Article

Religion, Spirituality, and Medicine: Psychiatrists' and Other Physicians' Differing Observations, Interpretations, and Clinical Approaches

Farr A. Curlin, M.D.

Ryan E. Lawrence, M.Div.

Shaun Odell, B.A.

Marshall H. Chin, M.D., M.P.H.

John D. Lantos, M.D.

Harold G. Koenig, M.D.

Keith G. Meador, M.D., Th.M., M.P.H.

Objective: This study compared the ways in which psychiatrists and nonpsychiatrists interpret the relationship between religion/spirituality and health and address religion/spirituality issues in the clinical encounter.

Method: The authors mailed a survey to a stratified random sample of 2,000 practicing U.S. physicians, with an oversampling of psychiatrists. The authors asked the physicians about their beliefs and observations regarding the relationship between religion/spirituality and patient health and about the ways in which they address religion/spirituality in the clinical setting.

Results: A total of 1,144 physicians completed the survey. Psychiatrists generally endorse positive influences of religion/spirituality on health, but they are more likely than other physicians to note that religion/spirituality sometimes causes negative emotions that lead to increased patient suffering (82% versus 44%). Compared to other physicians, psychiatrists are more likely to encounter religion/spirituality issues in clinical settings (92% versus 74% report their patients sometimes or often mention religion/spirituality issues), and they are more open to addressing religion/spirituality issues with patients (93% versus 53% say that it is usually or always appropriate to inquire about religion/spirituality).

Conclusions: This study suggests that the vast majority of psychiatrists appreciate the importance of religion and/or spirituality at least at a functional level. Compared to other physicians, psychiatrists also appear to be more comfortable, and have more experience, addressing religion/spirituality concerns in the clinical setting.

(Am J Psychiatry 2007; 164:1825–1831)

Psychiatry and religion often provide alternative explanations for many of life's deepest and most mysterious phenomena. As a result, there has historically been tension between these two domains of understanding. Freud equated religion with neurosis (1, p. 92) and even called it an enemy (2, p. 160). Also, DSM-III used religion and spirituality to illustrate psychopathology and was criticized as portraying religion negatively (3). Conversely, religious thinkers have, at times, expressed skepticism toward elements of psychiatry. For example, Agostino Gemelli, who was himself a Catholic priest and psychiatrist, called psychoanalysis the "morbid product of Freud's coarse materialism" and stated that Catholics should neither practice it nor be treated by it (4, p. 344). Reflecting this tension, several empirical studies of psychiatrists' religious characteristics have indicated that psychiatrists are measurably less religious than the general population (5, 6), their patients (5), and other physicians (6).

Some recent developments suggest that this historical antagonism is waning. Studies of the health effects of religion and/or spirituality have linked it to reduced depression and anxiety, increased longevity, and other physical and psychological health benefits (7–9). DSM-IV added a diagnostic category for religious and spiritual problems, therein recognizing that religious/spiritual beliefs are not inherently pathological (10). The 1995–1996 edition of the Graduate Medical Education Directory stated that all psychiatric residencies must include didactic sessions on religion/spirituality (11). Additionally, after surveying 425 psychotherapists (71 of whom were psychiatrists), Bergin and Jensen noted "sizable personal investment in religion," which suggests a large degree of "unrecognized religiousness" in the profession (12, p. 6).

These developments raise questions about how contemporary psychiatrists view the relationship between religion/spirituality and health. This is an important question because most Americans consider religion/spirituality to be an important part of their lives (6), and some evidence suggests that patient outcomes improve when psychiatrists integrate therapy with patients' religious beliefs. Psychiatrists' views toward religion/spirituality likely shape the ways in which they respond to patients who bring reli-

This article is featured in this month's AJP Audio and discussed in an editorial by Dr. Eichelman on p. 1774.

