A Hazardous Profession: War, Journalists, and Psychopathology

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Objective: War journalists often confront situations of extreme danger in their work. Despite this, information on their psychological well-being is lacking.

Method: The authors used self-report questionnaires to assess 170 war journalists, who recorded symptoms of posttraumatic stress disorder (PTSD) (with the Impact of Event Scale—Revised), depression (with the Beck Depression Inventory-II), and psychological distress (with the 28-item General Health Questionnaire). To control for stresses generic to all journalism, the authors used the same instruments to assess 107 journalists who had never covered war. A second phase of the study involved interviews with one in five journalists from both groups, using the Structured Clinical interview for Axis I DSM-IV Disorders.

Results: The rates of response to the self-report questionnaires were approximately 80% for both groups. There were no demographic differences between groups. Both male and female war journalists had significantly higher weekly alcohol consumption. The war journalists had higher scores on the Impact of Event Scale and the Beck Depression Inventory. Their lifetime prevalence of PTSD was 28.6%, and the rates were 21.4% for major depression and 14.3% for substance abuse. War journalists were not, however, more likely to receive treatment for these disorders.

Conclusions: War journalists have significantly more psychiatric difficulties than journalists who do not report on war. In particular, the lifetime prevalence of PTSD is similar to rates reported for combat veterans, while the rate of major depression exceeds that of the general population. These results, which need replicating, should alert news organizations that significant psychological distress may occur in many war journalists and often goes untreated.

(Am J Psychiatry 2002; 159:1–6)

Journalism can be a hazardous profession. During 2001 alone, 100 journalists were killed and many hundreds imprisoned and maltreated (1). While the majority were local journalists, targeted for exposing corruption or expressing political dissent, the names of foreign war correspondents feature prominently among those killed or detained. It should be self-evident that war is dangerous and that those who report on it run the risk of becoming casualties themselves, a point poignantly made by a collection of photographs of the Vietnam war assembled from the work of photographers killed in the conflict (2). What is new, however, is a perception in the profession that the number of war journalists killed may be on the increase (3). The recent ambush and murder in Sierra Leone of two of the most respected war journalists shocked the industry and demonstrated that experience, knowledge, and common sense are not guarantees of survival.

It is therefore notable that despite the risks inherent in reporting war, we could find no research on the psychological health of war reporters. In the absence of empirical data, eloquent anecdotal evidence remains the only source offering clues as to the mental well-being of war journalists. Ranging from Robert Capa's memoir of World War II (4), through Michael Herr's account of Vietnam (5), to Anthony Loyd's self-revelatory telling of the Balkans tragedy (6), war journalists' accounts have spelled out not only the horrors of conflict, but also the journalists' reactions to the considerable dangers they confront in getting news to the public.

The lack of research in this area contrasts with a burgeoning trauma literature on the emotional effects of combat on soldiers (7, 8) and civilians (9, 10). The psychological consequences of being subjected to life-threatening events include posttraumatic stress disorder (PTSD), major depression, substance abuse, and dissociative disorder, four of the most common and disabling conditions. Similar responses have been documented after both man-made (11, 12) and natural (13, 14) disasters. What all these reports have in common is the conclusion that individuals will develop an array of psychopathology in response to situations of great personal danger.

Given the dearth of data in relation to war journalists coupled with concerns that reporting war may be becoming increasingly dangerous, we investigated the extent and nature of psychopathology among those who bring us the news from the world's conflict zones.

Method

We approached six major news organizations—CNN, BBC, Reuters, CBC, Associated Press, ITN (Independent Television News), and an organization representing freelance journalists (the Rory Peck Trust)—and explained the purposes of the study. All six organizations agreed to participate and provided 170 names, together with work and e-mail addresses. Only journalists fluent in English and currently covering war were assessed.

First Phase

The first phase of the study involved asking the journalists to complete a series of self-report questionnaires. The itinerant nature of war journalism, the far-flung geographic locations involved, and the fact that postal services frequently stop during periods of conflict made contacting the journalists problematic. To overcome this difficulty, we developed an interactive web site. Each journalist was assigned an individual, confidential identification number that had to be entered to access the web site. The contents of the paper and Internet versions were identical and covered 1) basic demographic data, 2) details of alcohol and illicit drug use, and 3) assessment of PTSD, depression, psychological distress, and personality traits by four self-report questionnaires.

