religious beliefs through all aspects of my life."	True	53	37.9
	False	87	62.1
"My approach to life is entirely based on my religion."	True	10	7.1
	False	130	92.9
"It doesn't matter so much what I believe as long as I lead a moral life."	True	102	72.9
	False	38	27.1
Religious affiliation	Buddhist	4	2.9
	Catholic	38	27.1
	Hindu	6	4.3
	Jewish	21	15.0
	Muslim	3	2.1
	Protestant	29	20.7
	None	18	12.9
	Other	21	15.0
Frequency of service attendance	Never	46	33.1
	Once per month	63	45.3
	Twice or more per month	30	21.6

Lupi. Conscientious refusal in reproductive medicine. Am J Obstet Gynecol 2009.

TABLE 2
Comparison in pre- and postsession aggregate self-reported comfort in nondirective options counseling

Timing	Comfortable, n (%)	Somewhat comfortable, n (%)	Undecided, n (%)	Somewhat uncomfortable, n (%)	Uncomfortable, n (%)
Presession	54 (38)	60 (42)	11 (8)	15 (10)	3 (2)
Postsession	83 (59)	42 (30)	9 (6)	7 (5)	0

Lupi. Conscientious refusal in reproductive medicine. Am J Obstet Gynecol 2009.

TABLE 3
Change in willingness to provide nondirective counseling

Variable	Test	*P*
Sex	χ^2	.80
Race	Fisher exact	.12
"I try hard to carry my religious beliefs through all aspects of my life."	χ^2	.20
"My approach to life is entirely based on my religion."	Fisher exact	.09
"It doesn't matter so much what I believe as long as I lead a moral life."	χ^2	.002
Religious affiliation	χ^2_{CMH}	.98
Frequency of attending services	Fisher exact	.08

Lupi. Conscientious refusal in reproductive medicine. Am J Obstet Gynecol 2009.

and 10% (n = 14) toward less comfort. No significant correlation of change in comfort with measured demographic variable or religious affiliation emerged (Table 3).

Among those 38 participants who responded "false" to the statement, "It doesn't matter so much what I believe as long as I lead a moral life," 71% changed their comfort level after the workshop, with 81% reporting more comfort and 19% reporting less comfort. For those who responded "true" to the same statement, the corresponding percentages were 61% had no change in their comfort level and 29% did demonstrate change. The difference in change in comfort level according to the response to this statement was highly significant ($P < .002$, χ^2)

Role playing the physician "somewhat changed" or "significantly changed" understanding of the physician's role for 56% (n = 78) of students. Role playing altered understanding of the patient among 60% (n = 85.) Role playing the patient changed understanding of the physician's role and of the patient for approximately 50% of students (n = 69, n = 70).

Playing the role of the physician at least partially compromised personal moral integrity among 31.9% (n = 43). The exercise did not appear to have any influence on the likelihood of this set of participants to report a change in comfort level with nondirective counseling compared with the rest of the group (χ^2, $P = .17$).

The helping trios and subsequent discussion were rated the best portion of the exercise by 63.4% (n = 83). Preference for format of the exercise was not associated with a change in comfort level with nondirective counseling (Fisher exact, $P = .59$).

Another question asked in both the pre- and postsurveys was, "Is it ethical for a physician to explain to the patient why he or she objects to the requested procedure?" with possible answers as "yes," "only if the patient asks," "undecided," and "no." A change before and after the workshop was reported by 40% of participants, with 22% moving toward a more restrictive answer and 18% toward a more liberal response.

Student overall ratings of the workshop are presented in Table 4. A sample of typical narrative comments is found in Table 5.

TABLE 4
Educational valuation results

Statement	Strongly agree, n (%)	Agree, n (%)	Disagree, n (%)	Strongly disagree, n (%)
"This exercise was useful to my learning."	35 (26)	93 (68)	6 (4)	2 (1)
"This exercise helped me consider things I hadn't thought about before."	31 (23)	91 (67)	12 (9)	2 (1)
"This exercise will help me consider approaching things differently."	15 (11)	100 (73)	20 (15)	2 (1)

Lupi. Conscientious refusal in reproductive medicine. Am J Obstet Gynecol 2009.