TABLE 1. Characteristics of Survey Respondents[a]

Variable	Psychiatrists (N=100)		Other Physicians (N=1,044)		Analysis
	Mean	SD	Mean	SD	p (t test)
Age (years)	50.9	8.0	48.8	8.3	0.02
	N	%	N	%	p (χ^2)
Women	35	35	265	25	0.04
Race/ethnicity					0.61
Asian	9	9	129	12	
Black non-Hispanic	1	1	25	3	
Hispanic/Latino	6	6	51	5	
White non-Hispanic	80	80	791	77	
Other	4	4	26	2	
Foreign medical graduates	23	23	201	19	0.38
Region					0.13
Northeast	32	32	232	22	
South	31	31	355	34	
Midwest	18	18	258	25	
West	19	19	197	19	
Primary specialty					—
Family practice	—	—	158	15	
General internal medicine	—	—	129	12	
Medicine subspecialties	—	—	231	22	
Obstetrics and gynecology	—	—	80	8	
Pediatrics and subspecialties	—	—	147	4	
Surgical subspecialties	—	—	100	10	
Other	—	—	197	19	
Religious affiliation					<0.001
None[b]	17	18	100	10	
Protestant	28	29	399	40	
Catholic	10	10	234	23	
Jew	29	30	152	15	
Other	13	13	125	12	
Intrinsic religiosity					0.11
Low	45	47	362	36	
Moderate	21	22	271	27	
High	30	31	369	37	
Spirituality					0.46
Low	21	22	272	27	
Moderate	51	54	484	47	
High	23	24	269	26	

[a] Totals do not all sum to 1,144 because of partial nonresponse.
[b] Includes atheist, agnostic, and none.

gious or spiritual matters to the clinical encounter and may affect the types of care that patients receive.

Surprisingly, we know very little about psychiatrists' beliefs in these matters. How do most psychiatrists respond when religion/spirituality issues emerge? Do psychiatrists encourage patients to discuss their religious/spiritual beliefs? In light of psychiatrists' personal beliefs about religion, do they view religion/spirituality more negatively than other physicians? To explore these questions, we use data from a national survey of U.S. physicians from all specialties to compare psychiatrists' and nonpsychiatrist physicians' beliefs and observations regarding the influence of religion/spirituality on health and their attitudes and self-reported behaviors regarding religion/spirituality in the clinical encounter.

Method

The methods for this study have been described in detail elsewhere (6, 13–15). A confidential, self-administered 12-page questionnaire was mailed to a stratified random sample of 2,000 practicing U.S. physicians ages 65 or younger, chosen from the American Medical Association Physician Masterfile, a database intended to include all physicians in the United States. Psychiatrists were oversampled to increase the power of the analyses presented here. Physicians received up to three separate mailings of the questionnaire, and the third mailing offered $20 for participation. Characteristics of the survey respondents are included in Table 1. This study was approved by the University of Chicago's institutional review board.

Survey Content

The survey questions measured physicians' observations and interpretations of the influence of "religion/spirituality" on patients' health (Table 2) and physicians' attitudes and self-reported behaviors regarding religion/spirituality in the clinical encounter (Table 3). These items were written by the investigators after reviewing the spirituality and medicine literature and conducting a series of qualitative pilot interviews (16). Items were then pretested and revised for clarity through multiple iterations of expert panel review (17). The terms *religion* and *spirituality* are closely related and used in overlapping ways within the medical literature. In the survey, these terms were not defined as distinct concepts but presented together, allowing respondents to apply their own working definitions.

