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Workplace bullying in surgical environments in Saudi Arabia: A multiregional cross-sectional study

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Abstract:

BACKGROUND: Workplace bullying (WPB) is any sort of repeated and unjustified verbal, sexual, or physical intimidation that a person is exposed to by a group or another person in the workplace. In healthcare environments, practitioners are occasionally victims of WPB incidents. Bullying in surgical environments is an important issue that needs attention as it could affect patient care either directly or indirectly. The objective of this study was to assess the prevalence of bullying in surgical environments in multiple regions in Saudi Arabia.

MATERIALS AND METHODS: This cross-sectional study was conducted among surgeons, trainees, interns, nurses, and students in surgical specialties in multiple Saudi regions. The survey was designed by Survey Monkey and posted online. The data were analyzed through SPSS Version-21 by computing descriptive statistics as frequency and percentages with graph construction.

RESULTS: About two-thirds (65.2%) of the 788 study participants were male and were between the age of 20 and 29 years (67.8%). Consultants came first as perpetrators of bullying in the past 12 months (44.3%) and residents and interns were the major victims. The NAQ-R score ranged from 22.00 to 110.00, with a mean score of 42.47 (SD=17.9). Statistically significant association was found between mean NAQ-R score and age ($P = 0.007$), specialty ($P = 0.002$), and position ($P < 0.001$).

CONCLUSION: WPB is a pervasive problem in surgical environments in multiple regions of Saudi Arabia. Consultants and specialists are the primary offenders in bullying, which makes the hospital an environment for bullying behaviors.

Keywords:

Bullying, healthcare, Saudi, surgical, workplace

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Introduction

The cultural and contextual differences make the definition of workplace bullying (WPB) difficult. However, it could be defined as the circumstances, in which the employee is a victim of aggressive or negative acts at work, principally psychologically with the impact of humbling, threatening, frightening, or harming the employee.[1]

Healthcare practitioners are not immune to WPB. For example, in the United States, the abuse rates of nurses and doctors were 21.9/1000 and 16.2/1000 employees, respectively.[2] Moreover, about 34.5% of emergency department staff are exposed to physical bullying and 71.6% are victims of confrontational verbal abuse. In an Iranian medical center experience, 44.4% were bullied annually.[3] WPB is the result of many factors. It mainly involves a vulnerable victim, a bystander, and a undeterred perpetrator.[4]

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Surgical environments are especially prone to bullying. First, because the hierarchy is well respected.[5] Second, many surgeons refuse to speak against their colleagues for fear of retaliation.[6] Third, the surgical environment is extremely stressful, be it the operating room, trauma center, or even when discussing cases at conferences. Surgeons even bully under the pretext of being patient advocates. Junior doctors and residents who have observed bullying could themselves in future become bullies. This is particularly so if the bully is considered successful in their field.[7]

A study conducted in Australia in 2019 showed that 47% of training and practicing surgeons were victims of bullying, while another 68% had witnessed bullying.[8] A US Bullying Workplace Survey conducted in 2007 by the WPB Institute revealed that 49% of surgeons were either victims of bullying or had witnessed bullying at their workplace. Most of these surgeons later developed posttraumatic stress disorder.[9] In 2018, a systematic review conducted to measure the differences between the prevalence of bullying in different countries concluded that in certain countries such as Australia and the UK, the prevalence is high, 49.3% and 53.8%, respectively. In Japan, however, the prevalence of bullying was low, with 27.6% of the respondents.[7]

Unfortunately, in healthcare environments, WPB has an adverse effect on teamwork performance, threatens integrity,[10] and negatively affects patient care.[11] WPB also increases the incidence of medical errors, resulting in adverse outcomes.[11] Besides, these negative acts also limit the care of patients.[12] WPB reduces the commitment of healthcare professionals and makes staff absenteeism and increased burnout rates more likely.[13] Recently, the Saudi Ministry of Labor introduced new rules which came into effect on October 20, 2020, to reduce the incidence and prevalence of WPB.[14]

