SPECIAL ARTICLES

The Case for Cultural Competence in Health Professions Education

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Health profession schools in the United States have to be able to meet the health and pharmaceutical care demands of a rapidly growing racial and multiethnic population. One tactic is to develop and implement or expand existing resources and didactic courses to address cultural competence in the curricula of every college and school of pharmacy. The curriculum should require a focus on the reality of evidence-based health disparities among racial and ethnic minority populations; importance of providing culturally competent care and communication to meet the health needs of diverse patient populations; and exposure to cultural diversity. Students should be grounded in cultural awareness and cultural sensitivity. This article establishes a case for integrating cultural competence into the curricula of health professions schools.

Keywords: health disparities; cultural competence; health professions; education.

HEALTH DISPARITIES

Introduction

The shift in the demographics of the United States is steadily increasing towards racial and ethnic minority populations of varied cultural and linguistic backgrounds. The US Census Bureau projects that the overall US population will increase by 50%, from 263 million in 1995 to 394 million in 2050.¹ Additionally, racial and ethnic minority populations will account for nearly 90% of the increase in the overall US population from 1995 to 2050. (The US Census Bureau defines "minority" as the combined population of people who are Black, American Indian, Eskimo, Aleut, Asian, Pacific Islander, or of any race of Hispanic origin.) The word *minority* may become meaningless as the proportion of the aforementioned racial and ethnic minority populations increase and the proportion of non-Hispanic white population decreases. The Census Bureau projects that by 2050, non-Hispanic whites will constitute less than 53% of the US population (minorities will constitute more than 47%). The Hispanicorigin population will be the fastest growing ethnic group; however, the fastest growing racial groups will continue to be the Asian and Pacific Islander population.²

The increase in racial, ethnic, cultural and linguistic diversity among the US population poses a unique challenge for all health professions. Race and ethnicity are

associated with persistent, and often increasing, health disparities among various sectors of the US population.³ Thus, the anticipated demographic changes over the next decade magnify the critical need to address disparities in health status, particularly in different population groups. Racial and ethnic minority groups currently experiencing poorer health outcomes are expected to increase as a proportion of the total US population.³ Therefore, the future of the overall health of the US population will be influenced considerably by the success in improving the health of these groups.³ Accordingly, there is an increased need for all health professionals to better respond to the population health and health care necessities of racial and ethnic minorities.⁴ For example, professions such as medicine and pharmacy continue to be confronted with disparities in the incidence of diseases, medication-related/ health outcomes, and access to health care among all racial and ethnic minority groups. The report published by the Institute of Medicine in 2003, entitled "Unequal treatment: confronting racial and ethnic disparities in healthcare" underscored the gravity and extent of racial/ethnic disparities in health care in the United States.⁵ Cardiovascular diseases, diabetes, HIV/AIDS, cancer, and tuberculosis continue to disproportionately burden minority populations compared to nonminority populations.⁶ Racial disparities in the use of prescription drugs and other health services, and the relationship of these disparities to differences in treatment and health outcomes continues to persist. In addition, while most of the US population has health insurance, racial and ethnic minorities are less likely to report that they have health insurance compared with whites.⁷ The existence of these

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health and health care disparities between diverse populations continues to be a public health dilemma and an ongoing task for Healthy People 2010 to reduce and ultimately eliminate. (Healthy People 2010 is a national health promotion and disease prevention initiative to increase the quality and years of healthy life among individuals of all ages and eliminate health disparities among different segments of the populations.)

Contributing Factors

Health disparities are defined by the National Institutes of Health (NIH) as: "differences in the incidence, prevalence, mortality, and burden of diseases and adverse health conditions that exists among specific population groups."⁸ Although the reasons for health disparities are multiple and complex, there are a number of well-documented factors that may contribute to health disparities. There exist among all populations genetic and biologic factors that contribute to diseases associated with health disparities.⁹ The geographic location of available health care services and factors within the health system, including cultural and linguistics barriers, time pressures, and cost-control strategies also are potential factors for disparities.⁹ Bias, stereotyping, prejudice, and clinical uncertainty on the part of the health care provider during patient encounters may also contribute to disparities in health. Other factors contributing to health disparities are low health literacy (ie, the ability to read, understand, interpret and act on health information) levels among patients.¹⁰ If patients cannot understand needed health information, attempts to improve the quality of health care and reduce health care costs and disparities may be unsuccessful. In addition, an increasing body of evidence documents racial and ethnic differences in the quality of care that may contribute to disparities in health among minority/ethnic populations.⁵ A health provider's lack of cultural awareness of the values, customs, and norms of multiethnic patient populations, and lack of knowledge of and experiences with the aforementioned factors, may further exacerbate the effects of health disparities.