The primary predictor was whether a physician was a psychiatrist. As reported elsewhere (6), psychiatrists are less religious on average than other physicians, and physicians' religious characteristics are strongly associated with their beliefs and behaviors related to religion/spirituality and medicine (13, 14). Therefore,

TABLE 2. Psychiatrists Versus Nonpsychiatrists: The Relationship Between Religion/Spirituality and Health

Questionnaire Item[a]	Response Category	Psychiatrists (weighted %)	Other Physicians (weighted %)	Analysis p (χ^2)
Patients mention religion/spirituality				
How often have your patients mentioned religion/spirituality issues such as God, prayer, meditation, the Bible, etc.?[b]				<0.0001
	Rarely or never	9	25	
	Sometimes	46	51	
	Often or always	46	23	
Potential positive influences of religion/spirituality				
Is the influence of religion/spirituality on health generally positive or negative?				0.04
	Positive	76	85	
	Negative	2	1	
	Equal	21	12	
	Has no influence	1	2	
Religion/spirituality helps patients to cope with and endure illness and suffering.[c]				0.96
	Rarely or never	1	1	
	Sometimes	22	23	
	Often or always	77	76	
Religion/spirituality gives patients a positive, hopeful state of mind.[c]				0.08
	Rarely or never	2	1	
	Sometimes	34	25	
	Often or always	64	74	
How often have your patients received emotional or practical support from their religious community?[b]				0.09
	Rarely or never	2	4	
	Sometimes	51	40	
	Often or always	47	56	
Potential negative influences of religion/spirituality				
Religion/spirituality causes guilt, anxiety, or other negative emotions that lead to increased patient suffering.[c]				<0.0001
	Rarely or never	18	57	
	Sometimes	63	37	
	Often or always	19	7	
Religion/spirituality leads patients to refuse, delay, or stop medically indicated therapy.[c]				0.25
	Rarely or never	63	69	
	Sometimes	37	29	
	Often or always	0	2	
How often have your patients used religion/spirituality as a reason to avoid taking responsibility for their own health?[b]				0.12
	Rarely or never	63	68	
	Sometimes	36	28	
	Often or always	1	4	

[a] Those who marked "Does not apply" are not included in the denominator.
[b] Preceded by "In your experience…."
[c] Preceded by "Considering your experience, how often do you think…."

we controlled in multivariate analyses for physicians' religious *affiliation* (none, Protestant, Catholic, Jew, Hindu, Muslim, or other), *intrinsic religiosity* (low, moderate, or high), and *spirituality* (very to not at all), along with age, gender, race/ethnicity, and foreign versus U.S. medical school graduation.

Statistical Analysis

Case weights (18) were assigned and included in analyses to account for the sampling strategy and modest differences in response rate by gender and foreign medical graduation. We first generated population estimates for each of the criterion variables and used the Pearson chi-square test to examine whether psychiatrists' responses differed from those of other physicians. We then used multivariate logistic regression to compare psychiatrists to other physicians after controlling for physicians' religious and demographic characteristics. All analyses took into account survey design and case weights by using the survey commands of Stata/SE 9.0 (Stata Corp, College Station, Tex., 2005).

Results

Survey Response

Of the 2,000 potential respondents, an estimated 9% were ineligible because their addresses were incorrect or they were deceased. (Details of ineligibility estimation are reported elsewhere [reference 13].) Among eligible physicians, our response rate was 63% (1,144 of 1,820) and did not differ for psychiatrists compared to other physicians. Overall, foreign medical graduates were less likely to respond than U.S. medical graduates (54% versus 65%; Pearson's χ^2=14.2, df=1, p<0.01), and men were slightly less likely to respond than women (61% versus 67%; Pearson's χ^2=5.9, df=1, p=0.03). These differences were accounted for by assigning case weights. Response rates did not differ by age, region, or board certification.