The basic demographic data included the number of years the respondent had worked as a war journalist, the list of wars covered, and past psychiatric history. Attempts at tallying all traumatic events were abandoned given the impracticality of the task. The average duration of time spent in zones of conflict by the war journalists (approximately 15 years) meant that the hazardous events experienced were too numerous to accurately recall. For example, the one war that attracted the greatest number of war journalists was the Bosnian conflict, which lasted many years. Journalists took to living in cities under siege, such as Sarajevo, where their attempts at reporting or filming the news often exposed them daily to life-threatening situations.

A unit of alcohol was defined as a regular-size bottle of beer, a glass of wine, or a shot of spirits. Fourteen units of alcohol per week for men and 9 units for women were considered the upper limits of acceptable weekly intake (15).

The Impact of Event Scale—Revised (16) contains 22 questions that closely follow the DSM-IV criteria for posttraumatic stress disorder. Thus, the questionnaire contains three subscales for intrusive (reexperiencing), avoidance, and hyperarousal phenomena. We followed the rating scale instructions by asking subjects to indicate symptoms that occurred during the past 7 days only and were related to traumatic, dangerous, or disturbing life experiences. Given the many wars covered by the group, we did not specify any particular conflict or event but allowed the journalists to chose single, multiple, or no events, as they deemed suitable. We did, however, ask the journalists to specify what events had been most troubling to them. For all the war journalists, the events chosen related to their war exposure.

The Beck Depression Inventory-II (17), which contains 21 mood-related questions, was used to assess depression. It provides a choice of four responses per question and is scored in a Likert fashion (the possible scores are 0, 1, 2, 3).

The 28-item General Health Questionnaire (18) contains four subscales, each with seven questions, describing symptoms of somatic complaints, anxiety, social dysfunction, and depression, respectively. A choice of four responses is provided for each question. The subscale scores are summed to give an overall index of psychological distress. A simple Likert scoring method (possible scores of 0, 1, 2, 3) was used as this is preferred for detecting between-group differences in subscale scores.

Second Phase

The second phase of the study involved direct interviews. The difficulties in contacting the group were magnified when it came to direct interviews, and because of time and cost restraints, it was not possible to interview the entire study group. Therefore, a random sample of 20% of the responding journalists were approached for interview. None refused. The interviews took place in New York, London, Paris, Madrid, Barcelona, and Johannesburg. The 28 journalists were interviewed with the Structured Clinical Interview for Axis I DSM-IV Disorders (SCID) (19), and the prevalences of PTSD, mood disorders, and substance use disorders (lifetime, current, and before war exposure) were ascertained. The interviewer was blind to the results of the self-report questionnaires.

Comparison Group

Irrespective of setting, there are stressors generic to journalism (e.g., deadlines, "scooping" the competition). To control for these in symptom expression, we assessed a comparison group of nonwar journalists. A group of 107 domestic journalists who did not report on war were approached to undergo the same assessment procedure used with the war journalists. While some in this group also occasionally reported on distressing events (e.g., plane crashes), care was taken to exclude those who had traveled to report on war. Similarly, a random sample of 19 of these journalists (18%) were selected for interview with the SCID. None refused. The interviews were conducted face to face or by telephone.

Statistical Analysis

We compared the two groups by using t tests and chi-square analyses. All two-by-two chi-square analyses were two-sided and Yates corrected. If any one cell in a two-by-two analysis had a count of less than 5, a two-sided Fisher's exact test was used. With respect to between- group t test analyses, the Levene test for equality of variance was applied, and where appropriate, the unequal-variance t values and significance levels were reported. All t tests were two-tailed. To control for multiple comparisons, we applied a Bonferroni correction (0.05/22, setting the significance level at 0.002). Transmitting data from a web site relied on the variable quality of the Internet connection. In a few cases, this resulted in lost data. Since the number of subjects varied slightly between tests, the results are presented with the relevant numbers of subjects.

