

EDUCATION

Obstetrician-gynecologists, religious institutions, and conflicts regarding patient-care policies

Debra B. Stulberg, MD, MA; Annie M. Dude, MD, PhD; Irma Dahlquist, BS; Farr A. Curlin, MD

OBJECTIVE: The purpose of this study was to assess how common it is for obstetrician-gynecologists who work in religiously affiliated hospitals or practices to experience conflict with those institutions over religiously based policies for patient care and to identify the proportion of obstetrician-gynecologists who report that their hospitals restrict their options for the treatment of ectopic pregnancy.

STUDY DESIGN: We mailed a survey to a nationally representative sample of 1800 practicing obstetrician-gynecologists.

RESULTS: The response rate was 66%. Among obstetrician-gynecologists who practice in religiously affiliated institutions, 37% have had a conflict with their institution over religiously based policies. These con-

flicts are most common in Catholic institutions (52%; adjusted odds ratio, 8.7; 95% confidence interval, 1.7–46.2). Few reported that their options for treating ectopic pregnancy are limited by their hospitals (2.5% at non-Catholic institutions vs 5.5% at Catholic institutions; $P = .07$).

CONCLUSION: Many obstetrician-gynecologists who practice in religiously affiliated institutions have had conflicts over religiously based policies. The effects of these conflicts on patient care and outcomes are an important area for future research.

Key words: ectopic pregnancy, ethics, religion

Cite this article as: Stulberg DB, Dude AM, Dahlquist I, et al. Obstetrician-gynecologists, religious institutions, and conflicts regarding patient-care policies. *Am J Obstet Gynecol* 2012;207:73.e1-5.

Religious denominations sponsor a significant share of health care institutions in the United States.¹ Catholic hospitals account for 16% of admissions

to community hospitals,² and 4 of the 10 largest health systems are Catholic.³ Such institutions often have policies regarding patient care that are derived from religious teachings; at times those policies lead to conflicts with physicians regarding how best to care for patients. Popular media have reported recently on cases in which Catholic moral teaching has conflicted with physicians' judgments about patient care,⁴ and a national survey of internists and family physicians found that 1 in 5 of those who had worked in religiously affiliated institutions had experienced conflict with the institution over religiously based policies for patient care.⁵ Obstetrician-gynecologists' experiences of conflict over religious hospital policies have not been examined formally in the literature.

Obstetrician-gynecologists are the physicians perhaps most likely to be impacted by religiously based policies for patient care. Hospitals that are sponsored by a range of religious denominations restrict abortion⁶; Catholic institutions, in particular, prohibit many common and professionally accepted practices that are related to sexuality and reproduction. For example, the Ethical and Religious Directives for Catholic Health Care Services (hereafter, the Di-

rectives), which are authoritative for all Catholic health care institutions in the United States, prohibit abortion, sterilization, contraception, and most uses of assisted reproductive technologies.⁷

One area of ambiguity has been how Catholic teaching applies to the treatment of ectopic pregnancy. The Directives state, "In case of extrauterine pregnancy, no intervention is morally licit which constitutes a direct abortion."⁷ In the past, many Catholic ethicists had interpreted Catholic teaching as banning any direct treatment of ectopic pregnancy unless the fallopian tube had already ruptured.⁸ Today Catholic ethicists generally agree that salpingectomy may be used to treat an ectopic pregnancy (without the need to wait for tubal rupture) because, in removing the diseased fallopian tube, the fetus is destroyed indirectly as a secondary effect.⁸⁻¹⁰ However, Catholic ethicists still disagree about the moral permissibility of salpingostomy and methotrexate, which are 2 safe and effective methods that are supported by the American College of Obstetrics and Gynecology.¹¹ There are Catholic ethicists who endorse their use,¹⁰ but others argue that, when the fetus has heart tones (and therefore

From the Department of Family Medicine (Dr Stulberg and Ms Dahlquist); MacLean Center for Clinical Medical Ethics, (Drs Stulberg and Curlin); the Department of Obstetrics & Gynecology (Dr Stulberg); and the Department of Medicine (Dr Curlin), University of Chicago, Chicago, IL; and the Department of Obstetrics & Gynecology, Duke University Medical Center, Durham, NC (Dr Dude).

