

Original Article

Burnout and Mobbing Among Physicians in a City Center**Nurhan Meydan Acimis, PhD**

Associate Professor, Pamukkale HacıCafer Ozer Community Health Center, Denizli, Turkey

Mustafa Agah Tekindal, PhD

Data Analyst, WYG Turkey

Correspondence: Dr. Mustafa Agah Tekindal, Data Analyst, WYG Turkey
E-mail: matekindal@gmail.com**Abstract**

Introduction: Job burnout and mobbing in the workplace are important problems. The concept of “mobbing” introduced by Heinz Leymann to express the systematic subjection of one or more individuals to emotionally disturbing behaviors. Job burnout is defined by Maslach and Jackson as a syndrome showing itself as emotional exhaustion, depersonalization and reduced personal accomplishment. In both cases, the health of the employees is affected adversely.

Aim: This study was conducted to examine burnout and mobbing among the residents and emergency physicians who agreed to participate in this study.

Materials and Method: A cross-sectional/descriptive study was conducted among physicians in May 2013. A questionnaire was mailed to possible participants, 158 were expected to participate and finally 41.1% (65) of them volunteered to participate. The assessment of the burnout levels was performed using the Maslach Burnout Inventory and the prevalence of mobbing was examined based on Leymann’s Typology of Mobbing Behaviors (1993) which consists of 45 mobbing behaviors. Data were analyzed using SPSS 20 (IBM Corp. Released 2011. IBM SPSS for Windows, Version 20.0. Armonk, NY: IBM Corp.). Descriptive statistics were used for categorical and continuous variables. Levene's test was used to test the assumption of homogeneity of variance of parametric tests. Independent Two-Sample T-Test was used to compare the means of two independent groups (Student’s t-test). When these assumptions are not met, Mann Whitney-U test was used as an alternative. For comparison of means for three or more groups, One-Way Analysis of Variance was used. For multiple comparisons, Tukey’s HSD test was preferred. When the assumptions are not met, the Kruskal Wallis test and Bonferroni-Dunn’s multiple comparison test were used. **Findings:** A 58.4% (38) of the physicians were male, 46.2% (30) were 23 to 30 years old, 56.9% (37) were married and 47.7% (31) were fellows. The mean Emotional Exhaustion level was 26.6 ± 6.88 (min 11.0-max 40.0). The mean for Personal Accomplishment, was: 24.52 ± 3.61 (min 8.0-max 31.0). Based on Leymann’s Typology, the mean for the category “Attacks on reputation” was 21.05 ± 11.59 , while that for the category “Prevention of Self-Expression and Communication” was: 20.23 ± 10.36 (min 0.0- max 19.0). There was a statistically significant difference in the categories of “Prevention of Self-Expression and Communication”, “Attacks on reputation” and “Attacks on Quality of Life and Occupational Position” between different age groups ($p < 0.05$; $p < 0.01$). There was also a statistically significant difference among married and single participants in the “Reduced Personal Accomplishment” category of the Maslach Burnout Inventory and in all categories of Leymann’s scale ($p < 0.05$; $p < 0.01$). All categories of Leymann’s typology differ significantly according to the length of service of the participants ($p < 0.05$; $p < 0.01$). There was a statistically significant negative association (27.1%) between emotional exhaustion and prevention of self-expression and communication.

Conclusion: The findings revealed that physicians mostly experienced emotional exhaustion and reduced personal accomplishment. The mobbing behaviors of “attacks on reputation” and “prevention of self-expression and communication” were more frequent than other mobbing behaviors. In terms of job burnout, married physicians exhibited a high level of reduced personal accomplishment, while the scores for almost all categories of mobbing showed significant differences among single physicians. Attending physicians were found to be at greater risk for experiencing attacks on the quality of their professional and life situation. Job burnout and mobbing must be addressed as an important community health problem and necessary measures must be taken in this regard.

Key Words: Burnout, Mobbing, Physicians

Introduction

Employees encounter some behaviors in the workplace which they consider unacceptable. Unfortunately, such behaviors stay among the important problems facing today's business world. The concept of mobbing was first introduced by the German psychologist Heinz Leymann at the late 1980s. According to his definition, mobbing is the situation where one or (rarely) more individuals are subjected to systematic emotionally abusive behaviors by one or a number of persons everyday over several months (Leymann, 1996). The historical process related to such behaviors investigated under the umbrella term of "mobbing" dates back to the 1960s. The concept of mobbing, first used by Dr. Leymann for workplace relations in the 1980s, refers to group hostility among adults within an organization (Davenport, Schwartz and Elliott, 2003).

According to the model of burnout proposed by Maslach and Jackson, burnout includes increased feeling of emotional exhaustion, development of depersonalization and the feeling of personal accomplishment (Maslach and Jackson, 1986). Emotional exhaustion refers to a state where individuals feel that they have no remaining energy to give to others and feel emotionally drained. Depersonalization is a negative perception of the self and others as a result of lack of interest in others, withdrawal, apathy and hostile attitudes. Reduced personal accomplishment refers to a feeling of inadequacy in meeting occupational responsibilities and working with service recipients (Gundersen, 2001; LeBourdais, 1989; Lee and Ashforth, 1990; Maslach, Schaufeli and Leiter 2001).

According to the International Labor Organization (ILO), work-related psychological problems, such as violence, mobbing and burnout experienced at work are a globally increasing problem (Chappell and Di Martino, 2006). Especially the people working in the health sector are at more risk than employees of other service sectors and occupations. Studies indicate that people working in the health sector have a 16-fold higher risk of being subject to violence and that nurses are under risk three times higher than that of other employees (Kingma, 2001). In healthcare facilities which provide mostly public services, intense work load and irregular and uncertain working conditions are the primary factors that cause increased risk of exposure to

psychological violence and experiencing burnout in healthcare employees (EUROFOUND, 2007). As per the Turkish Code of Obligations (Act no. 6098, March 2011), employers are obliged to protect their employees from psychological abuse. They are also obliged to treat equally to all employees as per Article 5 of the Turkish Labor Act No. 4857 <http://www.resmigazete.gov.tr/eskiler/2011/02/20110204-1.htm> (erişim tarihi 9.10.2016) http://dergi_ceis.org.tr_dergiDocs_makale311 (erişim tarihi 9.10.2016) TBBB, 2011)

This study aims to examine burnout and mobbing among the residents and emergency physicians who agreed to participate in this study.