Consent

Both the paper and Internet versions of the study received ethical approval. After complete description of the study to the subjects, written informed consent was obtained. On the web site, subjects gave consent by clicking on the "I agree" box after reading the descriptive preamble.

Results

Self-Report Questionnaires

One journalist was murdered before the questionnaire reached him, thereby reducing the number of subjects to 169. Of these, 82.8% (N=140) gave their consent. The response rate in the comparison group was similar, i.e., 79.9% (107 of 134). The war group had spent on average 15 years reporting on wars; the list of conflicts covered included every major conflagration during this period, i.e., Bosnia, Rwanda, Chechnya, the Gulf war and Middle East, Congo, Sierra Leone, Indonesia, Somalia, Ethiopia, Afghanistan, and others. The two groups of journalists were well

TABLE 1. Demographic Characteristics of War Journalists and Comparison Journalists Reporting on Other Subjects

Characteristic	War Journalists (N=140)		Comparison Journalists (N=107)		Analysis		
	Mean	SD	Mean	SD	t	df	p
Age (years)	39.2	6.3	39.0	8.2	0.2	192.5	0.84
Length of career as a journalist (years)	15.6	6.8	15.5	8.5	0.1	186.2	0.94
	N	%	N	%	Yates-Corrected χ^2 (two-sided)	df	p
Gender					1.9	1	0.18
Male	110	78.6	76	71.0			
Female	30	21.4	31	29.0			
Marital status					9.2	2	0.01
Single	61	43.6	28	26.2			
Married	64	45.7	69	64.5			
Divorced	15	10.7	10	9.3			

matched with respect to age, gender, and years of work as a journalist (Table 1). An analysis of marital status revealed similar proportions of divorced journalists in the two groups but more unmarried journalists in the war group (Table 1). A reanalysis of marital status with divorced journalists excluded did not reveal a significant group difference (χ^2=9.0, df=1, p=0.003) after Bonferroni correction.

When it came to psychiatric comparisons, the war group performed significantly worse on a number of variables (Table 2). The mean weekly alcohol consumption levels, 14.7 units for men and 10.8 units for women, were two and three times those of the nonwar group, respectively. With 14 units of alcohol per week considered the upper limit of acceptable drinking for men (15), 45 war journalists as opposed to 13 nonwar journalists were drinking excessively (χ^2=11.9, df=1, p=0.001). The comparable numbers of women, at a weekly limit of 9 units, were 15 and two, respectively (p=0.0001, Fisher's exact test, two-sided). There were no differences between groups in use of cannabis or hard drugs.

Psychometric comparisons based on the three rating scales are also displayed in . Regarding symptoms of PTSD, the war journalists endorsed more symptoms of intrusive thoughts and images of trauma events (all war related in the case of war journalists) while displaying greater avoidance and hyperarousal phenomena. The war journalists had significantly higher scores on the Beck Depression Inventory, and this difference was confirmed by the scores on the depression subscale of the General Health Questionnaire (Table 2).

The war journalists were not significantly more likely to have received psychiatric help; 24.6% (34 of 138) had received psychotropic medication, psychotherapy, or a combination of the two treatments, compared with 16.2% (17 of 105) of the comparison journalists (χ^2=2.6, df=1, p=0.11).

Subject Interviews

Every fifth journalist from the war (N=28) and nonwar (N=19) groups was interviewed. For the war group, lifetime, current, and prewar diagnoses of PTSD were made for eight (28.6%), three (10.7%), and one (3.6%) subject, respectively. For major depression the numbers were six (21.4%), two (7.1%), and one (3.6%), respectively. For substance abuse the numbers were four (14.3%), two (7.1%), and one (3.6%), respectively. No journalist in the comparison group had had PTSD, while one (5.3%) had a lifetime diagnosis of major depression and one (5.3%) a lifetime diagnosis of substance abuse; in both cases the disorders had begun before the individuals began working as journalists.

Discussion

In this study of 140 war journalists, drawn from the world's major news organizations, we found higher rates of psychopathology than in a demographically matched comparison group of 107 nonwar journalists. Specifically, the war journalists drank more heavily and showed higher rates of PTSD and major depression. They were not more likely to receive treatment for these conditions. Before discussing these results in greater detail, we would like to address the composition of the study group.

