ORIGINAL ARTICLE

Cuneyt Ardic¹ Oguzer Usta¹ Guzin Zeren Ozturk²

 ¹Recep Tayyip Erdogan University, Department of Family Medicine, Rize, Turkey.
 ²Sisli Hamidiye Etfal Training and Research Hospital, Family Physicians, Istanbul, Turkey.

Corresponding Author: Cuneyt Ardic Recep Tayyip Erdogan University, Department of Family Medicine, Rize, Turkey Tel:+90 530 8839578 E-mail:drcuneytardic@hotmail.com

Received: 21.09.2017 Acceptance: 05.06.2018 DOI: 10.18521/ktd.339246

Konuralp Medical Journal

e-ISSN1309–3878 konuralptipdergi@duzce.edu.tr konuralptipdergisi@gmail.com www.konuralptipdergi.duzce.edu.tr

The Relationship between the Situation of Being Exposed to Violence and the Burnout in Security Guards Working in the Hospital

ABSTRACT

Objective: Burn-out affect was shown every occupational groups. Security guards at hospitals are at more risk because of their exposure to violence and their workload. The aim of this study was to investigate the relationship between the situation of being exposed to violence and the burnout in security guards at hospitals.

Methods: Study was performed between April and June 2017 at 6 hospitals from 3 different cities in Turkey. A self-report questionnaire was performed and filled by participants with face-to-face interaction. Questionnaire was consisting of 15 items towards variables that might cause burn-out syndrome and sociodemographic variables. Maslach Burnout Inventory was used to measure burn-out level of the participants. Statistical analyses were performed using SPSS. P < 0.05 was statistically significant.

Results: Participants were 215 security guards. 65.5 % (n=141) were exposed to verbally violent and 40.9 % (n=88) were exposed to physically violent acts during the past 12 months three times or more. There was statistically significant relation between exposure to verbal or physical violence in last year and Maslach emotional exhaustion scores. There was significant relation between Maslach depersonalization scores of the security guards who exposed to physical violence in last year, but it was not significantly at whom exposed to verbal violence in last year.

Conclusions: We found that as burn-out increased with exposure to violence. Therefore we suggest that security guards need to be educated about coping with violence and communication; also should evaluated physiologically within periodic examination. **Keywords:** Burnout, Security Guards, Violence

Hastanede Çalışan Güvenlik Görevlilerinin Şiddete Maruz Kalma ile Tükenmişlik Durumları Arasındaki İlişki _{ÖZET}

Amaç: Tükenmişliğin etkisi her meslek grubunda gösterilmiştir. Sağlık sektöründe çalışan güvenlik güçleri gerek iş yükü, gerekse şiddete maruz kalmaları nedeniyle diğer sektörlere göre daha fazla risk altındadır. Bu çalışmada hastanede çalışmakta olan güvenlik görevlilerinin tükenmişlik düzeylerinin şiddet görme durumları ve diğer faktörlerle ilişkisi araştırılmıştır.

Gereç ve Yöntem: Çalışmamız 2017 yılı Nisan-Haziran ayları arasında 3 farklı ilden 6 hastanede yapılmıştır. Çalışmada amacına uygun olarak hazırlanan sosyo-demografik özelliklere ve Tükenmişlik Sendromuna sebep olabileceği düşünülen değişkenlere yönelik 15 sorudan oluşan bir anket ile katılımcıların tükenmişlik düzeyini belirlemek için Maslach tükenmişlik ölçeği araştırmacılar tarafından yüz yüze görüşme yöntemi ile uygulanmıştır. Veriler SPSS 20.0 paket programında değerlendirilmiştir. p<0,05 anlamlı olarak alınmıştır.

