



Mobbing Exposure of Anaesthesiology Residents in Turkey

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Objective: In recent years, psychological problems that are caused by working conditions, like burn out syndrome, are more commonly observed. In our study, we aimed to evaluate mobbing exposure, factors causing mobbing and precautions for mobbing in residency students who are educated in anaesthesiology and reanimation clinics in Turkey.

Methods: After obtaining consent from the ethics committee, we sent our questionnaires to the secretariats of the departments by postal mail. Completed questionnaires were collected in our department's secretariat blindly and randomly mixed. One hundred and one participants were returned the questionnaires. Data was statistically analysed in SPSS 21.0 software programme.

Results: During residency programme, sated to have experienced mobbing one or more time. Interestingly, 5.9% participants complained of physical mobbing. Mobbing exposure was more common in females. The most serious new onset psychosomatic symptoms stated during residency were committing suicide (2%), addiction (16%), severe depression (18%), panic attack (8%), more accidents (7%) and tendency of violence (15%). In mobbing group there was statistically significant dissatisfaction rate.

Conclusion: In professions where mobbing is common, incidences of psychiatric diseases and suicide attempts are high are increased. Who are under risk for experiencing mobbing should be noticed carefully to ensure good judgement and problems should be inspected objectively in a detailed manner. Anesthesiology societies and other medical professional societies should establish mobbing committees. Thus, mobbing problems can be resolved and healthy career opportunities can be presented to residents.

Keywords: Mobbing, anaesthesiology, residents

Introduction

'Treat others as you would like them to treat you (1)'

Psychological harassment in the workplace (*mobbing*) is a concept that can be observed in the work environment and has been known for a long time. This concept is based on the discrimination that is made over age, gender, religion, ethnic origin, disability, background and socio-economic differences (2). Most people may not be aware of mobbing if they are not exposed to it themselves (1). As mobbing is a perception that is associated with culture, the form of exposure and sensitivity developed towards it vary in all countries (2).

In recent years, psychological problems such as professional burnout syndrome induced by working conditions have been seen to be increased in those working in the field of anaesthesiology in our country. Several guide books have been created for coping with various psychological stress factors, including workload and mobbing, for anaesthesiology and reanimation clinics in many countries (3). In our study, we aimed to evaluate the exposure to mobbing of speciality students enrolled in anaesthesiology and reanimation clinics in Turkey, factors that cause such mobbing and precautions that can be taken.

Methods

Heads of the anaesthesiology and reanimation departments or the people responsible for training were interviewed over the telephone, and clinics implementing this survey and providing information for it were selected. In accordance with the ethics committee's decision, written permission was received from the heads of the anaesthesiology and reanimation departments or the people responsible for training of speciality students who would participate in our survey. After the work approval

Table 1. Some characteristics of the participants [n, (%)]

	Total n, (%)	Mobbing (+) n, (%)	Mobbing (-) n, (%)	p
University/ERH	76 (75.2)/ 24 (23.7)	52 (51.4)/ 17 (16.8)	24 (23.7)/ 7 (6.9)	>0.05
Female/Male	48 (47.5)/ 53 (52.4)	38 (37.6)/ 32 (31.6)	10 (9.9)/ 21 (20.7)	0.041*
Married/Single	43 (42.6)/ 58 (57.4)	27 (26.7)/ 43 (42.5)	16 (15.8)/ 15 (14.8)	>0.05
Age distribution				
22–25	5 (5)	4 (3.9)	1 (0.9)	
26–29	49 (49)	35 (34.6)	14 (13.8)	
30–31	31 (31)	21 (20.7)	10 (9.9)	>0.05
32–35	12 (12)	8 (7.9)	4 (3.9)	
>35	4 (4)	3 (2.9)	1 (0.9)	
Total	101 (100)	71 (70.2)	30 (29.8)	
*When those who were and were not exposed to mobbing are compared: p=0.041. (Pearson's chi-square test; independent t-test). ERH: Education and Research Hospital				

was received from the Medical Faculty Ethics Committee of Uludağ University, the questionnaires and Informed Consent forms of the Faculty of Medicine's Clinical Research Ethics Committee of Uludağ University (for survey research) were delivered to the secretariats of these clinics. The participants were provided with the requisite information by the officers who distributed the forms. In particular, it was remarked that the participants should read the 'Informed Consent' form of the ethics committee. The speciality students who did not read it were excluded from the survey. Our ethics committee informed that a signed consent form was not required for survey research; therefore, an additional signed consent form was not taken from the participants. The questionnaires filled out by the speciality students were collected by our department's secretariat in closed envelopes.

The questionnaire is shown in Annex 1. In our country, there are 113 institutions providing speciality training in anaesthesiology and reanimation. Among all, 25 institutions that have the largest number of speciality students were called. In this study, 101 completed questionnaires were delivered to us by 7 institutions in which the study was conducted.