We conducted a cross-sectional study to assess the prevalence of WPB in surgical environments in multiple regions in Saudi Arabia. Surgical environments are replete with many situations that induce stress, which result in bullying of their colleagues and/or their patients by surgeons. Although different studies have assessed bullying among healthcare professionals, this is the first to assess WPB among surgeons in Saudi Arabia.[15-18]

Materials and Methods

This was a cross-sectional study conducted between February 24 and August 24, 2021, among surgeons, trainees, interns, nurses, and students in surgical specialties in multiple Saudi regions using a self-administered questionnaire. Ethical approval was obtained from the Institutional Review Board (IRB) vide Letter No. IRB-2021-01-061 dated 18/02/2021 and written informed consent was taken from all the participants. All information were kept confidential, and the data were used for the proposed research. A validated tool known as the ''Negative Attitude Questionnaire-Revised (NAQ-R)'' posted through Survey Monkey was used to collect the participants' answers. The questionnaires were distributed through WhatsApp and Telegram groups of surgeons, surgical trainee, surgical nurses, and students rotating in surgical specialties.

NAQ-R is composed of 22 questions, in which bullying is described in terms of behavior rather than a direct use of the term "bullying," to avoid influencing participants' response. Bullying is a subjective term, the threshold of its acceptance differing from person to person.[15] Questions are associated with negative behavior relating to person-related negative acts, work-related, and physical intimidation. Each question is answered on a scale, out of 5 points based on its frequency. The grading is as follows: one is never, now and then is two, monthly is three, weekly is four, and daily is five. The final question directly asks about bullying based on the definition. Demographics were also gathered. All levels of the Saudi healthcare system in all Saudi regions were sent an invitation to participate in our study.

Statistical analysis was done by the Statistical Package for the Social Sciences (SPSS) version 21 software (SPSS Inc., Chicago, IL, USA). The percentages and frequencies for all variables were calculated. Chi-squared test was applied to look for any relationship between variables. $P < 0.05$ was considered statistically significant. A cumulative score of NAQ-R < 33 was considered as not bullied, the score between 33 and 45 meant bullied infrequently, and above 45 were targets of frequent bullying at the workplace.

Results

A total of 788 respondents participated in the study on the exposure to bullying at work, person-related or the subject of physical bullying during the past 12 months. We noticed that most participants had chosen the answer never, followed by the answer "now" and "then" to all questions except to the question of being at the receiving end of excessive testing and sarcasm in the person-related category. The percentage of answers "monthly", "weekly", and "daily" came in the third, fourth, and fifth order, respectively, except to a question in the person-related category which concerned having insulting or offensive remarks made about one's person, attitudes, or private life, 46 (5.8%) said "weekly," and 26 (3.3%) said "monthly" [Table 1].

The description of demographic characteristics, including age, gender, nationality, position, and specialty, is illustrated in Table 2. Approximately two-thirds of the participants, 514 (65.2%), were male, and about a third, 274 (34.7%), were female. Most (67.8%) were aged 20–29 years and only 36 (4.6%) participants were aged above 50 years. Of the 788 respondents, 695 (86%) were Saudis, and 93 (11.8%) were non-Saudi. Students were in the majority with 314 participants (39.8%), while the smallest group of 71 (9%) was that of interns. There were varied levels of participant contributors: 38.1% were undergraduates, 55 (7.0%) were interns, and 26 (3.3%) from anesthesia. The remainder were from different surgical specialties such as orthopedics, pediatric, and cardiac surgery and so were grouped together because of low responses. General surgery was the highest with 140 (17.8%) and ophthalmology the lowest at 30 (3.8%).

Regarding the geographical distribution demonstrated in Figure 1, 238 (30.2%) was the contribution from Makkah province, 127 (16.1%) from the Riyadh province, and 30 (3.8%) from the Qassim province. Consultants were the largest group as perpetrators of a negative act in the past 12 months with 349 (44.3%), followed by specialists with 232 (29.4%), 173 (22%) residents, 163 (20.7%) students, and nurses with 52 (6.6%).