Bulgular: Çalışmaya hastanede çalışan 215 güvenlik görevlisi katılmıştır. Katılımcıların şiddet görme durumları değerlendirildiğinde %65,5'i (n=141) son bir yılda 3 veya daha fazla sözlü şiddete, %40,9'u (n=88) son bir yılda 3 veya daha fazla fiziksel şiddete maruz kalmıştı.Son 1 yıl içinde sözlü ve fiziksel şiddete maruz kalanların Maslach Duygusal tükenme puanları arasında ilişki bulunmuştur. (p<0.05)

Son 1 yıl içinde fiziksel şiddete maruz kalanlarda Maslach Duyarsızlaşma puanı arasında ilişki varken (p<0.05) sözlü şiddete maruz kalanlarda fark bulunamamıştır. (p>0.05)

Sonuç: Hastanede çalışan güvenlik görevlerinin şiddetle karşılaşma sıklıkları arttığında tükenmişlik durumlarının da arttığını saptadık. Bu nedenle güvenlik görevlilerinin şiddet ile başa çıkma ve iletişim konularında eğitim almaları ve periyodik muayene kapsamında psikolojik değerlendirilme yapılmasını önermekteyiz.

Anahtar Kelimeler: Tükenmişlik, Güvenlik Görevlileri, Şiddet

INTRODUCTION

The term "burnout" is firstly expressed by Freudenberger (1974, 1975) and then defined by Maslach and Jackson(1981, 1982, 1986) (1). Maslach ve Jackson have defined burnout "as a syndrome of emotional exhaustion, depersonalization reduced and personal accomplishment that can occur among individuals who work with people in some capacity" (2). According to another model Cherniss has defined burnout as "negative personal changes which occur over time in helping professionals working in demanding or frustrating jobs". According to Cherniss burnout was complete when the workers defensively cope with the job by psychologically detaching them selves from the job and becoming apathetic, cynical, and rigid (3).

Burnout syndrome not only be seen in occupation groups which work face-to-face with people like doctors, nurses, physiotherapists, teachers, social service workers, psychologists, but also seen in police officers, guards (4). Factors like age, gender, marital status, educational level, family structure, social support, workload affects burnout (5,6).

Workplace violence is defined by European Commission as: "Incidents where persons are abused, threatened or assaulted in circumstances related to their work, including commuting to and from work, involving explicit or implicit challenges to their safety, well-being or health" (7). Police officers and security guards more exposed to violence than other workers during their working hours (8,9,10). Moreover, police officers and security guards simply cannot withdraw from their work environment even if they feel seriously threatened because they are responsible for maintaining law and order in their workplaces (11,12,13)

There are two main results of the burnout: Disruption of the quality of the service that workers serve and physical exhaustion related to situations like sleeping disorder, alcohol and substance use, marriage and family problems (14).

Physical exhaustion symptoms caused by burnout affect workers from every occupation groups. Because of that it is highly important for public health. The aim of this study was to investigate relationship between burnout levels of the security guards who work at hospital and their exposure to violence and other factors. Also another aim of this study was enhance strategies to prevent burnout at security guards.

MATERIAL AND METHODS

Participants: Our study was performed between April 2017 and June 2017 at 6 hospitals from 3 different cities in Turkey. A self-report questionnaire was constructed by the researchers and filled by participants with face-to-face interaction. The study plan was approved by the Ethics Committee of the University of Recep Tayyip Erdogan

Measures: Questionnaire performed to participants was consisting of 15 items towards variables that might cause burnout syndrome and sociodemographic variables. Maslach Burnout Inventory (MBI) was used to measure burnout level of the participants

Maslach Burnout Inventory: The inventory that used in the study was enhanced by Maslach and Jackson at 1981 (14). This inventory evaluated for validity and reliability in Turkey by Ergin et al. Cronbach alfa internal consistency coefficient found 0.93. Cronbach alpha ratings found 0.83 for emotional exhaustion, 0.75 depersonalization, and 0.88 for personal accomplishment by Ergin.1

MBI contains 22 questions regarding the three areas that evaluate participants' work related attitudes. There are nine items for emotional exhaustion, five items for depersonalization and eight items for personal accomplishment (1,15). Emotional exhaustion defines depletion or draining of emotional resources; depersonalization, a negative, callous and cynical attitude towards recipients; and reduced personal accomplishment defines the tendency to evaluate oneself negatively with regard to one's accomplishments at work.