Statistical analysis

Statistical analysis of the data was done using the Statistical Package for the Social Sciences 21.0 statistical software package (IBM SPSS, Statistics, Armonk, New York, USA). The normal distribution of the data was analysed by using the Shapiro–Wilk test. The descriptive statistics of the data were determined as mean±standard deviation or median (minimum–maximum) for continuous variables and as frequency and percentage for categorical variables. The Mann–Whitney U test was used for an independent comparison of two groups

of abnormally distributed data and Pearson's chi-square test was used for the analysis of categorical data. Here $p < 0.05$ was considered to be statistically significant in differences.

Results

Out of the 101 participants, 76 were enrolled in university hospitals, 24 in educational and research hospitals and 1 participant did not indicate the institution where he/she was enrolled. Including the demographic characteristics, some features of the participants are shown in Table 1.

The proportion of respondents who said that they suffered mobbing once or more during the specialty education process was 69.3% and the remaining respondents did not suffer mobbing (30.7%). No statistical significance was found between those who were exposed and not exposed to mobbing in terms of the institution they worked in, marital status or age distribution. While the rate of males that suffered mobbing was statistically high, a higher rate was observed in women, although it was statistically not significant among the participants that suffered mobbing ($p = 0.041$).

The participants were inquired about their psychosomatic state during the specialty education process. According to the responses received, 11 (10.8%) participants had no complaints; various accompaniments to these complaints were observed in the other participants. There were other complaints accompanying crying episodes in thirteen participants and complaints accompanying tension and anger attacks in the others. Further, 2 (1.9%) participants expressed about a suicide attempt (one of the most serious complaints); 16 (15.8%) participants, alcohol/substance addiction; 18 (17.8%) participants, severe depression; 8 (7.9%) participants, panic attacks; 7 (6.9%) participants, experiencing increased accidents and 15 (14.8%) participants, tendency of violence towards others. The incidence of these problems between the groups exposed and not exposed to mobbing and the significance values between the differences are listed in Table 2.

When queried about taking on-duty leave, 93 (91.1%) respondents stated that they did not take leave and 8 (7.9%) stated that they continued working until the afternoon following the duty day.

For questions related to mobbers, 51 (50.4%) participants stated that the mobber was a faculty member; 48 (47.5%) participants, a senior speciality student; 3 (2.9%) participants, people more junior than themselves; 11 (10.8%) participants, a nurse; 39 (38.6%) participants, a surgical lecturer and 14 (13.8%) participants, a surgical speciality student. Further, 28 (27.7%) participants did not indicate the mobber: even though 18 (17.7%) participants indicated that they were exposed to mobbing, they did not reveal the mobber. With regard to the gender of the mobber, 36 (35.6%) participants replied as both male and female; 20 (19.8%)

Table 2. Psychosomatic conditions detected in participants

	Total n, (%)	Mobbing (+) n, (%)	Mobbing (-) n, (%)	p
Crying episodes	13 (12.8)	11 (14.8)	2 (1.9)	>0.05
Temper and anger attacks	49 (48.5)	39 (38.6)	10 (9.9)	0.001
Prolonged sleep problems	39 (38.6)	30 (29.7)	9 (8.9)	>0.05
Suicide attempt	2 (1.9)	2 (1.9)	0	>0.05
Gaining/losing excessive weight	32 (31.6)	27 (26.7)	5 (4.9)	0.01
Alcohol/substance addiction	16 (15.8)	13 (12.8)	3 (2.9)	>0.05
Being frequently late/ frequently taking sick leave	9 (8.9)	7 (6.9)	2 (1.9)	>0.05
Severe depression	18 (17.8)	15 (14.8)	3 (2.9)	>0.05
Panic attack	8 (7.9)	6 (5.9)	2 (1.9)	>0.05
Heart attack	0	0	0	-
Increase in the frequency of accidents	7 (6.9)	7 (6.9)	0	0.03
Tendency of violence to others	15 (14.8)	14 (13.8)	1 (3.2)	0.008
None	11 (10.8)	3 (2.9)	8 (25.8)	-
It is a multiple-choice question. Here, p values were determined by using the Pearson's chi-square test.				

Table 3. General considerations about mobbing in the department

	Total n, (%)	Mobbing (+) n, (%)	Mobbing (-) n, (%)	p
Those satisfied/ dissatisfied with the department	73 (72.2)/ 23 (22.7)	48 (47.5)/ 22 (21.7)	25 (24.7)/ 1 (0.9)	0.04
The workload is too heavy + heavy	94 (93)	67 (95)	27 (87)	>0.05
Factions among the speciality students yes / No	45 (44.5)/ 55 (54.4)	33 (47)	12 (38)	>0.05
Gender discrimination	13 (12.8)	10 (14.2)	3 (9.6)	-
Political discrimination	3 (29.7)	3 (4.2)	0	-
Ideological discrimination	5 (49.5)	5 (7.1)	0	-
Substantial discrimination	2 (1.9)	1 (1.4)	1 (3.2)	-
Social discrimination	22 (21.7)	21 (30)	1 (3.2)	-
Polarization of interests	35 (34.6)	27 (38.5)	8 (25.8)	-
The intervention of higher authorities is inadequate	74 (73.2)	61 (87.1)	13 (41.9)	0.006
This table contains multiple-choice questions. When analysed with the Pearson's chi-square test, a majority of participants expressing dissatisfaction with the selection of department significantly consists of respondents exposed to mobbing (p=0.04). A majority of those who think that the intervention of higher authorities is insufficient comprises those exposed to mobbing (p=0.006).				