TABLE 3. Psychiatrists Versus Nonpsychiatrists: Addressing Religion/Spirituality in Clinical Practice

Questionnaire Item	Response Category	Psychiatrists (weighted %)	Other Physicians (weighted %)	Analysis p (χ^2)
Inquiry				
In general, is it appropriate or inappropriate for a physician to inquire about a patient's religion/spirituality?				<0.0001
	Usually or always appropriate	93	53	
	Usually or always *in*appropriate	7	47	
Do you ever inquire about patients' religious/spiritual issues?				<0.0001
	Yes	87	49	
	No	13	51	
How often do you inquire when a patient suffers from anxiety or depression?				<0.0001
	Rarely or never	21	57	
	Sometimes	35	29	
	Often or always	44	14	
Dialogue				
In general, is it appropriate or inappropriate for a physician to discuss religious/spiritual issues when a patient brings them up?				0.05
	Usually or always appropriate	97	91	
	Usually or always *in*appropriate	3	9	
When, if ever, is it appropriate for a physician to talk about his or her own religious beliefs or experiences with a patient?				<0.05
	Never	20	13	
	Only when the patient asks	32	44	
	Whenever the physician senses…[a]	48	43	
I encourage patients in their own religious/spiritual beliefs and practices…[b]				0.11
	Rarely or never	4	8	
	Sometimes	13	19	
	Often or always	83	73	
I respectfully share my own religious ideas and experiences…[b]				<0.01
	Rarely or never	74	58	
	Sometimes	24	29	
	Often or always	2	12	
I try to change the subject in a tactful way…[b]				<0.01
	Rarely or never	90	74	
	Sometimes	7	20	
	Often or always	2	6	
Prayer				
When, if ever, is it appropriate for a physician to *pray* with a patient?				<0.0001
	Never	34	16	
	Only when the patient asks	34	54	
	Whenever the physician senses…[a]	32	29	
I pray with the patient…[b]				<0.01
	Rarely or never	94	80	
	Sometimes	5	16	
	Often or always	1	4	
Barriers				
Do any of the following discourage you from discussing religion/spirituality with patients? (check all that apply)				
	Insufficient time	35	48	0.02
	Concern about offending patients	25	41	<0.01
	Insufficient knowledge/training	25	26	0.80
	General discomfort	13	24	0.02
	Concern that colleagues will disapprove	3	4	0.61

[a] Followed by "it would be appropriate."
[b] Followed by "when religious/spiritual issues come up in discussions with patients."

As shown in Table 1, psychiatrists were less religious, slightly older, and more likely to be women than nonpsychiatrists. They did not differ from other physicians with respect to race/ethnicity, foreign medical graduation, or region.

Religion and Spirituality in the Clinical Setting

Psychiatrists are more likely than other physicians to address religion/spirituality in clinical settings. To begin with, they are more likely to report that patients often mention religion/spirituality issues (46% versus 23% report that patients do so often or always) (adjusted odds ratio=3.9, 95% confidence interval [CI]=2.3–6.8). They are also more likely to believe it is appropriate to inquire about a patient's religion/spirituality (93% versus 53%; odds ratio=17.2, 95% CI=7.7–38.7), to report that they do inquire (87% versus 49%; odds ratio=9.2, 95% CI=4.6–18.4), and to report that they frequently inquire when patients suffer from anxiety or depression (44% versus 14% often/always; odds ratio=7.4, 95% CI=4.1–13.4).

Psychiatrists and nonpsychiatrists share many perceptions about the positive and negative influences of religion/spirituality. Most psychiatrists and nonpsychiatrists believe that religion/spirituality often helps patients to cope with and endure illness and suffering. They also believe that religion/spirituality gives patients a positive, hopeful state of mind. Approximately half of psychiatrists and nonpsychiatrists believe that religion/spirituality often or always provides a community that offers emotional or practical support. Only a fraction of psychiatrists and nonpsychiatrists indicated that religion/spirituality often leads patients to refuse, delay, or stop medically indicated therapy or motivates patients to avoid taking responsibility for their own health.

Three of four psychiatrists describe the influence on health as generally positive, which is not quite as high as the proportion of nonpsychiatrists who describe it so. However, more psychiatrists than nonpsychiatrists describe the influence as equally positive and negative (21% versus 12%), and psychiatrists are more likely to say that religion/spirituality sometimes causes guilt, anxiety, or other negative emotions that lead to increased patient suffering (82% versus 44% sometimes/often/always; odds ratio=5.3, 95% CI=3.0–9.2).