Received Jan. 23, 2012; revised March 30, 2012; accepted April 23, 2012.

Supported by grants from the Greenwall Foundation, the John Templeton Foundation, the National Center for Complementary and Alternative Medicine (1 K23 AT002749 to F.A.C.), and the Eunice Kennedy Shriver National Institute of Child Health and Human Development (1 K08 HD060663 to D.B.S.).

The authors report no conflict of interest.

Presented at the 39th annual meeting of the North American Primary Care Research Group, Banff, AB, Canada, Nov. 12-16, 2011.

Reprints: Debra B. Stulberg, MD, 5841 South Maryland Ave., MC 7110, Suite M 156, Chicago, IL 60637. stulberg@uchicago.edu.

0002-9378/\$36.00

© 2012 Mosby, Inc. All rights reserved.

<http://dx.doi.org/10.1016/j.ajog.2012.04.023>

TABLE 1
Characteristics of obstetrician-gynecologists, by whether they practice in a religiously affiliated institution (n = 1128)

Characteristic	Practice in religiously affiliated institution?, n (%) ^a		P value ^b
	Yes (n = 241)	No (n = 887)	
Age, y ^c	47.3 ± 9.0	47.7 ± 9.2	.58
Sex			.58
Male	120 (21.0)	485 (79.0)	
Female	121 (22.5)	402 (77.5)	
Race/ethnicity			.43
White, non-Hispanic	177 (23.4)	583 (76.6)	
Black, non-Hispanic	11 (17.3)	54 (82.7)	
Hispanic or Latino	12 (18.2)	51 (81.8)	
Asian	33 (17.9)	163 (82.1)	
Other	3 (14.4)	19 (85.6)	
Geographic region			.002
Northeast	37 (12.5)	246 (87.5)	
South	85 (24.1)	278 (75.9)	
Midwest	67 (27.1)	179 (72.9)	
West	52 (22.0)	182 (78.0)	
Immigration history			.25
Born in the United States	179 (22.5)	622 (77.5)	
Immigrated to the United States at any age	60 (18.8)	255 (81.2)	
Religious affiliation			.32
No religion	21 (17.3)	96 (82.7)	
Hindu	15 (15.4)	73 (84.6)	
Jewish	38 (25.5)	118 (74.5)	
Muslim	9 (14.5)	44 (85.5)	
Catholic	58 (22.5)	200 (77.5)	
Evangelical Protestant	22 (24.5)	68 (75.5)	
Nonevangelical Protestant	61 (21.0)	233 (79.0)	
Other religion	15 (34.0)	31 (66.0)	
Importance of religion			.02
The most important	35 (23.5)	120 (76.5)	
Very important	86 (23.4)	287 (76.6)	
Fairly important	77 (25.9)	240 (74.1)	
Not very important	40 (14.4)	227 (85.6)	

^a Counts do not equal 241 or 887 for all variables because of the partial nonresponse; percentages are adjusted for survey design to estimate the portion of all obstetrician-gynecologists who practice in the United States with a given characteristic who practice in a religion- or nonreligion-affiliated institution (for example, 21.0% of all male obstetrician-gynecologists are estimated to practice in religion-affiliated institutions); ^b χ^2 test; ^c Data are given as mean ± SD.

Stulberg. Religious institutions and conflict. *Am J Obstet Gynecol* 2012.

under Catholic teaching is treated as a living person), performing a salpingostomy (to remove the embryo while leaving the fallopian tube in place) or giving

methotrexate constitutes a direct abortion.⁹ In interviews, some physicians working at Catholic hospitals report that their hospitals prohibit them from offering

methotrexate for women with ectopic pregnancies.¹² To our knowledge, no previous research has assessed quantitatively the experiences of obstetrician-gynecologists with hospital policies that would restrict options for the treatment of ectopic pregnancy.

