

# Prevalence of harassment and discrimination among residents in three training hospitals in Saudi Arabia

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**BACKGROUND AND OBJECTIVES:** Multiple surveys of medical residents have shown a high incidence of harassment and discrimination in academic health centers. Harassment has a negative effects on residents' health and on their ability to function. No previous study has documented the prevalence of harassment and discrimination among residents in Saudi Arabia. We aimed in this study to assess the prevalence of harassment and discrimination among residents at a tertiary care academic hospitals in Saudi Arabia.

**DESIGN AND SETTING:** Cross-sectional survey conducted at National Guard Hospitals in Riyadh, Jeddah and Al-Ahsa'a from 27 July to 20 August 2010.

**SUBJECTS AND METHODS:** The survey included questions on the prevalence of harassment of different types, including verbal, academic, physical and sexual harassment, as well as discrimination on the basis of gender, region of origin or physical appearance.

**RESULTS:** Of 380 residents, 213 (56%) returned a completed questionnaire (123 male, 57.8%). At least one of type of harassment and discrimination was reported by 83.6% of respondents. The most frequently reported forms were verbal harassment and gender discrimination (61.5% and 58.3%, respectively). Sexual harassment was commonly reported (19.3%) and was experienced significantly more often by female residents than by male residents ( $P=.0061$ ).

**CONCLUSION:** Harassment and discrimination of Saudi residents is common with more than three-quarters reporting having had such an experience. Identification of the risk factors is a necessary first step in clarifying this issue and could be used when planning strategies for prevention.

A healthy and secure learning environment is essential for optimal medical training. The quality of training, education and daily experience of medical residents are largely influenced and controlled by patients and their families, their supervisors, nurses, peers or any other health care providers. These individuals can be a major source of discomfort and stress as well as major source of harassment and discrimination.

Harassment and discrimination of residents is not uncommon.<sup>1-5</sup> For example, a survey of 619 residents from 37 hospitals in Japan found that 84.8% of the

respondents reported some form of mistreatment.<sup>6</sup> Another survey showed that 98.6% of residents at post-graduate year (PGY1) reporting at least one experience of perceived harassment.<sup>7</sup> A recent meta-analysis included 51 studies showed that 59.4% of medical trainees (including; students, interns, and residents) had experienced at least one form of harassment or discrimination during medical training. Verbal harassment was the most commonly cited form of harassment.<sup>8</sup>

Several studies have shown the striking impact of harassment and discrimination on the trainees' behavior. A previous cross-sectional survey reported some

trainees felt that harassment and abuse created a hostile environment for residency training (7.9%). Other adverse effects included impaired performance (reported by 3.3%), and 2.6% of the respondent reported a changed work routine.<sup>9</sup> Sheehan and colleagues found that medical students who were frequently harassed were less likely to complete assignments or provide optimal patient care.<sup>10</sup> Although their finding may not be generalized to residents, nevertheless, it confirms the unwanted consequences of these unsavory behaviours. Emotional or mental health problems have also been reported with trainees experiencing depression, anxiety, drinking for escape, insomnia and appetite loss.<sup>11-13</sup>

No previous study has documented the prevalence of harassment and discrimination amongst medical residents in Saudi Arabia and the Middle East.<sup>14,15</sup> We aimed to examine the prevalence of harassment and discrimination as an initial step in understanding its significance and exploring potential preventative strategies.

## SUBJECTS AND METHODS

In this observational, cross-sectional study, a detailed questionnaire used previously elsewhere for a similar study<sup>6,9</sup> was adopted to local needs to assess relevant aspect of the residency programs including domains of enquiry identified from a literature search. The questionnaire was reviewed after pre-testing on ten interns at the hospital. The survey included demographic information such as gender, age, residency year, nationality and region of origin. It also included questions about whether residents had ever experienced harassment and discrimination from consultants, nurses, patients or their family members or other healthcare providers. Seven possible categories of abuse (verbal, academic, physical and sexual harassment and discrimination on the basis of gender, regional orientation or physical appearance) were examined.<sup>6</sup> Two additional questions were also asked: "Because of the harassment, did you seek any professional help (e.g., psychiatric) and would you pursue another career if you had to do it all over?". In the questionnaire, verbal harassment was defined as behavior that made people feel hurt, devalued or incompetent. Such behavior could include yelling or shouting, if the content was inappropriately nasty, rude, hostile, belittling or humiliating.<sup>16</sup> Physical harassment was defined as behavior that either threatened or actually subjected the residents to physical harm. Academic harassment was defined as the assignment of undesirable tasks as punishment, threats to fail residents unfairly, unfair competition with residents, and negative remarks about residents' prospects of becoming a doctor or of pursuing a career in medicine. Sexual harass-