With respect to religion/spirituality in the clinical encounter, psychiatrists and nonpsychiatrists have points of similarity and dissimilarity (Table 3 and Table 4). Approximately half of the psychiatrists and nonpsychiatrists believe that the physician may talk about his or her own religious beliefs or experiences whenever he or she senses that it is appropriate. Only a minority of psychiatrists and nonpsychiatrists report sharing their religious ideas and experiences, suggesting that most of the time they do not sense it is appropriate. Psychiatrists are more likely than other physicians to believe it is appropriate for a physician to discuss religious or spiritual issues when a patient brings them up (97% versus 91%; odds ratio=4.1, 95% CI=1.1–14.5), more likely to often or always encourage patients in their own religious ideas and experiences (83%

TABLE 4. Comparison of Psychiatrists to Other Physicians After Control for Other Covariates

Questionnaire Item	Odds Ratio [a]	95% CI
Patients mention religion/spirituality		
Patients have mentioned religion/spirituality issues (often/always)	3.9***	2.3 to 6.8
Potential positive influences of religion/spirituality		
The influence of religion/spirituality on health is generally positive	0.6	0.3 to 1.0
Religion/spirituality helps patients cope (often/always)	1.4	0.8 to 2.7
Religion/spirituality gives patients a positive, hopeful state of mind (often/always)	0.7	0.4 to 1.2
Patients have received support from their religious community (often/always)	0.8	0.5 to 1.3
Potential negative influences of religion/spirituality		
Religion/spirituality causes negative emotions (sometimes/often/always)	5.3***	3.0 to 9.2
Religion/spirituality leads patients to forego medically indicated therapy (sometimes/often/always)	1.0	0.6 to 1.6
Patients have used religion/spirituality to avoid responsibility for their health (sometimes/often/always)	1.1	0.7 to 1.8
Inquiry		
It is appropriate for a physician to inquire about a patient's religion/spirituality	17.2***	7.7 to 38.7
I do inquire about religion/spirituality	9.2***	4.6 to 18.4
When a patient suffers from anxiety or depression, I inquire (often/always)	7.4***	4.1 to 13.4
Dialogue		
It is appropriate for a physician to discuss religion/spirituality issues when a patient brings them up	4.1*	1.1 to 14.5
It is appropriate for a physician to talk about his or her own religious beliefs or experiences whenever the physician senses appropriate	1.6	0.9 to 2.8
I encourage patients in their own religious/spiritual beliefs and practices (often/always)	2.4**	1.3 to 4.6
I respectfully share my own religious ideas and experiences (sometimes/often/always)	0.7	0.4 to 1.2
I try to change the subject in a tactful way (sometimes/often/always)	0.2***	0.1 to 0.5
Prayer		
It is appropriate to pray with a patient whenever the physician senses appropriate	1.5	0.8 to 2.6
I pray with patients (sometimes/often/always)	0.3**	0.1 to 0.7
Barriers		
Insufficient time	0.7	0.4 to 1.1
Concern about offending patients	0.5*	0.3 to 0.9
Insufficient knowledge/training	0.9	0.6 to 1.6
General discomfort	0.5*	0.2 to 0.9
Concern that colleagues will disapprove	1.1	0.3 to 3.9

[a] Multivariate logistic regression analyses with control for age, gender, ethnicity, foreign medical graduation, religious affiliation, intrinsic religiosity, and spirituality.
*p<0.05. **p<0.01. ***p<0.001.

versus 73%; odds ratio 2.4, 95% CI=1.3–4.6), and less likely to change the subject away from religion or spirituality (9% versus 26% sometimes/often/always; odds ratio=0.2, 95% CI=0.1–0.5). Yet, while a third of psychiatrists and nonpsychiatrists believe it is okay for a physician to pray with the patient whenever the physician senses it is appropriate, in practice, psychiatrists are significantly less likely than other physicians to pray with patients (6% versus 20% sometimes/often; odds ratio=0.3, 95% CI=0.1–0.7).