This study surveyed a nationally representative sample of practicing obstetrician-gynecologists to characterize those who practice in religiously affiliated institutions and to determine the prevalence and correlates of physician-institution conflicts over religiously based policies for patient care. The study also measured the proportion of obstetrician-gynecologists who say that the policies of their institution limit their options for the treatment of ectopic pregnancy and how that proportion varied by the religious affiliation of the institution.

MATERIALS AND METHODS

Data

The methods of this study have been reported elsewhere.¹³ From October 2008 to January 2009, we mailed a self-administered confidential survey to a stratified random sample of 1800 practicing obstetrician-gynecologists aged ≤65 years. We obtained our sample from the American Medical Association Physician Masterfile, which is a database that is intended to include all practicing physicians in the United States. To increase minority representation (especially minority religious perspectives), we used validated surname lists to create 4 strata.¹⁴⁻¹⁶ We sampled 180 physicians with typical South Asian surnames, 225 physicians with typical Arabic surnames, 180 physicians with typical Jewish surnames, and 1215 other physicians (from all those whose surnames were not on one of these ethnic lists). Physicians received up to 3 separate mailings of the questionnaire; the first included \$20, and the third offered an additional \$30 for participating. Physicians also received an advance letter and a postcard reminder after the first questionnaire mailing. The University of Chicago Institutional Review Board approved this survey. The requirement for written consent was waived,

which is typical for confidential, self-administered surveys.

Variables

For the present study, we asked respondents, "Is your primary place of practice religiously affiliated?" (yes/no). Those who indicated "yes" were asked, "What is the religious affiliation of that hospital/practice?" (Jewish, Roman Catholic, Christian non-Catholic, other), and "Have you ever had a conflict with that hospital/practice over religiously-based policies for patient care?" (yes/no).

We also presented the following clinical vignette: "A 24-year-old patient has left lower quadrant pain. Vaginal ultrasound scanning reveals a 7-week ectopic pregnancy implanted in the fallopian tube, with fetal heart tones present." We then asked respondents, "Assuming it was technically feasible and you have the appropriate surgical skills, would you be willing to perform a salpingostomy in this case?" (yes/no) and "...would you be willing to perform a salpingectomy in this case?" (yes/no). In addition, we asked, "Do the policies of your hospital or employer limit the options you have for treating ectopic pregnancy in cases like this one?" (yes/no).

Predictors were physician age, sex, race/ethnicity, region, immigration status (born in the United States or immigrated), religious affiliation, and importance of religion. Participants indicated their religious affiliation as Hindu, Muslim, Catholic (Roman Catholic or Eastern Orthodox), Jewish, evangelical Protestant, nonevangelical Protestant, other, or none. They were also asked, "How important would you say your religion is in your own life?" Response options were not very important in my life, fairly important in my life, very important in my life, and the most important thing in my life.

Statistical analysis

We used χ^2 tests for bivariate analyses and logistic regression for multivariate analyses. We carried out all analyses using the survey design adjusted commands in STATA software (release 11.0; StataSoft Corp, College Station, TX). All analyses were adjusted with the use of