Materials and Method

This study was planned in May 2013 and was conducted as a cross-sectional/descriptive study. The participants were reached by questionnaires mailed to them. A couple of family practitioners, community health physicians and attending physicians volunteered to fill in the preliminary questionnaire. Convenience of the questions was tested. The consent was obtained from the relevant Provincial Directorate of Health for the participation of emergency physicians and from the Office of the Chief Physician of the relevant university hospitals for the participation of residents and academicians. The questionnaires filled out by the participants were received by mail or by hand in sealed envelopes. 158 physicians were estimated to participate with a margin of error of $\alpha=0.05$ and a 95.0% confidence interval. However, 41.1% (65) of them volunteered to participate.

Maslach Burnout Inventory (MBI): The validity and reliability of the inventory was conducted by Ergin (1993) in Turkey. The inventory has 22 items, each measured using a five-point rating scale. It has three components: emotional exhaustion, personal accomplishment and depersonalization (Maslach and Jackson, 1986). The emotional exhaustion and depersonalization scales have negative responses, whereas the personal accomplishment scale has positive responses. Scores are calculated separately for each sub-scale. Since there is no cut-off score for scores obtained from sub-scales, there is no distinction regarding the existence or absence of burnout. The MBI is originally structured on a 7-point Likert-type scale; however, its Turkish version includes 22 items structured on a 5-point scale. The participants are

expected to respond to items with anchors of 1) “Never”, 2) “Rarely”, 3) “Sometimes”, 4) “Frequently” and 5) “Always”. The items such as “I feel emotionally drained from my work” indicate emotional exhaustion, while those such as “I feel like I treat my patients as if they were not humans” indicate depersonalization and those such as “I achieved considerable progress in this work” indicate reduced personal accomplishment.

On the scale, the items no. 1, 2, 3, 6, 8, 13, 14, 16, 20 are to measure emotional exhaustion, the items no. 5, 10, 11, 15, 22 are to measure depersonalization and the items no. 4, 7, 9, 12, 17, 18, 19, 21 are to measure reduced personal accomplishment. Each item of reduced personal accomplishment is reverse-scored.

Scores are calculated separately for each component. As scores on the emotional exhaustion and depersonalization scales increase, and as the score on the sense of reduced personal accomplishment scale decreases, the level of burnout increases. Each item is scored on a scale ranging from 0 to 4. The total scores range from 4 to 36 for emotional exhaustion, from 4 to 20 for depersonalization and from 4 to 32 for personal accomplishment. As scores are close to the minimum, the level of burnout decreases, or vice versa.

Five main categories of Leymann’s typology of mobbing behaviors

1. **Prevention of self-expression and communication:** Restriction of the victim’s opportunities for self-expression and development by superiors.
2. **Isolation from social relationships:** People ostracize the victim, they do not talk with him/her, he/she is treated as invisible etc.
3. **Attacks on reputation:** People talk badly behind the victim’s back, unfounded rumors are circulated, the victim is ridiculed and sexual innuendos are made etc.
4. **Attacks on the quality of life and occupational position:** The victim is not given any special tasks or assignments are taken back, meaningless jobs are given to carry out, constant reassigning of tasks and creating general damage incurring financial costs for the victim etc. • **Direct attacks on health:** Forcing the victim to carry out physically difficult tasks, threats of physical

violence, physical abuse and sexual harassment etc. (Gül 2009)

Descriptive research design was adopted in this study. Descriptive research design aims to describe a given problem, the situations related to this problem, the variables and the relations between these variables. The model adopted in this study is explained below.

There are 45 mobbing behaviors according to Leymann’s (1993) typology. These behaviors are grouped under five categories: prevention of self-expression and communication, Attacks on Social Relationships, attacks on reputation, attacks on quality of life and occupational position, and direct attacks on the person’s health. In this stud, we addressed organizational commitment based on the three-component model developed by Meyer and Allen (1991) and tried to examine how mobbing behaviors affect three components of organizational commitment, i.e. affective commitment, continuance commitment and normative commitment.

In the section including the items for measuring the level of mobbing:

The items from 1 to 11 measure Prevention of Self-expression and Communication,

The items from 12 to 16 measure Attacks on Social Relationships,

The items from 17 to 31 measure Attacks on Reputation,

The items from 32 to 40 measure Attacks on the Quality of Life and Occupational Position,

The items from 41 to 45 measure Direct Attacks on Health.

Statistical Method

The data were analyzed using SPSS 20 (IBM Corp. Released 2011. IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp.). Descriptive statistics tools (mean, standard deviation, median, minimum, maximum, figures and percentages) were used for categorical and continuous variables. Reliability of the scales for the sample groups was tested using Cronbach’s Alpha (α). Besides, Levene’s test was used to test the assumption of homogeneity of variance of parametric tests. During the data analysis, Independent Two-Sample T-Test was used to compare the means of two independent groups (Student’s t-test). When these assumptions are

not met, Mann Whitney-U test was used as an alternative.

For comparison of means for three or more groups, One-Way Analysis of Variance was used. For multiple comparisons, Tukey's HSD test was preferred. When the assumptions are not met, the Kruskal Wallis test and Bonferroni-Dunn's multiple comparison test were used. The strength of association between two continuous variables was tested using the Pearson's Correlation Coefficient. When the data do not meet the assumptions of parametric test, the Spearman's Correlation Coefficient was used. p values of less than 0.05 and 0.01 were regarded as statistically significant.

This study is of high importance in measuring the burnout and mobbing levels of the physicians working in different fields of medicine across the city. However, it is limited by the health facilities from which consent was obtained and by the participation of physicians working at the field (i.e. family practitioners etc.).

Results

Regarding the Socio-Demographic Data of the sample.

Of 65 physicians, 58.4% (38) were male, 46.2% (30) were aged 23 to 30 years, 56.9% (37) were married and 47.7% (31) were fellows. 73.8% (48) of the participants were working at a university hospital, while 66.2% (43) were residents. Of all the participants, 9.2% (6) were part of the emergency mobile team. 33.8% (22) had 1 to 4 years of service, while 47.7% (31) had 1 to 4 years of working life and 52.3% (34) had a duration of working at the current workplace ranging from 1 to 4 years (Table 1).

