

One of the most difficult situations that health care workers face is the threat of physical harm at the hands of a patient, a patients' relatives, a colleague or superior.⁵ Job conditions such as working alone or in small numbers, working late at night, working in high-crime and unsecured areas, work load, job-related stress, role conflict, lack of supervisor support, low visibility, and poor lighting,⁶⁻⁸ which have been associated with workplace violence, may signal opportunity for the perpetrator. We conducted a study to learn more about the prevalence rates and risk factors for violence in various workplace conditions, providing a specific focus on the extent and nature of violence against health care workers.

Our study was carried out in the cities of Eskisehir, Ankara, Kutahya and Bilecik, in the western part of Turkey. The study population was comprised of staff at 34 health institutions. All 1368 health care workers working in the four study areas were recruited randomly during routine visits to local health institutions, and of these, 1209 workers agreed to participate. We evaluated the prevalence of violence towards health care workers in a one-year period, regardless of the types of violence at the time of the interview. This study was approved by Osmangazi University Management and the Turkish Medical Association. We used a Form of Violence Experience (FVE), a self-report questionnaire developed from the Violent Incident Form (VIF).⁹ Health care workers were asked to recall physical, sexual and emotional experiences of violence directed at them at work over the previous year. The data were analyzed by a binary logistic regression model when appropriate to examine group disparities.

The overall response rate was 88.4% (1209/1368). Ages of respondents ranged 16 to 73 years (mean, 32 years). Female health care workers constituted 58.9% of the

total. Nearly 50% [n=598 (49.5%)] of the respondents had experienced one or more types of violence during the past year at work: 14.5% once, 33.8% between twice and five times, and 51.7% six or more times. The most frequent form of violence was emotional/verbal (72.4%) compared to physical (11.7%) and physical-emotional/verbal (15.9%). Of 598 violent events, 47.7% were reported in men, and 50.7% in women, which did not show a significant difference with regards to women. Compared with Eskisehir, which has the best socio-economic development, the risk of being exposed to violence in Bilecik, Kutahya and Ankara was reduced (odds ratio=0.46, 0.41, 0.75, respectively). Compared with specialist physicians, ancillary health personnel, dentists, pharmacists, security guards and academic staff were at a higher risk of experiencing violence while the potential for exposure to violence was lower for assistant doctors, nurses and general practitioners. However, attendants experienced nearly the same risk of violence as that of specialist doctors. Only emergency service was associated with significantly less exposure to violence compared with other services ($P<0.05$). Length of time working in the health care sector proved a risk factor in being exposed to violence ($P<0.05$). Most aggressors were patient relatives/visitors (57.5%). The most common aggressors were men (76.9%), between 31 to 50 years of age (55.3%), and those with a regular income (19.2%), not counting those for whom income was unknown (63.6%).

Health care workers in this region of Turkey work in an environment in which they are constantly exposed to situations with aggressive/violent individuals. Our findings are consistent with previous studies suggesting a 25% to 88% incidence of any form of violence in the previous year.^{1,3,10,11} The results presented in these studies show that workplace

Violence in health institutions: A survey of health care workers in west Turkey

To the Editor: Violent, aggressive or abusive behaviour towards health care workers is an ever-increasing concern in today's health care workplace.¹ Some studies in connection with violence conducted in Turkey show that the frequency of violence has increased recently.^{2,3} Health care workers are particularly vulnerable due to the nature of their jobs, which include dealing with clients who may be emotionally disturbed.⁴

violence in the health sector is universal, although local characteristics may vary. In this study, those working in an economically or socially better developed city (Eskisehir) experienced a higher proportion of violence, which is consistent with previous research showing that the socio-economic status of the cities are proportional with exposure to violence.^{12,13} Academic staff in this study reported less exposure to violent incidents than nurses and assistant doctors. This may be due to the distance they maintain from patients/relatives and the tendency for academic staff to have far more of an official appearance towards patients/relatives because of the traditional structure of the society. Doctors and nurses appear to be particularly vulnerable. This may simply reflect the fact that nurses spend more time with patients than other professional groups working in health care workplaces, and are often involved with them in a more intimate, interactive manner, especially in the acute phases of illnesses. The highest percentage of aggressors were males (76.9%). Hypothesizing, we could say that violence towards women is more prevalent than toward men because of the total predominance that men have over women and the man's active role in the Turkish community. In addition, some occupations like nursing are only particular to women.

