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

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 an undeterred perpetrator.[4]

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Surgical environments are especially prone to bullying. First, because the hierarchy is well respected. Second, many surgeons refuse to speak against their colleagues for fear of retaliation. 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.

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. 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. 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.

Unfortunately, in healthcare environments, WPB has an adverse effect on teamwork performance, threatens integrity, and negatively affects patient care. WPB also increases the incidence of medical errors, resulting in adverse outcomes. Besides, these negative acts also limit the care of patients. WPB reduces the commitment of healthcare professionals and makes staff absenteeism and increased burnout rates more likely. 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.

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.

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). 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-Saudis. 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%) 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.

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.”

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 (68.7)  | 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.

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. Similar to the Australasian College of Surgeons findings, which reported that attending faculty were the most likely to bully, our results revealed that consultants were the major offenders (44.3%). At a private college of medicine in Lahore, Mukhtar et al., (2010) reported that faculty members were the main perpetrators of bullying, especially of medical students. However, Timm (2014) 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. 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 3: Frequency of being bullied or witnessing bullying in the past 12 months

| How frequently have you been treated with such behavior in the past 12 months? | N (%) |
|---|---|
| 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? | N (%) |
|---|---|
| Never | 269 (34.1) |
| Now and then | 233 (29.6) |
| Daily | 30 (3.8) |
| Weekly | 73 (9.3) |
| Monthly | 183 (23.2) |

### 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 |
| 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

| Gender | Yes, I have reported | I haven’t been exposed to bullying | Didn’t know who to report to | No, I was concerned that the issue would make the situation worse | I felt I would not be supported if I did report | The behavior stopped and did not recur |
|---|---|---|---|---|---|---|
| Male | 103 (20) | 120 (23.3) | 71 (13.8) | 146 (28.4) | 42 (8.2) | 32 (6.2) |
| 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) |
| 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) |
| 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) |
| 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 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.

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.

References

1. Einarsen S, Hoel H, Notelaers G. Measuring exposure to bullying and harassment at work: Validity, factor structure and psychometric properties of the negative acts questionnaire-revised. Work Stress 2009;23:24-44.
2. O'Rourke M, Wrigley C, Hammond S. Violence within mental health services: How to enhance risk management. Risk Manag Healthc Policy 2018;11:159-67.
3. Afshari Saleh L, Niroumand S, Dehghani Z, Afshari Saleh T, Mousavi SM, Zakeri H. Relationship between workplace violence and work stress in the emergency department. J Inj Violence Res 2020;12:183-90. [doi: 10.5249/jivr.v12i2.1526]
4. Cantone E, Piras AP, Vellante M, Preti A, Danielsdottir S, D’Alloa E, et al. Interventions on bullying and cyberbullying in schools: A systematic review. Clinical practice and epidemiology in mental health. CP EMH 2015;11 Suppl 1 M4:58-76.
5. Srivastava R. Speaking up – When doctors navigate medical hierarchy. N Engl J Med 2013;368:302-5.
6. DesRoches CM, Rao SR, Fromson JA, Birnbaum RJ, Jezloni L, Vogeli C, et al. Physicians’ perceptions, preparedness for reporting, and experiences related to impaired and incompetent colleagues. JAMA 2010;304:187-93.
7. Halim UA, Riding DM. Systematic review of the prevalence, impact and mitigating strategies for bullying, undermining behaviour and harassment in the surgical workplace. Br J Surg 2018;105:1390-7.
8. Pei KY, Cochran A. Workplace bullying among surgeons-the perfect crime. Ann Surg 2019;269:43-4.
9. Kelly S. Workplace bullying: The silent epidemic. N Z Med J 2004;117:U1125.
10. Bjerkelo B, Einarsen S, Matthiesen SB. Predicting proactive behaviour at work: Exploring the role of personality as an antecedent of whistleblowing behaviour. J Occup Organ Psychol 2010;83:371-94.
11. Al Omar M, Salam M, Al-Surimi K. Workplace bullying and its impact on the quality of healthcare and patient safety. Hum Resour Health 2019;17:89.
12. Srabstein JC, Leventhal BL. Prevention of bullying-related morbidity and mortality: A call for public health policies. Bull World Health Organ 2010;88:403.
13. Hogh A, Hoel H, Carneiro IG. Bullying and employee turnover among healthcare workers: A three wave prospective study. J Nurs Manag 2011;19:742-51.
14. Workplace anti-harassment rules to be in force from Oct. 20 - Saudi Gazette.
15. ALMulhim AA, Nasir M, AlThukair A, ALNasser M, Pikard J, Ahmer S, et al. Bullying among medical and nonmedical students at a university in Eastern Saudi Arabia. J Family Community Med 2018;25:211-6.
16. Mohamed AG. Work-related assaults on nursing staff in Riyadh, Saudi Arabia. J Family Community Med 2002;9:51-6.
17. Al-Shamlan NA, Jayaseeli N, Al-Shawi MM, Al-Joudi AS. Are nurses verbally abused? A cross-sectional study of nurses at a university hospital, Eastern Province, Saudi Arabia. J Family Community Med 2017;24:173-80.
18. Alsaleem SA, Al-Sabaani A, Alamri RS, Hadi RA, Alkhayri MH, Badawi KK, et al. Violence towards healthcare workers: A study conducted in Abha City, Saudi Arabia. J Family Community Med 2018;25:188-93.
19. Nagata-Kobayashi S, Maeno T, Yoshizu M, Shimbo T. Universal problems during residency: Abuse and harassment. Med Educ 2009;43:628-36.
20. Ling M, Young CJ, Shepherd HL, Mak C, Saw RP. Workplace bullying in surgery. World J Surg 2016;40:2560-6.
21. Crebbin W, Campbell G, Hillis DA, Watters DA. Prevalence of bullying, discrimination and sexual harassment in surgery in Australasia. ANZ J Surg 2015;85:905-9.
22. Nabi H, Harley S, Murphy E. The perils and triumphs of night surgical residents across South Australia. J Surg Educ 2013;70:265-72.
23. Wu S, Zhu W, Li H, Lin S, Chai W, Wang X. Workplace violence and influencing factors among medical professionals in China. Am J Ind Med 2012;55:1000-8.
24. Arianayagam R, Rashid P. Bullying among urology trainees in Australia and New Zealand: Lessons from a cross-sectional survey. ANZ J Surg 2015;85:499-500.
25. Harries RL, Gokani VJ, Smitham P, Fitzgerald JE; Councils of Association of Surgeons in Training and British Orthopaedic Trainees Association. Less than full-time training in surgery: A cross-sectional study evaluating the accessibility and experiences of flexible training in the surgical trainee workforce. BMJ Open 2016;6:e010136.