participants, only female and 19 (18.8%) participants, only male. In this study, 5 (4.9%) participants indicated that the mobber subjected mobbing only to them, 27 (26.7%) participants specified that the mobber directed mobbing towards certain persons, 24 (23.7%) participants indicated that the mobber directed mobbing only towards speciality students and 22 (21.7%) participants indicated the mobber directed mobbing towards everyone.

No one gave the answer 'sexual abuse' as the type of mobbing. Here, 63 (62.3%) participants indicated that they were subjected to verbal violence (bad words/appeal), 56 (55.4%) participants indicated that mobber(s) were discourteous and 6 (5.9%) participants indicated that they were subjected to physical violence.

When they had to stay away from their professions due to special problems, to the question 'Did you get help in your institution in the adaptation process to return to the job?', 33 (32.6%) respondents indicated that they received help and 56 (55.4%) respondents stated that they did not receive any help. Here, 12 (11.8%) participants did not respond to this question.

One of the respondents (0.009%) read about a study on professional mobbing, 6 (5.9%) respondents encountered a clinical/psychiatric presentation, 6 (5.9%) respondents encountered a management course for the approach towards mobbing and 6 (5.9%) respondents encountered a book/guide. Further, 13 (12.8%) respondents were made aware about mobbing via publications or the Internet. In this study, 70 (69.3%) respondents had never come across any activities related to mobbing. The rate of participation in presentations and programs and access to guides related to mobbing were significantly higher in those who stated that they were exposed to mobbing than those who stated that they were not (p=0.008).

There were 73 (72.2%) participants who were pleased to have chosen speciality education in the field of anaesthesiology and reanimation. Also, 23 (22.7%) participants were not pleased and 5 (4.9%) participants did not give any answer to this question. Out of the 73 respondents who were pleased, 65.8% (n=48) said they were exposed to mobbing. Out of those who were not pleased, 95.7% (n=22) stated that they were exposed to mobbing. The participants who stated that they were pleased and also were exposed to mobbing formed 19.8% of all the respondents (n=20). A significantly high rate of dissatisfaction was found in the group that was exposed to mobbing (p=0.04) (Table 3).

With questions regarding the workload, the marking rate of the answers regarding heavy and very heavy workloads were found to be statistically significantly higher in the group of participants exposed to mobbing than the other group (p=0.02) (Table 3). In the group that was exposed to mobbing, there were 45 (44.5%) participants who felt that

Table 4. General situation regarding professional burnout syndrome

	Total n	Mobbing (+) n	Mobbing (-) n	p
Professional burnout syndrome yes/no	75/24	61/9	14/15	<0.001
Those who received medical assistance	5	5	-	-
Those who received social support	35	25	10	-
Those who received medical + social support	2	2	-	-
Those who received no supports	34	29	5	-
Those who did not respond to the question	2	1	1	-
Total	99*	70*	29*	

*1 participant exposed to mobbing and 1 participant not exposed to mobbing did not answer the question. Professional burnout syndrome was found at high rates in participants exposed to mobbing (p<0.001, Pearson's chi-square test)

the workload was deliberately increased by the mobbers (p<0.001). Also, 52 (51.4%) participants described the workload as *very heavy*; 42 (41.5%) participants, *heavy*; 3 (2.9%) participants, *normal*; 3 (2.9%) participants, *'it can be lighter'* and 1 (0.009%) participant, *'it's exactly as I want'*. The number of participants who stated that they felt the workload was deliberately increased by the mobbers was 49 (48.5%), whereas the number of those who did not feel this way was 44 (43.5%); 8 (7.9%) participants did not answer this question (Table 3).

With regard to the question on factionalism, there were 45 (44.5%) participants who thought there were factions among the speciality students and 55 (54.4%) participants who thought otherwise. Sex discrimination was indicated by 13 (12.8%) participants; political discrimination, 3 (2.9%) participants; ideological discrimination, 5 (4.9%) participants; substantive discrimination, 2 (1.9%) participants; social discrimination, 22 (21.7%) participants and polarisation of interests, 35 (34.6%) participants (Table 3).

No statistically significant difference was found between the groups who were exposed and not exposed to mobbing when they were questioned regarding factionalism among speciality students. A similar result was obtained in both the groups related to more gender discrimination and polarisation of interests.

