

Running Head: UNDERREPRESENTATION OF LATINOS

Underrepresentation of Latinos in U.S. Medical Schools

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International Health Final Fall 2008

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I, Elizabeth Homan-Sandoval, hereby declare, upon my word of honor, that I have neither given nor received unauthorized help on this work. (/s/ Elizabeth Homan-Sandoval)

Introduction

In the United States Latinos now make up over 15% of the population, and their numbers are rising with estimates that by 2050 they will constitute almost 25% of the nation's residents (U.S. Census, 2008, U.S. Census Bureau, 2004). By 2050 1 in 4 people in the U.S. will likely be Latino, yet at most only 5% of practicing physicians in the country are Latino (U.S. Census Bureau, 2004, American Medical Association Minority Affairs Consortium, 2008). At worst, conservative estimates find that African American, Native American, and Latino physician totals combined make up only 6% of the U.S. active physician workforce (Sullivan Commission on Diversity in the Healthcare Workforce, 2004).

Medical schools are not sufficiently increasing the volume of Latino physicians produced to meet the need: only 6.4% of 2007 medical school graduates were Latino (AAMC, 2008, Burkhart, Lischka, 2008, AOA, 2008). Others report Latinos comprise just 2.8% of all the active U.S. allopathic physicians in the U.S. (Castillo-Page, 2006). In 2008, gains were made as a 10% increase in enrollment of Latinos into medical school lead to 7.9% of the incoming class being Latino (Aspiring Docs, 2008, AAMC, 2008).

It is not that Latinos are not trying to get into medical school and the profession of medicine. Latinos are applying to medical schools in large numbers (AAMC, 2008). However they made-up only 7.3% of all applicants in 2008 (AAMC, 2008). About 47.6% of the applicants were accepted to medical school, similar to the acceptance rate for whites of 47.3% (AAMC, 2008).

There is strong evidence in the peer reviewed literature that supports the need for an increase in the number of Latino physicians, individuals from Latino communities in the U.S., trained in U.S. medical schools. Many institutions, committees, and organizations have given advice to accomplish the task.

U.S. Latino Demographics

Since the 1970's the population of Latinos in the United States has been growing (Ethnicity and Ancestry Branch, 2008). In 1970 the US Census Bureau estimated that the Hispanic population was 4.7% of the total population, while by 2010 it will probably reach 15.5% (Ethnicity and Ancestry Branch, 2008). As of July 2007, the Hispanic population had reached 45.5 million, constituting 15% of the total population of the United States (U.S. Census Bureau, 2008). This number did not include the 3.9 million people in Puerto Rico, which is a U.S. territory (U.S. Census Bureau, 2008). Of the individuals added to the U.S. population in 2007, 1 in 2 of them were Hispanic (U.S. Census Bureau, 2008). Latinos are the fastest growing minority group (U.S. Census Bureau, 2008). Since 1990 the Latino population has doubled in size (U.S. Census Bureau, 2008). Looking at the total population only Mexico had a larger total number of Latino individuals living in the country than the United States, Spain is now behind the U.S. with only 40.4 million residents (U.S. Census Bureau, 2008). The majority of Latinos in the U.S. are actually born in the United States; only 40% are foreign born

(Grieco, 2003). Although, from 1990-2000 the foreign born Latino population grew at a faster rate than the native born population (Grieco, 2003).

The cities with the largest number of Latinos in 2000, were New York, NY with 2.16 million, Los Angeles, CA with 1.72 million, Chicago, IL with 750,000, followed by Houston, TX, San Antonio, TX, Phoenix, AZ, El Paso, TX, Dallas, TX, San Diego, CA, and San Jose, CA (Guzman, 2001). Half of all Latinos in the U.S. live in California (30% of the total number of Latinos in the U.S.), or Texas (19% of the total number of Latinos) (Pew Hispanic Center, 2007). The other top 10 states with the highest percentage of the total Latino population residing in the state are Florida (8%), New York (7.4%), Illinois (4.3%), Arizona (3.9%), New Jersey (3.2%), Colorado (2.1%), and New Mexico (2.0%) (Pew Hispanic Center, 2007).