Out of 788 participants, most responses (40.7%) indicated that they had never been bullied or been the recipients of such treatment in the past 12 months. On the other hand, 25 (3.2%) participants had been bullied daily. Moreover, 269 of the participants had never been witnesses to the bullying of other people, while 233 (29.6%) had witnessed this every now and then [Table 3].

With regard to reporting to authority if they had been exposed to bullying, only 172 (21.8%) said "yes," 174 (22.1%) said they "hadn't been exposed to bullying," 220 (27.9%) said that "reporting the issue would make the situation worse," 71 (9%) felt "not be supported if they reported," and 41 (5.2%) said "the behavior stopped and didn't re-occur."

The range of NAQ-R score was from 22.00 to 110.00 (mean = 42.47, standard deviation = 17.9), which indicates that bullying of the participants was infrequent.

The Chi-square test reported a significant association between mean NAQ-R score regarding age, specialty, and position ($P = 0.007$, 0.002, and < 0.001, respectively),

Table 1: Exposure of healthcare workers working in surgical specialties to bullying during the past 12 months, Saudi Arabia

During the past 12 months, how frequently you exposed to	Never *N* (%)	Now and then *N* (%)	Daily *N* (%)	Weekly *N* (%)	Monthly *N* (%)
Work-related					
Someone withholding information that affects your performance	317 (40.2)	229 (29.1)	28 (3.6)	75 (9.5)	139 (17.6)
Being ordered to do work below your level of competence	266 (33.8)	242 (30.7)	58 (7.4)	69 (8.8)	153 (19.4)
Having your opinions ignored	272 (34.5)	227 (28.8)	43 (5.5)	73 (9.3)	173 (22.0)
Being given tasks with unreasonable deadlines	286 (36.3)	243 (30.8)	36 (4.6)	64 (8.1)	159 (20.2)
Excessive monitoring of your work	299 (37.9)	231 (29.3)	47 (6.0)	55 (7.0)	156 (19.8)
Pressure not to claim something you are entitled to	343 (43.5)	215 (27.3)	42 (5.3)	60 (7.6)	128 (16.2)
Being exposed to an unmanageable workload	291 (36.9)	202 (25.6)	55 (7.0)	68 (8.6)	172 (21.8)
Person-related					
Being humiliated or ridiculed as regards your work	365 (46.3)	217 (27.5)	18 (2.3)	56 (7.1)	132 (16.8)
Having key areas of responsibility removed or replaced with more trivial or up	364 (46.2)	203 (25.8)	18 (2.3)	55 (7.0)	148 (18.8)
Spreading of gossip or rumors about you	384 (48.7)	185 (23.5)	24 (3.0)	54 (6.9)	141 (17.9)
Being ignored or excluded	329 (41.8)	223 (28.3)	27 (3.4)	52 (6.6)	157 (19.9)
Having insulting or offensive remarks made about your person, attitudes, or private life	411 (52.2)	192 (24.4)	26 (3.3)	46 (5.8)	26 (3.3)
Hints or signals you should quit your job	418 (53.0)	183 (23.2)	17 (2.2)	45 (5.7)	125 (15.9)
Repeated reminders of your errors or mistakes	384 (48.7)	210 (26.6)	29 (3.7)	37 (4.7)	128 (16.2)
Being ignored or facing hostile reaction when you approach	197 (25.0)	197 (25.0)	23 (2.9)	43 (5.5)	111 (14.1)
A persistent criticism of your errors or mistakes	416 (52.8)	178 (22.6)	22 (2.8)	57 (7.2)	115 (14.6)
Practical jokes by people you don't get along with	431 (54.7)	172 (21.8)	19 (2.4)	36 (4.6)	130 (16.5)
Having allegations made against you	459 (58.2)	153 (19.4)	22 (2.8)	44 (5.6)	110 (14.0)
Being subject to excessive testing and sarcasm	450 (57.1)	43 (5.5)	32 (4.1)	43 (5.5)	450 (57.1)
Physically intimidating					
Being shouted at or being the target of spontaneous anger	431 (54.7)	114 (14.5)	29 (3.7)	36 (4.6)	114 (14.5)
Intimidating behavior	450 (57.1)	159 (20.2)	23 (2.9)	39 (4.9)	111 (14.1)
Threats of violence or physical abuse, or actual abuse	549 (69.7)	117 (14.8)	17 (2.2)	33 (4.2)	66 (8.4)