In Table 2 Data Obtained from the Maslach Burnout Inventory and Leymann's Inventory of Psychological Terror are presented

Table 3 shows the Cronbach's Alpha (α) values estimated for the sample on which Maslach Burnout Inventory and Leymann's Scale were administered. The Cronbach's alpha

coefficient values were above 0.70, which indicated that the questionnaire has an acceptable level of internal consistency. According to the Maslach Burnout Inventory, emotional exhaustion level of the physicians is: 26.6 ± 6.88 (min 11.0-max 40.0) and the level of reduced personal accomplishment is: 24.52 ± 3.61 (min 8.0-max 31.0). The mobbing scores based on Leymann's Inventory show that the mean score for attacks on reputation is: 21.05 ± 11.59 and for Prevention of Self-expression and Communication is: 20.23 ± 10.36 (min 0.0-max 19.0) (Table 2). There is a significant gender difference in the scores for reduced personal accomplishment and the scores for prevention of self-expression and communication ($p < 0.05$) (Table 4). Moreover, there is a statistically significant difference in the scores for Prevention of Self-expression and Communication, Attacks on Reputation and Attacks on the Quality of Life and Occupational Position according to the age of the participants ($p < 0.05$; $p < 0.01$) (Table 5).

Similarly, there is a statistically significant difference in the scores for reduced personal accomplishment according to the marital status of the participants ($p < 0.05$) (Table 6). The scores for all categories of Leymann's Inventory differ significantly in terms of marital status ($p < 0.05$; $p < 0.01$) (Table 6).

The scores for Attacks on the Quality of Life and Occupational Position differ significantly in terms of the educational background of the participants ($p < 0.05$) (Table 7).

The scores for all categories of Leymann's Inventory differ significantly in terms of the length of service of the participants ($p < 0.05$; $p < 0.01$) (Table 9).

There is a statistically significant difference in the depersonalization levels of physicians in terms of their marital status ($p < 0.05$) (Table 11).

There is a statistically significant negative association (27.1%) between emotional exhaustion and prevention of self-expression and communication (Table 12).

Table 1. Demographic characteristics

Gender		
	n	%
Female	27	41.6
Male	38	58.4
Age		
23-30 years	30	46.2
31-38 years	17	26.2
39-45 years	11	16.9
46+	7	10.8
Marital status		
Married	37	56.9
Single	26	40.0
Divorced	2	3.1
Educational background		
Graduate of Medicine	22	33.8
Fellow	31	47.7
Attending Physician	2	3.1
Academician	10	15.4
Income level		
1900-3200	16	24.6
3201-5500	43	66.2
5501-9000	6	9.2
Working life		
Less than 1 year	8	12.3
1-4 years	22	33.8
6-10 years	12	18.5
11-15 years	9	13.8
16 years and above	14	21.5
Length of service		
Less than 1 year	18	27.7
1-4 years	31	47.7
5-8 years	9	13.8
9-12 years	3	4.6
13 years and above	4	6.2
Duration of working at the current workplace		
Less than 1 year	18	27.7
1-4 years	34	52.3
5-8 years	5	7.7
9-12 years	4	6.2
13 years and above	4	6.2
Currently working at		
Community health center	4	6.2

State hospital	1	1.5
Private hospital	2	3.1
University hospital	48	73.8
Other	10	15.4
occupation		
Resident	43	66.2
Family physician-practitioner	5	7.7
Attending family physician	1	1.5
Clinical Field Expert	3	4.6
Assist. Prof. Dr.	3	4.6
Assoc. Prof. Dr.	2	3.1
Professor	2	3.1
Emergency service	6	9.2
Total	65	100.0

Table 2. Descriptive Statistics for the Maslach Burnout Inventory and Leymann's Inventory of Psychological Terror

	Emotional Exhaustion	Depersonalization	Reduced Personal Accomplishment	Prevention of Self-Expression and Communication	Attacks on Social Relationships	Attacks on Reputation	Attacks on Quality of Life and Occupational Position	Direct Attacks on Health
N	65	65	65	65	65	65	65	65
Mean	26.66	12.40	24.52	20.23	7.48	21.05	14.34	7.51
Std. Deviation	6.88	6.45	3.61	10.36	4.34	11.59	8.09	4.38
Median	27.00	11.00	25.00	20.00	6.00	19.00	13.00	6.00
Min.	11.00	5.00	8.00	0.00	0.00	0.00	0.00	0.00
Max.	40.00	53.00	31.00	43.00	19.00	59.00	35.00	25.00

Table 3. Cronbach's Alpha (α) Values for Maslach Burnout Inventory and Leymann's Inventory of Psychological Terror

		n	Cronbach's alpha
Leymann	Prevention of Self-Expression and Communication	11	0.852
	Attacks on Social Relationships	5	0.745
	Attacks on Reputation	15	0.963
	Attacks on Quality of Life and Occupational Position	9	0.637
	Direct Attacks on Health	5	0.834
Maslach	Emotional Exhaustion	9	0.963
	Depersonalization	5	0.941
	Reduced Personal Accomplishment	8	0.927

Table 4. Assessment of Maslach Burnout Inventory and Leymann's Inventory of Psychological Terror in terms of Gender

	Gender	N	Mean	Std. Deviation	Std. Error Mean	p	
Maslach	Emotional Exhaustion	Female	27	28.07	6.08	1.17	0.16
		Male	35	25.54	7.53	1.27	
	Depersonalization	Kadın	27	11.41	3.44	0.66	0.281
		Male	35	13.23	8.14	1.38	
	Reduced Personal Accomplishment	Female	27	23.89	2.58	0.50	0.04*
		Male	35	25.23	3.02	0.51	
Leymann	Prevention of Self-Expression and Communication	Female	27	23.07	10.36	1.99	0.04*
		Male	35	18.03	9.38	1.58	
	Attacks on Social Relationships	Female	27	8.22	4.45	0.86	0.251
		Male	35	6.97	4.02	0.68	
	Attacks on Reputation	Female	27	23.52	10.23	1.97	0.108
		Male	35	19.03	11.12	1.88	
	Attacks on Quality of Life and Occupational Position	Female	27	15.56	7.35	1.41	0.271
		Male	35	13.34	8.09	1.37	
	Direct Attacks on Health	Female	27	7.56	3.00	0.58	0.95
		Male	35	7.49	5.08	0.86	