In considering possible barriers to addressing religion or spirituality in clinical practice, psychiatrists were less likely to cite general discomfort or to be concerned about offending patients. Psychiatrists and other physicians had similar reports of being inhibited by insufficient time, insufficient knowledge/training, and concerns about disapproval from colleagues.

Discussion

This study suggests that psychiatrists may be more open to interacting with patients about religion/spirituality in the clinical encounter than other physicians. It also shows that psychiatrists generally have a positive attitude toward the influence of religion/spirituality on health, although they recognize that religion/spirituality can have negative effects (19). Several factors may contribute to this tendency. Psychiatrist George Engel's biopsychosocial model for medicine (20) recommends that psychiatrists (and other doctors) give attention to social and cultural dimensions of their patients' illnesses. Thus, psychiatric training may predispose psychiatrists to attend to religion and to appreciate its connection to mental health. Psychiatrists may also be more likely than other physicians to encounter clinical situations in which a patient's religious beliefs must be evaluated as part of the diagnostic process. Additionally, some mental illnesses are known to be associated with hyperreligiosity, and psychiatrists are at times asked to evaluate patients' decisional capacity when religious beliefs collide with medical advice (21, 22). Each of these factors may increase psychiatrists' openness to dialogue with patients about religious/spiritual matters.

The finding that psychiatrists generally acknowledge the relevance of religion/spirituality in inpatient care and value the importance of addressing it contrasts with the claim that psychiatrists ignore the spiritual realm (23) but is consistent with other tendencies integrating religion/spirituality and psychiatry. The World Psychiatric Association recently established a section on psychiatry and religion (24), medical schools and residencies have begun to teach about religion/spirituality (24), and some writers have claimed mental health workers increasingly value close cooperation with community clergy and patient belief systems (25). These developments suggest that the historic division between psychiatry and religion may be narrowing.

Browning (26) suggested a possible reason why psychiatrists, who remain less religious than other physicians, turn out to be more open to religion/spirituality than their physician colleagues. Drawing on William James's statement that it is more worthwhile to study the results of different religions than to study their origins (27), he suggested that psychiatrists' openness may be rooted in an appreciation of religion's effects rather than religion's ontological value. Larson et al. (28) made a similar suggestion, observing that professionals may have no personal religious beliefs and still recognize that religion has an important influence on human behavior. In this way, psychiatrists may remain less religious than others without necessarily being less open to addressing religion/spirituality in clinical settings.

One implication of these findings is that patients may increasingly have the opportunity to discuss religious/spiritual concerns with their psychiatrists. Since religious patients may benefit from treatments that accommodate their religious beliefs (29, 30), outcomes could improve for this group. Improved outcomes, however, may depend upon the knowledge and expertise that psychiatrists bring to such discussions. Most psychiatrists receive little professional training about religious matters (31), and psychiatric journals seldom deal with theological issues (28, 32). Psychiatrists thus risk speaking beyond the area of their expertise and/or without having explored their own biases for or against particular viewpoints (30). Because religion/spirituality is an important component of many clinical encounters, psychiatrists would benefit from increased professional training on religious/spiritual issues as well as an increased awareness of pastoral or theologically trained colleagues with whom they might consult when appropriate.

