Us, Too. Sexual Harassment Within Academic Medicine in the United States

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ABSTRACT

PURPOSE: We report on the extent of sexual harassment among residents and examine its relationship to specialty and program year and effects.

METHODS: Using the C–Change Resident Survey, we surveyed residents in 34 internal medicine, pediatrics, and general surgery programs in 14 academic medical centers (AMCs). A total of 1708 residents completed the survey (70% response-rate): 51% (n = 879) were women. Respondents reported unwanted sexual comments, attention, or advances by a superior or colleagues within the last 2 years. Measures of vitality and ethical or moral distress were included in the surveys.

RESULTS: Rates of sexual harassment reported by women differed across the 34 programs, with an interquartile range of 0%-11%. Residents in pediatrics had the lowest frequencies of sexual harassment (mean 2%, 95% confidence interval [CI] 0%, 4%). Residents in internal medicine had higher rates of sexual harassment (mean 7%, 95% CI 1%, 25%). Residents in surgery had the highest rates (mean 12%, 95% CI 2%, 33%). Sexual harassment was associated with lower levels of vitality and higher ethical or moral distress (both, P < 0.05).

CONCLUSIONS: Sexual harassment is more common for women residents in Internal Medicine and Surgery programs. The adverse effects of sexual harassment on female residents detracts from an institution’s professional workforce.

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KEYWORDS: Culture of medicine; Residents; Sexual harassment

We have studied perceptions of the culture of academic medicine for residents, medical students, and faculty in academic medical centers (AMCs) for more than a decade.1–3 We report on sexual harassment in AMCs nationally among residents.

Aligned with national trends, there is also increased recent attention in the health sciences to gender discrimination and sexual harassment,4,5 but few quantitative studies specifically address sexual harassment. Studies conducted nearly 30 years ago found that 73% of female residents in internal medicine (IM) had been sexually harassed at least once during their training, primarily by attending physicians and colleagues.6 More recently, a meta-analysis reported on “the surprisingly high prevalence of harassment and discrimination.”7 In a recent survey of US medical faculty receiving National Institutes of Health (NIH) career-
development awards, 30% of the women reported experiencing sexual harassment, and female leaders have called for attention to sexual harassment in AMCs. The literature includes studies of sexual harassment in medical students; this report contributes quantitative data on the current prevalence of sexual harassment in a nationally representative sample of residents.

METHODS

Measures

Using the validated Change Resident Survey (CRS), we asked residents to report on their personal experiences of sexual harassment during residency training. The CRS also assesses dimensions of the culture from the perspective of residents, including dimensions of vitality; relationships, inclusion, and trust; values alignment; ethical or moral distress; self-efficacy in career advancement; institutional support; mentoring; respect; gender equity; equity for underrepresented in medicine minority members; work-life integration; and leadership aspirations.

Sample

In 2014-2015 we surveyed electronically all residents in a purposive representative sample of 14 AMCs. The AMCs represented different attributes of residency programs, including study-site diversity by region of the United States, patient population served, institutional funding (public or private), and size of programs. Within these 14 academic health centers, we invited all 35 residency programs in general surgery (GS; 12), IM (12), and pediatrics (11) to participate. These three specialties were selected because they are represented in almost all AMCs and are usually the largest residency programs. Thirty-four of the 35 residency-program directors agreed to include their programs in the study. All residents (1333 IM, 643 pediatrics, and 476 GS) were invited to participate. A total of 1708 completed the survey—overall response rate 70%; 51% (n = 879) were women and 16% (n = 286) were from underrepresented in medicine minority (URMM) groups. The proportion of female residents varied by specialty: pediatrics, 71%, IM, 46%, and GS, 42%.

The following item was included in the surveys: “I have personally experienced unwanted sexual comments, attention or advances by a superior or colleagues at my institution.” Possible responses were: “Yes, within the last two years;” “Yes, over two years ago;” or “No.”

For the analyses reported here, the sample was limited to women. Data analysis was undertaken with HLM v. 7 (Scientific Software International, Skokie, IL) applying a multilevel model to accommodate the clustering of reports in residency programs and AMCs. Where the outcome was dichotomous, a Bernoulli (i.e., logistic) model was employed. Descriptive statistics were estimated using Systat v. 13 (Systat Software, San Jose, CA).

RESULTS

Table 1 presents a demographic overview of residents; Figure 1 presents rates of sexual harassment by specialty and program year. Fourteen programs had none of the women residents reporting sexual harassment within the past 2 years, but 9 programs had more than 10% of women reporting recent sexual harassment. Specialties differ in the amount of sexual harassment reported. When we restrict our analysis to the first 3 postgraduate years of training, GS had the highest (12%, 95% confidence interval [CI]: 2%, 33%), followed by IM (7%, 95% CI: 1%, 25%), and least in pediatrics (2%, 95% CI:0%, 4%). Only the differences between pediatrics and GS, and between pediatrics and IM were statistically significant.