Experienced war journalists are relatively few in number. The 170 names forwarded by organizations such as the BBC and CNN represent a sizable segment of those who travel to areas of conflict. Our response rate of greater than 80% therefore suggests our subjects are representative of war journalists in general. The fact they have been reporting wars for, on average, 15 years highlights not only their experience but also our success in capturing the central core of bona fide war journalists, as opposed to those who cover a conflict or two before moving on to less hazardous news work. It is also important to note that while war journalists are never openly forced into covering a particular conflict by their news bosses, it is generally recognized that a pattern of refusing dangerous assignments may have adverse career consequences. Thus, when starting out in their career there is a tendency to accept every war story. Only as established war journalists can they be more selective in choosing when and where they are sent.

TABLE 2. Psychiatric Measures for War Journalists and Comparison Journalists Reporting on Other Subjects

Measure	War Journalists (N=140)		Comparison Journalists (N=107)		Analysis			
	N	%	N	%			Fisher's Exact Test, Two-Sided (p)	
Cannabis use	34	24.3	20	18.7			0.29	
Use of other substances[a]	9	6.4	2	1.9			0.12	
	Mean	SD	Mean	SD	t	df	p	95% CI of Difference
Weekly units of alcohol[b]								
Men	14.7	12.3	7.6	7.1	5.0	178.9	0.0001	4.3 to 10.1
Women	10.8	9.4	3.9	3.7	3.8	37.7	0.001	3.2 to 10.7
Scores on Impact of Event Scale—Revised[c]								
Intrusion	9.2	7.1	4.3	4.4	6.5	226.6	0.0001	3.4 to 6.4
Avoidance	6.7	6.2	3.1	4.0	5.4	229.1	0.0001	2.3 to 4.9
Arousal	4.7	4.9	2.0	2.8	5.2	215.1	0.0001	1.6 to 3.6
Total	20.2	16.0	9.1	9.5	6.5	210.1	0.0001	7.7 to 14.4
Score on Beck Depression Inventory-II[d]	10.1	7.8	6.4	6.1	4.1	235.8	0.0001	1.9 to 5.4
Scores on General Health Questionnaire[e]								
Somatic	4.4	3.4	4.2	2.9	0.6	243	0.54	–0.6 to 1.1
Anxiety	5.9	4.0	4.7	3.5	2.3	243	0.02	0.2 to 2.1
Social dysfunction	7.3	3.0	6.7	2.2	1.9	243.5	0.05	–0.0 to 1.3
Depression	2.2	3.4	1.0	2.3	3.4	239.5	0.001	0.5 to 1.9
Total	19.8	10.6	16.6	7.8	2.7	243.6	0.008	0.9 to 5.5

[a] Amphetamines, cocaine, barbiturates, heroin.
[b] A unit of alcohol was defined as a regular-size bottle of beer, a glass of wine, or a shot of spirits. Fourteen units of alcohol per week for men and 9 units for women were considered the upper limits of acceptable weekly intake (15).
[c] Number of war journalists: intrusion, N=135; avoidance, N=134; arousal, N=133; total, N=127.
[d] For war journalists, N=132.
[e] Number of war journalists: somatic, N=138; anxiety, N=138; social dysfunction, N=139; depression, N=139; total, N=138.

A significant number of war correspondents, particularly women, drink excessively, with a weekly alcohol consumption well above that of their nonwar colleagues. However, heavy drinking did not necessarily translate into a diagnosis of alcohol abuse or dependence as defined by DSM-IV. The lifetime prevalence of alcohol abuse did not differ from that in the general population (20). While heavy drinking may not have rendered the majority dysfunctional with respect to their work, it does leave the individual at risk for a host of long-term medical problems (15).