ment was defined by any of the following: offensive comments (e.g., repeated comments about resident's appearance), unwanted attention (e.g., persistent unwelcome flirtation), unwelcome verbal advances (e.g., expression of sexual interest or sexual inquiries), unwanted persistent invitations, unwelcome explicit proposition, offensive body language (e.g., repeated leering, standing too close), and unwanted physical advances or sexual bribery (e.g., offers of advantages or the withdrawal of a threat in exchange for sexual favors). Gender discrimination was defined as the denial of the opportunity to examine patients or to practice a medical technique based on gender, assignments given on the basis of gender, or denial of the opportunity to attend a conference or a meeting or restriction in career choice based on gender.<sup>6,16</sup> The prevalence of abuse or harassment was categorized into two main answers: 'YES' or 'NO'.

We distributed the questionnaire from July 27th to August 20th, 2010 during multiple shifts in all wards, clinics, emergency rooms and morning meetings of residents enrolled in all residency-training programs at National Guard Hospitals (NGH) in Riyadh, Jeddah and Al-Ahsa'a. Residents were asked to return questionnaire to the secretary of the departments. The Retrospective Research Sub-Committee at King Abdullah International Medical Research Center approved the protocol. Informed consent was obtained. Completion of the questionnaire was voluntary and responses were kept anonymous.

All of the variables were summarized and reported across the study cohorts using descriptive statistics. Interval variables, such as age and residency year, were summarized and reported according to their mean and standard deviation. Categorical variables, such as gender, region in Saudi Arabia, types of harassment (verbal harassment, gender harassment, academic harassment, racial discrimination, sexual harassment, physical appearance and physical harassment), residents reaction to harassment and type of harassment stratified by harasser, were summarized and reported according to their frequency distributions. Categorical variables, such as types of harassment, were compared statistically across genders using chi-square tests for independence. All of the statistical tests were declared significant at  $\alpha < .05$ . Logistic regression analysis was used to analyze the relationship between the outcome variable any type of harassment and the other independent variables. The independent variables included the following: age, residency year, and region in Saudi Arabia. All of the results were summarized using odds ratios and the corresponding *P* values.

## RESULTS

Of the 380 residents surveyed, 213 returned completed questionnaires. The response rate was 56%. Of the respondents, 123 (57.8%) were males. The mean (SD) age was 27.7 (2.13). At least one of type of harassment and discrimination was reported by 83.6% of respondents. No demographic variable significantly predicted any type of harassment ( $P>.05$ ) (Tables 1, 2).

Verbal harassment during residency training was the most commonly reported form of abuse and was reported by 61.5% of the residents [ $n=131$  (63 male, 68 female)] (Table 3, 4). Consultants were cited most frequently as the source of harassment and discrimination. However, it was not statistically significant when compared for gender ( $P>.05$ ). Residents also reported verbal abuse from a number of sources including patients and their families (49.51%,  $n=51$ ) and nurses (32.69%,  $n=34$ ) (Table 5).

Gender discrimination was the second most frequent type of abuse, with 123 of the residents (58.29%) reporting that they had been discriminated on the basis of their gender. Of these, 69 (57.02%) were males and 54 (60%) were females and this was not significantly different ( $P=.664$ ) (Table 3). Reports of academic harassment were significantly higher among female residents than among male residents (40% vs. 20.33%, respectively,  $P=.0017$ ) (Table 3).

Sexual harassment was experienced by 19.34% of the respondents. Female residents were more frequently subjected to sexual harassment than were males (28.09% vs. 13.01%, respectively,  $P=.0061$ ). The most frequently reported events included offensive body language, unwanted attention, offensive comments and unwelcome verbal advances. Female respondents were more likely to report offensive body language than were males (Table 3).