Health care workers that had been working less than 5 years were more likely to experience violence. This finding emphasizes the point that experienced health personnel should work in some critical areas like emergency service. Prevention of violence against health care workers will require an understanding of the social and economic causes of violence, beyond the confines of the workplace because Carmen and Hunter found that the level of the ward staff's compliance with mandated training in management of assaultive behavior was associated with

the rate of staff injury from inpatient violence. The high-compliance wards experienced much lower instances of injury than the low-compliance wards.¹ This suggests, of course, that employees may benefit from training programs that assist them in handling assaultive behaviour. Further research is needed to describe the epidemiology of aggression and violence toward health care workers and to evaluate the efficacy of educational programs and interventions designed to prevent its occurrence.

Unal Ayranci*
Cinar Yenilmez**
Fezan Sahint
Yasemin Gunay†
Ilhami Unluoglu‡
Kazim Ozdamar†
Cem Kaptanoglu**

*Medico-Social Center

**Faculty Psychiatry Department,

†Medical Faculty Biostatistics

Department

‡Medical Faculty Forensic Medicine

Department

†Medical Faculty Family Medicine

Department

Osmangazi University,

Eskisehir, Turkey

References

1. Cole LL, Grubb PL, Swanson NG, Lawless P. Psychosocial correlates of harassment, threats and fear of violence in the workplace. *Scand J Work Environ Health*. 23:450-457.
2. Gunay Y, Akbay MO. Violence in workplace (Is yerinde siddet). *Calisma Ortami Dergisi*. 2001; 5(3):26-30.
3. Olmezoglu ZB, Vatansver K, Ergor A. Evaluation of exposure to violence for 112 workers in Izmir region (Izmir metropol alanı 112 çalışanlarında siddet maruziyetinin degerlendirilmesi). *Toplum ve Hekim*. 1999; 14(6):420-425.
4. Trape M. Workplace violence: Occupational Safety and Health Administration guidelines for workers in health care and social services. *Conn Med*. 1998; 62: 333-336.
5. Bureau of Labor Statistics Nonfatal Occupational Injuries Due to Assault and Violent Acts. Washington, DC: U.S. Department of Labor; 1995.
6. Davis H. Workplace homicides of Texas males. *Am J Public Health*. 1987; 77:1524-1527.
7. Mangione T, Quinn R. Job satisfaction, counterproductive behavior and drug use at work. *J Appl Psychol*. 1975; 60:114-116.
8. Spector PE. Relationships of organizational frustration with reported behavioral reactions of employees. *J Appl Psychol*. 1975; 60:635-637.
9. Arnetz JE. The Violent Incident Form (VIF): a practical instrument for the registration of violent incidents in the health care workplace. *Work and Stress*. 1988; 12:17-28.
10. Schulte JM, Nolt BJ, Williams RL, Spinks CL, Hellsten JJ. Violence and threats of violence experienced by public health field-workers. *JAMA*. 1998; 280(5): 439-442.
11. Arnetz JE, Arnetz BB. Implementation and evaluation of a practical intervention programme for dealing with violence towards health care workers. *J Adv Nurs*. 2000; 31(3):668-680.
12. Messner SF. Economic discrimination and societal homicide rates: further evidence on the cost of inequality. *Am Sociol Rev*. 1989; 54(4):597-611.
13. Macedo AC, Paim JS, Silva LM, Costa Md Mda C. Violence and social inequalities: mortality rates due to homicides and life conditions in Salvador, Brazil. *Rev Saude Publica*. 2001; 35(6):515-522.
14. Carmel H, Hunter M. Compliance with training in managing assaultive behavior and injuries from inpatient violence. *Hosp Community Psychiatry*. 1990; 41(5):558-560.