The original form of the inventory items were scored on a 7-point rating scale. At Turkish version of the inventory, items were scored on a 5point rating scale, ranging from `never' [0] to every day' [4]. According to this, score ranges are calculated 0-36 for emotional exhaution, 0-20 for and 0-32 depersonalization for personal accomplishment. High levels of emotional exhaustion and depersonalization and low levels of personal accomplishment are indicative of burnout. There isn't any exact prediction for existence or absence of the burnout. Therefore burnout scores obtained from studies are evaluated according to other occupation groups (16,17,18)

Statistical Analysis: Data about descriptive features of the security guuards evaluated with number, percentand mean. Statistical analyses were performed using the statisticalsoftware SPSS, version 20.0. Parametric tests which T test and Anova tests were used for evaluating descriptive statistics, Maslach emotional exhaustion scores and Maslach personal accomplishment scores. To evaluate depersonalization scores non-parametric tests which Man Whitney U and Kruskal-Wallis tests were used for correlation analysis. With 95% confidence interval differences were considered statistically significant if P < 0.05.

RESULTS

Participants were 215 security guards. The average age was 34.31 years. As shown at table-1;

80.9% were men and 63.7% were married. 74.4 % of the participants were high school graduated.

Number	%
174	80,9
41	19,1
110	51,2
105	48,8
68	31,6
137	63,7
10	4,7
24	11,2
160	74,4
31	14,4
130	60,5
85	39,5
	174 41 110 105 68 137 10 24 160 31 130

 Table 1.
 Socio-demographic features of the participants

Participants had been working as security guard for a mean of 7.6 years (SD = 4.3). Questions and answers about working conditions and exposure to violence are shown at table-2. 61.9% of the participants were working with shift precedure and 34.4% were working at emergency.

Of all respondents, 94.4%(n=203) experienced work-related violence. Participants who work with shift procedure experienced less violence than the others. Exposure to violence was 88.5 % at the participants work with shift procedure and 91.4 % for the others. 65.5 % were exposed to verbally violent acts during the past 12 months three times or more and 40.9 % were exposed to physically violent acts during the past 12 months three times or more. 47 % of the participants were very much worried about verbal violence in next year future violence and 36.7 % said they were very much worried about physical violence in the next year. participants were asked what would be their reaction when they exposed violence and 70.2 % of them said they would wait for other person calming down. 59.1 % of them weren't search for their rights against violent acts beacuse of long judicial process.

Emotional exhaustion scores were 15.56 (\pm 7.819), depersonalization scores were 6.91 (\pm 4.224) and personal accomplishment scores were 16.99 (\pm 6.756) in the results.

 Table 2. Working conditions and prevelance of violence

violence				
Department	Number	%		
Emergency	74	34,4		
Other	141	65,6		
Shift worker				
Yes	133	61,9		
No	82	38,1		
Exposure to at least one physical/ver	rbal violence	?		
Yes	193	89,8		
No	22	10,2		
Exposure to verbal violence in last y	ear			
None	29	13,5		
1 time	18	8,4		
2 times	27	12,6		
3 or more times	141	65,5		
Exposure to physical violence in las	t year			
None	56	26,1		
1 time	38	17,7		
2 times	33	15,3		
3 or more times	88	40,9		
Personal worry about future verbal	violence			
None	11	5,1		
A little	19	8,8		
Somewhat	45	20,9		
A lot	39	18,1		
Very much	101	47,0		
Personal worry about future physical violence				
None	14	6,5		
A little	18	8,4		
Somewhat	52	24,2		
A lot	52	24,2		
Very much	79	36,7		
Reaction to violence				
I wait for him/her calm down	151	70,2		
I react back with type of violence i expose	53	24,7		
I react back extremely	3	1,4		
Other	8	3,7		
Cause of not searching legal rights				
Long judicial process	114	59,1		
Termination of act nicely	53	27,5		
Social pressure	3	1,6		
Fear for exposure to more violence	12	6,2		
Other	11	5,7		

Associations of burnout scores and some sociodemographic variables of the participants are shown at Table-3.