The distributions of the number of employment years were the same in the group exposed to mobbing when compared with all the participants. The number of duties per month was also similar to all the groups of participants, which was mostly declared between 6 and 10.

The proportion of participants who thought that the chief of department, chief intern, department of speciality and clinic chief did not sufficiently interfere with personal problems such as mobbing that occurs among speciality students was 73.2%; 11.8% respondents did not answer this question. When an evaluation was made between the groups that were and were not exposed to mobbing, it was found that most of those who stated insufficient interference were in the group exposed to mobbing (p=0.06) (Table 3).

In this study, 38 (37.6%) participants stated that they could sufficiently use their legal leaves at work and 62 (61.3%) participants stated that they could not. With regard to the question 'which leave do you have problems to use?', 29 (28.7%) participants replied as *annual leave*; 34 (33.6%) participants, *casual leave*; 14 (13.8%) participants, *breast-feeding leave* during pregnancy and 11 (10.8%) participants, *maternity leave*. There were 10 (9.9%) participants stating that they could not use the right of exemption from night duty that is given during maternity and pregnancy. There were 6 (5.9%) participants indicating that they could not use paternity leave. There were 6 (5.9%) participants stating that they could not use the right to temporarily discontinue the work for military service and return to their profession afterwards. Also, 40 (39.6%) participants did not respond to this question. Among the participants who thought that legal leaves could not be used in the workplace, no statistically significant difference was found between those who were and were not exposed to mobbing. In both the groups, it was noted that problems mostly occurred in using the annual leaves.

By defining the concept of *mentoring*, there were 81 (81%) participants who thought that a support in this regard may help and 19 (19%) participants who thought that it will not help. Further, 53 (54.1%) participants stated that there were people helping them as a mentor with the problems in the workplace and 45 (45.9%) participants indicated that they did not have any mentoring; no difference was found between the participants exposed and not exposed to mobbing with regard to having a mentor. Both the groups thought that mentoring would be useful.

There were 75 (75.8%) participants who experienced the professional burnout syndrome and 24 (24.2%) participants who did not experience this syndrome. Further, 5 (4.9%) participants received medical aid, 35 (34.6%) participants received social support and 2 (1.9%) participants received both. The number of participants who experienced the professional burnout syndrome and received no support was 34 (33.6%). This syndrome was observed in 61 participants in the group exposed to mobbing, and it was significantly higher than the group that was not exposed to mobbing (p<0.001). In this case, 5 participants received medical assistance, 25 participants received social assistance and 2 participants received both; thus, a total of 32 (52.4%) participants received support due to this syndrome. Further, there were 14

participants who suffered from this syndrome in the group not exposed to mobbing. Only 10 participants received social support (Table 4).

There were 94 (94.9%) participants who wanted a sub-unit to be established by the Turkish Anaesthesiology and Reanimation Association (TARA) for the solution of problems related to the satisfaction of speciality students. In the responses that were given, no statistically significant difference was found between the groups that were and were not exposed to mobbing.

Discussion

Mobbing can be subjected by superiors to their subordinates in the workplace and vice versa; it is also possible that mobbing occurs among peers. Systematic mobbing that is repeated at a continuous frequency results in dismay, pacification and suspension from work. It inflicts damage to personality, professional status or health of the sufferer. Negative attitudes and behaviours towards a person can be hidden or openly shown (4).

In recent years, awareness about the health of employees and mobbing has increased all around the world and improvement activities regarding this matter have been initiated. Various studies have been undertaken in our country, too. Our study was planned in response to verbal feedback received from doctors who were speciality students for whom mobbing was the most tiring experience during the training period.

A major portion of mobbers define themselves as good leaders and do not accept that they can subject someone to mobbing (5).

Studies on mobbing and professional satisfaction in speciality students have been conducted in India (6) and Canada (7); the degree of dissatisfaction and exposure towards mobbing is similar in our country as compared to these countries. Trying to simultaneously juggle workload in large hospitals and undertake education was stated to be the main cause for the speciality students to be exposed to mobbing, thereby experiencing vocational dissatisfaction.

With regard to occupational groups that are most commonly exposed to mobbing, security forces are at the forefront followed by healthcare employees (8).

Awareness about mobbing has increased in our country during recent years. Regarding this issue, various studies have been conducted by the Ministry of Labour and Social Security. However, there are insufficient data and guidance institutions related to mobbing subjected to speciality students. Similar to the studies carried out abroad, high rates of mobbing were determined by studies investigating the perception of mobbing of speciality students and exposure rates to mobbing in our country (9, 10).

An organisational structure where the management authority is very prominent is seen in hospitals, particularly in some clinics. This dual authority of the management is exerted particularly on nurses and sometimes on doctors who are speciality students; this is a good example regarding the dismay arising from an organisation's structure. Direct participation of the management in accepting or denying conflict may be the cause of dismay and burnout in interpersonal conflicts as well as in the conflicts between groups (11).