26. Awai NS, Ganasegeran K, Abdul Manaf MR. Prevalence of workplace bullying and its associated factors among workers in a Malaysian public university hospital: A cross-sectional study. Risk Manag Healthc Policy 2021;14:75-85.

27. Borges E, Ferreira TD. Bullying no trabalho: Adaptação do Negative Acts Questionnaire Revised (NAQ R) em enfermeiros. Rev Port Enferm Saúde Ment 2015;25:25-33.

28. Norton P, Costa V, Teixeira J, Azevedo A, Roma-Torres A, Amaro J, et al. Prevalence and determinants of bullying among healthcare workers in Portugal. Workplace Health Saf 2017;65:188-96.

29. Baburajan C, Arasu S, Naveen R. Prevalence of bullying among nurses in a tertiary hospital, Bangalore. Int J Occup Safety Health 2019;9:8 12.

30. Hassan ME. Workplace bullying among nurses in primary healthcare centers in port said. Port Said Sci J Nurs 2021;8:163-83.

31. Ariza-Montes A, Muniz NM, Montero-Simó MJ, Araque-Fadilla RA. Workplace bullying among healthcare workers. Int J Environ Res Public Health 2013;10:3121-39.

32. Keeley PW, Waterhouse ET, Noble S1. Prevalence and characteristics of bullying of trainees in palliative medicine. Palliat Med 2005;19:84-5.

33. Mukhtar F, Daud S, Manzoor I, Amjad I, Saeed K, Naeem M, et al. Bullying of medical students. J Coll Physicians Surg Pak 2010;20:814-8.

34. Timm A. ‘It would not be tolerated in any other profession except medicine’: survey reporting on undergraduates’ exposure to bullying and harassment in their first placement year. BMJ open. 2014 Jul 1;4(7):e005140.

35. Garling PR. Final report of the special commission of inquiry into acute care services in Sydney, NSW public hospitals, 2008.

36. Illing JC, Carter M, Thompson NJ, Crampton PE, Morrow GM, Howse JH, et al. Evidence synthesis on the occurrence, causes, consequences, prevention and management of bullying and harassing behaviours to inform decision making in the NHS.