Table 2: Association between demographic characters and mean negative attitude questionnaire-revised score

Variables	*N* (%)	Mean NAQ-R score	*P*-value
Age			
20-29	534 (67.8)	43.9550	0.007*
30-39	157 (19.9)	39.7197	
40-49	61 (7.7)	37.8197	
>50	36 (4.6)	40.2500	
Gender			
Female	274 (34.8)	42.7190	0.272
Male	514 (65.2)	42.3294	
Nationality			
Saudi	695 (88.2)	42.1153	0.135
Non-Saudi	93 (11.8)	45.0753	
Position			
Student	314 (39.8)	41.1789	<0.001*
Intern	71 (9.0)	47.1549	
Resident	164 (20.8)	46.3506	
Specialist	85 (10.8)	39.5059	
Consultant	77 (9.8)	36.2987	
Nurse	77 (9.8)	45.4939	
Specialty			
Student	300 (38.1)	40.6856	0.002*
Intern	55 (7.0)	48.8545	
Anesthesia	26 (3.3)	38.6538	
ENT	34 (4.3)	42.0294	
General surgery	140 (17.8)	45.9000	
Obs/Gyn	67 (8.5)	42.7612	
Ophthalmology	30 (3.8)	34.2000	
Special surgeries	136 (17.3)	42.7721	

*Statistical significance *P*<0.05. NAQ-R=Negative attitude questionnaire-revised, ENT=Ear, nose, and throat

where the age category of 20–29, and interns were more frequently bullied than other participants [Table 2].

The statistical analysis reported no significant association of mean NAQ-R score regarding the geographic area ($P = 0.097$) but reported a significant association between mean NAQ-R score regarding reporting authorities ($P < 0.001$) [Table 4]. There was a significant association between nationality and age group regarding reporting authorities ($P = 0.001$ and < 0.001, respectively). Similarly, a significant association was seen between positions regarding reporting authorities ($P < 0.001$) [Table 5].

Discussion

Surgery is a vital part of healthcare and a cornerstone in managing many conditions. Unfortunately, WPB could affect the surgeon by diminishing their self-confidence and questioning their ability to provide care.WPB affects nurses, adversely affects patient's health, and creates a toxic workplace environment for the organization. There are three types of negative WPB that health workers face: that which occurs in the workplace, that which occurs on a personal level, and that which involves physical violence.[19] This study aimed to assess the prevalence of WPB in surgical environments in different regions in the Saudi healthcare system.

