

## VIEWPOINTS

### **Increasing the Representation of Underrepresented Minority Groups in US Colleges and Schools of Pharmacy**

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The United States is rapidly becoming a more racially and ethnically diverse nation. The US Census Bureau projects that by 2050, non-Hispanic whites will constitute less than 53% and minorities will constitute more than 47% of the American population. According to the Census Bureau's 2006 American Community Survey,<sup>1</sup> Blacks, Hispanics, and Native Americans comprise 28% of the US population (Black, 12.4%; Hispanic or Latino 14.8%, and Native American, 0.8%). When the representation of Blacks, Hispanics and Native Americans in colleges and schools of pharmacy is compared to these census data, it is clear that the representation of these racial and ethnic groups is considerably lower than their representation in the general population. In 2006, these underrepresented minority groups accounted for 12% of the total number of doctor of pharmacy (PharmD) degrees conferred as first professional degrees (Black, 7.4%; Hispanic, 4.2% and Native American, 0.4%).<sup>2</sup> Stronger representation of Black, Hispanic and Native American students graduating from PharmD programs is necessary to positively impact the health outcomes of an increasingly diverse US population, and to develop and sustain a pool of culturally competent educators, researchers, and practitioners.

Pharmacy is experiencing many of the same challenges faced by dentistry, medicine, and nursing in increasing representation of minority students in their professional programs. These challenges include the level of K-12 educational preparation of minority students for college work, including inadequate science education; inadequate numbers of faculty members from minority groups to advise, teach and mentor underrepresented minority students; increasing costs of higher education and declining levels of financial aid; lower performance on admission tests; an over reliance on standardized testing in the admissions process<sup>3</sup>; unsupportive institutional cultures<sup>3</sup>; lack of sufficient funding for student support services; and lack of administrative leadership to guide the development and implementation of sustainable programs to address recruitment, retention, and graduation of underrepresented minority students. There are some

emerging issues in pharmacy education that have the potential to negatively impact future enrollment of underrepresented minority students. These issues include increasing the number of hours of pharmacy prerequisites and making the baccalaureate degree a requirement for admission to the PharmD program.

Data provided in the American Association of Colleges of Pharmacy's *Profile of Pharmacy Students* on applications to first professional degree programs, degrees conferred, and student enrollment in professional and graduate degree programs at US colleges and schools of pharmacy with accredited professional degree programs is instructive. In this discussion, particular attention is paid to the data reported for underrepresented minority groups, Black or African American, Hispanic or Latino, and Native American (American Indian or Alaska native) in 2003-2004<sup>4</sup>, 2004-2005<sup>5</sup> and 2005-2006.<sup>2</sup>

The composition of the applicant pool is one indicator of the collective success of AACP's member colleges and schools efforts to recruit underrepresented minority students. According to the AACP's *Profile of Pharmacy Students*, underrepresented minority candidates submitted 12.6% of pharmacy applications in 2003-2004 (Black, 8.4%; Hispanic, 3.7% and American Indian, 0.5%)<sup>4</sup>; 11.2% in 2004-2005 (Black, 6.9%; Hispanic, 3.9%; and American Indian, 0.4%)<sup>5</sup>; and 13.3% in 2005-2006 (Black 8.9%, Hispanic 3.9% and American Indian 0.5%).<sup>2</sup> There are some limitations to the interpretation of these data due to colleges and schools reporting applicants that had applied to multiple colleges or schools. This impacted our ability to accurately assess the size and composition of the applicant pool.

Between 1988 and 2002,<sup>2</sup> the enrollment of underrepresented minority students in first professional degree (baccalaureate, PharmD) programs continued to increase from 10.6% (3,058) of 28,891 total students enrolled in 1988, to 14.0% (5,460) of 38,902 total students enrolled in 2002. There was almost a 3% decrease in underrepresented minority enrollment from 14% in 2002 to 11.1% (5,383) of 48,592 total students enrolled in 2006. According

to AACP's Fall 2006 Profile of Pharmacy Students,<sup>2</sup> the pharmacy student enrollment was composed of White 60.2%; Black or African American 6.7%; Hispanic or Latino, 3.9%; Asian, Hawaiian or other Pacific Islander, 21.2%; American Indian or Alaska native, 0.5%; Other/unknown, 5.4% and Foreign, 2.1%. The largest percent change from previous year enrollment (2006 compared to 2005) was an 11.6% decrease in Black student enrollment and a 6% decrease in Native American enrollment. Hispanic enrollment increased modestly from 5.1% to 6.2%.