Further analysis of the Latino population reveals that 64% are of Mexican background, 9% Puerto Rican, 3.4% Cuban, 3.1% Salvadoran, and 2.8% Dominican (U.S. Census Bureau, 2008). Hispanic group breakdown geographically, Mexicans are found in Los Angeles, Chicago, Houston, San Antonio, and Phoenix (Guzman, 2001). Puerto Ricans are concentrated in NYC, Chicago, and Philadelphia (Guzman, 2001). Cubans are concentrated in Hialeah, Miami, NYC, Tampa, and Los Angeles (Guzman, 2001). The top ten cities with the highest percent of their population made up of Latinos are East Los Angeles (96.8%), Laredo, TX (94.1%), Brownsville, TX (91.3%), Hialeah, FL (90.3%), McAllen, TX (80.3%), El Paso, TX (76.6%), Santa Ana, CA (76.1%), El Monte, CA (72.4%), Oxnard, CA (66.2%), and Miami, FL (65.8%) (Guzman, 2001).

These demographics are important especially when comparing them to the demographics of physicians in those regions, states and cities.

Demographics of Physicians in the U.S.

Estimates vary for total number of practicing physicians in the U.S. In 2006, the American Medical Association (AMA) found there were an estimated 737,504 MD physicians actively practicing in the U.S. (American Medical Association, 2002). By 2004, according to the Council on Graduate Medical Education (COGME) there were 779,772 practicing physicians (MD and DO) in the US (Phillips, Dodoo, Jaén, and Green, 2005). The Bureau of Labor Statistics reported a slightly more conservative total, they found in 2006 a total of 633,000 physicians including both MD's and DO's (U.S. Bureau of Labor Statistics, 2008). Recently the AMA found the number of practicing physicians to have risen to 921,904 in 2006 (AMA, 2008).

Of these hundreds of thousands of physicians in the U.S. a very low percentage of them are Latino. As noted above, 15% of the U.S. is now Latino, and that number is projected to continue to rise (U.S. Census Bureau, 2008). Despite this fact, Latinos are underrepresented in every facet of medicine, and U.S. medical schools are not sufficiently adding to physician diversity (Mizelle, 2002). The AMA Minority Affairs Consortium reported that in 2006 Latino physicians made up only 5.0% of the total physician population, although 22% of the physicians surveyed declined to report their race/ethnicity (AMA Minority Affairs Consortium, 2008). The Sullivan Commission on

Diversity in the Healthcare Workforce found the percentages of Latino, African American, and American Indian physicians to combine to only 6% of the total physician workforce (Sullivan Commission on Diversity in the Healthcare Workforce, 2004).

Others report that Latinos make up just 2.8% of all the active U.S. allopathic physicians in the U.S. (Castillo-Page, 2006).

Resident Demographics

Without some residency training in a Graduate Medical Education program, a physician cannot be licensed to practice in the U.S. (Salsberg, Rockey, Rivers, Brotherton, Jackson, 2008) The 2007-2008 training year had 106,012 “active residents in Accreditation Council of Graduate Medical Education -accredited programs” (Brotherton, Etzel, 2008) While there are also osteopathic residents as well, there are roughly only 4500 in osteopathic residency training programs each year (Salsberg, et. al., 2008) Thus to examine the demographics of allopathic residents is to roughly know the demographics of the future makeup of the medical workforce (Salsberg, et. al., 2008). Latino residents in ACGME accredited residency programs totaled 7,440 in the 2007-2008 academic year, or 7% of the total U.S. physician resident population in ACGME accredited programs (Brotherton, Etzel, 2008).

Each year around 19,000 new residents enter ACGME accredited program training after matching through the National Residency Matching Program (Brotherton, Etzel, 2008). In 2007, 1,186 Latino U.S. allopathic medical students applied for ACGME

accredited program residency positions, and 116 Latino osteopathic medical students, through ERAS (AAMC, 2008). Of the 7,740 Latino residents, 53.6% graduated from U.S. or Canadian allopathic medical schools, and 2.2% from U.S. osteopathic medical schools (AAMC, 2008). While the actual numbers of Latino residents that attended Canadian allopathic medical schools is not clear, it is likely extremely small, as only 341 residents or 0.3% of the total number of residents in ACGME accredited programs in 2007-2008 academic year graduated from Canadian allopathic medical schools (AAMC, 2008).