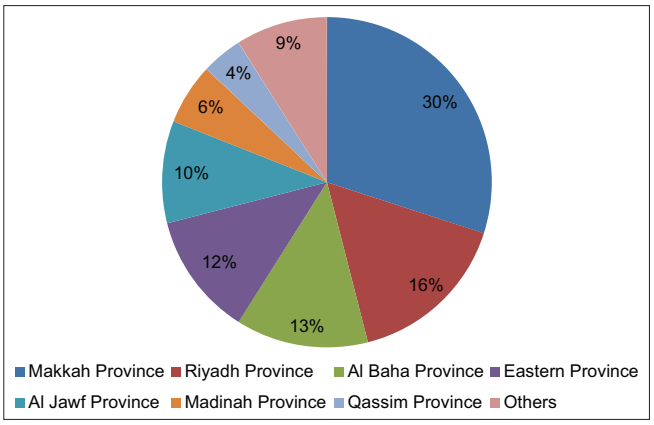

Figure 1: Area of training\studying within the past 12 months

In this study, students formed the majority of participants compared with surgeons, trainees, and nurses. Students who participated were rotating in surgical specialties in different centers in various regions of Saudi Arabia. The results showed that 47.6% of our participants, in many surgical environments, had been bullied during the last 12 months, with a NAQ-R score of 42.47, indicating that the participants had been bullied infrequently. Our results match the Ling *et al's* study of 2016,[20] which reported the prevalence of WPB in general surgery as 47%, with a NAQ-R score of 38%. This is supported by such other studies as Nabi *et al*., 2013,[21] in which 49.3% of participating consultants and trainee surgeons had been bullied.

However, Crebbin *et al*., 2015, showed that Japanese doctors rotating in surgical specialties had reported a lower prevalence of bullying, 27.6%.[22,23] Moreover, the literature suggests that bullying is often visible, since most surgeons had observed unprofessional behavior such as bullying.[24,25]

The present result revealed a statistically significant relationship of demographic characteristics of participants, namely age, position, and specialty with WPB. This is in line with Awai *et al*., (2021)[26] and Borges *et al*., (2015)[27] who reported a significant association between age and WPB, whereby junior doctors were more likely to be bullied than senior doctors. On the other hand, Norton *et al* (2017),[28] Baburajan *et al* (2019),[29] Hassan ME (2021),[30] and Ariza-Montes *et al* (2013) findings are not in accord with our results.[31]

Consultants and surgical trainees are perpetrators of negative acts toward each other. The bullying happens vertically (attending to resident) and horizontally (resident to resident, attending to attending).

This finding reveals a culture of bullying not only in surgical environments but also in the entire health sector.[32] Similar to the Australasian College of Surgeons findings, which reported that attending faculty were the most likely to bully,[32] our results revealed that consultants were the major offenders (44.3%). At a private college of medicine in Lahore, Mukhtar *et al*., (2010)[33] reported that faculty members were the main perpetrators of bullying, especially of medical students. However, Timm (2014)[34] who interviewed over a hundred medical students in the UK stated that senior faculty were mostly responsible (44.0%). The reasons for this pattern of bullying are complex. Sometimes, negative feedbacks are viewed as "bullying." Some people even think of harassment as an effective method in the education of surgical trainees.[35]

Table 3: Frequency of being bullied or witnessing bullying in the past 12 months

	N (%)
How frequently have you been treated with such behavior in the past 12 months?	
Never	321 (40.7)
Now and then	216 (27.4)
Daily	25 (3.2)
Weekly	51 (6.5)
Monthly	175 (22.2)
How frequently have you been a witness to the bullying of other colleagues in the past 12 months?	
Never	269 (34.1)
Now and then	233 (29.6)
Daily	30 (3.8)
Weekly	73 (9.3)
Monthly	183 (23.2)

Although many studies are interested in studying WPB in surgical environments, to the best of our knowledge, no study has focused on studying the association between mean NAQ-R score of demographics including age, gender, nationality, and the position of reporting authorities on bullying in participants' workplace. This was our focus in the study, and we revealed a significant association of reporting authorities on mean NAQ-R score, age group, nationality, and position. Therefore, we recommend that more studies should be conducted

Table 4: Association between mean negative attitude questionnaire-revised score and reporting to authorities

	Mean NAQ-R score±SD	*P*-value
I haven't been exposed to bullying	28.0115±10.29338	<0.001*
Yes, I have been exposed to bullying	40.9419±13.48411	
I didn't know who to report to	47.1443±16.28457	
No, I was concerned that reporting the issue would make the situation worse	50.6781±18.90184	
I felt not supported on reporting	45.9143±17.77047	
The behavior stopped and did not recur	46.5610±20.43165	

