

# Journalists covering the refugee and migration crisis are affected by moral injury not PTSD

Anthony Feinstein, Bennis Pavisian and Hannah Storm

Sunnybrook Health Sciences Centre, Toronto, ON M4N 3M5, Canada

**Corresponding author:** Anthony Feinstein. Email: ant.feinstein@utoronto.ca

## Summary

**Objective:** To explore the emotional health of journalists covering the migrations of refugees across Europe.

**Design:** Descriptive. A secure website was established and participants were given their unique identifying number and password to access the site.

**Setting:** Newsrooms and in the field.

**Participants:** Responses were received from 80 (70.2%) of 114 journalists from nine news organisations.

**Main outcome measures:** Symptoms of PTSD (Impact of Events Scale-revised), depression (Beck Depression Inventory-Revised) and moral injury (Moral Injury Events Scale-revised).

**Results:** Symptoms of PTSD were not prominent, but those pertaining to moral injury and guilt were. Moral injury was associated with being a parent ( $p = .031$ ), working alone ( $p = .02$ ), a recent increase in workload ( $p = .017$ ), a belief that organisational support is lacking ( $p = .046$ ) and poor control over resources needed to report the story ( $p = .027$ ). A significant association was found between guilt and moral injury ( $p = .01$ ) with guilt more likely to occur in journalists who reported covering the migrant story close to home ( $p = .011$ ) and who divulged stepping outside their role as a journalist to assist migrants ( $p = .014$ ). Effect sizes ( $d$ ) ranged from .47 to .71.

**Conclusions:** On one level, the relatively low scores on conventional psychometric measures of PTSD and depression are reassuring. However, our data confirm that moral injury is a different construct from DSM-defined trauma response syndromes, one that potentially comes with its own set of long-term maladaptive behaviours and adjustment problems.

## Keywords

Other psychiatry, anxiety disorders (including OCD and PTSD)

spectrum and heightened emotional distress that falls short of syndromal psychiatric diagnoses at the other.<sup>4,5</sup> What unites this range of experience and response is the fact that journalists are often first responders to a trauma scene and it is this proximity to events that can become, for some, a very significant stressor.

Journalists may also be regarded as contemporary historians, recording events of national and international importance. One example of this is their coverage of the current refugee crisis. Millions of people are now on the move, displaced by war and dire economic circumstances. The United Nations High Commission for Refugees reported that there were 21.3 million refugees.<sup>6</sup> It is estimated that 34,000 people are displaced daily, with current rates of displacement the highest on record. The mortality and morbidity, both physical and emotional, associated with such large movements of people are considerable and reflect the challenges faced by migrants before they set out, on the journey itself and after their arrival.<sup>7</sup> Journalists are witness to these journeys and as such observe first-hand the painful plight of those displaced.

The current study focuses on how journalists have responded emotionally to their work covering the migration crisis in Europe. The inquiry, however, goes beyond recoding symptoms of PTSD and depression to encompass the issue of moral injury. This has been defined as the injury done to a person's conscience or moral compass when that person perpetrates, witnesses or fails to prevent acts that transgress their own moral and ethical values or codes of conduct. While the challenge posed by moral injury is not new to journalists, and there are numerous personal accounts of how journalists have been troubled by it,<sup>8,9</sup> systematic research has to date passed it by. The issue, however, appears particularly germane to the migrant crisis that is currently unfolding in Europe. Here journalists have been exposed to the suffering of huge numbers of refugees against the backdrop of how their own countries, colleagues and fellow citizens have responded to a humanitarian crisis in their backyards.

## Introduction

There is now a substantial body of research showing that journalists can be adversely affected emotionally by their work. Be it covering war,<sup>1</sup> natural disasters<sup>2</sup> or local news with a traumatic crime or accident content,<sup>3</sup> their responses can encompass post-traumatic stress disorder and major depression at one end of the

The aim of our study was essentially descriptive, namely to determine whether journalists covering the migration of refugees across Europe had been affected emotionally by this work and if so to delineate the phenomenology of their distress. We hypothesised that symptoms of moral injury would be present and associated with PTSD-type symptoms and depression, in keeping with findings from the military literature,<sup>10</sup> and that work-related factors and the news organisations' approaches to covering the crisis would influence the degree of moral injury elicited.

## Methods

**Participants:** Nine major European and American news organisations associated with the International News Safety Institute took part in the study. Each provided a list of their journalists who were covering the migration crisis in Europe. A dedicated, password protected website was developed for the study. One hundred and fourteen journalists were approached and 80 (70.2%) agreed to take part. Of these 47 (58.8%) were men, 47 (58.5%) were married, 49 (61.4%) had children, 68 (85%) were university educated, 55 (68.8%) had previously covered war, 57 (71.3%) were covering the refugee crisis close to home and 61 (76.3%) divulged having stepped outside their role as a journalist and directly assisted refugees. The average age was 42.95 (8.44) years. On average participants had been working for 18.28 (8.09) years as a journalist and had been covering the refugee crisis for 19.65 (19.41) months. All journalists had directly witnessed the plight of the refugees by covering the news out in the field on assignment and not from behind a desk in the newsroom.