There was statistically significant relation between exposure to verbal or physical violence in last year and Maslach emotional exhaustion scores.

Table 3. Burnout scores of participants according to sociodemographical variables.

	Maslach Emotional Exhaustion	Maslach Depersonalization	Maslach Personal Accomplishment
	M±SD	M±SD	M±SD
Exposure to physical v	iolence in last year(n=215)		
None	12,31±6,32 ^a	5,42±3,66 ^a	$8,65 \pm 6,06$
1-2 times	$15,44 \pm 8,02^{b}$	$6,94{\pm}4,25^{bd}$	$7,24 \pm 6,95$
3 or more times	$17,83 \pm 7,86^{\circ}$	$7,86 \pm 4,33^{cd}$	$15,94 \pm 6,77$
Р	*P ^A <0,001	*P ^{kw} =0,002	P ^A =0,061
Exposure to verbal vio	lence in last year(n=215)		
None	$13,07 \pm 6,41^{ad}$	$6,34 \pm 3,56$	$19,52 \pm 5,92$
1-2 times	13,87±7,45 ^{bd}	$6,16 \pm 4,12$	$15,76 \pm 6,75$
3 or more times	$16,64 \pm 8,05^{\circ}$	$7{,}28\pm4{,}37$	$16,\!90 \pm 6,\!83$
P	*P ^A =0,021	P ^{kw} =0,144	P ^A =0,061
Gender			
Male (n=174)	$15,29 \pm 7,8$	$6,83 \pm 4,1$	$17,33 \pm 6,7$
Female (n=41)	16,68±7,57	$7,24 \pm 4,5$	$15,5 \pm 6,7$
Р	P ^t =0,307	P ^{mw} =0,408	P ^t =0,127
Department			
Other (n=74)	$14,74 \pm 9,3$	$5,\!47 \pm 4,\!1$	$18,72 \pm 7,03$
Emergency (n=141)	$16,13 \pm 6,8$	$7{,}66 \pm 4{,}06$	$16,08 \pm 6,4$
Р	P ^t =0,18	*P ^{mw} <0,001	*P ^t = 0,006
Marital status			
Single (n=78)	$14,\!49 \pm 8,\!7$	$6,04 \pm 3,8$	$17,28 \pm 6,9$
Married (n=137)	$16,17 \pm 7,1$	$7,\!40\pm7,\!4$	$16,82 \pm 6,6$
Р	P ^t =0,152	*P ^{mw} =0,014	P ^t =0,629
Age			
<35 (n=110)	$14,9 \pm 7,7$	$6,5 \pm 4,0$	$18,05 \pm 6,4$
>35 (n=105)	$16,22 \pm 7,8$	$7{,}29\pm4{,}4$	$15,\!87 \pm 6,\!9$
Р	P ^t =0,227	P ^{mw} =0,107	*P ^t = 0,017
Shift			
Yes (n=131)	$13,\!47 \pm 8,\!09$	$5,44 \pm 3,9$	$18,22 \pm 6,5$
No (n=81)	$19,\!09\pm5,\!8$	$9,\!37\pm3,\!4$	$14,16 \pm 6,1$
Р	*P ^t <0,001	*P ^{mw} <0,001	*P ^t <0,001
Education			
Primary School (n=24)	13,42 ± 7,61	$6{,}42 \pm 3{,}38$	15,38 ± 7,69
High School (n=160)	$15,94 \pm 7,88$	$6,94 \pm 4,21$	$16,76 \pm 6,52$
University (n=31)	15,23 ± 7,57	$7{,}13\pm4{,}90$	$19,\!42 \pm 6,\!80$
Р	PA= 0,327	Pkw= 0,57	PA= 0,61
Professional Eperience			
7 years or less (n=106)	$14,12 \pm 8,44$	$6{,}09\pm4{,}00$	$17,74 \pm 7,06$
More than 7 years (n=109)	$16,95 \pm 6,91$	$7,70 \pm 4,29$	$16,26 \pm 6,39$
Р	$*P^{t} = 0,008$	$*P^{mw} = 0,03$	$P^{t} = 0,109$