Results from all self-report measures of PTSD and depression revealed higher scores in the war group. While useful as screening instruments, self-report questionnaires cannot by themselves generate psychiatric diagnoses. Furthermore, the Impact of Event Scale—Revised, Beck Depression Inventory-II, and General Health Questionnaire provided indices of current symptoms only. These two limitations do not, however, apply to a structured clinical interview, such as the SCID. The fact that only one in five war journalists could be interviewed was due solely to logistical difficulties. The 28 journalists selected at random were scattered over three continents during the course of the study, and it often took months to finally connect and complete the process. Nevertheless, the clinical interviews corroborated the finding of significant psychopathology in approximately one-quarter of the group.

Posttraumatic Stress Disorder

Of the 28 war journalists interviewed, all had been shot at numerous times, three had been wounded (of whom one had been shot on four separate occasions), three had had close colleagues who were killed while they were working together on assignments, two had been subject to mock executions, two had had bounties placed on their heads, one had survived a plane crash (the pilots were killed) only to be subsequently robbed by soldiers who looted the wreckage, and two had had close colleagues who committed suicide. Given these descriptive details, higher scores on the Impact of Event Scale, an index of PTSD, were not unexpected in the war group. While symptoms from all three subscales were frequently endorsed, intrusive and hyperarousal symptoms, i.e., unwanted recollections of specific events accompanied by hypervigilance and autonomic arousal, were more common than avoidance phenomena. Of note was the fact that the avoidance item "I stayed away from reminders of the trauma" was endorsed least often. Rather, the avoidance pattern incorporated such maladaptive strategies as "My feelings about it were kind of numb" and "I felt as if it hadn't happened." Thus, despite deeply troubling recollections of events witnessed, the war journalists returned constantly to the scenes of old or new traumas, a pattern of behavior sustained over many years. This could contribute to their high lifetime prevalence of PTSD, i.e., 28.6%. In addition, the fact that PTSD, in all but one case, developed after the journalists began working in war zones suggests a strong connection between the dangers confronted in war and the development of psychopathology.

It is noteworthy that the lifetime prevalence of PTSD in war journalists exceeds the 7%–13% reported for traumatized police officers (21, 22) but is equivalent to (23) or less than (24) figures for combat veterans, depending on the source cited. Such comparisons, while placing the result within a comparative frame of reference, are nevertheless misleading. Soldiers and policemen receive extensive training to deal with violence. War journalists do not. In recognition of this deficiency, innovative trauma education programs for journalists in training have begun to be offered by some universities (25).

The high PTSD figures are matched by the rates for major depression. Once again, the figures for the war group are substantially higher than those for the comparison group. With the structured interview, the lifetime prevalence of major depression in the war group was 21.4%, which exceeds the 17.1% rate reported for the general population in the United States (20). If one removes the one subject whose major depression predated work in war zones, the prevalence drops to 14.3%. However, it is important to note that the U.S. data are made up of equal numbers of male and female subjects, and the latter have a lifetime prevalence of 21.3%, almost double the approximately 12% in males. In our predominantly male study group, even after we controlled for the cases predating war exposure, the result still translates into a lifetime prevalence of major depression above that in the U.S. National Comorbidity Study (20). The high comorbidity of major depression and PTSD in this study is in keeping with figures from trauma studies of other population groups (26, 27).

With the stringent Bonferroni correction factor applied to the data, the results from the 28-item General Health Questionnaire essentially confirmed the preceding finding with respect to depression. This instrument was used previously as an index of psychological distress in trauma settings (28, 29). The higher total scores in the war journalists were driven mostly by elevated depression scores and, to a lesser extent, symptoms of anxiety and social dysfunction.

The interviews with 20% of the group revealed that war journalists are profoundly affected by their symptoms of PTSD. While we had no clear way of judging the effects of the syndrome on the quality of their work, every war journalist with PTSD spoke of considerable social difficulties, such as an inability to adjust to life back in a civil society, a reluctance to mix with friends, fraught relationships, the use of alcohol as a hypnotic, and embarrassing startle responses that led to social avoidance. With such difficulties, they fulfilled the DSM-IV criterion that specifies that the symptoms must cause "significant distress or impairment in social, occupational or other important areas of functioning."