Disparities in health and health care may arise from the inability of a health provider to offer culturally appropriate health care services to multiethnic patients based on cultural and linguistic barriers. According to Sarto, "most practicing physicians, irrespective of their own cultural backgrounds, seldom have had much intercultural contact with others who are substantially unlike themselves."⁹ Sometimes it may be the health professionals' lack of knowledge about cultural health beliefs and practices that negatively affects patient care. For example, if a practitioner is unaware that some patients of Asian descent may take only half of the prescribed amount of medicine because those patients believe that the dosage is designed for Caucasians, the practitioner may wonder why treatment has been ineffective. The introduction of multiculturalism in the training of health professionals from all disciplines is warranted, particularly in providing culturally competent care to racial and ethnic minority patient groups.

In 2004, Wilson et al conducted an analysis of a national survey of 789 first- and fourth-year medical students that included questions addressing disparate treatment of patients in the health care system based on 4 categories: health insurance status, income level, English language speaking ability, and racial/ethnic backgrounds.¹¹ The student results were compared to survey answers administered to physicians (n = 2,608) and the general public (n = 3,884) about perceptions of health care disparities. The authors found that students were more likely than physicians to perceive inequitable treatment of patients. For example, approximately 80% of medical students compared to 45% of physicians perceived inequitable treatment of patients in the health care system based on English language speaking ability; and 57% compared to 30%, respectively, for inequality based on racial/ethnic backgrounds. The results of the analysis demonstrate a need for practicing physicians as well as other health providers to conduct cultural self-assessments, particularly in delivering health care to diverse ethnic minority patient populations. Furthermore, there is some evidence of desensitization about issues that may contribute to health disparities among racial and ethnic minority groups along the continuum of education. Effecting the education of health professional students by incorporating curricula that addresses health disparities and the need for cultural competence is vital.

The role of a pharmacist encompasses cognitive services in that pharmacists provide pharmaceutical care to patients in addition to preparing and dispensing medication. Pharmaceutical care is defined as the direct, responsible delivery of medication-related care for the purpose of achieving definite outcomes that improve a patient's quality of life.¹² For instance, as part of pharmaceutical care, pharmacists may provide patient counseling sessions to discuss the implications of noncompliance with medication prescriptions. However, factors such as culture, language, and education level may present barriers to the delivery of optimal pharmaceutical care to multiethnic patient populations.

In 2003, Brown et al conducted a national representative survey of medical/executive directors or pharmacists at 1260 community and mental health centers to assess issues and barriers related to the delivery of pharmaceutical care.¹³ The overall response rate was 46.9% (558 surveys returned out of 1,119 assumed delivered). Issues that presented as barriers related to the delivery of pharmaceutical care were categorized into 4 areas: facilities/structure; equipment/education; patient-related; and personnel. The authors found that the top 3 issues reported in each category were as follows:

- facilities/structure: private counseling area (58.5%), lack of space (53.2%), and insufficient time (26.6%);
- equipment/education: computer system/software (61.7%), computer training (18.1%), and pharmaceutical care training/ continuing education (12.8%);
- patient-related: language (67%), socioeconomic status (25.5%), and culture (11.7%); and
- personnel: inadequate staffing of personnel (46.8%), bilingual/multilingual staff (29.8%), and relationships/teamwork (21.3%).

These findings provide insight about barriers to the provision of pharmaceutical care that may contribute to health disparities among racial and ethnic minority patient groups. Also, further thought is applied to the adequate training of pharmacists to deliver optimal pharmaceutical care to patients of diverse ethnic minority backgrounds.

