Letters

RESEARCH LETTER

Sexual Harassment and Discrimination Experiences of Academic Medical Faculty

Recent high-profile cases of sexual harassment illustrate that such experiences still occur in academic medicine.[1] Less is known about how many women have directly experienced such behavior. Most studies have focused on trainees, single specialties, and non-US settings or lack currency.[2] In a 1995 cross-sectional survey,[3] 52% of US academic medical faculty women reported harassment in their careers compared with 5% of men. These women had begun their careers when women constituted a minority of the medical school class; less is known about the prevalence of such experiences among more recent faculty cohorts.

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Methods | After approval from the University of Michigan institutional review board and waiver of written informed consent, in 2014 we conducted a postal survey of individuals who had received new K08 and K23 career development awards (hereafter referred to as K-awards) from the National Institutes of Health from 2006-2009. Items on gender bias (both perceived in the environment and personally experienced), gender advantage, and sexual harassment were included in a larger questionnaire evaluating career and personal experiences. Additionally, those who had experienced sexual harassment in their professional careers were asked to report perceived effects on confidence and career advancement and specify the severity of the experience using 5 levels[4]: 1, generalized sexist remarks and behavior; 2, inappropriate sexual advances; 3, subtle bribery to engage in sexual behavior; 4, threats to engage in sexual behavior; and 5, coercive advances. The proportion of respondents experiencing more severe forms of harassment (levels 2-5) was quantified and the perceived effects and severity described. These items are commonly administered in national studies of sexual harassment and are comparable with those in the 1995 survey (Supplement).

SAS (SAS Institute), version 9.4, was used to describe and compare responses by gender using multiple variable logistic models adjusting for self-reported race (categorized by the investigators as non-Hispanic white vs other), specialty (grouped as medical; surgical; women, children, and families; hospital-based; basic sciences[5]), and years in faculty position. Two-sided *P* values less than .05 were considered statistically significant.

Results | Of all 1719 new recipients of K-awards in 2006-2009, 1066 recipients (62%) responded to the survey. Response rate was not significantly different by gender (61% among men vs 64% among women, *P* = .13) but differed by K-award type (59% among K08 recipients vs 66% among K23 recipients, *P* = .002) and year (58% for 2006, 62% for 2007, 60% for 2008, and 68% for 2009, *P* = .01). Mean respondent age was 43 years (SD, 4.3); 46% were women; 71% were white.

Women were more likely than men to report perceptions (70% [95% CI, 65%-74%] vs 22% [95% CI, 19%-25%]; difference, 48% [95% CI, 43%-53%], *P* < .001) and experience (66% [95% CI, 62%-70%] vs 10% [95% CI, 8%-13%]; difference, 57% [95% CI, 52%-62%], *P* < .001) of gender bias in their careers (**Table 1**). Women were more likely to report having personally experienced sexual harassment (30% [95% CI, 26%-35%]

Table 1. Self-reported Experiences of Gender Bias, Advantage, and Sexual Harassment of K08 and K23 Career Development Awardees

	Reporting, No. (%) [95% CI]		Estimate Difference, % (95% CI)	
	Women (n = 493)	Men (n = 573)	Women vs Men	*P* Value[a]
Respondents who perceived gender-specific bias in the academic environment[b]	343 (69.6) [65.3-73.6]	125 (21.8) [18.5-25.4]	48.0 (42.7-53.3)	<.001
Respondents who reported they personally experienced gender bias in professional advancement[c]	327 (66.3) [62.0-70.5]	56 (9.8) [7.5-12.5]	57.0 (52.1-61.8)	<.001
Respondents who reported they personally experienced gender advantage in professional advancement[d]	129 (26.2) [22.3-30.3]	118 (20.6) [17.4-24.1]	5.6 (0.5-10.8)	.08
Respondents who reported they personally experienced harassment[e]	150 (30.4) [26.4-34.7]	24 (4.2) [2.7-6.2]	26.5 (22.1-30.9)	<.001

[a] *P* value adjusting for specialty, race (majority vs minority), and years in faculty position.

[b] This item asked, "Do you perceive any gender-specific biases or obstacles to the career success or satisfaction of faculty by gender in your work environment (ranging from 1 [no, never] to 5 [yes, frequently])?" Responses of 3, 4, and 5 were considered affirmative.

[c] This item asked, "In your professional career, have you ever been left out of opportunities for professional advancement based on gender (1, yes; 2, probably; 3, possibly; 4, probably not; 5, no)?" Responses of 1, 2, and 3 were considered affirmative.

[d] This item asked, "In your professional career, have you had increased opportunities for professional advancement based on gender (1, yes; 2, probably; 3, possibly; 4, probably not; 5, no)?" Responses of 1, 2, and 3 were considered affirmative.

[e] This item asked, "In your professional career, have you encountered unwanted sexual comments, attention, or advances by a superior or colleague (yes or no)?" Responses of "yes" were considered affirmative.

Table 2. Severity Among Women With K08 and K23 Awards Who Reported Having Experienced Harassment (n = 150)

Experience	Respondents, No. (%) [95% CI][a]
Sexist remarks or behavior	138 (92.0) [86.4-95.8]
Unwanted sexual advances	62 (41.3) [33.4-49.7]
Subtle bribery to engage in sexual behavior	9 (6.0) [2.8-11.1]
Threats to engage in sexual behavior	2 (1.3) [0.2-4.7]
Coercive advances	14 (9.3) [5.2-15.2]

[a] Totals sum to more than 100% because respondents were asked to indicate all that applied.

vs 4% [95% CI, 3%-6%]; difference, 26% [95% CI, 22%-31%], $P < .001$). Among women reporting harassment (n = 150), 40% (95% CI, 32%-48%) described more severe forms (**Table 2**), 59% (95% CI, 50%-67%) perceived a negative effect on confidence in themselves as professionals, and 47% (95% CI, 39%-56%) reported that these experiences negatively affected their career advancement.

Discussion | In this sample of clinician-researchers, 30% of women reported having experienced sexual harassment compared with 4% of men. Although a lower proportion reported these experiences than in a 1995 sample, the difference appears large given that the women began their careers after the proportion of female medical students exceeded 40%.

Limitations include nonresponse bias, which could inflate estimates of prevalence if those who experienced harassment were more motivated to respond; to minimize this risk, we placed these questions at the end of a 12-page instrument that otherwise focused on general career experiences. Our estimates were based on self-report, not documented cases.

Recognizing sexual harassment is important because perceptions that such experiences are rare may, ironically, increase stigmatization and discourage reporting. Efforts to mitigate the effect of unconscious bias in the workplace and eliminate more overtly inappropriate behaviors are needed.

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COMMENT & RESPONSE

Early Azithromycin Treatment to Prevent Severe Lower Respiratory Tract Illnesses in Children

To the Editor The study by Dr Bacharier and colleagues[1] found that using azithromycin in preschool children with a history of wheezing and respiratory tract infection (RTI) prevented progression to "severe" lower respiratory tract illness (LRTI). The authors defined severe LRTI as needing intensive rescue albuterol treatments; it was not defined as pneumonia, the classic definition of severe LRTI. Although azithromycin limited the need for intensive rescue albuterol, it did not prevent urgent care or emergency visits, hospitalizations, or future RTI episodes, arguably the most important prevention outcomes.

Furthermore, randomized children who had severe LRTI, needed emergent care, had uncontrolled asthma, or had respiratory-related problems at or prior to presentation with RTI were deemed "early termination," meaning that they were not given the study medication or included in the