*p<0.05

Table 5. Assessment of Maslach Burnout Inventory and Leymann’s Inventory of Psychological Terror in terms of Age

		N	Mean	Std. Deviation	Minimum	Maximum	p	
Maslach	Emotional Exhaustion	23-30 years	30	26.57	6.25	16.00	0.776	
		31-38 years	17	27.47	8.20	12.00		
		39-45 years	11	27.18	7.80	11.00		
		46+	7	24.29	5.12	20.00		
		Total	65	26.66	6.88	11.00		40.00
	Depersonalization	23-30 years	30	11.83	4.27	5.00	23.00	0.291
		31-38 years	17	12.06	4.07	5.00	18.00	
		39-45 years	11	11.64	3.72	5.00	19.00	
		46+	7	16.86	16.20	7.00	53.00	
		Total	65	12.40	6.45	5.00	53.00	
	Reduced Personal Accomplishment	23-30 years	30	24.20	2.89	18.00	29.00	0.16
		31-38 years	17	24.59	3.36	18.00	30.00	
39-45 years		11	23.55	5.39	8.00	27.00		
46+		7	27.29	2.93	23.00	31.00		
Total		65	24.52	3.61	8.00	31.00		
Leymann	Prevention of Self-Expression and Communication	23-30 years	30	24.00	8.74	11.00	43.00	0.006**
		31-38 years	17	20.35	9.09	0.00	39.00	
		39-45 years	11	15.64	11.99	0.00	39.00	
		46+	7	11.00	10.38	0.00	24.00	
		Total	65	20.23	10.36	0.00	43.00	
	Attacks on Social Relationships	23-30 years	30	8.80	3.60	5.00	15.00	0.07
		31-38 years	17	7.00	3.84	0.00	19.00	
		39-45 years	11	6.55	5.73	0.00	19.00	
		46+	7	4.43	4.72	0.00	11.00	
		Total	65	7.48	4.34	0.00	19.00	
	Attacks on Reputation	23-30 years ^{abc}	30	25.03	9.28	15.00	51.00	0.023*
		31-38 years ^c	17	19.88	12.11	0.00	59.00	
		39-45 years ^c	11	18.00	12.95	0.00	44.00	
		46+	7	11.57	11.86	0.00	30.00	
		Total	65	21.05	11.59	0.00	59.00	
	Attacks on Quality of Life and Occupational Position	23-30 years ^{abc}	30	17.17	6.88	9.00	31.00	0.030*
		31-38 years ^c	17	13.71	7.56	0.00	35.00	
		39-45 years	11	10.91	9.71	0.00	31.00	
		46+	7	9.14	8.09	0.00	19.00	
		Total	65	14.34	8.09	0.00	35.00	
Direct Attacks on Health	23-30 years ^{bc}	30	8.40	3.57	5.00	15.00	0.061	
	31-38 years ^{bc}	17	8.41	5.60	0.00	25.00		
	39-45 years	11	5.45	3.70	0.00	12.00		
	46+	7	4.71	3.64	0.00	10.00		
	Total	65	7.51	4.38	0.00	25.00		

*p<0.05 **p<0.01 a: different from 31-38 years, b: different from 39-45 years, c: different from 46+ years

Table 6. Assessment of Maslach Burnout Inventory and Leymann's Inventory of Psychological Terror in terms of Marital Status

			N	Mean	Std. Deviation	Minimum	Maximum	p
Maslach	Emotional Exhaustion	Married	37	25.78	7.31	11.00	40.00	0.446
		Single	26	28.00	6.33	16.00	39.00	
		Divorced	2	25.50	4.95	22.00	29.00	
		Total	65	26.66	6.88	11.00	40.00	
	Depersonalization	Married	37	12.51	7.69	5.00	53.00	0.757
		Single	26	12.50	4.49	5.00	23.00	
		Divorced	2	9.00	2.83	7.00	11.00	
		Total	65	12.40	6.45	5.00	53.00	
	Reduced Personal Accomplishment	Married ^{ab}	37	25.27	2.81	18.00	30.00	0.038*
		Single ^b	26	23.85	2.84	18.00	28.00	
		Divorced	2	19.50	16.26	8.00	31.00	
		Total	65	24.52	3.61	8.00	31.00	
Leymann	Prevention of Self-Expression and Communication	Married ^{ab}	37	17.08	9.58	0.00	39.00	0.003**
		Single ^b	26	25.35	9.16	12.00	43.00	
		Divorced	2	12.00	16.97	0.00	24.00	
		Total	65	20.23	10.36	0.00	43.00	
	Attacks on Social Relationships	Married ^{ab}	37	6.49	4.36	0.00	19.00	0.009**
		Single ^b	26	9.27	3.68	5.00	15.00	
		Divorced	2	2.50	3.54	0.00	5.00	
		Total	65	7.48	4.34	0.00	19.00	
	Attacks on Reputation	Married ^{ab}	37	18.41	11.77	0.00	59.00	0.01*
		Single ^b	26	25.81	9.57	15.00	51.00	
		Divorced	2	8.00	11.31	0.00	16.00	
		Total	65	21.05	11.59	0.00	59.00	
	Attacks on Quality of Life and Occupational Position	Married ^{ab}	37	12.00	7.34	0.00	35.00	0.003**
		Single ^b	26	18.23	7.61	9.00	31.00	
		Divorced	2	7.00	9.90	0.00	14.00	
		Total	65	14.34	8.09	0.00	35.00	
	Direct Attacks on Health	Married ^{ab}	37	6.68	4.53	0.00	25.00	0.046*
		Single ^b	26	9.00	3.72	5.00	15.00	
		Divorced	2	3.50	4.95	0.00	7.00	
		Total	65	7.5077	4.37722	0.00	25.00	

*p<0.05 **p<0.01 a: different from Single, b: different from Divorced

Table 7. Assessment of Maslach Burnout Inventory and Leymann's Inventory of Psychological Terror in terms of Educational Background