The population of Latinos is smaller in Canada as well, the 2001 Canadian Census there Hispanics made up roughly 1% of the population, with only 300,000 Latino residents, and only 11.5% of the female Latino Canadian population had a degree in a health related field (Statistics Canada, 2001). Thus it is very unlikely more than a negligible quantity of Latino medical graduates are coming to U.S. residency programs from Canadian medical schools. However these statistics do show that 44.2% of the Latino residents graduated from medical schools outside of the U.S., probably Latin American medical schools.

In 2007-2008 the trend continued of Latinos commonly specializing in primary care (Brotherton, Etzel, 2008). In descending order of total number of Latino residents per specialty, specialties with highest actual number of Latinos were Internal Medicine (1714), Family Medicine (777), Pediatrics (699), Psychiatry (401), and Ob/Gyne (351) (Brotherton, Etzel, 2008). Specialties with a higher than average percentage of residents

with Latino heritage were Medical Genetics (13%), Psychiatry (8.6%), Family Medicine (8.3%), Internal Medicine (7.8%), OB/Gyne (7.4%), and Neurology (7.4%) (Brotherton, Etzel, 2008). The specialties with the lowest percentage of residents with Latino heritage were Orthopedic Surgery (3.8%), Otolaryngology (4.5%), Ophthalmology (4.8%), and Dermatology (5.1%) (Brotherton, Etzel, 2008). Thus Latino residents were more likely to be found in primary care specialties, and were severely underrepresented in many of the non-primary care fields.

Medical School Graduation Rates

Entering medical school almost guarantees becoming a physician as medical schools have an extremely high graduation rate (AAMC, 2007). Close to 81% of medical students in the U.S. graduate within 4 years of starting medical school, within 5 years the graduation rate jumps to 91%, within 7 years 94% graduate, and by 10 years 96% of those who began medical school in the U.S. graduated (AAMC, 2007). Compared to other graduate education this is a very high graduation rate, for example only 62% of “doctorate, master’s, or first-professional degree program” students graduate after 10 years (AAMC, 2007).

Latino medical students in U.S. medical schools have slightly higher attrition rates (AAMC, 2007). In a 1995 cohort, 4 years after starting medical school only 76.5% of U.S. Latino medical students had graduated, and by 10 years only 94.2 had graduated (AAMC, 2007). Calculating that there are roughly 16,000 U.S. medical students each

year (AAMC, 2008), around 6% are Latino, and if 6% of those Latinos do not graduate (AAMC, 2007), that is roughly 57 students each year that do not make it to the finish line. This is significant considering how much a Latino student has overcome to get to the point of being a medical student, the struggles of the competitive medical schools admissions, compounded by the struggles of completing this journey as a Latino student, and by how badly needed Latino physicians are. Considering all this it is painful to have even one Latino student not graduate from medical school, let alone over 50 each year. Latinos who do not graduate most commonly list academic reasons as the reason for leaving (AAMC, 2007). Latinos are more likely to list this than White and Asian students (AAMC, 2007).

Medical School Graduates Demographics

The latest graduating classes of medical students are not demonstrating a level of diversity that matches the nation's population demographics. Medical school efforts are not sufficiently meeting the need for a higher percentage of Latino physicians. While over 15% of the U.S. is now Latino (U.S. Census Bureau, 2008), only 6.4% of the graduating medical students in 2007 were Latino (AAMC, 2008, Burkhart, Lischka, 2008, AOA, 2008). In 2007, there were a total of 19,246 U.S. medical school graduates, 84% MD's, and 16% DO's (AAMC, 2008, Burkhart, Lischka, 2008).

Of the 16,143 newly graduated MD physicians of 2007, 6.4% or 1102 of the degrees awarded went to Latinos (AAMC, 2008). Further breakdown of the Latino

graduate demographics shows 372 self identified as Mexican (2.3% of the total graduates), 282 as Puerto Rican (1.7% of the total graduates), 75 as Cuban (0.5% of the total graduates), and 373 as other Hispanic or Latino (2.3% of the total graduates) (AAMC, 2008). Of the Latino MD graduates, 33% were from Mexican background, 26% from Puerto Rican background, 6.8% from Cuban background, and 34% from other Hispanic or Latino background. Recall that those of Mexican heritage make up 64% of the U.S. Latino population, Puerto Ricans 9% Puerto Rican, Cubans 3.4% Cuban, and other Latinos only 27% (U.S. Census Bureau, 2008). Thus while there is underrepresentation of Latinos as a whole in medicine, certain groups are even more underrepresented such as Latinos of Mexican heritage.