TABLE 2

Conflicts over religious policies for patient care

Physician characteristics	n (%) ^a	P value ^b	Have had conflict over religiously based policies (n = 90)
			Multivariable odds ratio (95% CI)
Sex			
Male	40 (31)	.07	1.0 (Reference)
Female	50 (43)		1.4 (0.7–2.9)
Geographic Region			
Northeast	11 (30)	.53	1.0 (Reference)
South	31 (38)		1.6 (0.5–5.3)
Midwest	30 (55)		1.1 (0.3–3.9)
West	18 (31)		0.4 (0.1–1.8)
Immigration history			
Born in the United States	75 (41)	.003	1.0 (Reference)
Immigrated to the United States at any age	15 (18)		0.4 (0.1–1.5)
Religious affiliation (physician)			
No religion	8 (44)	.002	1.0 (Reference)
Hindu	7 (35)		1.4 (0.2–12.9)
Jewish	16 (41)		1.6 (0.3–8.1)
Muslim	2 (22)		0.6 (0.1–3.7)
Catholic	21 (35)		0.7 (0.2–2.9)
Evangelical Protestant	1 (5)		0.1 (0.0–1.3)
Nonevangelical Protestant	25 (41)		0.9 (0.2–3.6)
Other religion	10 (76)		4.4 (0.2–22.9)
Importance of religion			
Most important	8 (20)	.010	1.0 (Reference)
Very important	30 (30)		1.0 (0.3–3.4)
Fairly important	34 (49)		1.8 (0.5–6.1)
Not very important	18 (48)		1.9 (0.4–8.9)
Hospital religious affiliation			
Other religious facility	3 (16)	< .001	1.0 (Reference)
Jewish facility	1 (9)		0.6 (0.0–8.4)
Christian, non-Catholic facility	9 (17)		1.9 (0.3–11.7)
Catholic facility	77 (52)		8.7 (1.7–46.2) ^c

^a Counts do not equal 90 for all variables because of the partial nonresponse; percentages are adjusted for survey design to estimate the portion of all obstetrician-gynecologists who practice in the United States and who work in religious institutions with a given characteristic who have had conflict (for example, 31% of all male obstetrician-gynecologists who work in religious institutions are estimated to have had a conflict); ^b χ^2 test; ^c $P < .05$.

Stulberg. Religious institutions and conflict. *Am J Obstet Gynecol* 2012.

probability weights to account for oversampling of physicians by ethnic surname and to account for differential response rates among physicians from each of the 4 different strata. In this way, we were able to generate estimates for the

population of obstetrician-gynecologists who currently are practicing in the United States. Missing data were excluded from analyses, and we considered findings significant at a probability value of $< .05$.

TABLE 3
Ectopic pregnancy treatment

Variable	n (%) ^a	P value
Physician willingness to perform selected procedures to treat ectopic pregnancy		
Salpingectomy (n = 1111)	1006 (91.6)	
Salpingostomy (n = 1114)	1057 (95.1)	
Hospital/employer limits options for treating ectopic pregnancy: all obstetrician-gynecologists (n = 1111)	31 (2.9)	
By hospital/practice affiliation		
Nonreligious (n = 871)	21 (2.4)	.14 ^b
Religious (n = 240) ^c	10 (4.4)	
Roman Catholic (n = 143)	7 (5.5)	.07 ^d
Christian, non-Catholic (n = 56)	3 (4.6)	
Jewish (n = 18)	0	
Other (n = 21)	0	

^a Survey design-adjusted percentages of obstetricians-gynecologists who responded "yes" to each question; ^b Comparison of respondents who work at religion-affiliated vs nonreligion-affiliated institutions; ^c Responses do not equal 240 because 2 respondents did not report the religious affiliation of their hospital/practice; ^d Comparison of respondents who work at Catholic vs all other (non-Catholic) institutions.

Stulberg. Religious institutions and conflict. *Am J Obstet Gynecol* 2012.

RESULTS

Of 1800 physicians who were sampled, 40 were ineligible for this study because they either had retired or had an invalid address. The overall response rate of the survey was 66% (1154/1760). Among respondents, 19 physicians had missing data on whether they worked in a religiously affiliated institution, and an additional 7 physicians had missing data on whether they had experienced conflict with their institution, which left an analytical sample of 1128 physicians.

Approximately 22% of US obstetrician-gynecologists (n = 241) primarily practice in religiously affiliated institutions. Most of these (59%; n = 143) practice in Catholic institutions; 23% (n = 56) practice in Christian non-Catholic institutions; 8% (n = 19) practice in Jewish institutions; 9% (n = 21) practice in institutions with other religious affiliations, and 1% (n = 2) did not report where they practiced. Those who work in the Northeast are less likely to work in religiously affiliated institutions than those in the South, Midwest, or West (Table 1). Those for whom religion is not personally important are also less likely to work in religiously affiliated institutions than are their colleagues who rate

religion as fairly, very, or most important. However, obstetrician-gynecologists who work in religious hospitals are themselves religiously diverse and do not differ from other obstetrician-gynecologists with respect to religious affiliations. Physicians who identify as Roman Catholic are no more likely (when the data are controlled for other characteristics) to work in a Catholic hospital (odds ratio, 1.7, compared with those who report no religious affiliation; 95% confidence interval, 0.7–4.1; data not reported).