mw:MannWhitney U test; A: ANOVA test; kw: Kruskal-Wallis test; *p:statistically signifant

There was significant relation Maslach depersonalization scores of the participants who exposed physical violence in last year, but there is not relation between Maslach personal accomplishment scores and exposure to verbal or physical violence.

There was't significant difference under 35 years age group and over 35 years age group participants' Maslach emotional exhaustion and depersonalization scores but Maslach personal accomplishment scores were significantly different. Personal accomplishment scores of the under 35 years age group were higher. Maslach emotional exhaustion, depersonalization and personal accomplishment scores did not differ significantly according to gender and education status

There was significant difference between Maslach emotional exhaustion, depersonalization scores of the participants who were working seven years or more as security guard and under seven years. Ones were working seven years or more had higher emotional exhaustion and depersonalization scores, but personal accomplishment scores did not differ significantly.

Security guards who were working at emergency had higher depersonalization scores (p=<0,001) and lower personal accomplishment scores (p=0.006). Emotional exhaustion scores did not differ significantly between that groups.

Maslach emotional exhaustion and depersonalization scores of the single security guards were significantly lower than single ones. Personal accomplishment scores were not significantlydifferent.

Maslach emotional exhaustion and depersonalization scores of the shift workers were significantly lower than the others. On the other handpersonal accomplishment scores were significantly higher than the others.

Correlation analysis of our data is shown at Table-4 and there was strong relation between Maslach emotional exhaustion and Maslachdepersonalization scores (r=.778).

As emotional exhaustion scores increases depersonalization scores were also inceasing. There was positive weak relation between depersonalization scores of the participants and age (r=.139).

When age fixed, there was strong positive relation between Maslach emotional exhaustion scores and Maslach depersonalization scores (r=.767). Besides that there was weak negative relation between Maslach emotional exhaustion scores and personal accomplishment scores (r=.373).As the working time at job increases, exposure to violence also was increasing but there wasn't statistically significant difference.

As emotional exhaustion increases there was increasing at depersonalization and decreasing at personal accomplishment. There was positive weak relation between emotional exhaustion and verbal/physical violence (r=.189,r=.274). As the number of verbal and physical violent acts increase, emotional exhaustion was also increasing. There was negative weak relation between personal accomplishment score and number of physical violence (r=.169). There was positive weak relation between depersonalization and number of physical violence(r=.239). As the number of the physical violence increases, there was increasing at depersonalization and decreasing at personal accomplishment, eventually increasing at burnout.

DISCUSSION

Violence to health workers are increasing in last years at World and also our country. According to World Health Organization data this range is between 8-38 % (19).

Studies that search violence situation towards health workers are usually done for doctors and nurses. For instance Berna Aydin at al. has shown that 82.8 % of the doctors exposed to violence and most of it was verbal violence (20). In another study in Izmir, Turkey towards nurses Ergün FSat al.has shown that 98.5 % of the participants exposed to verbal violence and 19.7 % exposed to physical violence (21).

Security guards who work at hospital are at risk for violence because of their intervention duty at the time of any case. At least one verbal or physical violent act was 89.3 % (n=198), exposure to verbal violence in last year was 86.5 (n=186), exposure to physical violence in last year was 73.9 % (n=159) in our study. In another study at Finland,2011 TM by Leino at al., exposure to physical violence at police officers or security guards was 73 % (22), Excess of exposure to specially physical violence more than other health workers attract the attention. This might be caused by besides their own exposure to violence, their intervention every violent acts in their workplace.

