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Original Article

The Effect of Workplace Bullying Perception on Psychological Symptoms: A Structural Equation Approach

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ABSTRACT

Background: The aims of this study were to determine the extent of workplace bullying perceptions among the employees of a Faculty of Medicine, evaluating the variables considered to be associated, and determining the effect of workplace bullying perceptions on their psychological symptoms evaluated by the Brief Symptom Inventory (BSI).
Methods: This cross-sectional study was performed involving 355 (88.75%) employees.
Results: Levels of perceived workplace bullying were found to increase with the increasing scores for BSI and BSI sub-dimensions of anxiety, depression, negative self, somatization, and hostility (all $p < 0.001$). One point increase in the workplace bullying perception score was associated with a 0.47 point increase in psychological symptoms evaluated by BSI. Moreover, the workplace bullying perception scores were most strongly affected by the scores of anxiety, negative self, depression, hostility, and somatization (all $p < 0.05$).
Conclusion: The present results revealed that young individuals, divorced individuals, faculty members, and individuals with a chronic disease had the greatest workplace bullying perceptions with our study population. Additionally, the BSI, anxiety, depression, negative self, somatization, and hostility scores of the individuals with high levels of workplace bullying perceptions were also high.

1. Introduction

The World Health Organization defines violence as "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation" [1]. Another issue that can be considered to be violence and is as important as the definition of violence is the perception of violence. Some people regard struggled attitudes or behaviors as violent, while others do not. Thus, people who do not consider such behaviors and attitudes to be violent give these behaviors and attitudes legitimacy. The specific behaviors that are considered to be violent in the workplace vary according to the employees' cultural and religious structures and personality types [2]. Physical violence in the workplace (e.g., homicides, attacks, and beating) and psychological violence (e.g., workplace bullying, mobbing, and harassment) affect all categories of workers in nearly all sectors [3].

The International Labor Office defines workplace bullying as offensive behavior that is repeated over time and manifested as vindictive, cruel, or malicious attempts to humiliate or undermine an individual or group of employees [3]. Although the ICD-10 and DSM V indicate two conditions (post-traumatic stress disorder and adjustment disorder), not necessarily work-related, that are directly related to stress, the mobbing syndrome has not been clearly identified [4,5]. The health sector is particularly at a high risk of workplace bullying due to the fundamental characteristics of the services delivered and the work environment of this sector. The negative consequences of widespread violence in the health care sector include workers' decisions to leave the health profession and deleterious effects on the quality of the health services provided. These consequences can result in reductions in the health services available to the general population and increases in the costs of health care.

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Health workers are already a scare resource, and if they abandon their profession due to the threat of violence, equal access to primary health care will be threatened in developing countries [3].

Workplace bullying that is encountered in the workplace negatively affects people's professional and social lives (i.e., resignation, dismissal, and loss of income because of frequently using sick leave or receive reports) [6] and their health. Different physical, mental, and psychosomatic symptoms can be observed among individuals who have been exposed to workplace bullying. These symptoms include the following: (1) physical disorders including chronic fatigue, gastrointestinal disorders, excessive weight gain or weight loss, insomnia, various pain syndromes, deterioration in the immune system function, and increased use of alcohol, drugs, and cigarettes; (2) mental disorders including depression, burnout, emotional emptiness, feelings that life is meaninglessness, anxiety, loss of motivation, loss of enthusiasm, apathy, hypomania, and adjustment disorder; and (3) behavioral disorders including irritability, risky behavior, loss of concentration, forgetfulness, emotional outbursts, roughness, exaggerated sensibility to external stimuli, lack of emotion, family problems, divorce, and suicide [6–9].

Researches on workplace violence have shown that workplace bullying is currently more dangerous than physical violence. Moreover, these researches have shown that workplace bullying has become a major health and safety issue for employees in the workplace [1,3,6–12]. Recently, workplace bullying has been discussed in terms of psychosocial risk factors in the workplace. Thus, this study was designed to examine workplace bullying in the risky area of health care. The aims of this study were to determine the extent of workplace bullying perceptions among the employees of a University Faculty of Medicine, evaluating the variables considered to be associated, and determining the effect of workplace bullying perceptions on their psychological symptoms evaluated by the Brief Symptom Inventory (BSI).