This study has several limitations. Undoubtedly some of the variation between psychiatrists' and nonpsychiatrists' responses is shaped by the distinctive goals and interactions inherent in the field of psychiatry. Physician-patient interactions in psychiatry differ from physician-patient interactions in other fields of medicine. If religion is a topic that simply shows up more often in a psychiatrist's office and if psychiatrists handle the topic differently than other physicians (for example, reflectively listening rather than directing the patient), that could exaggerate the apparent differences between psychiatry and other medical fields. In addition, the boundaries between psychiatry, psychology, neurology, and counseling have not always been stable or well-defined (26), so it is unclear whether these findings are limited to the field of psychiatry or may be generalized to include other fields of mental health. Concerning the survey, the response rate was better than average (33), and we did not find substantial evidence to suggest response bias (6, 13). Nevertheless, religious and other characteristics may have systematically affected physicians' willingness to respond in unmeasured ways. Moreover, self-reports are always imperfect measures of physicians' actual practices.

In conclusion, this study reveals that psychiatrists are more open to engaging patients on religious and/or spiritual matters than are other physicians; thus, models that portray psychiatry and religion as conflicting fields may not be as accurate as previously assumed. The growing appreciation for the functional clinical importance of religion/spirituality in psychiatry requires continued examination and negotiation if psychiatrists are to wisely address religion and spirituality in their clinical practices.

Received Dec. 20, 2006; accepted March 2, 2007 (doi: 10.1176.appi.ajp.2007.06122088). From the Department of Medicine, Department of Pediatrics, MacLean Center for Clinical Medical Ethics, and the Pritzker School of Medicine, the University of Chicago; the Department of Psychiatry and Behavioral Sciences, Duke University Medical Center, Durham, N.C.; the Geriatric Research, Education and Clinical Center, VA Medical Center, Durham, N.C.; and the Duke Divinity School, Duke University, Durham, N.C. Address correspondence and reprint requests to Dr. Curlin, University of Chicago, 5841 South Maryland Ave., MC 2007, Chicago, IL 60637; fcurlin@medicine.bsd.uchicago.edu (e-mail).

All authors report no competing interests.

Funded by grants from the Greenwall Foundation and the Robert Wood Johnson Clinical Scholars Program (Drs. Curlin, Chin, and Lantos). Dr. Curlin is supported by National Center for Complementary and Alternative Medicine grant number K23/AT002749. The funding agencies did not have any role in the design, conduct, analysis, and interpretation of the study or in the preparation of the article.

The authors thank members of the University of Chicago Templeton Foundation Faculty Network for their feedback on an earlier draft of this article.