Perhaps our most telling observation was that despite greater levels of psychopathology than in the comparison group, the war journalists were not more likely to have received help, be it pharmacotherapy or psychotherapy. The clear implication is that many war journalists are not receiving treatment for their PTSD, depression, and alcohol abuse. The reasons for this are many and varied and not the subject of the present study. However, this observation together with the fact that we have found no previous research on this topic speak to a culture of silence on the part of the news bosses and the journalists themselves.

This last point touches on an intriguing question: What motivates war journalists to return to situations of extreme peril, particularly when almost one in four have suffered from PTSD at some point in their careers? While we plan to report this separately, a few comments are called for here. The first salient observation is that, until recently, discussing psychological distress within the profession was discouraged. A prevalent view was that to be a war journalist you had to have the "right stuff." An admission of emotional distress in a macho world was feared as a sign of weakness and a career liability. Ambition, coupled with a belief that war reporting enhances a career by giving a high media profile, left journalists reluctant to speak out about their fears and insecurities. Many chose to suffer in silence. The recent death of two celebrated war journalists on assignment in Sierra Leone (mentioned earlier) was, in part, the catalyst for a reappraisal of these views. Another, lesser factor that could have contributed to repeated exposure to trauma despite adverse consequences is the psychological naiveté inherent in some members of the profession. A number of journalists interviewed were deeply unhappy, prey to symptoms of PTSD and depression, but surprisingly unaware of what afflicted them. Thus, while giving articulate voice to subjective distress, a diagnosis such as PTSD was for the most part unknown. Such naiveté is also consonant with a belief that as a profession they can go off to war and emerge psychologically unscathed. This denial may be a necessary, albeit distorted prerequisite allowing war journalists to venture repeatedly into situations of grave physical danger.

We believe that our study is the first to explore the psychological status of war correspondents. As such, the results need replicating, moreso as we were able to interview only one in five journalists. While we did not find strong evidence that psychopathology in the war group predated their exposure to war, the limited number of subjects suggests this question may not be definitively answered here. However, our findings that PTSD may affect a quarter of war journalists and that they have a high lifetime prevalence of major depression deserve serious consideration. These disorders adversely affect quality of life (30) and may tend toward chronicity if left untreated (31). The data should therefore come as a wake-up call to the news organizations that all is not necessarily well with the men and women who, at considerable risk, bring us news of the world's conflicts.

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Supported by grants to Dr. Feinstein from the Freedom Forum and the Guggenheim Foundation.

The authors thank Vin Ray and Jackie Owen (BBC), Chris Cramer (CNN), Stephen Jukes (Reuters), Dave Modrowski (Associated Press Television News), Richard Tait (ITN), Dan Halton, George Hoff and Tony Burman (Canadian Broadcast Corporation), and Tina Carr (Rory Peck Trust).