		N	Mean	Std. Deviation	Minimum	Maximum	p	
Maslach	Emotional Exhaustion	Graduate of Medicine	22	26.41	7.92	11.00	40.00	0.642
		Fellow	31	27.61	6.11	16.00	39.00	
		Attending	2	26.00	12.73	17.00	35.00	
		Academician	10	24.40	6.20	15.00	35.00	
		Total	65	26.66	6.88	11.00	40.00	
	Depersonalization	Graduate of Medicine	22	11.95	3.50	5.00	17.00	0.438
		Fellow	31	11.65	4.45	5.00	23.00	
		Attending	2	14.50	6.36	10.00	19.00	
		Academician	10	15.30	13.57	6.00	53.00	
		Total	65	12.40	6.45	5.00	53.00	
	Reduced Personal Accomplishment	Graduate of Medicine	22	23.73	4.75	8.00	31.00	0.321
		Fellow	31	24.48	2.77	19.00	30.00	
Attending		2	25.00	4.24	22.00	28.00		
Academician		10	26.30	2.67	23.00	30.00		
Total		65	24.52	3.61	8.00	31.00		
Leymann	Prevention of Self-Expression and Communication	Graduate of Medicine	22	17.09	11.61	0.00	37.00	0.148
		Fellow	31	22.81	9.74	0.00	43.00	
		Attending	2	27.00	16.97	15.00	39.00	
		Academician	10	17.80	6.11	10.00	31.00	
		Total	65	20.23	10.36	0.00	43.00	
	Attacks on Social Relationships	Graduate of Medicine	22	6.45	4.98	0.00	15.00	0.278
		Fellow	31	8.00	3.92	0.00	19.00	
		Attending	2	12.00	9.90	5.00	19.00	
		Academician	10	7.20	2.39	5.00	11.00	
		Total	65	7.48	4.34	0.00	19.00	
	Attacks on Reputation	Graduate of Medicine	22	16.27	12.69	0.00	51.00	0.061
		Fellow	31	24.23	10.90	0.00	59.00	
		Attending	2	29.50	20.51	15.00	44.00	
		Academician	10	20.00	5.40	15.00	30.00	
		Total	65	21.05	11.59	0.00	59.00	
	Attacks on Quality of Life and Occupational Position	Graduate of Medicine ^{abc}	22	10.77	8.37	0.00	31.00	0.025*
		Fellow ^{bc}	31	17.16	7.53	0.00	35.00	
		Attending ^c	2	18.50	12.02	10.00	27.00	
		Academician	10	12.60	5.58	9.00	24.00	
		Total	65	14.34	8.09	0.00	35.00	
Direct Attacks on Health	Graduate of Medicine	22	5.73	3.76	0.00	15.00	0.083	
	Fellow	31	8.84	4.76	0.00	25.00		
	Attending	2	8.00	4.24	5.00	11.00		
	Academician	10	7.20	3.43	5.00	15.00		
	Total	65	7.51	4.38	0.00	25.00		

*p<0.05 **p<0.01 a: different from Fellow, b: different from Attending, c: different from Academician

Table 8. Assessment of Maslach Burnout Inventory and Leymann's Inventory of Psychological Terror in terms of Income Level

			N	Mean	Std. Deviation	Minimum	Maximum	p
Maslach	Emotional Exhaustion	1900-3200	16	23.88	7.61	12.00	40.00	0.074
		3201-5500	43	28.05	6.56	11.00	39.00	
		5501-9000	6	24.17	4.54	20.00	32.00	
		Total	65	26.66	6.88	11.00	40.00	
	Depersonalization	1900-3200	16	10.81	4.83	5.00	23.00	0.059
		3201-5500	43	12.05	3.79	5.00	19.00	
		5501-9000	6	19.17	16.68	10.00	53.00	
		Total	65	12.40	6.45	5.00	53.00	
	Reduced Personal Accomplishment	1900-3200	16	24.63	2.75	19.00	28.00	0.412
		3201-5500	43	24.23	4.02	8.00	31.00	
		5501-9000	6	26.33	1.86	23.00	28.00	
		Total	65	24.52	3.61	8.00	31.00	
Leymann	Prevention of Self-Expression and Communication	1900-3200	16	20.19	7.77	13.00	43.00	0.377
		3201-5500	43	21.02	11.34	0.00	40.00	
		5501-9000	6	14.67	8.43	0.00	22.00	
		Total	65	20.23	10.36	0.00	43.00	
	Attacks on Social Relationships	1900-3200	16	7.81	3.60	5.00	15.00	0.620
		3201-5500	43	7.58	4.72	0.00	19.00	
		5501-9000	6	5.83	3.43	0.00	10.00	
		Total	65	7.48	4.34	0.00	19.00	
	Attacks on Reputation	1900-3200	16	21.13	6.46	15.00	35.00	0.601
		3201-5500	43	21.65	13.23	0.00	59.00	
		5501-9000	6	16.50	9.77	0.00	30.00	
		Total	65	21.05	11.59	0.00	59.00	
	Attacks on Quality of Life and Occupational Position	1900-3200	16	14.94	4.95	9.00	28.00	0.286
		3201-5500	43	14.81	9.12	0.00	35.00	
		5501-9000	6	9.33	5.75	0.00	18.00	
		Total	65	14.34	8.09	0.00	35.00	
	Direct Attacks on Health	1900-3200	16	7.81	3.62	5.00	15.00	0.924
		3201-5500	43	7.47	4.62	0.00	25.00	
5501-9000		6	7.00	5.10	0.00	15.00		
Total		65	7.51	4.38	0.00	25.00		

Table 9. Assessment of Maslach Burnout Inventory and Leymann’s Inventory of Psychological Terror in terms of Working Life

