Concerns about Bias in the PA Admissions Process: A Pre-PA Perspective

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BACKGROUND

❖ Increasing diversity in the physician associate (PA) profession is important for better overall patient care. Understanding a barrier such as bias in the PA program admissions process is important for programs to be aware of as they seek to enroll more diverse students.

❖ Based on the 2023 AAPA Salary Report's Distribution of PA's by Race and Ethnicity:

    ➢ 85.4% of PAs are White and 14.6% make up Asian, Black/African American, Hispanic, Latinx, Spanish origin, American Indian, and Other.

❖ Diverse PAs can establish provider-patient racial concordance which lead to overall better patient outcomes.

❖ Understanding barriers that pre-PA students may face can help us understand what changes need to be made at the PA school application level as well as at an early education level.

OBJECTIVE

❖ To determine if pre-PA students were concerned about bias in the admissions process and whether underrepresented minorities in medicine (URM-Med), sexual or gender minorities (SGM), or low socioeconomic status (SES) groups were more concerned about bias

❖ To determine if different support types impacted concerns about bias

METHODS

❖ Between February-March 2023, pre-PA students with an email on file with the AAPA and matriculated/enrolled PA students were recruited to complete a 55-item survey: the annual AAPA Student Survey (sent via email and social media)

    ➢ Survey demographics included age, gender, ethnicity, race, and identification with a disadvantaged group (URM-Med, SGM, low SES, etc)

    ➢ Questions on concerns about bias in the admissions process were measured on Likert scale (1 strongly disagree-5 strongly agree)

    ➢ Questions on the types of support during the application process: use of paid application review services, financial support, family/friends support, academic mentor support, healthcare mentor support

❖ All data was collected by the AAPA's Research Department.

❖ Data analysis conducted using SAS OnDemand for Academics (Cary, NC). Multivariate logistic regression model was used to adjust for confounding variables as it related to concerns with bias and support. Stepwise selection model was used to determine which variables had the best model fit.

❖ Stanford University's Institutional Review Board determined the project did not require IRB review.

RESULTS

Pre-PA Students

38.9%

61.1% ■ Concerns about Bias in the Application Process
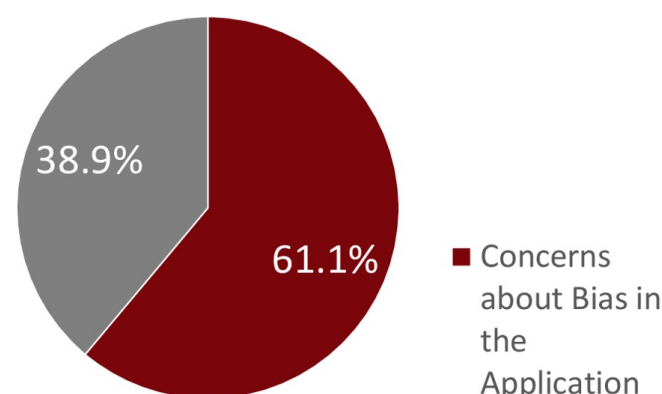
Underrepresented Minority in Medicine	Non URM-Med (n=406)	URM-Med (n=200)	P-value
Concern with Bias (Mean ± SD)	3.6 ± 1.1	3.8 ± 1.0	0.012
Agree/Strongly Agree with Concerns about Bias, N (%)	236 (58.1%)	134 (67.0%)	0.035
Sexual Gender Minority	Not SGM (n=552)	SGM (n=54)	P-value
Concern with Bias (Mean ± SD)	3.6 ± 1.1	4.0 ± 1.0	0.011
Agree/Strongly Agree with Concerns about Bias, N (%)	328 (59.4%)	42 (77.8%)	0.008
Low Socioeconomic Status	Non-Low SES (n=481)	Low SES (n=125)	P-value
Concern with Bias (Mean ± SD)	3.6 ± 1.1	4.0 ± 1.1	<0.001
Agree/Strongly Agree with Concerns about Bias, N (%)	276 (57.4%)	94 (75.2%)	<0.001

Odds Ratios for Concerns about Bias

Bias	OR	95% CI
URM-Med (underrepresented minorities in medicine)	1.23	0.83-1.80
SGM (Sexual Gender Minority)	2.37	1.18-4.73
Low SES (Socioeconomic Status)	1.68	1.04.2.73
Academic Mentors	0.64	0.41-0.99

❖ 606 out of 675 pre-PA Students completed the survey.

❖ Most applicants were concerned about bias in the application process (61.1%) with an overall mean score of 3.7 ± 1.1 (median 4.0).

❖ More URM-Med were concerned about bias than non URM-Med (67.0% vs 58.1%, p=0.035).

❖ More SGM were concerned about bias than non-SGM (77.8% vs 59.4%, p=0.008).

❖ More low SES pre-PA students were concerned about bias than non-low SES pre-PA students (75.2% vs 57.4%, p<0.001).

❖ SGM were more likely to be concerned about bias than non-SGM (OR 2.37, 95% CI 1.18-4.73).

❖ Low SES pre-PA students were more likely to be concerned about bias than non-low SES pre-PA students (OR 1.68, 95% CI 1.04-2.73).

❖ Of the various types of support, only having an academic mentor was shown to be a protective factor for concern about bias (OR 0.64, 95% CI 0.41-0.99).

DISCUSSION

❖ This is the first study to look at underrepresented pre-PA minority groups (URM, SGM, Low SES) and the barriers that they face in the PA admissions/application process.

❖ PA programs should work to identify biases within their own admissions processes and attempt to make changes by increasing transparency and by using holistic admissions processes.

❖ Developing and continuing mentorship programs should begin as early as possible through a student's academic career for them to feel supported through the PA application process.

❖ Increasing the diversity of healthcare providers can increase access and the quality of care for patients.

CONCLUSION

❖ Most pre-PA student applicants were concerned about bias in the PA admissions application process.

❖ Pre-PA students who identified as a sexual gender minority or low socioeconomic status face a barrier in the PA student application/admissions process. → The barrier faced is "concerns about bias" in the application/admissions process by these two groups.

❖ Pre-PA students who had an academic mentor reported less concern about bias in the application/admissions process.

❖ PA programs can utilize this information to reduce bias in future application cycles in order to increase diversity in the PA profession.