Of the reported 5,383 underrepresented minority students enrolled in US colleges and schools of pharmacy, 1,850 (34.4%) were enrolled at 5 of the 6 predominantly minority institutions (Howard, Florida A&M, Texas Southern, Puerto Rico, and Xavier). Notably, 11 colleges/schools (Arnold & Marie Schwartz, Howard, Florida A&M, Florida, Nova Southeastern, Puerto Rico, Rutgers, New Mexico, Texas Southern, University of Texas at Austin, and Xavier) had combined enrollments of 2,892 or 54% of the underrepresented minority students enrolled in 2006. Almost 63% of the 2,892 students were enrolled at 4 schools: Florida A&M, Nova Southeastern, Texas Southern, and Xavier. It is important to constantly examine these data to ascertain changes in the contributions of various colleges and schools to increasing underrepresented minority participation. Also, it would be constructive to know precisely what these and other colleges and schools are doing to improve underrepresented minority participation so that these practices, programs, and strategies can be shared across the academy.

Underrepresented minority students received 11.5% (Black, 7.5%; Hispanic, 3.6%; and Native American, 0.4%) of the 8,158 first professional degrees (baccalaureate, PharmD) conferred in 2003-2004<sup>4</sup>; 13.7% (Black, 8.7%; Hispanic, 4.4%; and Native American, 0.6%) of the 8,268 first professional degrees (baccalaureate, PharmD) conferred in 2004-2005<sup>5</sup>; and 12% (Black, 7.4%; Hispanic, 4.2% and Native American, 0.4%) of 9,040 first professional PharmD degrees conferred in 2005-2006.<sup>2</sup> There were a total of 25,466 pharmacy graduates from 2004 to 2006. Approximately 12.4% or 3,156 of these graduates were members of underrepresented minority groups. The percent representation of underrepresented minority graduates was 63.4% Black, 32.7% Hispanic, and 3.9% Native American. Eleven schools (Arnold and Marie Schwartz, Florida A&M, Hampton, Howard, Maryland, Massachusetts-Boston, Mercer, Nova Southeastern, Temple, Texas Southern, and Xavier) produced 58.7% or 2,000 Black pharmacy graduates; 5 schools (Florida, New Mexico, Nova Southeastern, Puerto Rico, and University of Texas at Austin) produced 43.8% or 1,033 Hispanic or Latino pharmacy graduates;

and 2 schools (Oklahoma and Montana) produced 46% or 123 Native American pharmacy graduates. Five historically black colleges and schools of pharmacy (Hampton, Howard, Florida A&M, Texas Southern and Xavier) produced 69% of all first professional degrees conferred to Black graduates. The analysis of the data shows that approximately 13% of colleges and schools are educating 58.7% of Black graduates; approximately 6% of colleges and schools are educating 43.8% of Hispanic pharmacy graduates; and approximately 2% of colleges and schools are educating 46% of Native American pharmacy graduates. These data suggest that there are substantial opportunities for additional colleges and schools to contribute to closing the gap in participation of underrepresented minorities in pharmacy.

In 1998, the AACP Ad Hoc Committee on Affirmative Action and Diversity was appointed to assist AACP member schools in understanding the foundation of the AACP's policy supporting diversity and affirmative action in pharmaceutical education. The Committee's final report<sup>6</sup> was issued in October 2000. One of the Committee's charges was to determine what measures or strategies AACP member schools were successfully employing to ensure diversity and what additional or alternative approaches could be recommended to help increase academic pharmacy's commitment to diversity in light of the legal and sociopolitical environment. The Committee recommended a set of strategies that colleges and schools of pharmacy could use to promote diversity and cultural competence and bring presently underrepresented populations into full participation in the academy. The strategies included pharmacy colleges and schools establishing goals, objectives, and accountability within their program policies regarding diversity and cultural competence; identifying and engaging minority graduates for recognition, service as mentors or preceptors for minority students, and participation in student recruitment activities; funding of minority student support services; and establishing cooperative agreements with majority or minority institutions for student exchanges, visiting scholars, and practice experiences. Perhaps it is time to revisit these strategies and determine to what extent they have been implemented in AACP member colleges and schools.