CULTURAL COMPETENCE Defining Cultural Competence

There is no consensus on a single definition of *cul*tural competence. Cross et al defined cultural competence as "a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or profession that enables that system, agency, or profession to work effectively in cross-cultural situations."^{14,15} The definition has been widely adapted and modified. The Office of Minority Health (OMH) of the US Department of Health and Human Services defines cultural competence from an individual and organization perspective as having the capacity to function effectively within the realm of cultural beliefs, behaviors, and needs presented by consumers and their communities.¹⁶ Moreover, OMH has created national standards for addressing cultural fluency in health care (ie, linguistic services for limited-English speaking patients) that are directed at health care organizations. However, health professionals are strongly encouraged to utilize the standards to make their practices more culturally and linguistically accessible. In 2002, Betancourt et al described cultural competence in the area of health care; specifically, the ability of systems to provide care to patients of diverse backgrounds, including tailoring the delivery of health care to meet patient's social, cultural, and linguistic needs.¹⁷ For the purpose of this article, cultural competence is a student's ability in the health professions to deliver culturally appropriate

and specifically tailored care to patient populations with diverse values, beliefs, and behaviors.

Other terms similar to cultural competence like *cultural proficiency* and *cultural humility* have emerged to convey the idea of more effective cross-cultural capabilities. Cultural proficiency as developed by the National Alliance for Hispanic Health is shown when providers and systems seek to do more in delivering unbiased care as they endorse the positive role culture can play in a person's health and wellbeing.¹⁸ Cultural humility incorporates a health provider's commitment and active engagement in a lifelong practice of self-evaluation and self-critique within the context of the patient-provider (or health professional) relationship through patient-oriented interviewing and care.¹⁹ Cultural humility has been suggested as a more appropriate target for multicultural medical education than cultural competency.¹⁹

Different cultural competence techniques have been identified in the literature as possible approaches to conceptually improve outcomes and reduce disparities. These techniques include interpreter services, recruitment and retention policies, training, coordinating with traditional healers, use of community health workers, culturally competent health promotion, immersion into another culture, administrative and organizational accommodations, and models.²⁰ Other studies have explored the potential for the impact of such programs.²¹ There is some evidence that cultural competency training improves the knowledge of health professionals and may improve the attitudes and skills of health professionals as well as patient satisfaction. However, a large part of the literature is not based on original data.²² Little is known about the impact of such training on patient adherence, equity of services across racial groups, or patient health status outcomes.^{23,24} Furthermore, little is known about the costs of cultural competency training.²⁵

Integrating Cultural Competence in Health Professions Training

The health professions in the United States have to be able to meet the health and pharmaceutical care demands of a rapidly growing multiethnic population. One tactic is to develop and implement or expand on the resources and didactic courses and training of cultural competent programs in health professions schools. The curriculum should require a focus on the reality of evidence-based health disparities among racial and ethnic minority populations; importance of providing culturally competent care and communication to meet the health needs of diverse patient populations; and exposure to cultural diversity. Overall, students should be grounded in cultural awareness and cultural sensitivity.

In 1999, Chevannes conducted a pre- and post-analvsis of training needs of a purposive sample of 22 health professionals working across 5 health services organizations located in a multiracial city.²⁶ The aim of the study was twofold. The primary aim was to assess what health professionals knew about caring for patients and other health service users from multiethnic patient groups. The secondary aim was to find out their perceptions of training needs in their respective area of work. Sixty-five percent of participants confirmed that no attention was given in their initial education to the health care needs of minority ethnic groups. Instead, participants engaged in self-initiated learning to improve knowledge and understanding of working with such groups. Furthermore, all participants indicated that meeting the health care needs of minority ethnic populations was important and that lack of effective communication with these populations affected the quality of care they received.

The results of Chevannes' study demonstrate the need to integrate cultural competence into the foundations of health profession education. A core curriculum that includes cultural competency training affords students both experience in and understanding of delivering high-quality care to multiethnic populations. However, before any strategies for teaching culturally competent care can be implemented effectively, a depth of changes must be made within the context of existing health professions training.

Model for Integration. Assemi and colleagues have done exemplar work in pharmacy education in the area of cultural competence, assessing the impact of course and curricular outcomes, and the professional practice of pharmacy graduates.²⁷ More specifically, Assemi presented considerations for integrating cultural competency training in pharmacy education.²⁸ Some of the considerations include recruiting institutional and leadership support (eg, chancellors, deans, department chairs, and curriculum committees); identifying current faculty members willing to develop and teach content; identifying course coordinators willing to integrate training content within existing curriculum; and procuring resources and training tools that involve faculty development workshops utilizing textbooks, teaching tools, and videos to address cultural competency. Additionally, curriculum restructuring may be needed that allows for orientationrelated activities to teaching cultural diversity, core and elective didactic (classroom) courses, and core and elective experimental courses in the subject area. Certainly, these considerations extend to other health profession programs as well.