References

1. Journalists and Media Staff Killed in 2001: An IFJ Report on Media Casualties in the Field of Journalism and Newsgathering. Brussels, International Federation of Journalists, 2001
2. Faas H, Page T: Requiem: By the Photographers Who Died in Vietnam and Indochina. New York, Random House, 1997
3. Corera G: Trends in violence and intimidation against journalists: British Broadcasting Company memo. London, BBC, 2000
4. Capa R: Slightly Out of Focus. New York, Random House (Modern Library), 1999
5. Herr M: Dispatches. New York, Vintage Books, 1991
6. Loyd A: My War Gone By, I Miss It So. New York, Atlantic Monthly Press, 1999
7. Lee KA, Vaillant GE, Torrey WC, Elder GH: A 50-year prospective study of the psychological sequelae of World War II combat. Am J Psychiatry 1995; 152:516–522
8. Wolfe J, Erickson DJ, Sharkansky EJ, King DW, King LA: Course and predictors of posttraumatic stress disorder among Gulf War veterans: a prospective analysis. J Consult Clin Psychol 1999; 67:520–528
9. Sack WH, Seeley JR, Clarke GN: Does PTSD transcend cultural barriers? a study from the Khmer Adolescent Refugee Project. J Am Acad Child Adolesc Psychiatry 1997; 36:49–54
10. Michultka D, Blanchard EB, Kalous T: Responses to civilian war experiences: predictors of psychological functioning and coping. J Trauma Stress 1998; 11:571–577
11. Epstein RS, Fullerton CS, Ursano RJ: Posttraumatic stress disorder following an air disaster: a prospective study. Am J Psychiatry 1998; 155:934–938
12. Eriksson NG, Lundin T: Early traumatic stress reactions among Swedish survivors of the Estonia disaster. Br J Psychiatry 1996; 169:713–716
13. Wang X, Gao L, Shinfuku N, Zhang H, Zhao C, Shen Y: Longitudinal study of earthquake-related PTSD in a randomly selected community sample in North China. Am J Psychiatry 2000; 157: 1260–1266
14. Najarian LM, Goenjian AK, Pelcovitz D, Mandel F, Najarian B: Relocation after a disaster: posttraumatic stress disorder in Armenia after the earthquake. J Am Acad Child Adolesc Psychiatry 1996; 35:374–383
15. Bondy S, Ashley MJ, Rehm JT, Walsh G: Low risk drinking guidelines: the scientific evidence. Can J Public Health 1999; 90:272–276
16. Weiss D, Marmar CR: The Impact of Event Scale—Revised, in Assessing Psychological Trauma and PTSD: A Practitioner's Handbook. Edited by Wilson JP, Keane TM. New York, Guilford, 1996, pp 399–411
17. Steer RA, Ball R, Ranieri WF, Beck AT: Dimensions of the Beck Depression Inventory-II in clinically depressed outpatients. J Clin Psychol 1999; 55:117–128
18. Goldberg DP, Hillier VF: A scaled version of the General Health Questionnaire. Psychol Med 1979; 9:139–145
19. First MB, Spitzer RL, Gibbon M, Williams JBW: Structured Clinical Interview for DSM-IV Axis I Disorders, Patient Edition (SCID-P), version 2. New York, New York State Psychiatric Institute, Biometrics Research, 1994
20. Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen H-U, Kendler KS: Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: results from the National Comorbidity Survey. Arch Gen Psychiatry 1994; 51:8–19
21. Carlier IV, Lamberts RD, Gersons BP: Risk factors for posttraumatic stress symptomatology in police officers: a prospective analysis. J Nerv Ment Dis 1997; 185:498–506
22. Robinson HM, Sigman MR, Wilson JP: Duty related stressors and PTSD in suburban police officers. Psychol Rep 1997; 81: 835–845
23. Centers for Disease Control: Health status of Vietnam veterans: psychosocial characteristics. JAMA 1988; 259:2701–2707
24. Kulka RA, Schlenger WE, Fairbank JA, Hough RL, Jordan BK, Marmar CR, Weiss DS: Trauma and the Vietnam War Generation: Report of Findings From the National Vietnam Veterans Readjustment Study. New York, Brunner/Mazel, 1990
25. Coté W, Simpson R: Covering Violence: A Guide to Ethical Reporting About Victims of Trauma. New York, Columbia University Press, 2000
26. Bleich A, Koslowsky M, Dolev A, Lerer B: Posttraumatic stress disorder and depression: an analysis of comorbidity. Br J Psychiatry 1997; 170:479–482
27. Brady KT: Posttraumatic stress disorder and comorbidity: recognizing the many faces of PTSD. J Clin Psychiatry 1997; 58(suppl 9):12–15
28. McFarlane AC, Papay P: Multiple diagnoses in posttraumatic stress disorder in the victims of a natural disaster. J Nerv Ment Dis 1992; 180:498–504
29. Turner SW, Thompson J, Rosser RM: The Kings Cross fire: psychological reactions. J Trauma Stress 1995; 8:419–427
30. Zatzick DF, Marmar CR, Weiss DS, Browner WS, Metzler TJ, Golding JM, Stewart A, Schlenger WE, Wells KB: Posttraumatic stress disorder and functioning and quality of life outcomes in a nationally representative sample of male Vietnam veterans. Am J Psychiatry 1997; 154:1690–1695
31. Hierhollzer R, Munson J, Peabody C, Rosenberg J: Clinical presentation of PTSD in World War II combat veterans. Hosp Community Psychiatry 1992; 43:816–820