

Examining the Burden of Educational Debt and Socioeconomic Disadvantage among Orthopaedic Surgery Residency Applicants

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INTRODUCTION:

Educational debt is common among applicants to orthopaedic surgery residency programs. The amount of educational debt held by applicants may influence decision making and is not well known. We sought to analyze the educational debt burden among orthopaedic surgery applicants in order to understand disparities across socio-demographic characteristics and how this may be associated with match rates.

METHODS:

A retrospective review of orthopaedic surgery residency application data from the American Association of Medical Colleges (AAMC) was analyzed from 2011 to 2021. Self-report data included premedical, medical, and total educational debt burden as well as indicators for it socioeconomically disadvantaged (SED) status and if the applicant received a fee waiver from the AAMC. Monetary values were reported in US Dollars and inflation-adjusted to 2021 using the Consumer Price Index (CPI). Students t-tests and chi-squared tests were performed for continuous and categorical variables, respectively. significance was considered at <0.05.

RESULTS:

A total of 8,170 applicants were included overall from 2011-2021; 6,660 (82%) male. In total, 1,114 (14%) were classified as under-represented minorities (URM), 643 (7.9%) classified as SED. A total of 4,969 (61%) reported receiving at least 1 scholarship, 2,746 (34%) had pre-medical debt, and 5,909 (72%) had any educational debt including medical school. Among those with educational debt, the mean total amount was \$238,447 ± 124,532. Among those with scholarships, the mean amount was \$67,230 ± 97,393. URM applicants had significantly higher scholarship amounts (\$87,566 vs. \$63,347, p<0.001), but similar amounts of total educational debt (\$237,085 vs. \$238,685, p=0.725). SED applicants had higher scholarship amounts (\$84,627 vs. \$65,267, p<0.001) and higher total educational debt (\$267,355 vs. \$235,421, p<0.001). Applicants classified as socioeconomically disadvantaged had decreased match rates (76% vs. 61%, p<0.001).

DISCUSSION AND CONCLUSION: Half of applicants applying to orthopaedic surgery residency have educational debt, with a mean value of \$238,447 in inflation-adjusted US dollars. Overall, socioeconomically disadvantaged applicants have increased debt despite increased scholarship amounts, and also have 15% less chances of matching. Despite higher scholarship amounts, URM applicants have similar total debt burden.