		N	Mean	Std. Deviation	Minimum	Maximum	p	
Maslach	Emotional Exhaustion	Less than 1 year	8	28.63	4.10	23.00	35.00	0.831
		1-4 years	22	26.41	6.80	16.00	39.00	
		6-10	12	27.25	7.44	17.00	40.00	
		11-15	9	24.67	8.47	12.00	39.00	
		16 years and above	14	26.71	7.25	11.00	35.00	
		Total	65	26.66	6.88	11.00	40.00	
	Depersonalization	Less than 1 year	8	12.88	4.12	7.00	19.00	0.243
		1-4 years	22	11.73	4.60	5.00	23.00	
		6-10	12	16.08	12.12	8.00	53.00	
		11-15	9	10.33	3.46	5.00	15.00	
		16 years and above	14	11.36	3.50	5.00	17.00	
		Total	65	12.40	6.45	5.00	53.00	
	Reduced Personal Accomplishment	Less than 1 year	8	24.38	3.16	18.00	28.00	0.591
		1-4 years	22	23.95	2.84	19.00	30.00	
		6-10	12	23.75	3.39	18.00	29.00	
11-15		9	25.56	2.24	23.00	30.00		
16 years and above		14	25.50	5.47	8.00	31.00		
	Total	65	24.52	3.61	8.00	31.00		
Leymann	Prevention of Self-Expression and Communication	Less than 1 year ^{abcd}	8	28.25	7.80	15.00	39.00	0.007**
		1-4 years ^{cd}	22	22.36	8.99	11.00	43.00	
		6-10 ^{cd}	12	23.08	10.84	0.00	40.00	
		11-15 ^d	9	14.67	6.12	3.00	25.00	
		16 years and above	14	13.43	10.81	0.00	33.00	
		Total	65	20.23	10.36	0.00	43.00	
	Attacks on Social Relationships	Less than 1 year ^{abcd}	8	11.00	4.57	5.00	19.00	0.003**
		1-4 years ^{cd}	22	8.41	4.23	5.00	19.00	
		6-10 ^{cd}	12	7.92	3.53	0.00	13.00	
		11-15 ^d	9	5.44	2.60	0.00	10.00	
		16 years and above	14	4.93	4.34	0.00	15.00	
		Total	65	7.48	4.34	0.00	19.00	
	Attacks on Reputation	Less than 1 year ^{abcd}	8	30.63	12.01	15.00	51.00	0.002**
		1-4 years ^{cd}	22	23.91	10.85	15.00	59.00	
		6-10 ^{cd}	12	22.42	11.16	0.00	37.00	
		11-15 ^d	9	14.78	6.34	0.00	24.00	
		16 years and above	14	13.93	10.45	0.00	34.00	
		Total	65	21.05	11.59	0.00	59.00	
	Attacks on Quality of Life and Occupational Position	Less than 1 year ^{abcd}	8	21.50	7.09	9.00	31.00	0.001**
		1-4 years ^{cd}	22	16.86	7.30	9.00	35.00	
		6-10 ^{cd}	12	14.92	6.97	0.00	27.00	
11-15 ^d		9	9.00	2.87	4.00	13.00		
16 years and above		14	9.21	8.49	0.00	31.00		
	Total	65	14.34	8.09	0.00	35.00		
Direct Attacks on Health	Less than 1 year ^{abcd}	8	9.63	3.54	5.00	15.00	0.013*	
	1-4 years ^{cd}	22	9.18	5.02	5.00	25.00		
	6-10 ^{cd}	12	7.33	3.42	0.00	12.00		
	11-15 ^d	9	6.33	3.28	5.00	15.00		
	16 years and above	14	4.57	3.55	0.00	12.00		
	Total	65	7.51	4.38	0.00	25.00		

*p<0.05 **p<0.01 a: different from 1-4 years, b: different from 6-10 years, c: different from 11-15 years, d: different from 16+ years

Table 10. Assessment of Maslach Burnout Inventory and Leymann’s Inventory of Psychological Terror in terms of the Duration of Working at the Current Workplace

		N	Mean	Std. Deviation	Minimum	Maximum	p	
Maslach	Emotional Exhaustion	Less than 1 year	18	25.89	7.63	12.00	39.00	0.84
		1-4 years	31	26.61	7.06	11.00	35.00	
		5-8 years	9	27.11	6.75	17.00	40.00	
		9-12 years	3	31.00	4.36	26.00	34.00	
		13 years and above	4	26.25	4.79	21.00	32.00	
		Total	65	26.66	6.88	11.00	40.00	
	Depersonalization	Less than 1 year	18	12.00	4.61	5.00	23.00	0.356
		1-4 years	31	11.52	4.04	5.00	19.00	
		5-8 years	9	16.22	14.09	7.00	53.00	
		9-12 years	3	14.67	3.21	11.00	17.00	
		13 years and above	4	10.75	2.50	8.00	14.00	
		Total	65	12.40	6.45	5.00	53.00	
	Reduced Personal Accomplishment	Less than 1 year	18	24.06	3.46	18.00	30.00	0.489
		1-4 years	31	24.13	3.92	8.00	30.00	
		5-8 years	9	25.11	3.37	19.00	31.00	
9-12 years		3	26.67	1.53	25.00	28.00		
13 years and above		4	26.75	2.99	23.00	30.00		
Total		65	24.52	3.61	8.00	31.00		
Leymann	Prevention of Self-Expression and Communication	Less than 1 year	18	17.67	9.47	0.00	37.00	0.249
		1-4 years	31	22.23	11.37	0.00	43.00	
		5-8 years	9	23.22	6.30	13.00	33.00	
		9-12 years	3	14.33	12.06	3.00	27.00	
		13 years and above	4	14.00	9.66	0.00	22.00	
		Total	65	20.23	10.36	0.00	43.00	
	Attacks on Social Relationships	Less than 1 year	18	7.06	4.02	0.00	15.00	0.379
		1-4 years	31	8.16	4.73	0.00	19.00	
		5-8 years	9	8.00	3.50	5.00	15.00	
		9-12 years	3	3.33	2.89	0.00	5.00	
		13 years and above	4	6.00	4.69	0.00	11.00	
		Total	65	7.48	4.34	0.00	19.00	
	Attacks on Reputation	Less than 1 year	18	18.61	11.13	0.00	51.00	0.249
		1-4 years	31	23.97	12.47	0.00	59.00	
		5-8 years	9	21.11	8.01	15.00	34.00	
		9-12 years	3	11.67	10.41	0.00	20.00	
		13 years and above	4	16.25	11.09	0.00	25.00	
		Total	65	21.05	11.59	0.00	59.00	
	Attacks on Quality of Life and Occupational Position	Less than 1 year	18	12.33	7.28	0.00	31.00	0.142
		1-4 years	31	16.16	8.61	0.00	35.00	
		5-8 years	9	16.44	7.21	6.00	31.00	
		9-12 years	3	7.33	2.89	4.00	9.00	
		13 years and above	4	9.75	7.80	0.00	19.00	
		Total	65	14.34	8.09	0.00	35.00	
Direct Attacks on Health	Less than 1 year	18	5.67	3.36	0.00	15.00	0.059	
	1-4 years	31	8.77	5.12	0.00	25.00		
	5-8 years	9	8.67	2.45	5.00	12.00		
	9-12 years	3	6.33	1.53	5.00	8.00		
	13 years and above	4	4.25	2.99	0.00	7.00		
	Total	65	7.51	4.38	0.00	25.00		