The internal form of mobbing deals with all the employees; however, the external form-in addition to employees-also deals with persons who are from the outside and at the workplace during the instance of mobbing (8). In our study, it was found that mobbing occurred in the form of exclusion of other groups as a result of factionalism in the workplace and mobbing was a result of individual problems between the participant and some people.

Terror at workplaces in the field of healthcare continues at breakneck speed. The World Health Organization has also conducted some survey studies and training courses regarding this issue (12). According to the departments where nurses have been exposed to mobbing by their administrators, the study by Turaç et al. (13) has found that mobbing was mostly prevalent in the emergency department, followed successively by the operating room, intensive care and the sections of service, polyclinic and administration.

Following speciality students, employees of the gynaecology and obstetrics departments were reported to suffer mobbing on the basis of their responses (14).

There are some significant differences between a healthy work environment and the environment where mobbing is prevalent in terms of roles, collaborative relationships, goals, organisational structure, reactions, strategies, conflicts and types of communication. In environments where mobbing is prevalent, the roles are unclear; there are no collaborative relationships; it is impossible to see the future; relationships are unclear; organisational shortcomings exist; long-term unethical reactions are observed; strategies are meaningless; the existence of conflict may be denied and hidden and there is indirect and sloppy communication (15).

Mobbing is exacerbated by conflict and unsatisfactory performance. The first signs of mobbing become evident after unresolved conflicts. The person feels anxious and depressed, which is a sign that mobbing has started. The conflict escalates, followed by mental and physical violence. Mobbing intensifies even further. The conflict continues. This disease prevents productive conflict. Mobbing continues to intensify. Resignation or dismissal may follow (16).

Psychological harassment (mobbing)-a workplace problem-can be encountered in all cultures and countries, regardless of age, gender, seniority and hierarchical position; it is a

workplace issue that is conducted systematically and contrary to business ethics (4). In our earlier study that evaluated the professional satisfaction of speciality students in Canada, we found that mobbing was more prevalent in women (7). Similarly, our study has also revealed a statistically significant association between exposure to mobbing and the female gender. However, exposure to sexual abuse was not mentioned by any participant.

In a survey study on mobbing carried out in another state university, the perception of mobbing was found to be significantly associated with the age and education of employees. However, no significant relationship was observed with marital status and gender (16). In our study, age, marital status and exposure to mobbing were also evaluated, but no significant relationship was found.

The findings obtained in a similar study showed that the sociability level and communication skills of all victims of mobbing were low. The probability of exposure to emotional abuse is apparently more in full-time employees of hospitals because they have closer contact with managers, other healthcare team members and patients, particularly patients' relatives. It was found that employees working in specialised units such as emergency services, intensive care and operating room were exposed to more instances of mobbing (17).

Management type, work organisation and work environment may contribute to the formation of a variety of risks in the exposure to mobbing (1). Because speciality education cannot be standardised in our country and variations in active work, being on duty, responsibilities taken, seniority system, workload and even salaries are observed in university hospitals and educational and research hospitals, the management type and work organisation also vary a lot.

Among the measures to be taken, regularly informing employees about mobbing, guidebooks, determining the rules of ethical behaviour and establishing business contracts are recommended (1). Based on the findings of our study, we also believe that speciality education should be based on some rules in the seniority system. While training is given and at the beginning of education, the personal rights of speciality students should be informed to research assistants in a comprehensive written form; further, mentors should be assigned to each speciality student by a council comprising management representatives or instructors.

Secondary prevention methods include assigning someone inside or outside the workplace in order to listen to the problems of those who are exposed to mobbing and create solutions as well as a mediator finding mutual expectations and providing solutions (1). We believe that the administrative authority or instructors in a neutral status may gather in a council on a regular basis or when needed in order to achieve this end. According to the results of our study, a majority of the respondents exposed to mobbing think that higher

authorities do not sufficiently deal with the solution of the problems.

Early detection of health problems developing in victims of mobbing and factionalism and acting on them are classified as tertiary prevention methods (1). In our study, professional burnout syndrome was also observed in participants who were not exposed to mobbing and psychosomatic symptoms, and complaints were found to be more common in the group that was exposed to mobbing. On the basis of our study, various protective measures can also be taken about the mental health of speciality student doctors, and it may be appropriate to impart psychological counselling at the beginning of their profession and at regular intervals upon the recommendation of mentors or with their request.

In the survey study conducted in Canada about the professional satisfaction assessment of speciality students, it was found that 14% students wanted to change their departments and 22% students-given the opportunity-did not want to work in the healthcare sector anymore. As a result of these studies, it was stated that guidance programs are needed to direct students to the correct persons when they demand assistance (7).

Mentoring is a concept that is used as guidance, and it is frequently brought up in studies involving complicated and stressful educational conditions, e.g. medical education (18). In our study, a majority of those who suffered mobbing stated that the top authorities did not intervene in cases involving mobbing: 78% stated they needed mentors. Therefore, if every speciality student can have a guide trainer, the problems can get highlighted in an effective manner.