Collaborative Care Model. The new practice model that can deal with the challenges of increasing the success

of students in the provision of culturally competent care in the health professions is the Collaborative Care Model. The model cultivates continuous improvement in the health status of individuals and communities by integrating education, research, and clinical care. Collaborative care must be quality-driven, evidenced-based, and above all, patient-, family-, and community-oriented.²⁹ Embedded within the model is an alliance of patients, providers, researchers, educators, communities, and health systems that addresses the identified issues within the US health care system. Additionally, there is great flexibility within the model to foster across the broad curricular content for teaching cultural competency in health professions schools and thus train students to work together with other health professionals to address health disparity issues (ie, via the sharing of information, becoming involved in medical and community tasks forces and policy groups, etc). Health professional students must be trained within the context of the model in the early stages of their practicing careers to work as partners on multidisciplinary teams for better patient care that is culturally appropriate and patient-centered.

Other Considerations and Needed Resources. Other considerations and resources for expanding the capacity for teaching multicultural content are needed.

Additional minority health professional students and faculty members. The training of more ethnic minority students and recruitment of more ethnic minority faculty members in the health professions across the country is necessary. Diversity fosters learning, knowledge, skills, and abilities that are vital to professionalism.³⁰ Learning is enhanced in settings where individuals are part of a diverse group of people who are not like themselves.^{30,31} In particular, diversity in health professions' training environments improves the cross-cultural training and cultural competencies of all participants.^{30,32,33} Furthermore, interaction among students from diverse backgrounds helps to challenge assumptions and broaden perspectives regarding racial, ethnic, and cultural differences,³⁴ thereby facilitating professionalism.³⁰ According to a recent report by the Institute of Medicine, increasing racial and ethnic diversity among health professionals is associated with improved access to care for racial and ethnic patients, greater patient choice and satisfaction, better patient-provider communication, and improved educational experiences for allied health students.34

Expert faculty in the content area. Recruiting additional faculty members who are experts in cultural diversity training and assessment methods should be emphasized.

Advanced training opportunities, grants, awards, and incentives. Faculty grants for teacher training and development; textbooks and media resources; and other support for student exposure to field experiences, as well as novel experimental practice sites, is needed. Faculty members will have to be trained to appropriately bridge evidence-based knowledge with multicultural content. As an example, there are currently faculty development workshops entitled "Incorporating Cultural Competence into the Pharmacy Education" being run by the Center for the Health Professions, University of California, San Francisco, for which continuing education credits can be earned from the Accreditation Council for Pharmaceutical Education.³⁵ Effort and scholarship in this content area should be valued and recognized for promotion and tenure purposes to encourage (and not penalize) those persons who are interested in making cultural competency training their specialty. In addition, there is a need for curriculum content that transcends the classroom, such as service projects and externships with community service organizations in various geographical areas. Students should receive appropriate credit for such service work.

Curriculum assessment. A curriculum design committee is specifically warranted for developing and implementing appropriate measurement tools for assessing multicultural content. The committee has to make certain that the teaching of cultural diversity is not only a current objective, but prominent within a school's long-term strategic planning and organizational facilitation. The committee also needs to make sure that educational outcomes include professionalism that embodies cultural sensitivity and patient-centered care.

Implications to Health Professions

While the causes of health disparities are complex and multifaceted and have been associated with socioeconomic status and cultural and environmental factors,⁵ there are arguments as to whether disparities in health status can be attributed to racism or genetics.^{36,37} In addition to the grave ethical issues raised by allowing health disparities in the United States to persist, there is a concern that these disparities could jeopardize the economic advancement of society as a whole, and economic and professional advancement of minorities in particular.⁵ It is also disconcerting that disparities may reflect the extent to which subjectivity can permeate health care and affect quality of care. However, health professionals are at the frontline of quality patient care. The mission and ethical responsibility of every health professional is to maximize the health of all patients.