Emotional exhaustion scores were 15.56 (± 7.819) , depensionalization scores were 6.91 (± 4.224) and personal accomplishment scores were 16.99 (±6.756) in our study. Score ranges are calculated 0-36 for emotional exhaution, 0-20 for depersonalization and 0-32 for personal accomplishment. Besides anycut-off pointnot used for existence or absence of the burnout, score ranges are calculated 0-36 for emotional exhasution, 0-20 for depersonalization and 0-32 for personal accomplishment. According to this, emotional exhaustion is main subhead of burnout. NicolienKop at al. has found Emotional exhaustion scores 9.8 (±6.0), depersonalization scores7.5 (±3.9) and personal accomplishment scores28.5 (± 5.9) in their study on police officers in 1999 (23) In another study in Turkey Erol Almıla at al. studied on security guards who work at emergency service and they found emotional exhaution mean score 17.7 (\pm 8.3), depersonalization mean score 5.8 (±2.4) and personal accomplishment mean score

21.7 (\pm 6.7) (24).It can be concluded from that level of burnout is more at security guards. We think that it might be related with increasing violent acts because of our country's developmental state or difficulty of personal life standards because of low socio-economical level.

In another study in China,2015 ShiyingChen at al. studied with 2030 health workers and they have shown that health workers who exposed physical or verbal violence mostly had higher emotional exhaustion and depersonalization scores and lower personal accomplishment scores than less or none exposed health workers (25). Also in another study Zhang Y at al. have shown that as number of violent acts to health workers increase, also burnout scores increase (26). In our study we found that as at vears job increase. Maslachemotional exhaustion and depersonalization also increase significantly. It might be caused by increasing of exposure to violence as years at job increase.

When we evaluate relation between burnout syndrome and violence, participants who exposed to physical violence three times or more in last year had significantly higher emotional exhaustion and depersonalization scores than whom exposed 1-2 times or none (p<0.01;p<0.02). There wasn't significant difference between personalaccomplishment scores of these groups (p=0.061).

Participants who exposed to verbal violence three times or more in last 12 months had higher emotional exhaustion scores than other groups (p=0.021), but depersonalization and personalaccomplishment scores didn't differ significantly (p=0.144;p=0.061). Our results support that as violence increases burnout also increases. It might be concluded from that physical violence is more powerful than verbal violence, because phyical violence can cause physical damage as well as emotional destruction.

When other factors were evaluated, gender's affect on burnout was not significant, but married security guards had higher depersonalization scores than single ones (p=0.014). This might be explained by increased familial responsibility of married security guards.

In literature, there are studies that have shown increased burnout at shift work.6,27 But our results indicate that shift work lowers burnout. We also found that exposure to violence at shift workers were less than others and this might cause that result. Cause of lower violent acts at shift workers might be caused by fewer patient came to hospital at night.

Conclusion

Security guards' whom are responsible for hospital security, exposure to violence and as a result of it increased burnout levels of them can cause poor communication with other health workers, patients and as a result weakness at security. Because of this burnout not only affects person himself/herself, also affects person's environment and community.

Even if our findings that shift work lowers burnout and violence, to suggest shift work to security guards wider studies must be done.

We found that as exposure to violence increased, burnout also increased. Therefore we suggest that security guards need to be educated about coping with violence and communication. We also suggest that security guards should be evaluated physiologically within periodic examination.

REFERENCES

1. Ergin, C. Adaptation of Maslach Burnout Inventory for Turkish Nurses and physicians. Ankara: VII. National Physicology Congress Scientific Publications; 1992

.