Eight residents sought professional assistance (psychiatric) due to harassment. Forty-seven (22.38%) residents wanted to pursue another career. Consultants were the group most often reported by residents as being abusive, followed by patients or their families (Table 5).

## DISCUSSION

Our study provides the first report on the prevalence of harassment and discrimination among residents in Saudi Arabia and the Middle East. Furthermore, it emphasizes how common this problem is in our training programs. Similar to the Japanese study,<sup>6</sup> the overall rate of harassment and discrimination in our study was 83.64%, which is strikingly high in comparison to rates reported in Western countries. In the United States, a

**Table 1.** Resident demographics.

Total Sample, N	213
Age, mean (SD) (years)	27.66 ( 2.13 )
Residency year, mean (SD)	2.33 (1.25 )
Gender <sup>a</sup>	
Male	57.75 (123)
Female	41.78 (89)
Nationality	
Non-Saudi	2.82 (6)
Saudi	97.18 (207)
Region in Saudi Arabia	
Middle	18.84 (39)
East	22.22 (46)
West	42.03 (87)
North	2.90 (6)
South	14.01 (29)

<sup>a</sup>One participant did not provide a response for this variable; Gender  $n=212$ . Data are % (n) unless otherwise indicated.

**Table 2.** Predictors of being harassed and discriminated (any type).

Variable	Odds Ratio	P value
Age	1.118	.3856
Gender (Female)	1.786	.1966
Residency year	1.111	.6084
Region (East)	0.343	.0502
Region (Middle)	0.325	.0502
Region (North)	0.218	.1218
Region (South)	0.482	.2599

study released by the Minnesota Medical Association showed that at least 58% of the residents and students were subject to one or more forms of harassment and discrimination during medical training compared to 50% in Canada,<sup>9,17</sup> 40% in the United Kingdom,<sup>18</sup> 61% in Ireland,<sup>19</sup> and 68% in Turkey.<sup>2</sup> Similar to these studies, the most commonly cited form of harassment in our study was verbal abuse, and consultants and supervisors were the major sources of such behaviors.

Verbal harassment by consultants towards their residents may be correlated with anger as well as superiority status.<sup>6</sup> Similar abuse inflicted by patients may suggest dissatisfaction with health care services, or lack of acceptance of care provided by resident.<sup>20</sup> The strikingly high prevalence of sexual harassment (19.34%) is

**Table 3.** Prevalence and types of resident harassment and discrimination during residency training, comparison between male and female respondents.

Variable	Male % (n)	Female % (n)	Total % (n)	P value
Verbal harassment	51.22% (63)	75.56 % (68)	61.5% (131)	.0003
Physical harassment	8.94% (11)	11.1% (10)	9.86% (21)	.6001
Academic harassment	20.33% (25)	40% (36)	28.64% (61)	.0017
Sexual harassment	13.1% (16)	28.9% (25)	19.34% (41)	.0061
Offensive comments (e.g., repeated comments about your anatomy)	7.4% (8)	9.3% (10)	16.7% (18)	.157
Unwanted attention (e.g., persistent unwelcome flirtation)	9.2% (10)	10.1% (11)	19.3% (21)	.216
Unwelcome verbal advances (e.g., expressions of sexual interest or sexual inquiries)	6.4% (7)	9.2% (10)	15.6% (17)	.104
Unwanted, persistent invitations	6.4% (7)	0.9% (1)	7.3% (8)	.969
Unwelcome explicit proposition	3.7% (4)	1.8% (2)	5.5% (6)	.712
Offensive body language (e.g., repeated leering or standing too close)	10.1% (11)	13.8% (15)	23.9% (26)	.069
Unwanted physical advances	3.7% (4)	5.6% (6)	9.13% (10)	.153
Sexual bribery (e.g., offers of advantages or the withdrawal of a threat in exchange for sexual favors)	0.9% (1)	0	0.9% (1)	.815
Gender discrimination	57.2% (69)	60% (54)	58.29% (123)	.6647
Denied the opportunity to examine patients	29.2% (40)	10.2% (14)	39.4% (54)	.999
Denied the opportunity to practice a medical technique	26.8% (37)	20.3% (28)	47.1% (65)	.613
Assignments made based on gender	20.4% (28)	24.1% (33)	44.5% (61)	.027
Denied attendance at a conference or meeting	10.4% (14)	9.6% (13)	20% (27)	.336
Restriction in career choice	9% (12)	19.5% (26)	28.6% (38)	0
Discrimination on the basis of physical appearance	9.02% (11)	25.6% (23)	16.4% (34)	.0012
Discrimination on the basis of region of origin	18.70% (23)	30% (27)	23.47% (50)	.0546

a disturbing and unexpected finding, considering that Saudi Arabia is a conservative and religious society, where overt sexual practices are highly condemned.