2. Materials and methods

This cross-sectional study was performed among the employees of the Faculty of Medicine at a university located in the Central Anatolia Region in 2012. The study was based on the variables of workplace bullying perceptions and psychological symptoms evaluated by the BSI. A theoretical model was designed in the study assuming that the perception of workplace bullying may affect psychological symptoms. This theoretical model was tested on causality level by the structural equation model (SEM).

The study universe consisted of 1,433 individuals who worked in the Faculty of Medicine. This research was intended to be performed on a sample size of 400 individuals. The current employees were layered according to their professions and departments (considering their titles and tasks). The individuals included in the sample were systematically selected from a list of existing employees who met the research criteria. The total number of participants was 355 (88.75% response rate) (Table 2). A questionnaire form was prepared for the study purposed. The questionnaire included questions about sociodemographic characteristics (sex, age, education, marital status, having a child, profession) and some factors possibly related to the workplace bullying [administrative tasks (administrative tasks were interpreted in two manners: working in managerial positions and working in professional capacities), working time in the profession (seniority), working time in the current workplace, weekly working time, working department, general economic status according to their own evaluations, workplace changes, chronic diseases, and mental diseases], and questions of the Workplace Bullying Scale (WBS) and BSI.

The WBS was used in this study for the assessment of workplace bullying perception levels of employees. The Negative Acts Questionnaire was developed by Einarsen and Raknes (1997) and adapted by Einarsen and Hoel (2001) [13,14]. A study of the validity and reliability of the Turkish version was performed by Aydın and Öcel (2009) [15]. Aydın and Öcel did not directly translate the name of the scale into Turkish. These authors believed that the original name of the scale would cause misunderstandings regarding the properties that the scale aims to measure. Thus, these authors used "Workplace Bullying Scale" as the title. The scale consists of 22 five-point Likert type (scored from 1 to 5) items. The minimum score possible on this scale is 22, and the maximum score is 110. This scale does not have a cut-off. The frequency of workplace bullying score was obtained by collecting the marks for each scale item [15]. In this study, the scores derived from the WBS were expressed as workplace bullying perception score. In our research, the Cronbach α value for the WBS was 0.933.

The BSI was used in this study for the assessment of the psychological symptoms considered to be associated with workplace bullying perception. The BSI was developed by Derogatis (1992). It is a self-report symptom inventory that was designed to reflect the psychological symptoms. It is a brief form of the SCL-90 [16] and consists of 53 items. It has also been used in research analyzing the relationship between immune system functioning and stress because this scale is sufficient for measuring stress-related psychological symptoms. The BSI is a self-administered scale that is rated on a five-point Likert scale that ranges from 0 (not at all) to 4 (extremely). The standardization, validity, and reliability of the Turkish version of this instrument were performed by Şahin and Durak (1994). The BSI consists of the following five subdimensions: Anxiety, Depression, Somatization, Hostility, and Negative Self. The minimum score on this scale is 0, and the maximum score is 212. This scale does not have a cut-off point. Higher scores indicate more severe psychological symptoms [17,18]. In our research, the Cronbach α for the BSI was 0.974.

2.1. Study approval

This study was approved by the ethical committee of the university (Date: 09.05.2012, No: 2012/111). Furthermore, approval from the dean of the University Faculty of Medicine was separately obtained (Date: 15.05.2012, No: 3418-4540). The sample group was informed about the research, and an oral consent was obtained from each participant.

2.2. Limitations of the study

This study was based on employees' perceptions of workplace bullying. Thus, the real frequency of workplace bullying at this workplace could not be determined. Individuals with associate's degrees or higher levels of education were included in the study to measure workplace bullying perceptions as accurately as possible. No groups that worked outside of the health care field were included; thus, comparisons across employment fields could not be made in this study. The workplace bullying perception and psychological symptoms measured in the study were limited to the scales' items.

2.3. Statistical analyses

The data were evaluated using the SPSS 16.0 and AMOS 22 software programs. Statistical analysis was performed using Mann Whitney U, Kruskal–Wallis, and Spearman correlation tests. SEM was used to determine the effect of workplace bullying perception on psychological symptoms. The indexes for SEM analysis were

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