Most people may not be aware of the existence of mobbing unless they are exposed to it themselves. Today's autocratic and hierarchical structure facilitates psychological terror in the private sector and in the field of healthcare, military and education. The awareness created by the media on bullying and positive developments in law enables the reduction of such toxic phenomena (3). In a study conducted in our country, mobbing was evaluated in healthcare employees: it was found that 50% victims did nothing but assume a humble attitude (16). This means that awareness is really low and people greatly refrain from such situations. We did not inquire about the people's reaction to mobbing in our study. However, when queried about the type of mobbing, 6 participants indicated that they suffered from physical violence. Consequently, we assume that such situations could have been brought to trial. The most important element in the fight against psychological harassment in the workplace is that the victim him/herself as well as the employer should be aware of it, and colleagues and the entire society should treat such problems with the same importance (19).

In response to institutional permission demands in our survey, permission could be received from only a few of the several institutions existing in Turkey: the questionnaires could

be employed only for speciality students. This means that institutions refrain from raising such issues at the behest of their management.

A medical faculty in California evaluated mobbing in medical students in a 13-year study and concluded that they were exposed to several instances of bad behaviour, including physical violence (5%) and sexual abuse (20). A study evaluating the working hours of speciality students revealed that violent disputes among the medical staff and medical errors increased in cases where the students had insufficient hours of sleep (20). In a study carried out in Saudi Arabia, 90% medical students stated that they were exposed to mobbing in different ways, including sexual abuse, physical violence, religious discrimination, etc. (21). In another multi-centre study, the mood of 2000 medical faculty students and speciality students were assessed: suicidal personalities (6%), particularly in the female gender; major depression (12%) and mild to moderate depression (9.2%) were found to exist (22). In a study on newly graduated doctors in Pakistan (23), 417 (68%) out of 654 doctors stated that they had been exposed to mobbing at least once in the last 12 months. A majority of them (70%) stated that they gave no response to mobbing. In a study involving 260 medical school speciality students in Mexico City, it was found that they were exposed to mobbing at the rate of 98.6% by their superiors at least once in the form of loud yelling or prevention of getting experience (14). In our study, verbal violence and vulgarity were the most prevalent: 5.9% participants confirmed exposure to physical violence.

In a survey study conducted in a state university to evaluate the perception of psychological violence in the institution, senior speciality students and academic members were found to be the most frequent mobbers (9). Similar proportions were also observed in our study. However, in our study, while assessing the years of seniority (period of study) of those who suffered mobbing, no significant relationship was determined between being exposed to mobbing and seniority.

The most important element in the fight against psychological harassment in the workplace is that everybody involved in the institution should be aware about their responsibility to stop psychological harassment in the workplace and fight against such instances. It is very difficult for an individual to be able to fight alone with the fear and concern instilled by obscurity and desperation (24).

In the field of anaesthesiology, conditions such as professional burnout syndrome, psychosomatic conditions, suicide thoughts and attempts, workload and despair brought by inexperience should be evaluated by means of separate surveys at regular intervals. It has become mandatory for associations and other institutions to take measures regarding these issues and set up committees and guidance programs. In the form used in our study, 2 (2%) participants marked suicide attempt; 15 (15%), alcohol/substance addiction; 22 (22%), severe depres-

sion; 8 (8%), panic attacks; 7 (7%), accidents and 17 (17%), tendency of violence towards other people. These were found significantly high in the group that suffered mobbing.

It was found that mobbing and burnout levels of speciality student doctors significantly varied according to their medical fields. In addition, a study concluded that there was a relationship between mobbing, emotional exhaustion, depersonalisation and personal success (10). There were 75 (74.2%) participants who indicated that the professional burnout syndrome began during the speciality education in our study, too. No significant difference was found between internal, surgical and basic medicine sciences and the sub-parameters of burnout syndrome in the study by Marakoğlu et al. (24). This was attributed to the fact that research assistants working in internal and surgical clinics of the hospital have fewer shifts (duty) than those in other hospitals and the physical conditions are sufficient. It has also been remarked that young academic members have good communication with research assistants; therefore, the motivation of research assistants is affected positively.

It is useful to take into account one limitation of our study. Participants may have refrained from trusting the person distributing and collecting the filled forms. Since in this study, the status of the person who delivers and collects the questionnaires (e.g. academic members, secretaries, speciality students, specialists or chief intern) could not be controlled, for future studies, it will be appropriate to deliver and collect such forms by a single source, if ethics committee's consent is received. We believe that more striking results can be achieved in survey studies that are performed in secret.

Psychological disorders and suicide rates increase in occupational groups where mobbing is prevalent. Guidance systems are needed to handle the mobbing problem of speciality students in anaesthesiology and reanimation clinics. Increasingly healthy decisions taken by speciality students experiencing moral and material troubles in their private lives and future experts and academicians maintaining their profession with a healthy psychology are possible solutions to the mobbing problem. Therefore, the problem needs to be considered on a preferential basis in a detailed and impartial manner. We believe that the associations representing the civil society should create guidebooks containing accurate and reliable rules on this subject, and commissions should be set up not only to prevent mobbing but also provide assessments of all complaints. The creation of such commissions in all educational institutions can in a significant manner support the understanding of freedom of students and safe working and educational environments.