Table 11. Assessment of Maslach Burnout Inventory and Leymann’s Inventory of Psychological Terror in terms of the Duration of Working at the Current Unit

		N	Mean	Std. Deviation	Minimum	Maximum	p	
Maslach	Emotional Exhaustion	Less than 1 year	18	25.89	7.63	12.00	39.00	0.952
		1-4 years	34	26.82	6.80	11.00	35.00	
		5-8 years	5	26.80	8.98	17.00	40.00	
		9-12 years	4	29.00	5.35	23.00	34.00	
		13 years and above	4	26.25	4.79	21.00	32.00	
		Total	65	26.66	6.88	11.00	40.00	
	Depersonalization	Less than 1 year ^{bcd}	18	12.00	4.61	5.00	23.00	0.015*
		1-4 years ^{bcd}	34	11.21	3.88	5.00	19.00	
		5-8 years ^{cd}	5	21.40	17.85	10.00	53.00	
		9-12 years ^d	4	14.75	2.63	11.00	17.00	
		13 years and above	4	10.75	2.50	8.00	14.00	
		Total	65	12.40	6.45	5.00	53.00	
	Reduced Personal Accomplishment	Less than 1 year	18	24.06	3.46	18.00	30.00	0.45
		1-4 years	34	24.18	4.01	8.00	31.00	
		5-8 years	5	25.00	2.12	23.00	28.00	
9-12 years		4	26.75	1.26	25.00	28.00		
13 years and above		4	26.75	2.99	23.00	30.00		
Total		65	24.52	3.61	8.00	31.00		
Leymann	Prevention of Self-Expression and Communication	Less than 1 year	18	17.67	9.47	0.00	37.00	0.203
		1-4 years	34	22.97	11.01	0.00	43.00	
		5-8 years	5	20.00	5.83	13.00	27.00	
		9-12 years	4	15.00	9.93	3.00	27.00	
		13 years and above	4	14.00	9.66	0.00	22.00	
		Total	65	20.23	10.36	0.00	43.00	
	Attacks on Social Relationships	Less than 1 year	18	7.06	4.02	0.00	15.00	0.346
		1-4 years	34	8.38	4.71	0.00	19.00	
		5-8 years	5	6.60	2.30	5.00	10.00	
		9-12 years	4	4.25	2.99	0.00	7.00	
		13 years and above	4	6.00	4.69	0.00	11.00	
		Total	65	7.48	4.34	0.00	19.00	
	Attacks on Reputation	Less than 1 year	18	18.61	11.13	0.00	51.00	0.205
		1-4 years	34	24.18	12.19	0.00	59.00	
		5-8 years	5	18.40	6.50	15.00	30.00	
		9-12 years	4	13.50	9.26	0.00	20.00	
		13 years and above	4	16.25	11.09	0.00	25.00	
		Total	65	21.05	11.59	0.00	59.00	
	Attacks on Quality of Life and Occupational Position	Less than 1 year	18	12.33	7.28	0.00	31.00	0.082
		1-4 years	34	16.76	8.57	0.00	35.00	
		5-8 years	5	14.00	5.66	6.00	18.00	
		9-12 years	4	7.75	2.50	4.00	9.00	
		13 years and above	4	9.75	7.80	0.00	19.00	
		Total	65	14.34	8.09	0.00	35.00	
Direct Attacks on Health	Less than 1 year	18	5.67	3.36	0.00	15.00	0.08	
	1-4 years	34	8.71	4.81	0.00	25.00		
	5-8 years	5	7.80	2.59	5.00	10.00		
	9-12 years	4	8.50	4.51	5.00	15.00		
	13 years and above	4	4.25	2.99	0.00	7.00		
	Total	65	7.51	4.38	0.00	25.00		

*p<0.05 **p<0.01 a: different from 1-4 years, b: different from 5-8 years, c: different from 9-12 years, d: different from 13 years and above

Table 12. Assessment of the Associations between the Categories of the Maslach Burnout Inventory and Leymann’s Inventory of Psychological Terror

		Emotional Exhaustion	Depersonalization	Reduced Personal Accomplishment
Prevention of Self-Expression and Communication	r	.271*	.129	.040
	p	.029	.306	.753
	n	65	65	65
Attacks on Social Relationships	r	-.009	.072	.032
	p	.946	.567	.802
	n	65	65	65
Attacks on Reputation	r	.059	.120	.087
	p	.643	.340	.493
	n	65	65	65
Attacks on Quality of Life and Occupational Position	r	.161	.128	.099
	p	.200	.309	.434
	n	65	65	65
Direct Attacks on Health	r	.019	.102	.155
	p	.879	.420	.217
	n	65	65	65

p<0.05

Discussion

The reports by the International Labor Organization (ILO) points out the increase of violence problems experienced at work recently. The work-related psychological problems, such as mobbing and burnout are increasing day by day. Employees are frequently subject to mobbing activities defined as “burnout and psychological bullying” in the workplaces around the world. However, it is extremely difficult to reveal the impacts of these activities on the employees. It is especially striking that physicians and nurses experience psychological violence even more frequently. Unfortunately, employees are not able to explicitly express that they are experiencing mobbing and burnout in their workplace. This study aimed to reveal burnout and mobbing among the physicians. The burnout level of the physicians was measured using the Maslach Burnout Inventory, while the perceived mobbing levels were measured using the Leymann’s Inventory of Psychological Terror.

Out of all participants, more than half were male, almost half were aged 23 to 30 years and more than 60% were residents. The findings revealed that physicians mostly experienced emotional exhaustion and reduced personal accomplishment. They also frequently experienced mobbing behaviors including attacks on reputation, self-expression and the way communication happens. Emotional exhaustion level of females was higher than that of the males (p>0.05), while reduced personal accomplishment level was higher in males (p<0.05). The level of mobbing activities for prevention of self-expression and communication towards the female physicians was higher than that towards the males (p<0.05) (Table4).