Comment

Our data demonstrate, both directly and indirectly, notable and potentially constructive effects of this educational module on student understanding of the communication skills and ethical reasoning involved in this type of patient-provider values conflict.

Both the positive and negative changes in self-reported comfort levels with nondirective options counseling, could result from alterations in moral dissonance and/or in communications skills confidence. It is important to note that comfort is a feeling, not a measure of competence. A change in feeling is important evidence of developing personal awareness, a key ingredient in the development of humanistic and healing physicians.[23] Even a negative change in comfort, resulting from heightened awareness of the complexity of the skills and/or ethical issues, suggests a desired outcome in the move from unconscious incompetence to conscious incompetence.

The reported changes in understanding of the physician's role constitute an increased personal awareness for the student doctor; changes in understanding of the patient provide the basis for increased empathy. Both of these role-play outcomes are important prerequisites for effective patient-centered communication.[24]

Because our project embraced the larger issue of patient-physician values conflict around medical interventions,

TABLE 5
Selected narrative comments from students

Question	Student response
If role playing the physician changed your understanding of the physician's role, how was your understanding changed?	"I realized that you are there to do what is best for the patient, regardless of what your beliefs are." "I learned you have to try to be objective and not direct the patient's decision making but also adhere to your moral integrity." "It's complicated to provide care when you don't necessarily agree with the patient's choices." "The doctor must address the patient's feelings and motivation for pregnancy; must speak to the patient in a way that doesn't cause her to feel ashamed or guilty." "I agreed with the patient's choice based on my faith/moral beliefs, and it was hard for me to present the other side to make sure the patient understood all of the options and risks."
If role playing the physician changed your understanding of the patient's role, how was your understanding changed?	"There is always more to the story than the patient immediately divulges." "Each patient has her own story; it is important not to equivocate yourself and what you would do with her and what she would do."
If role playing the patient changed your understanding of the patient's role, how was your understanding changed?	"We need to learn to consider all aspects of a patient's life to understand her decisions." "Culture has a very significant impact on a patient's decision."
If role playing the patient changed your understanding of the physician's role, how was your understanding changed?	"I have a better idea of what it feels like to be judged by a physician, and I know what I would want to hear as a patient." "How to provide health care for someone you don't agree with is a necessary skill."
If this workshop changed your comfort level with providing nondirective counseling, why so?	"It provided me with needed experience in counseling, and I learned different ways to approach a difficult subject." "Acting out the scenario helped me to see the patient's perspective, and I can better appreciate my responsibility as a physician."
If this exercise helped you to consider things you had not thought about before, what specifically?	"How to provide care for patients outside of my moral beliefs without being judgmental." "This exercise helped me to consider that some people have circumstances that I may not have realized if I didn't ask; this will help me to consider where the patient is coming from better." "Sometimes one must compromise his or her own beliefs to best benefit the patient; I learned my duty is to adequately inform all patients."
If this exercise helped you to consider approaching things differently, in what way did it do so?	"I now know that I will not give my opinion of what I would do in these controversial situations." "How to approach referrals without compromising my beliefs." "I will offer all alternatives and provide all pertinent information."
Was this exercise useful to your learning? Why or why not?	"It was good to practice, and it gave me the opportunity to see and hear different perspectives." "This brings up difficult issues that we may not be prepared for; it is a good way of encountering a situation prior to seeing it in clinic." "It was a great time to practice communication skills; this helped me to vocalize my beliefs." "It was helpful to find myself in 1 of these situations so that I could understand my own reaction better."

Lupi. Conscientious refusal in reproductive medicine. Am J Obstet Gynecol 2009.

we broadened our scenario set beyond abortion to generalize the discussion and skills and minimize the possibility that the workshop would focus on the abortion controversy. However, our outcome question dealt with nondirective options counseling because this clinical scenario has been deemed appropriate at the medical student level.[15] Not all participants, however, chose scenarios relating to abortion. Our lack of data on the scenario choice of participants leaves us unable to speculate on the influence of scenario choice on change in comfort level. It may have been overly optimistic to expect that practicing the skill set in 1 clinical scenario would so readily translate into comfort change for other scenarios.