Conclusion

A high rate of 69.3% speciality students indicating that they have been exposed to mobbing in their professional lives at the anaesthesiology and reanimation departments is a critical fact concluded in our study.

Although not desired, mobbing existing in a stressful job should be assessed in terms of its occupational and psychological consequences in speciality students of anaesthesiology and reanimation. The importance of implementing guidance programs has been demonstrated such that speciality students exposed to mobbing in the workplace-particularly those having problems in their private lives-can make the right decisions (3, 7, 22). Similar to all medical fields, in order to handle the problem of mobbing in a detailed and impartial manner in workplaces, anaesthesiology and reanimation associations as well as those medical associations assuming responsibilities for creating help and solution-oriented commissions can facilitate examining the situation and create healthy solutions.

Ethics Committee Approval: Ethics committee approval was received for this study from the ethics committee of Uludağ University School of Medicine.

Peer-review: Externally peer-reviewed.

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ANNEX-1**The survey of exposure to occupational mobbing for anaesthesia assistants in Turkey**

The fact that the employees of anaesthesiology and reanimation departments provide services in several fields such as CPR, operating room, intensive care, pain, sedoanalgesia and outpatient services significantly increases their workload; insufficient number of employees (particularly research assistants) in large centres are forced them to work at an exhausting pace.

We believe that the reason for unhappiness at the workplace arises primarily due to mobbing in addition to working at an exhausting pace. We aim to create data that can form a resource in the provision of guidance systems, as that done in other countries, in order to improve peace in the work environment for our colleagues who have to face responsibilities like nurturing human life even before they adapt to their new work/education environment.

Psychological terror in the workplace (i.e. mobbing) is defined as the situation in which tough and daunting attitudes in communication (especially in superior–subordinate communication) lead to resignations. Picking on someone constantly and deliberately in such a manner that they are disinclined to conduct their profession falls under the definition of mobbing.

Temporary and non-repetitive discussions and misunderstandings that can be resolved through communication and tolerance should not be considered within this scope. We request that you to take this into consideration when filling out the questionnaire.

A)**The organization where you work**

- University Hospital
- Education and Research Hospital

B)**Gender**

- Female
- Male

C)**Marital status**

- Married
- Single

D)**Age**

- 1) 22-25
- 2) 26-28
- 3) 29-31
- 4) 32-35
- 5) >35

E) Mark the situations beginning at the process of assistantship?**Response**

- | | |
|---|--|
| <input type="radio"/> Crying episodes | <input type="radio"/> Being late frequently / frequent sick leaves |
| <input type="radio"/> Tension and anger attacks | <input type="radio"/> Severe depression |
| <input type="radio"/> Prolonged sleep disorders | <input type="radio"/> Panic attack |
| <input type="radio"/> Suicide attempt | <input type="radio"/> Heart attacks |
| <input type="radio"/> Gaining/losing excessive weight | <input type="radio"/> Accidents |
| <input type="radio"/> Alcohol or drug / substance addiction | <input type="radio"/> Tendency of violence to others |

F)

The number of years worked

- 1
- 2
- 3
- 4
- 5

G)

The number of duties a month

.....

H)

Is on-duty leave available

- No
- Work continues until noon
- Leave is available after handover/meeting

I) Mobbing: it is most appropriately used to indicate dismay or psychological terror in the workplace. Have you been exposed to such treatment during your assistantship?

Response

- Yes
- No

J) What was the position of the mobber? (This can be more than one person.)

Response

- Academic member
- Senior assistant
- Junior assistant
- Nurse
- Surgery academic member
- Surgical assistant

K) What is the gender of the mobber?

Response

- Female
- Male

L) Does/do the mobber/mobbers mob(s) everyone or certain person/persons?

Response

- Only to me
- To certain persons
- Only to assistants
- To everybody in the workplace

M) Select the type of mobbing that you were exposed to here.

Response

- Verbal violence (bad word / appeal)
- Vulgarity
- Physical violence
- Sexual abuse

N) When you stay away from your profession due to special problems, do you get help in your institution in the adaptation process to return to the job?

Response

- Yes
- No

O) Have you encountered presentation or project-related professional mobbing before?

- a. Study
- b. Clinical / psychiatric presentation
- c. Courses on the management of approach to the subject
- d. Book / guideline
- e. Dissemination of information (via publication or the Internet, etc.)
- f. None

P) Are you happy to have chosen the Department of Anaesthesiology and Intensive Care?

Response

- Yes
- No

Q) How do you define your workload?