References

1. Freud S: Moses and monotheism, in Standard Edition of the Complete Psychological Works of Sigmund Freud, vol 23. London, Hogarth Press, 1964, pp 92–102
2. Freud S: The question of a *Weltanschauung*, in Standard Edition of the Complete Psychological Works of Sigmund Freud, vol 22. London, Hogarth Press, 1964, pp 157–164
3. Lukoff D, Lu F, Turner R: Toward a more culturally sensitive DSM-IV: psychoreligious and psychospiritual problems. J Nerv Ment Dis 1992; 180:673–682
4. Colombo D: Psychoanalysis and the Catholic Church in Italy: the role of Father Agostino Gemelli, 1925–1953. J Hist Behav Sci 2003; 39:333–348
5. Galanter M, Larson D, Rubenstone E: Christian psychiatry: the impact of evangelical belief on clinical practice. Am J Psychiatry 1991; 148:90–95
6. Curlin FA, Lantos JD, Roach CJ, Sellergren SA, Chin MH: Religious characteristics of U.S. physicians: a national survey. J Gen Intern Med 2005; 20:629–634
7. Ellison CG, Levin JS: The religion-health connection: evidence, theory, and future directions. Health Educ Behav 1998; 25: 700–720
8. Mueller PS, Plevak DJ, Rummans TA: Religious involvement, spirituality, and medicine: implications for clinical practice. Mayo Clin Proc 2001; 76:1225–1235
9. Matthews DA, McCullough ME, Larson DB, Koenig HG, Swyers JP, Milano MG: Religious commitment and health status: a review of the research and implications for family medicine. Arch Fam Med 1998; 7:118–124
10. Turner RP, Lukoff D, Barnhouse RT, Lu FG: Religious or spiritual problem: a culturally sensitive diagnostic category in the DSM-IV. J Nerv Ment Dis 1995; 183:435–444
11. American Medical Association: Program requirements for residency education in psychiatry, in Graduate Medical Education Directory 1995–1996. Chicago, American Medical Association, 1995, pp 218–225
12. Bergin AE, Jensen JP: Religiosity of psychotherapists: a national survey. Psychotherapy 1990; 27:3–7
13. Curlin FA, Chin MH, Sellergren SA, Roach CJ, Lantos JD: The association of physicians' religious characteristics with their attitudes and self-reported behaviors regarding religion and spirituality in the clinical encounter. Med Care 2006; 44:446–453
14. Curlin FA, Sellergren SA, Lantos JD, Chin MH: Physicians' observations and interpretations of the influence of religion and spirituality on health. Arch Intern Med 2007; 167:649–654
15. Curlin FA, Lawrence RE, Chin MH, Lantos JD: Religion, conscience, and controversial clinical practices. N Engl J Med 2007; 356:593–600
16. Curlin FA, Roach CJ, Gorawara-Bhat R, Lantos JD, Chin MH: How are religion and spirituality related to health? a study of physicians' perspectives. South Med J 2005; 98:761–766
17. Presser S, Blair J: Survey pretesting: do different methods produce different results? Sociol Method 1994; 24:73–104
18. Groves RM, Fowler FJ, Couper MP, Lepkowski JM, Singer E, Tourangeau R: Survey Methodology. Hoboken, NJ, John Wiley & Sons, 2004
19. Baetz M, Bowen R, Marcoux G: Spirituality and psychiatry in Canada: psychiatric practice compared with patient expectations. Can J Psychiatry 2004; 49:265–271
20. Engel GL: The need for a new medical model: a challenge for biomedicine. Science 1977; 196:129–136
21. Stotland NL: When religion collides with medicine. Am J Psychiatry 1999; 156:304–307
22. Hall DE, Curlin F, Koenig HG: When clinical medicine collides with religion. Lancet 2003; 362(suppl):s28–s29
23. Sims A: "Psyche"—spirit as well as mind? Br J Psychiatry 1994; 165:441–446
24. O'Connell RA: The church and psychiatry. National Catholic Weekly 2001; 185:15–17
25. Greenberg D, Witztum E: Problems in the treatment of religious patients. Am J Psychotherapy 1991; 45:554–565
26. Browning D: Internists of the mind or physicians of the soul: does psychiatry need a public philosophy? Aust N Z J Psychiatry 2003; 37:131–137
27. James W: Varieties of religious experience, in Writings 1902–1910. New York, Literary Classics of the United States, 1987, pp 11–31
28. Larson DB, Pattison EM, Blazer DG, Omran AR, Kaplan BH: Systematic analysis of research on religious variables in four major psychiatric journals, 1978–1982. Am J Psychiatry 1986; 143: 329–334
29. Propst LR, Ostrom R, Watkins P, Dean T, Mashburn D: Comparative efficacy of religious and nonreligious cognitive-behavioral therapy for the treatment of clinical depression in religious individuals. J Consult Clin Psychol 1992; 60:94–103
30. Meador KG, Koenig HG: Spirituality and religion in psychiatric practice: parameters and implications. Psychiatr Ann 2000; 30: 549–555
31. Sansone RA, Khatain K, Rodenhauser P: The role of religion in psychiatric education: a national survey. Acad Psychiatry 1990; 14:34–38
32. Weaver AJ, Samford JA, Larson DB, Lucas LA, Koenig HG: A systematic review of research on religion in four major psychiatric journals: 1991–1995. J Nerv Ment Dis 1998; 186:187–189
33. Asch DA, Jedrziewski MK, Christakis NA: Response rates to mail surveys published in medical journals. J Clin Epidemiol 1997; 50:1129–1136