GS residency programs require 5 years of training. Two of 13 women in their fourth year of GS (15%; 95% CI: -1%, 33%) followed by IM (7%, 95% CI: 1%, 25%), and least in pediatrics (2%, 95% CI:0%, 4%). Only the differences between pediatrics and GS, and between pediatrics and IM were statistically significant.

Table 1 Demographic Characteristics of Female Medical Residents

<table>
<thead>
<tr>
<th>Female Residents</th>
<th>All Specialties</th>
<th>Internal Medicine</th>
<th>Pediatrics</th>
<th>General Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total, no.</td>
<td>792</td>
<td>399</td>
<td>287</td>
<td>106</td>
</tr>
<tr>
<td>URMM, no. (%)</td>
<td>133 (17)</td>
<td>56 (14)</td>
<td>62 (22)</td>
<td>15 (14)</td>
</tr>
<tr>
<td>LGBTQ, no. (%)</td>
<td>21 (2.7)</td>
<td>13 (3.3)</td>
<td>5 (1.7)</td>
<td>3 (2.8)</td>
</tr>
<tr>
<td>Children, &lt; 18 years old at home, no. (%)</td>
<td>76 (9.6)</td>
<td>34 (8.5)</td>
<td>29 (10)</td>
<td>13 (12)</td>
</tr>
<tr>
<td>IMG, no. (%)</td>
<td>136 (17)</td>
<td>69 (17)</td>
<td>59 (21)</td>
<td>8 (7.6)</td>
</tr>
<tr>
<td>Age, mean (SD)</td>
<td>30 (2.7)</td>
<td>30 (2.7)</td>
<td>30 (2.7)</td>
<td>31 (3.0)</td>
</tr>
<tr>
<td>Postgraduate Year, no. (%)</td>
<td>295 (37)</td>
<td>153 (39)</td>
<td>104 (36)</td>
<td>38 (36)</td>
</tr>
<tr>
<td>PGY1</td>
<td>219 (28)</td>
<td>108 (27)</td>
<td>96 (34)</td>
<td>15 (14)</td>
</tr>
<tr>
<td>PGY3</td>
<td>234 (30)</td>
<td>132 (34)</td>
<td>87 (30)</td>
<td>15 (14)</td>
</tr>
<tr>
<td>PGY4</td>
<td>13 (2)</td>
<td>—</td>
<td>—</td>
<td>13 (12)</td>
</tr>
<tr>
<td>PGY5</td>
<td>24 (3)</td>
<td>—</td>
<td>—</td>
<td>24 (23)</td>
</tr>
</tbody>
</table>

IMG = international medical graduate; LGBTQ = lesbian, gay, bisexual, transgender, or queer or questioning; PGY, postgraduate year; sd = standard deviation; URMM = underrepresented in medicine minority. Numbers in the table reflect the demographics of women respondents before multiple imputation was conducted to replace missing values (i.e., complete case analysis).
38%) reported sexual harassment, as did 9 of 24 women in their fifth year of GS training (37%; 95% CI: 17%, 50%).

Reported rates of sexual harassment among female residents self-identifying as lesbian, gay, transgender, bisexual, or queer or questioning (LGBTQ) were significantly higher than those not expressing that identity (odds ratio [OR] 3.59, CI: 1.09-11.79, P = 0.03), with 19% (n = 4) of residents identifying as LGBTQ vs 6.2% (n = 46) of residents not identifying as LGBTQ reporting sexual harassment.

In assessing correlations between sexual harassment and dimensions of the culture assessed by the CRS, sexual harassment was associated with lower levels of vitality (being energized by work) with a small-to-medium standardized effect (β = −0.31, se = 0.12, P = 0.01, Cohen’s d = −0.35). Sexual harassment was associated with higher levels of ethical or moral distress, with a large standardized effect size (β = −0.60, se = 0.11, P < 0.001, Cohen’s d = −0.96).

**DISCUSSION**
For residents in our study, sexual harassment by colleagues and supervisors was less prevalent in pediatrics, where women residents and faculty outnumber men, than in IM or GS. Nationally, 36% of faculty in IM are female, but only 19% of surgical faculty are female.

For residents, sexual harassment is associated with reduced vitality and higher levels of ethical or moral distress. This relationship between sexual harassment and vitality and ethical or moral distress is also true for a national sample of women faculty at AMCs; additionally, female faculty reporting recent sexual harassment were 2.60 times more likely to intend to leave their institution (unpublished data).

Although using abbreviated measures to inquire about sexual harassment may lead to underestimation of harassment prevalence, we hypothesize that our survey item captured particularly egregious experiences above some threshold of "bad enough" to be recalled and reported.

It is chilling to realize the widespread extent of this unprofessional behavior among physicians in medical training programs. In our institutions of healing, learning, and discovery, gender bias and harassment must be eliminated. Our institutional leadership can help to create a culture in which individuals can speak out without fear when observing or experiencing sexual harassment. Sexual harassment is illegal and unprofessional and must be treated as the deprivation of equal rights that it is. In this era of cultural reckoning for women, academic medicine needs to look to its own house and ensure accountability and transparent responses to unprofessional behaviors, including sexual harassment.

**ACKNOWLEDGMENTS**
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**REFERENCES**