The Committee's report in response to its charge to examine and quantify the success that pharmaceutical education has had in achieving societal expectations for diversity in pharmaceutical education acknowledged that a few institutions within AACP have achieved much of the success in "opening avenues" into academic pharmacy for minority students. At the time of the report, AACP had 4 institutions designated as historically black

colleges and universities (HBCUs) by the federal government: Florida A&M, Howard, Texas Southern, and Xavier. These 4 AACP member colleges and schools of pharmacy were responsible for 44.8% or 149 of 401 first professional degrees (baccalaureate and PharmD) conferred to Black pharmacy students in 1998-1999. Three AACP member colleges and schools (Arnold and Marie Schwartz, New Mexico, and Puerto Rico) conferred 40.6% of first professional baccalaureate degrees awarded to Hispanic pharmacy students during this same period. Seven years later (2005-2006), with 4 of the 5 HBCUs reporting data for this period, Florida A&M, Howard, Texas Southern, and Xavier, accounted for the graduation of 38.2% of Black pharmacy students. Adding the contributions of Arnold and Marie Schwartz, Temple and Nova Southeastern, 7 AACP member schools graduated almost 50% of URM Black students in 2005-2006. According to AACP data for the same year, there were 4 member colleges and schools (New Mexico, Nova Southeastern, Puerto Rico, and UT Austin) responsible for graduating 41.1% of all Hispanic students.

*Missing Persons: Minorities in the Health Professions, A Report of the Sullivan Commission on Diversity in the Healthcare Workforce*<sup>3</sup> offers 37 recommendations for multiple actions to address the root cause of underrepresentation of minorities in the health professions. While the report focuses on medicine, dentistry, and nursing, the 3 overarching principles upon which the recommendations were based have relevance to pharmacy. The principles are that to increase diversity in the health professions, the culture of health professions schools must change; new and nontraditional paths to the health professions should be explored; and commitments must be at the highest levels of government and in the private sector. The Report suggests that improving underrepresentation by recruiting more students of color to the health professions will help to overcome health disparities and improve the health care of Blacks and other underrepresented groups. The Report also links the training of a diverse and culturally competent workforce of health care professionals to improvements in the quality of healthcare in the United States.

The Sullivan Commission Report is only one of several reports that document the need, importance, and value of increasing underrepresented minority participation in the health professions. Another frequently cited report is the Institute of Medicine's *In the Nation's Compelling Interest: Ensuring Diversity in the Health Care Workforce*.<sup>7</sup> This report states that increasing racial and ethnic diversity among health professionals is important because evidence indicates that diversity is associated with improved access to care for racial and ethnic pa-

tients; greater patient choice and satisfaction; better patient-provider communication, and improved educational experiences for health professions students. In "Diversity: A Missing Link to Professionalism,"<sup>8</sup> Chisholm states that a lack of a diversified academic environment leads to a pharmacy education that is culturally repetitive and likely to foster development of narrow values and beliefs. The failure to develop cultural competence in our students during the educational process has the potential to affect the ability of pharmacy students to fulfill their professional roles and responsibilities as pharmacists to understand, communicate with, and care for patients from diverse cultural, racial, ethnic, and socioeconomic backgrounds.

What can and should we do as colleges and schools of pharmacy to improve representation of minorities in pharmacy? First, we need to candidly and consistently acknowledge that this is an important issue in pharmacy. Second, we must confront the issue and develop curricular and program innovations such as summer academy programs and other enrichment programs to recruit and retain minority students. Third, we must continue to advocate for funding of programs at the local, state, and federal levels to educate and train a diverse pharmacy workforce. Fourth, we must form strategic alliances on state, regional, and national levels to share resources, strategies, and best practices to address this issue and encourage legislators, pharmacy associations, corporations, foundations, community colleges, school districts, and community groups to become partners in this endeavor. Finally, the pharmacy academy must take ownership of the URM issue and lead the transformation of the pharmacy workforce.

In conclusion, underrepresentation of minorities in pharmacy is an important issue for colleges and schools of pharmacy and this is a call to action. Each school is encouraged to scan their respective environments to assess the current status of underrepresented minority students in their professional pharmacy programs. If it is discovered that representation is lacking, then there is an opportunity to strategically focus on increasing the numbers of underrepresented minority students applying to, enrolling in, and graduating from the professional program. The annual AACP student profile data for 2004, 2005, and 2006 provide evidence that several colleges and schools, not specifically mentioned in this paper, are making important progress in increasing the number of underrepresented minority students in their programs. There is a need for more colleges and schools of pharmacy to actively enlist in this campaign for the benefit of our profession and the health and welfare of the people that we promise to serve.

## REFERENCES

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