CONCLUSIONS

Changing the behaviors, attitudes, and policies within the health professions to address cultural competence is

warranted to meet the health care needs of diverse patient populations. This change is most effective at the initial stage of health professional education with the implementation of a culturally competent curriculum that addresses health disparities. Additionally, the curricula should be supplemented with knowledge and skills drawn from other disciplines such as the behavioral and social sciences. Educating health professional students about cultural competence, including cultural knowledge, awareness, and sensitivity, may help to bridge the gaps between provider and patient relationships. Health professional students must acquire from their cultural competency training the following in order to be effective when they enter practice: knowledge of cultural diversity with respect to the communities they serve; competencies to be a part of and work with populations that suffer disproportionately from health disparities; and a nonjudgmental and respectful attitude towards all patients. Although health disparities continue to exist as a challenge, health professionals have the improved capacity to work together in addressing and ultimately eliminating health disparities.

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REFERENCES

1. Wan H, Hobbs F. Minority Population Growth: 1995 to 2050, The Emerging Minority Marketplace. Washington: U.S. Department of Commerce, Minority Business Development Agency; 1999. Available at: http://www.mbda.gov/documents/mbdacolor.pdf. Accessed October 8, 2005.

2. United States Census Bureau, Population Division and Housing and Household Economic Statistics Division. National Population Projections. Avail;able at: http://www.census.gov/population/www/pop-profile/natproj.html. Accessed March 15, 2006.

3. Office of Minority Health. Eliminating Racial and Ethnic Health Disparities. Available at: http://www.cdc.gov/omh/AboutUs/ disparities.htm. Accessed March 14, 2006.

4. Institute of Medicine. The Right Thing to Do, The Smart Thing to Do: Enhancing Diversity in Health Professions. Summary of the Symposium on Diversity in Health Professions in Honor of Herbert W. Nickens, M.D. August 31, 2001. Available at: http://

www.nap.edu/books/0309076145/html. Accessed October 8, 2005.

5. Smedley B, Stith A, Nelson A, eds. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care.* Washington, DC: National Academies Press; 2003.

6. Centers for Disease Control and Prevention. Healthy People 2001: final review. Available at: http://www.cdc.gov/nchs/data/hp2000/hp2k01.pdf. Accessed November 8, 2005.

7. Agency for Healthcare Research and Quality. National Healthcare Disparities Report. Available at: http://www.ahrq.gov/qual/nhdr03/ nhdrsum03.htm. Accessed November 5, 2005.

American Journal of Pharmaceutical Education 2006; 70 (6) Article 124.

8. National Institutes of Health. Strategic Plan to Reduce and Ultimately Reduce Health Disparities. Available at: http://

www.nih.gov/about/hd/strategicplan.pdf. Accessed October 8, 2005. 9. Sarto G. Of disparities and diversity: where are we? *Am J Obstet Gynecol*. 2005;192:1188-95.

10. Weiss BD, HartG, Pust RE. The relationship between literacy and health. *J Health Care Poor Underserved*. 1991;1:351-63.

11. Wilson E, Grumbach K, Huebner J, Agrawal J, Bindman AB. Medical student, physician, and public perceptions of health care disparities. *Fam Med.* 2004;36:715-21.

12. American Society of Hospital Pharmacists. ASHP Statement on Pharmaceutical Care. *Am J Hosp Pharmacists*. 1993;50:1720-3.

13. Brown CM, Barner JC, Shepard MD. Issues and barriers related to the provision of pharmaceutical care in community health centers and migrant health centers. *J Am Pharm Assoc.* 2003;5:1.

14. Cross TL, Barzon BJ, Dennis KW, et al. Towards a culturally competent system of care: A monograph on effective services for minority children who are severely emotionally disturbed. Washington, DC: CASSP Technical Assistance Center, Georgetown

University Child Development Center, 1989.

15. National Center for Cultural Competence. Definition and Conceptual framework for cultural competence. Available at: http://gucchd.georgetown.edu/nccc/framework.html. Accessed March 16, 2006.

16. US Department of Health and Human Services, Office of Minority Health (2001). National Standards for Culturally and Linguistically Appropriate Services in Health Care: Final Report, Available at http://www.omhrc.gov/clas/. Accessed March 16, 2006.

17. Betancourt J, Green A, Carrillo E. Cultural competence in health care: emerging frameworks and practical approaches. Field Report. New York, New York: Commonwealth Fund, 2002. Available at: http://www.cmwf.org/usr_doc/

betancourt_culturalcompetence_576.pdf. Accessed November 2, 2006.