Among physicians who work in religiously affiliated institutions, 37% (n = 90) have had a conflict with their institution regarding religiously based policies for patient care. Those who work in Catholic institutions were most likely to report such conflicts (52%). Although age, immigration history, religious affiliation, and religious motivation were all associated in bivariate analyses with having had a conflict (Table 2), only working in a Catholic institution remained significant after adjustment for other variables (odds ratio, 8.7; 95% confidence interval, 1.7–46.2).

With respect to the treatment of an ectopic pregnancy with fetal heart tones present, the great majority of obstetri-

cian-gynecologists would be willing to perform a salpingectomy and/or a salpingostomy (Table 3). Furthermore, few physicians (n = 31; 2.9%) reported that policies of their institution limit the options that they have for the treatment of ectopic pregnancy in similar cases: 2.5% of those who work in non-Catholic institutions vs 5.5% in Catholic institutions (P = .07).

COMMENT

Among obstetrician-gynecologists who practice in religiously affiliated institutions, >1 in 3 has had a conflict with their institution over religiously based patient care policies. This is true for more than one-half of those who work in Catholic facilities. As expected, these conflicts appear to be more common among obstetrician-gynecologists than was reported among general internists and family physicians in a previous study.⁵

These conflicts may have implications for both physicians and patients. Yoon et al¹⁷ found that obstetrician-gynecologists who have religiously based ethical conflicts with patients and colleagues exhibit higher rates of emotional exhaustion and lower levels of empathy. Physicians may wish to ask detailed questions about hospital policies before signing a contract for employment, medical privileges, or office space to minimize these conflicts. Similarly, patients who seek care may wish to ask about hospital policies that affect the treatments that their physicians will be allowed to offer. However, particularly in rural areas and certain regions of the country, there is not always a wide variety of institutions for practitioners and patients alike to choose from.¹⁸ Furthermore, new conflicts can arise when previously nonreligious facilities merge with religious ones and longstanding physicians and patients find themselves working under new policies.¹⁹

Based on obstetrician-gynecologists' experiences, hospital policies frequently do not restrict options for the treatment of ectopic pregnancy. Although physicians at Catholic hospitals were slightly more likely (P = .07) to report institutional restrictions than those at non-

Catholic hospitals, restrictions were uncommon in all institutions. These findings suggest that, although Catholic ethicists debate whether the use of salpingostomy and methotrexate constitute direct abortion, few institutions prohibit these practices. Confusion on this issue can lead to unnecessary delays (eg, if physicians transfer patients to other institutions) and potentially to patient harms (eg, from ruptured pregnancy).¹² Therefore, leaders of religiously affiliated institutions should work to clarify and educate physicians about their policies regarding which (if any) treatments of ectopic pregnancy are prohibited. Further research is warranted to understand those less common cases in which physicians' choices in the treatment of ectopic pregnancy are restricted by their hospitals.

This study has several limitations. First, we surveyed only obstetrician-gynecologists, not other physicians who may provide care to patients with ectopic pregnancies, including emergency and family physicians. In addition, survey nonrespondents might differ from respondents in terms of religion, potential for conflict, or other characteristics in ways that would bias the study's findings. Information on religious affiliation, religiosity, and conflict was self-reported and thus is subject to measurement error. We did not ask whether the respondents were aware of specific religiously based policies in their hospitals, so it is possible that physicians disagree with policies they are unaware of and thus under-report conflict. We also did not ask whether obstetrician-gynecologists who work in secular hospitals had ethical or other patient-care conflicts with their hospitals. In addition, limited survey

space kept us from asking about the qualitative aspects of physicians' conflicts with religious hospitals, if and how religious restrictions affected patient care, or the strategies that they have used to resolve them. In ongoing research, we are inviting survey respondents to participate in qualitative interviews to elicit more detail about the nature of their conflicts and relationships with their hospitals. Finally, our study cannot directly assess how institutional policies constrain physicians' decisions or otherwise affect patients.