- a. Very heavy
- b. Heavy
- c. Normal
- d. It can be lighter
- e. It is exactly as I want

R) Did you feel that your workload was deliberately increased by the mobber/mobbers?

Response

- Yes
- No

S) Do you think that there is factionalism among your assistant friends?

Yanıt

- Yes
- No

T) What kind of discrimination/polarisation has been created, if any?

Response

- | | | | |
|----------------------------|-----------------------|----------------------------|-----------------------|
| Gender discrimination | <input type="radio"/> | Substantial discrimination | <input type="radio"/> |
| Political discrimination | <input type="radio"/> | Social discrimination | <input type="radio"/> |
| Ideological discrimination | <input type="radio"/> | Polarization of interests | <input type="radio"/> |

U) Do you think that the chief of department, chief intern, department of speciality and clinic chief sufficiently interfered with the personal problems such as mobbing among assistants?

Response

Yes

No

V) Do you think that legal leaves can sufficiently be used at your workplace?

Response

Yes

No

W)

Which leave do you have problem to use?

Annual leave

Casual leave

Breast-feeding leave

Maternity leave

Permission for the exemption from night duty

Paternity leave

Permission to discontinue the work temporarily for the military service

X) Mentor (mentoring): People from the same family or profession who help with private or professional problems that other people cannot resolve are called mentors. Preferably, mentors should be more experienced people. Do you think that support in this respect can help you in your workplace?

Response

Yes

No

Y) Is there anyone who helps you with your problems as a mentor in the workplace?

Response

Yes

No

Z) 'Professional burnout' syndrome: It is characterised by symptoms such as fatigue, feeling intimidated, loss of clinical efficacy and loss of synergies with patients or colleagues. It impairs work performance, marital problems and sensibility. It can also cause diseases such as headache, sleep disorders, hypertension, anxiety and heart attack. It also induces alcoholism and drug addiction. Do you think that you have experienced such a syndrome during your assistantship?

Response

Yes

No

AA) If yes, did you get medical care or social support for it?

Response

Medical Assistance

Social Support

AB) Would you like a subsection to be created for the solution of your problems related to assistant satisfaction in your association?

Yes

No

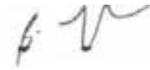
ANNEX-2

Please take the time to carefully read this document

We invite you to a survey-based **research** titled ‘**The exposure of anaesthesiology speciality students to mobbing in their professions in Turkey**’ conducted by Uludağ University’s Medical Faculty, Anaesthesiology and Reanimation Department. Before making the decision to participate in this study, you need to know why and how this research is performed. Therefore, it is very important for you to read and understand this form. Take time to read the following information carefully. If you want, discuss this information with your family and/or relatives. If things are not clear to you and you do not understand, or if you want more information, just ask us.

Participation in this survey study is completely **voluntary**. You have the right to not participate in this study. **Your answering of the questionnaire will be interpreted as confirmation of your consent to participate in this research.** While answering the questions in the **questionnaires** given to you, do not be under the influence or pressure of anyone. The information to be obtained from these forms will be used solely for the purpose of this research.

Responsible for the Research
(Name, Surname-Title-Signature)
Prof Belgin Yavaşcaoğlu



The aim of the study:

The fact that the employees of anaesthesiology and reanimation departments provide services in several fields such as CPR, operating room, intensive care, pain, sedoanalgesia and outpatient services significantly increases their workload; insufficient number of employees (particularly research assistants) in large centres force them to work at an exhausting pace.

We believe that the reason for unhappiness at the workplace arises primarily due to mobbing in addition to working at an exhausting pace. We aim to create data that can form a resource in the provision of guidance systems, as that done in other countries, in order to improve peace in the work environment for our colleagues who have to face responsibilities like nurturing human life even before they adapt to their new work/education environment.

Psychological terror in the workplace (i.e. mobbing) is defined as the situation in which tough and daunting attitudes in communication (especially in superior–subordinate communication) lead to resignations. Picking on someone constantly and deliberately in such a manner that they are disinclined to conduct their profession falls under the definition of mobbing.

Temporary and non-repetitive discussions and misunderstandings that can be resolved through communication and tolerance are not considered within the scope of this study.

Study Protocol, Methods and Actions to apply: The questionnaires will be delivered to the secretariats of the units where the participants work with a cover letter via courier and information will be given verbally to the secretariats over the phone. Documents will be received back via courier and the information will be analysed through SPSS-a computer program. It will take you approximately 10 minutes to fill out the questionnaire. Your information will be kept confidential.

The duration of research: 2 month

The Number of Expected Volunteers:100

Place(s) where the research will be conducted: All the Departments of Anaesthesiology and Reanimation

The researchers participating in the study:

Prof. Belgin Yavaşcaoğlu

Prof. Hülya Bilgin

Assistant Researchers:

Dr. Gülnihal Aykut

Dr. Esra Mercanoğlu Efe

Dr. Selcan Bayraktar

Dr. Sinem Şentürk

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Dr. Özlem Özkumit

Dr. Elmas Kabak