- 2. Maslach C, Jackson SE, Leiter MP. MBI: The Maslach Burnout Inventory manual. Palo Alto, CA: ConsultingPsychologistsPress;1997
- 3. Burke RJ, Greenglass ER. A longitudinal examination of the Cherniss model of psychological burnout. SocSciMed 199; 40:1357-63.
- 4. Neveu JP. Jailed resources: Conservation of resources theory as applied to burnout among prison guards. J Organ Behav. 2007;28: 21-42.
- 5. Öztürk G. Çetin M. Yıldıran N,et al. Burnout and job satısfactıon levels of physicians. Anatol J ClinInvestig 2012;6:239-45.
- 6. Zhang B, Zhang Li, Zhang N. Research on the relationship between job burnout and turnover intention among clinical nurses born in the 80s. J Clin Nurs 2013;28:16–8.
- 7. DiMartino V, Hoel H, Cooper CL. Preventingviolenceandharassment in theworkplace. European foundation for the improvement of living and working conditions, Dublin; 2003
- 8. Beech B, Leather P. Workplace violence in the healthcare sector: a review of staff training and integration of training evaluation models. AggressionViolentBehav 2006;11:27–43.
- 9. Webster S, Patterson A, Hoare J, et al. Violence at work: findings from the 2005/06 and 2006/07 British CrimeSurvey. HSE; 2008.
- 10. Collins PA, Gibbs CC. Stress in policeofficers: a study of theorigins, prevalence and severity of stress-related symptoms with in a county police force. OccupMed 2003;53:256–64.

- Andrew ME, McCanlies EC, Burchfield CM, et al. Hardiness and psychological distress in a cohort of police officers. Int J EmergMent Health 2008;10:137–48.
- 12. Santos A, Leather P, Dunn J,et al. Genderdifferences in exposuretoco-worker and public-initiated violence: assessing the impact of work-related violence and aggression in policework. Work Stress 2009;23:137–54
- 13. Maslach C, Jackson SE. The measurement of experienced burnout J Organ Behav 1981;2:99-113.
- 14. Günseli G. Burnout Syndrome in a Group of Primary School Teachers. Turkiye Klinikleri J MedSci 2011;31:602-8.
- 15. Öztürk A, Tolga Y, Şenol V, et al. Evaluation of burnout levels of health managers in Kayseri city. Erciyes Medical Journal 2008;30:92-9.
- 16. Kavlu İ, Pınar R. Effects of job satisfaction and burnout on quality of life in nurses who work in emergency services. Turkiye Klinikleri J MedSci 2009;29:1543-55.
- 17. Ünal S, Karlıdağ R, Yoloğlu S. Relationships between burnout, job satisfaction and life satisfaction in physicians. J Clin Psy. 2001; 4: 113-8.
- 18. Violence against health workers, World Health Organisation http://www.who.int/violence_injury_prevention/violence/workplace/en/
- 19. Aydin B.Violencea gainst general practitioners in Turkey. J Interpers Violence 2009;24: 1980-95
- 20. Ergün FS, Karadakovan A. Violence towards nursing staff in emergency departments in one Turkish city. IntNursRev 2005; 52: 154-60.
- 21. Leino TM, Selin R, Summala H, et al. Violence and psychological distress among policeofficers and security guards. Occup Med 2011;61: 400-6.
- 22. Nicolien K, Euwema M, Schaufeli W. Burnout job stress and violent behaviour among Dutch police officers. Work&Stress 1999;13: 326-40
- 23. Erol A. Burnout and job satisfaction among emergency department staff. J Clin Psy 2012;15:103-10.
- 24. Chen S.Work place violence and its effect on burnout and turn over at tempt among Chinese medical staff. Archives of environmental & occupational health 2016;71: 330-7.
- 25. Zhang Y, Liu YY, Wang Y. The study on job burn out status among physicians from large or middle-sized hospitals in Inner Mongolia. Chinese Journal of SocialMedicine. 2011;28: 343–5.
- 26. Zhu W, Lou XP, Wang ZM. The study of construct validity and reliability of the Maslach Burnout Inventory-General Survey (MBI-GS) for nurse. Chin J of Behavioral Med Sci. 2007;16:849–5.