Although there was no significant difference in the burnout scores in terms of age, the level of mobbing activities including prevention of self-expression and communication, attacks on reputation and attacks on the quality of life and occupational position was significantly higher in the participants aged 23 to 30 years (p<0.05)(p<0.01)(Table 5).

In terms of job burnout, married physicians exhibited a high level of reduced personal accomplishment, while the scores for almost all categories of mobbing showed significant differences among single physicians ($p < 0.05$)($p < 0.01$)(Table 6). Attending physicians were found to be at greater risk for experiencing attacks on the quality of their professional and life situation. There was a significant difference in the scores for all categories of mobbing among the physicians with a working life of less than a year ($p < 0.05$)($p < 0.01$)(Table 9. Burnout manifested itself as depersonalization in the physicians with 5 to 8 years of service ($p < 0.01$)(Table 11). In the developed countries, mobbing is called as the disease of upper management. In Turkey, mobbing is common in hospital environments and is considered as an important risk factor that adversely affects the job satisfaction of employees. Studies show that people working in the health sector have a 16-fold higher risk of being subject to mobbing than that of employees from other sectors. Such a high rate of risk results in exclusion, mobbing and other psychological bullying scenarios such as forceful appointment (Arisoy, 2011; <http://www.forumgercek.com/showthread.php?68010>.<http://mobbingturkiye.net/net/index.php?Option=com.content&task=view&task=view&id=81&Hemid=58>).

Istanbul Bilgi University and istanbulkaynaklari.com showed that 42.0% of the employees are victims of mobbing in Turkey. Another study conducted by an independent institution also reported that a total of 1771 female residents, practitioners, attending physicians and delivery nurses were subject to psychological violence. 43.9% of the females working at training hospitals, 43.3% of the females working at state hospitals, 38.7% of the females working at specialized hospitals and 28.2% of the females working at primary healthcare facilities are exposed to psychological violence in the workplace (Dikmetas and Top 2011).

In a study examining the burnout and mobbing levels of residents, 34.07% of the participants were female, 65.93% were male, 52.92% had less than 28 years of service, 54.07% were single and 54.44% had been working at the hospital for 2 years or less. Our findings are similar to the findings of that study in terms of age and length of service, but different in terms of other variables. The same study reported that the mean

mobbing score of residents was 1.87 and the mean burnout levels of residents were 2.99 for emotional exhaustion; 2.95 for depersonalization and 2.94 for personal accomplishment. Our findings are significantly different for the burnout level for “reduced personal accomplishment” and for the perceived mobbing levels for “prevention of self-expression and communication”. The reason may be the participants from different fields of service (attending physicians, emergency physicians etc.) and different hospitals (Sahin, et al, 2012).

Another study reported that 87.7% of the physicians recruited for compulsory military service experienced mobbing behavior. The same study also reported that physicians who worked more than 40 hours a week, single physicians, physicians working in university hospitals and private hospitals were also exposed to mobbing. In the same study, mobbing was not found to be associated with specialty status, service period, age, and personality variables. In our study, there is a significant gender difference in the scores for reduced personal accomplishment and the scores for prevention of self-expression and communication ($p < 0.05$) (Table 4) and the scores for all five categories of mobbing behaviors differ significantly in terms of marital status ($p < 0.05$) (Table 6).

There is no significant difference in the burnout scores in terms of age. However, there is a highly significant difference in the scores for “prevention of self-expression and communication” $p < 0.01$ (Table 5), and significant difference in the scores for “attacks on reputation” and “attacks on the quality of their professional and life situation” in terms of age ($p < 0.05$)(Table 5) (18). In a nationwide study on violence conducted in Turkey, 2.4% of the health care workers were found to have experienced mobbing, while shift work, gender, job, age and working hours were regarded as significant ($p < 0.05$) independent risk factors (Pinar, et al., 2015).

The study by Pıçakcıfe et al., (2015) reported that 31.1% of health workers had faced with mobbing in the last 1 year, and the frequency of experiencing mobbing of 48.6% of them was 1 to 3 times per year. The same study also revealed that a total of 70.3% of those who apply mobbing were senior health workers, and 91.9% were female. The frequency of encountering with “mobbing” was found significant in married

health workers and in those aged 16 years and over. Mobbing experience was also found to be frequent in those who had psychosocial reactions, and in those who had counterproductive behaviors. The study also discovered that primary health care workers had high prevalence of mobbing exposure. Another study conducted in Bosnia and Herzegovina reported that 387 (76% of all participants) physicians self-reported mobbing behavior in the working environment and 136 (26% of all participants) was exposed to persistent mobbing (Pranjic, et al., 2006).

In this study, more than half of all participants were male and most of the participants were residents. The findings revealed that physicians mostly experienced emotional exhaustion and reduced personal accomplishment. They also stated that they experienced mobbing behaviors including attacks on reputation and prevention of self-expression and communication. Emotional exhaustion level of females was higher than that of the males ($p>0.05$), while reduced personal accomplishment level was higher in males ($p<0.05$). The level of mobbing activities for prevention of self-expression and communication towards the female physicians was higher than that towards the males. Although there is no significant difference in the burnout scores in terms of age, the level of mobbing activities including prevention of self-expression and communication, attacks on reputation and attacks on the quality of life and occupational position was significantly higher in the participants aged 23 to 30 years.

In terms of job burnout, married physicians exhibited a high level of reduced personal accomplishment. On the other hand, the scores for almost all categories of mobbing showed significant differences among single physicians. Attending physicians were found to be at greater risk for experiencing attacks on the quality of their professional and life situation than the academicians. There was a significant difference in the scores for all categories of mobbing among the physicians with a working life of less than a year, while burnout manifested itself as depersonalization in the physicians with 5 to 8 years of service.

Conclusion

Job burnout and mobbing must be addressed as an important community health problem; because, these two phenomena reduces the production potential and motivation of employees

in a workplace and adversely affects their health. Preventive actions for the protection of risk groups must be integrated into occupation healthcare and necessary legal actions must be started.

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