Resident harassment and discrimination has been shown to have negative impact on residents' health and their ability to function.<sup>21</sup> One of the most striking findings in our survey was the frequency of respondents reporting they would pursue another career if they had to do it all over (n=47). Although we do not know if residents' answers to this question are directly related to harassment and discrimination, the possibility suggests that further investigations are warranted to establish

the psychological impact of harassment on the well-being of residents.

Consultants and supervisors play a key role on the residents' career development. Bad attitudes may instill negative attitudes on residents towards their future profession. This raises the possibility of getting engaged in patients' mistreatment later as future doctors. Efforts should be placed towards encouraging positive learning conditions.

Recognition of the prevalence of harassment and discrimination and identifying the exact nature of the most frequent types is a necessary first step in clarify-

ing this issue. This could be used in planning strategies to prevent harassment and discrimination in medical culture. Furthermore, policy makers and program directors should adopt a more proactive approach in dealing with harassment and discrimination during residency training.<sup>22</sup> For example, in 2004, The Royal College of Physician and Surgeons of Canada, approved "Accreditation and The Issue of Intimidation and Harassment in Postgraduate Medical Education; Guidelines for Surveyors and Programs". Their goals were to "develop definitions and to clarify an approach to the problem that could advise programs, universities and survey teams".<sup>22</sup> Our training programs lack such initiatives, despite the presence of some policies for conflict resolution, which justifies the need for proper implementation of procedures and policies to provide a clear definition for this problem and to eliminate many forms of harassment and discrimination during residency training.

A confidential feedback system would promote the reporting of harassment and discrimination, especially for sexual harassment, which could, otherwise go unreported. Moreover, any source of harassment or discrimination should be subjected to several actions including a written reprimand, suspension, a transfer or even a dismissal. To stem this practice, major changes at individual, team, departmental, organization, as well as national levels, are direly needed.

We recognize several limitations in the present study. The use of subjective measures in which individ-

uals judge and categorize what constitutes an abusive experience may cause controversial judgment among respondents. Furthermore, this study was retrospective and the responses are subject to recall bias. Finally, as completion of the survey was voluntary and anonymous, thus, our finding may not be representative of National Guard Hospital residents overall.

In conclusion, our study demonstrates a strikingly high prevalence of harassment and discrimination in our training programs. We confirmed the presence and commonality of this phenomenon during medical training at Saudi hospitals. A synthesis on the occurrence of harassment in medical training will likely lead to the establishment of strong preventive measures.

**Table 4.** Prevalence of various types of harassment and discrimination.

Type of harassment	% (n)
Overall prevalence of harassment	83.64 (179)
Verbal harassment	61.50 (131)
Gender discrimination	58.29 (123)
Academic harassment	28.64 (61)
Regional discrimination	23.47 (50)
Sexual harassment	19.34 (41)
Physical appearance	16.04 (34)
Physical harassment	9.86 (21)

**Table 5.** Types of harassment and discrimination stratified by harasser.

Type of Harassment	Harasser % (n)			
	Consultant	Nurse	Patient /families	Other HC Providers
Verbal harassment	67.96 (70)	32.69 (34)	49.51 (51)	16.67 (17)
Physical harassment	35 (7)	5.26 (1)	57.89 (11)	18.79 (3)
Academic harassment	96.15 (50)	0	2.04 (1)	10.20 (5)
Sexual harassment	38.89 (7)	16.67 (3)	50 (9)	22.22 (5)
Gender discrimination	57.89 (33)	3.77 (2)	58.49 (31)	19.23 (10)
Physical appearance	66.67 (20)	20.00 (6)	63.33 (19)	34.48 (10)
Racial discrimination	83.72 (36)	5.26 (2)	34.21 (13)	26.32 (10)

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