We obtained responses to 3 statements from a validated study to measure religi-

osity.[21] Two of these statements specified "religion" or "religious beliefs." The finding of no significant difference in impact on "comfort" according to these 2 measures of religiosity suggests that our format engaged these students at least as well as those who self-reported less religiosity. The third statement, although validated, is ambiguous in referring to "beliefs" without specifying "religious beliefs." For the subgroup of students who affirmed in this statement that their beliefs are necessary, impact of participation on "comfort" was particularly strong and in the positive direction. To the extent that participants inferred that "beliefs" means "religious beliefs," our original concern that students with stronger ratings of religiosity would report less impact of the workshop on nondirective options counseling would be dispelled. Other interpretations of "beliefs," however, would undermine this conclusion.

The change in opinion regarding the ethicality of physician disclosure of his or her reason for objection, although not occurring in the majority of students, demonstrated that opportunities to confront this issue are important for at least a sizable minority. Indeed, this topic occupied a significant amount of discussion time after the trio exercises, with various examples of how the ethicality may change in different circumstances and how disclosure may variably affect the patient-physician relationship.

Finally, the educational valuation responses, which are comparable with those of other communication skills workshops at our school that focus on much less controversial topics, demonstrate that the intervention not only provoked new thoughts but left students with the intent to "approach things differently." Precisely how these different approaches may translate into modified or improved care cannot be known. Based on some narrative comments, we reasonably hope that the exercise has expanded their openness to hearing and understanding the patient, even when her situation poses ethical challenges or summons assumptions.

No single method used in the workshop is new to communications skills teaching. Discussion[25,26] and trigger videos[18,19] have been used in ethics education to promote introspection and reflection on social issues. We are unaware of previous use of helping trios in medical ethics education. Given the highly controversial nature of these medical interventions, we recognized the heightened challenge and importance of using methods that create a safe and structured environment for students to articulate personal opinions and respectfully acknowledge differing points of view. [27]

With these challenges in mind, we started by pairing realistic skits showing that both pro-choice and pro-life physicians experience moral conflicts with patients and then engaged the students in observing and evaluating faculty and/or actors before turning to themselves and finally brought the focus to not only the physicians' behaviors but to patient-physician relationship and quality of care. Our results affirm that this combination of instructional methods engaged students and provided a valuable educational experience.

All outcomes reported were evaluated immediately after the workshop and are subject to degradation or amplification over time for an array of reasons, including the presence or absence of positive or negative clinical experience and modeling and personal capacity for change.

The most important limitation of this study is the absence of systematic observation and evaluation of student behavior with and without the intervention. We are developing a standardized patient to test students on both ethical reasoning and communications skills in the setting of pregnancy options counseling as a next step.

Conclusion

A structured workshop on conscientious refusal in reproductive medicine, integrating methods of ethical reasoning and communications skills instruction impacted on students' personal awareness, their understanding of the physician role and the patient's situations, and their comfort levels with nondirective options counseling. Students gave the workshop high ratings of educational valuation and agreed that participation will affect their approach to these situations in the future. ■

ACKNOWLEDGMENTS

Richard Tiberius, PhD, William Herbert, MD, and Jodi Steinauer, MD, provided critical feedback and insight in the development of this educational module and this evaluation. The project emerged from the primary author's participation in the APGO/Solvay Educational Scholars and Leaders Program.

REFERENCES

1. Cannold L. Consequences for patients of health care professionals' conscientious actions: the ban on abortions in South Australia. J Med Ethics 1994;20:80-6.

2. Weil E. Breeder reaction: does everyone now have a right to bear children? San Francisco: Foundation for National Progress; 2006 July/August. Available at: http://www.motherjones.com/politics/2006/07/breeder-reaction. Accessed July 12, 2009.

3. Weiss C, Borgmann C, Kenny L, Sternberg J, Crosby M. Religious refusals and reproductive rights: ACLU Reproductive Freedom Project. New York, NY: American Civil Liberties Union; 2002.