*Statistical significance *P*<0.05. NAQ-R=Negative attitude questionnaire-revised, SD=Standard deviation

Table 5: Association between gender, nationality, age, position, and reporting to authorities

	Yes, I have reported *N* (%)	I haven't been exposed to bullying *N* (%)	Didn't know who to report to *N* (%)	No, I was concerned that reporting the issue would make the situation worse *N* (%)	I felt I would not be supported if I did report *N* (%)	The behavior stopped and not recurred *N* (%)	*P*-value
Gender							
Male	103 (20)	120 (23.3)	71 (13.8)	146 (28.4)	42 (8.2)	32 (6.2)	0.056
Female	69 (25.2)	54 (19.7)	26 (9.5)	87 (31.8)	29 (10.6)	9 (3.3)	
Nationality							
Saudi	140 (20.1)	166 (23.9)	82 (11.8)	202 (29.1)	66 (9.5)	39 (5.6)	0.001*
Non-Saudi	32 (34.4)	8 (8.6)	15 (16.1)	31 (33.3)	5 (5.4)	2 (2.2)	
Age group							
20-29	98 (18.4)	113 (21.2)	69 (12.9)	168 (31.5)	50 (9.4)	36 (6.7)	<0.001*
30-39	42 (26.8)	32 (20.4)	17 (10.8)	52 (33.1)	12 (7.6)	2 (1.3)	
40-49	14 (23)	26 (42.6)	8 (13.1)	7 (11.5)	6 (9.8)	0	
≥50	18 (50)	3 (8.3)	3 (8.3)	6 (16.7)	3 (8.3)	3 (8.3)	
Position							
Student	18 (23.4)	28 (36.4)	7 (9.1)	13 (16.9)	8 (10.4)	3 (3.9)	<0.001*
Intern	7 (9.9)	21 (29.6)	9 (12.7)	24 (33.8)	6 (8.5)	4 (5.6)	
Resident	45 (27.4)	25 (15.2)	15 (9.1)	62 (37.8)	13 (7.9)	4 (2.4)	
Specialist	22 (25.9)	22 (25.9)	14 (16.5)	22 (25.9)	5 (5.9)	0	
Consultant	46 (14.6)	76 (24.4)	46 (14.6)	86 (27.4)	33 (10.5)	27 (8.6)	
Nurse	34 (44.2)	2 (2.6)	6 (7.8)	26 (33.8)	6 (7.8)	3 (3.9)	

*Statistical significance *P*<0.05

to address similar issues in different regions around the kingdom and elsewhere.

There are recognized limitations to this study. This cross-sectional study could not confirm direct relationships. Although the questionnaire (NAQ-R) had been validated, it might have been prone to bias since it was self-reported, and acceptance of Hofstede's theorem might have led to an underestimation of the prevalence of bullying. The nonrepresentative demographics of the study participants and the use of nonprobability sampling do not allow the generalization of the results of this study.

The Illing report[36] from England recommended dissecting bullying interventions to prevent bullying before it takes place, managing bullying when it takes place, aiding targets to heal, and bullies to reassess their behavior. Senior leaders' role is critical to the success of any new interventions, specifically in supporting decisions taken, role-modeling, and maintaining the change. Recently approved regulations to protect individuals' dignity, privacy, and personal freedom by the Saudi Minister of Labor and Social Development have been put into effect since October 20, 2020. Measures by the committee that investigated workplace harassment and the definition of workplace harassment form part of the solution put into effect by the Ministry.[14]

Conclusion

Persistent negative acts are well known, especially within surgical environments in the Saudi healthcare system. Consultants and specialists are the offenders in bullying, implying that bullying is pervasive in the healthcare system. The challenge is to find and introduce solutions that would have a positive effect on the toxic culture of WPB. Teamwork and hard work at all levels are required to lessen the pervasive this problem. This study could be the starting point of investigating the applicability and usefulness of interventions to minimize WPB.

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Conflicts of interest
There are no conflicts of interest.

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