Health Workforce Abstract

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Public Health Workforce Diversity: The Role of Academic Institutions

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ISSUE: Studies show that a racially and ethnically diverse health workforce is critical to addressing racial and ethnic disparities in health outcomes. In public health, the workforce also needs to be diverse in order to understand and address the needs of less advantaged communities in culturally appropriate ways. This study compares the diversity of graduates of different public health degrees and examines institutional characteristics associated with the diversity of its students.

METHODS: We performed a cross-sectional analysis of data from the Association of Schools and Programs of Public Health (ASPPH), which contains information on its former and current members (i.e., schools and programs of public health) for seven academic years from 2014-2015 to 2020-2021. We obtained the race and ethnicity of undergraduates and graduates in public health by their academic institution. We included White, Black, Hispanic, Asian, Native Hawaiian/Pacific Islander (NHPI), and Native American/American Indian (AIAN) as our race and ethnicity groups. For each institution, we calculated a diversity index (DI); defined as the proportion of the graduates for each race/ethnicity category divided by the percentage of the population of the respective race/ethnic group of student age (defined as those aged 20 to 35) in the state of the academic institution. This data was obtained from the annual estimates of the American Community Survey. Regression analysis examined the association between institutional characteristics such as ownership status, degree characteristics, and faculty diversity with the proportion of the underrepresented minority students.

FINDINGS: We included 109 institutions providing a public health degree. The DI varied significantly across institutions and by degree levels. The mean diversity index of the URM graduates across all degree levels offered by all ASPPH members in all years was 0.78. The mean diversity index suggested gradual improvement in the diversity among the graduates over time (DI was 0.7 in 2014 compared to 0.8 in 2020). The mean DI for each of the three degree levels is less than one, meaning that the under-representation of the URM group among the total graduates in each degree level is lower than the state population. The average DI for the undergraduate degree (0.98) was the highest, followed by masters (0.82), and the lowest for doctoral degrees (0.62). One percentage-point increase in the proportion of URM among the faculty members was associated with a 0.7 percentage-point increase in the proportion of URM graduates (p < 0.001). The proportion of graduates who earned their degrees in biostatistics was negatively associated with the proportion of URM graduates (b = -0.28; p < 0.01). Compared to the bachelor's degree program, the proportion of URM graduates was lower in the doctoral degree program by 8.91 percentage points (p < 0.01), which confirmed the trendline by degree level. None of the other characteristics examined, including ownership type, were statistically significantly associated with the proportion of URM graduates.

DISCUSSION: Our study is relevant to the broader inquiry into understanding the role of public health programs and institutions in producing a diverse workforce. Despite an upward trend in the diversity among the public health student cohort, the mean DI is less than one revealing an underrepresentation of the URM graduates compared to the population they will serve. DI varied significantly by the institution, although we could identify no statistically significant institutional characteristic explaining the variation. As investments are made into public health modernization, one area

in which more could be done is faculty diversity, which we know from other health professions is critical to recruiting and retaining students from racial and ethnic minority backgrounds. Results from the study will be publicly available in an interactive tool, allowing schools, students, and policymakers to track progress over time.

Key Words: Public health, workforce, diversity