Notwithstanding these limitations, this study suggests that conflict over religiously based patient care policies is common among obstetrician-gynecologists who work in religiously affiliated institutions, particularly Catholic institutions. Further research should explore the actual effects on patients of the Catholic Directives and other religiously based patient care policies. ■

REFERENCES

1. Uttley L, Pawelko R. No strings attached: public funding of religiously-sponsored hospitals in the United States, Albany, NY: MergerWatch; 2002. Available at: http://www.mergerwatch.org/storage/pdf-files/bp_no_strings_highlights.pdf. Accessed Jan. 23, 2012.
2. Catholic Health Association of the United States. Fast facts, 2011. Available at: http://www.chausa.org/Pages/Newsroom/Fast_Facts/. Accessed Jan. 23, 2012.
3. Modern Healthcare's 2011 Hospital System Survey. Available at: http://www.modernhealthcare.com/section/lists?djoPage=product_details&djoPid=23117&djoTry=1326343481. Accessed Jan. 12, 2012.
4. Stein R. Reproductive care restrictions at Catholic hospitals spark conflict, scrutiny. *Washington Post* Jan 20, 2011:A01.
5. Stulberg DB, Lawrence RE, Shattuck J, Curlin FA. Religious hospitals and primary care physicians: Conflict over policies for patient care. *J Gen Intern Med* 2010;25:725-30.
6. Freedman LR, Landy U, Steinauer J. When there's a heartbeat: miscarriage management in Catholic-owned hospitals. *Am J Public Health* 2008;98:1774-8.
7. United States Conference of Catholic Bishops. Ethical and religious directives for Catholic Health Care Services, 5th ed; 2009. Available at: <http://www.ncbcenter.org/document.doc?id=147>. Accessed Jan. 23, 2012.
8. Kelly DF. Contemporary Catholic health care ethics. Washington, DC: Georgetown University Press; 2004.
9. Pivarunas AR. Ethical and medical considerations in the treatment of ectopic pregnancy. *Linacre Q* 2003;70:195-209.
10. Kaczor C. The ethics of ectopic pregnancy: a critical reconsideration of salpingostomy and methotrexate. *Linacre Q* 2009;76:265-82.
11. American College of Obstetricians and Gynecologists. ACOG practice bulletin no. 94: medical management of ectopic pregnancy. *Obstet Gynecol* 2008;111:1479-85.
12. Foster AM, Dennis A, Smith F. Do religious restrictions influence ectopic pregnancy management? A national qualitative study. *Womens Health Issues* 2011;21:104-9.
13. Lawrence RE, Rasinski KA, Yoon JD, Curlin FA. Obstetrician-gynecologists' beliefs about assisted reproductive technologies. *Obstet Gynecol* 2010;116:127-35.
14. Lauderdale DS, Kestenbaum B. Asian American ethnic identification by surname. *Popu Res Policy Rev* 2000;19:283-300.
15. Lauderdale DS. Birth outcomes for Arabic-named women in California before and after September 11. *Demography* 2006;43:185-201.
16. Sheskin IM. A methodology for examining the changing size and spatial distribution of a Jewish population: a Miami case study. *Shofar* 1998;17:97-116.
17. Yoon JD, Rasinski KA, Curlin FA. Conflict and emotional exhaustion in obstetrician-gynaecologists: a national survey. *J Med Ethics* 2010;36:731-5.
18. Uttley LJ. How merging religious and secular hospitals can threaten health care services. *Soc Policy* 2000;30:4-13.
19. Gallagher J. Religious freedom, reproductive health care, and hospital mergers. *J Am Med Womens Assoc* 1997;52:65-8.