CONTROL ID: 2460383
TITLE: Mediators of racial and ethnic disparities in physicians’ early-career-mentored K (K01, K08 and K23) award receipt
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SUBMISSION ROLE: Research and Innovation Abstracts
PRESENTATION TYPE: Oral or Poster
CURRENT CATEGORY: Research
ABSTRACT BODY:
Short Description: We sought to identify mediators of racial/ethnic disparities in K-award receipt among U.S. medical-school graduates. Our analysis indicated that substantive and productive research experiences for medical students and graduates as well as debt explained, in part, the association between race/ethnicity and K-award receipt. Research experiences along the educational continuum and debt-lowering strategies may help create a more diverse physician-scientist research workforce.

Abstract: Purpose: The diversity of the federally funded physician-scientist workforce is an issue of national concern. Early-career mentored-K (K01, K08, K23) awards have had a particularly positive impact on physicians’ subsequent National Institutes of Health (NIH) research involvement. However, underrepresented minority (URM), including Black, Hispanic and Native American/Alaska Native medical-school graduates are less likely than white graduates to be K awardees. We sought to identify mediators of racial/ethnic disparities in K-award receipt.

Methods: We analyzed individualized, de-identified data from the Association of American Medical Colleges and NIH IMPAC II grants database for a national cohort of 1997-2004 medical-school graduates followed through August 2014. We identified mediators of the relationship between graduates’ race/ethnicity and K-award receipt in two models: Asian/Pacific Islander (PI) vs. URM, and white vs. URM.

Results: Of 98,831 graduates included, 1,489 (1.5%) received K awards (989/65,724 [1.5%] of white, 365/18,561 [2.0%] of Asian/PI, 29/1,263 [2.3%] of other/unknown race/ethnicity, 106/13,283 [0.8%] of URM graduates). Significant mediators (each 2-sided \( P < .001 \)) of disparities in K-award receipt included: research-intensive medical-school attendance (Asian/PI vs. URM: percentage of treatment effect \( [PTE], 12.9 \); white vs. URM: PTE, 7.9), research-paper authorship during medical school (Asian/PI vs. URM: PTE, 9.9; white vs. URM: PTE, 7.3), debt at graduation (Asian/PI vs. URM: PTE, 10.1; white vs. URM: PTE, 5.1), and graduate medical education research experience (Asian/PI vs. URM: PTE, 12.9; white vs. URM: PTE, 5.0). In total effects models including these and other mediators, we accounted for 84.9% of the observed Asian/PI vs. URM, and 82.4% of the observed white vs. URM disparity in K-award receipt.

Discussion/Conclusions: Substantive and productive research experiences for medical students and graduates as well as debt explained, in part, the association between race/ethnicity and K-award receipt. Research experiences along the educational continuum and debt-lowering strategies may help create a more diverse physician-scientist research workforce.

Level of Audience: Mid-career
Focus of Presentation: Continuum