4. The Henry J. Kaiser Family Foundation State Health Facts. States that allow institutions to refuse women's health services, as of October 1, 2008. Henry J. Kaiser Family Foundation. Available at: http://www.statehealthfacts.org/comparetable.jsp?ind=500&cat=10. Accessed Dec. 2, 2008.

5. ACOG committee opinion no. 385, November 2007: the limits of conscientious refusal in reproductive medicine. Obstet Gynecol 2007; 110:1203-8.

6. Access to fertility treatment by gays, lesbians, and unmarried persons. Fertil Steril 2006;86:1333-5.

7. Curlin FA, Lawrence RE, Chin MH, Lantos JD. Religion, conscience, and controversial clinical practices. N Engl J Med 2007;356: 593-600.

8. Espey E, Ogburn T, Dorman F. Student attitudes about a clinical experience in abortion care during the obstetrics and gynecology clerkship. Acad Med 2004;79:96-100.

9. Stennett RA, Bongiovi ME. Future physicians' attitudes on women's reproductive rights: a survey of medical students in an American university. J Am Med Womens Assoc 1991;46:178-81.

10. Rosenblatt RA, Robinson KB, Larson EH, Dobie SA. Medical students' attitudes toward abortion and other reproductive health services. Fam Med 1999;31:195-9.

11. Sirr RT. Medical student misinformation and bias regarding elective pregnancy termination. Contraception 2007;76:173.

12. Arnold RM, Forrow L. Assessing competence in clinical ethics: are we measuring the right behaviors. J Gen Intern Med 1993;8:52-4.
13. Fischer GS, Arnold RM. Measuring the effectiveness of ethics education. J Gen Intern Med 1994;9:655-6.
14. National Abortion Federation. The abortion option: a values clarification guide for health care professionals; 2005. Available at: http://www.prochoice.org/pubs_research/publications/downloads/professional_education/abortion_option.pdf. Accessed Jan. 30, 2009.
15. The Association of Professors of Gynecology and Obstetrics. APGO medical student educational objectives. 8th ed. 2004. Available at: http://www.apgo.org/binary/8th%20edition%20Objectives.pdf. Accessed Jan. 30, 2009.
16. Peppin JF. The Christian physician in the non-Christian institution: objections of conscience and physician value neutrality. Christ Bioeth 1997;3:39-54.
17. Christian Medical and Dental Association. Issues and ethics: abortion. Available at: http://www.cmda.org/AM/Template.cfm?Section=Abortion. Accessed Dec. 3, 2008.
18. Self DJ, Baldwin DC. Teaching medical humanities through film discussions. J Med Humanit 1990;11:23-9.
19. Self DJ, Baldwin DC Jr, Olivarez M. Teaching medical ethics to first-year students by using film discussion to develop their moral reasoning. Acad Med 1993;68:383-5.
20. Tiberius RG. Small group teaching: a troubleshooting guide. London: Routledge; 1999.
21. Hoge DR. A validated intrinsic religious motivational scale. J Sci Study Relig 1972; 11:369-76.
22. American Association of Medical Colleges. The AAMC data book: medical schools and teaching hospitals by the numbers, 2009. Available at: www.aamc.org/data/databook/start.htm. Accessed May 1, 2009.
23. Novack DH, Epstein RM, Paulsen RH. Toward creating physician-healers: fostering medical students' self-awareness, personal growth, and well-being. Acad Med 1999; 74:516.
24. Suchman AL, Markakis K, Beckman HB, Frankel R. A model of empathic communication in the medical interview. JAMA 1997;277: 678-82.
25. Eckles RE, Meslin EM, Gaffney M, Helft PR. Medical ethics education: where are we? Where should we be going? A review. Acad Med 2005;80:1143-52.
26. Smith S, Fryer-Edwards K, Diekema DS, Braddock CH 3rd. Finding effective strategies for teaching ethics: a comparison trial of two interventions. Acad Med 2004;79:265-71.
27. Becker HI, Cochran N. Student-initiated forum on abortion. Acad Med 2001;76:582.