Of the osteopathic graduates, there were a total of 3103 DO degrees awarded in 2007 (Burkhart, Lischka, 2008). Of those, 4% were Latino, for a total of 124 Latino graduates (AOA, 2008). From 2004-2008 the percentage of osteopathic medical students that are Latino has remained steady at 4% (AOA, 2008).

Medical School Student Demographics

The 2008 incoming class of U.S. allopathic medical schools had 18,036 students (AAMC, 2008). Of those 7.9% were Latino, a total of 1416 students. Further breakdown shows 33% of the Latino students were Mexican heritage, 24% Puerto Rican heritage,

9.3% Cuban heritage, 30% other Hispanic or Latino, and 4.6% multiple Hispanic or Latino (AAMC, 2008). This is an increase in Latinos in the matriculating class by more than 10% (Aspiring Docs, 2008). Native Americans saw a 5% increase in enrollment this year as well (Aspiring Docs, 2008).

Medical School Applicants

It is not that Latinos are not trying to get into medical school and the profession of medicine. Latinos are and have been applying to medical schools in large numbers (AAMC, 2008). However, they constituted only 7.3% of all applicants in 2008 (AAMC, 2008). About 47.6% of the applicants were accepted to medical school, similar to the acceptance rate for whites of 47.3% (AAMC, 2008). Thus either more applicants will be needed, if the acceptance rate can remain steady while increasing applicants, or a higher percentage of the Latino applicants will need to be accepted, in order to increase the number of U.S. Latino physicians in the U.S.

Evidence Supporting Need for Increase in Latino Physicians

The need for more Latinos in medicine is well documented in evidence based literature (Castillo-Page, et. al., 2005). The Sullivan Commission found that not only will doing so improve health for Latinos, but for the entire population and thus “increased diversity will improve the overall health of the nation.” (Sullivan Commission on Diversity in the Healthcare Workforce, 2004).

Increasing Latinos in medicine will decrease health disparities in the U.S. (Cohen, 2003). Increased diversity is linked “with improved access and quality of health care for the growing numbers of racial and ethnic minority patients, greater patient choice and satisfaction, and better educational experiences and benefits for all medical school students.” (Castillo-Page, et. al., 2005). Access to care for underserved Latinos is improved because Latino physicians are more likely to go back and work in underserved communities (Rabinowitz, Diamond, Veloski, Gayle, 2000, Komaromy, et. al., 1996, Moy, Bartman, 1995). Latino medical students are more likely to have the desire and intention to practice in underserved minority communities in their future practice (Castillo-Page, et. al., 2005).

All patients, including Latinos are more likely to choose a physician from a similar background, and Latinos report higher patient satisfaction when treated by Latino physicians (Saha, Arbelaez, Cooper, 2003, Cooper, et. al., 1999). Medical students from all backgrounds that go to schools with high diversity of minorities receive better preparation to treat patients with backgrounds different from their own (Saha, Guiton, Wimmers, Wilkerson, 2008)

Conclusion

The Latino population in the U.S. is growing (U.S. Census Bureau, 2008). Not only are there not enough Latino physicians to meet the need currently, new Latino physicians are not even being produced at the rate to meet current need, let alone the

projected short term future population (AAMC, 2008). Many barriers exist for Latino students to become physicians (Sullivan Commission on Diversity in the Healthcare Workforce, 2004, Cohen, 2003, Castillo-Page, et. al., 2005). The methods utilized in the 1990's that did increase rates of Latino physician production, like Affirmative Action, Title VII programs such as Hispanic Centers of Excellence, and scholarship programs such as the federal program to pay for students who work in underserved areas, all these methods have been severely attenuated or completely ended in the last few years by conservative lawmakers and politicians (Castillo-Page, et. al., 2005).

Affirmative Action cases such as in Michigan and California have limited medical schools ability to factor in diversity into their decision making process (Cohen, 2003). Title VII funding was completely cut by the federal government, leading to the closing of the majority of HCOE's, and severely limiting the capabilities of the few that were able to find alternative funding. Even the program that pays helps students pay for medical school in exchange for service in underserved areas has been severely cut. Without these methods, it will be even more difficult to meet the growing need for Latino physicians in the U.S. It is vital that the new administration and congress revisits this issue in 2009, as delaying only hurts the health of the U.S.

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