18. National Alliance for Hispanic Health, 2001. A Primer for cultural proficiency: Towards quality health care services for Hispanics. Washington, DC.

19. Tervalon M, Murray-Garcia J. Cultural humility versus cultural competence: a Critical discussion in defining physician training outcomes in multicultural education. *J Health Care Poor Underserved.* 1998;9:117-25.

20. Brach C, Fraserirector I. Can cultural competency reduce racial and ethnic health disparities? A review and conceptual model. *Med Care Res Rev.* 2000;57(S1):181-217.

21. Brach C, Fraser I. Reducing disparities through culturally competent health care: an analysis of the business case. *Quality Manage Health Care* 2002;10:15-28.

22. Taylor S, Lurie N. The role of culturally competent communication in reducing ethnic and racial healthcare disparities. *Am J Managed Care.* 2004;10:SP1-4.

23. Anderson LM, Scrimshaw SC, Fullilove MT, Fielding JE, Normand J. The tasks force on community preventive services culturally competent health care systems. A systematic review. *Am J Prev Med.* 2003;24(3S):68-79. 24. Tu K, Davis D. Can we alter physician behavior by educational methods? Lessons learned from studies of the management and follow-up of hypertension. *J Continuing Educ Health Professions*. 2002;22:11-22.

25. Beach MC, Price EG, Gary TL, et al. Cultural competence: a systematic review of health care provider educational interventions. *Med Care.* 2005;43:356-73.

26. Chevannes M. Issues in educating health professionals to meet the diverse needs of patients and other service users from ethnic minority groups. *J Adv Nurs.* 2002;39:290-8.

27. Assemi M, Cullander C, Humon KS. Implementation and evaluation of cultural competency training for pharmacy students. *Ann Pharmacother*. 2004;38:781-6.

28. Assemi M. Integrating Cultural competence into Health Professions Curricula. Presented at the Association of American Colleges of Pharmacy and Association of American Medical Colleges. Cultural competence in health professions training: considerations for implementation. Webcast on May 12, 2005. Available at: http://w3admin.ilearning.com/coursepath/AACP/ sg41A_L82D_E9F/Track/PR534_P508_2352/_resources_/ 52A_0202_247_2ich/Americanetotical.html.end.for.ndf

53A_929Q_247_3ieh/AssemipresentationHandout4_15_05.pdf. Accessed March 16, 2005.

29. Cohen JJ. Closing the gaps by working together". Presented at the Association of American Medical Colleges annual meeting, October 24, 1999. Washington, DC Available at: http:// www.aamc.org/newsroom/speeches/99amspee.htm. Accessed March

15, 2006.
30. Chisholm MA. Diversity: a missing link to professionalism. *Am J Pharm Educ.* 2004; 68(5):Article 120.

31. Guinier L. Colleges should take 'confirmative action' in admissions. The Chronicle of Higher Education. 2001; 48(16). Available at: http://www.minerscanary.org/mainart/highered.shtml. Accessed May 18, 2004.

32. Cohen JJ. The consequences of premature abandonment of affirmative action in medical school admissions. *JAMA* 2003;289:1143-9.

33. Whitla DK, Orfield G, Silen W, Teperow C, Howard C, Reede J. Educational benefits of diversity in medical school: a survey of students. *Acad Med.* 2003;78:460-6.

34. Smedley BD, Butler AS, Bristow LR, eds. In the nation's compelling interest: ensuring diversity in the health care workforce. Institute of Medicine (IOM) of The National Academies.

Washington, D.C.: The National Academies Press; 2004. Available at: http://www.nap.edu/books/030909125X/html/. Accessed March 19, 2006.

35. University of California, San Francisco School of Pharmacy and Center for Health Profession CE program, "Incorporating cultural competence into pharmacy education. A faculty development workshop." Available at: http://futurehealth.ucsf.edu/cnetwork/ index.html. Accessed March 15, 2006.

36. Bhopal R. Is research into ethnicity and health racist, unsound, or important science? *BMJ*. 1997;314:1751-6.

37. Stolley JM, Koenig H. Religion/spirituality and health among elderly African American and Hispanics. *J Psychosoc Nurs Ment Health Serv.* 1997;35:32-8.