## Measures

The Revised Impact of Events Scale (IES-R) contains 22 questions that closely follow the DSM-IV criteria for post-traumatic stress disorder.<sup>11</sup> Three subscales look at intrusive (re-experiencing), avoidance and hyperarousal phenomena. There is a choice of five responses for each question, which are scored 0 (low)–4 (high), respectively. Subjects were asked to indicate symptoms that had occurred during the past seven days only and related to traumatic events that had taken place in their line of work covering the refugees. Each total subscale score is divided by the number of questions in the subscale to give a mean score that equates with the individual ratings as described above. For example a mean score of < 1.0 equals a 'little bit', scores between 1.0 and 1.99 reflects 'moderately', 2.0–2.9 equals 'quite a bit' and > 3.0 equates with 'severely'. Cronbach's  $\alpha$  for

the intrusive, avoidance and arousal scales were .88, .86 and .79, respectively.

The Beck Depression Inventory Revised (BDI-II) was used to capture depressive symptomatology.<sup>12</sup> The 21 questions were scored a Likert way, namely 0–1–2–3 and summed to give an overall index of depression. Cronbach's  $\alpha$  for the BDI-II was .91.

Moral injury was assessed with a modified version of the Moral Injury Events Scale (MIES-R).<sup>13</sup> This 11-item scale was developed specifically for use by the military. It was adapted for journalists by removing the last five questions. The six remaining questions are as follows: I saw things that were morally wrong; I am troubled by having witnessed others' immoral acts; I acted in ways that violated my own moral code or values; I am troubled by having acted in ways that violated my own morals and values; I violated my own morals by failing to do something that I felt I should have done; I am troubled because I violated my morals by failing to do something that I felt I should have done. Each question comes with six possible responses: strongly agree, moderately agree, slightly agree, slightly disagree, moderately disagree and strongly disagree scored in a simple, reverse Likert fashion of 6 through 1. Cronbach's  $\alpha$  for the MIES-R was .79.

In addition to completing the Moral Injury Events Scale-Revised, journalists were asked to rate their feelings of guilt on a simple analogue scale in which a score of zero denoted no guilt and 10 indicated extreme guilt.

Journalists' perceptions of their work environment were captured in seven questions (see Table 2).

Data on past psychiatric history included whether journalists had been seen by a psychiatrist, the reason for the assessment (personal or conflict related) and the type of treatment received (medication, therapy or both).

**Details of alcohol and illicit drug use:** The amount of alcohol used weekly was recorded. A unit of alcohol was defined as either a regular size bottle of beer, glass of wine or shot of spirits. Fourteen units of alcohol per week for men and 9 units for women were considered the upper limit of acceptable weekly intake.<sup>14</sup>

**Data analysis:** Data were analysed with SPSS 20.0. All tests were two tailed with  $\alpha$  at .05. Internal consistency of reliability for the psychometric scales was assessed with Cronbach's  $\alpha$ . Given that five of the six work-related questions were dichotomous, the associations with scores on the MIES-R were explored with t-tests. Small, medium and large effect sizes were determined in keeping with Cohen's  $d$  values of 0.20, 0.50 and 0.80, respectively. Associations between demographic variables, indices of PTSD,

**Table 1.** Behavioural results (n = 80).

	Mean	SD	Interpretation
IES-R intrusion	.87	.70	Low
IES-avoidance	.62	.70	Low
IES-arousal	.47	.57	Low
BDI-II	7.30	7.41	Minimal
Moral Injury Events Scale*			
I saw things that were morally wrong	5.3	1.22	Strongly agree
I am troubled by having witnessed others' immoral acts	4.11	1.63	Moderately agree
I acted in ways that violated my own moral code	1.70	1.13	Moderately disagree
I am troubled by having acted in ways that violated my own morals	1.64	1.15	Moderately disagree
I violated my own morals by failing to do something that I felt I should have done	2.16	1.40	Slightly disagree
I am troubled because I violated my morals by failing to do something that I felt I should have done	2.09	1.42	Slightly disagree
Total Moral Injury Events Scale score	17.0	5.58	
Guilt	4.50	2.9	Moderate
Alcohol (men) <sup>†</sup>	11.81	7.57	Normal
Alcohol (women) <sup>†</sup>	7.57	5.03	Normal

IES-R: Impact of Events Scale-revised; BDI-II-Beck Depression Inventory-revised.

\*Interpretation of the moral injury data based on the 6-point Likert scoring method.

<sup>†</sup>Weekly consumption.

moral injury and work-related questions were assessed with Pearson *r* and Spearman's Rank correlation coefficients according to data distribution.

Ethics: Informed consent was obtained from all participants. Journalists indicated their consent by clicking on the relevant button in the website. The study was approved by the hospital's Research Ethics Board.

## Results

The descriptive data for the IES-R, BDI-II, MIES-R and substance use are shown in Table 1.

### Factors associated with moral injury

Journalists with children had higher scores on the MIES-R (18.02 (SD = 6.19) vs. 15.43 (SD = 4.08),  $t = -2.20$ ,  $p = 0.031$ ,  $d = .49$ ) as did those with a higher workload within the past year (18.07 (SD =

5.72) vs. 15.24 (SD = 4.01),  $t = -2.30$ ,  $p = .017$ ,  $d = .57$ ). The results of the work stressor questionnaire are shown in Table 2. Journalists working alone rather than with colleagues reported that they were more likely to have acted in ways that violated their own moral code (2.1 (SD = 1.32) vs. 1.43 (SD = .91),  $t = -2.41$ ,  $p = .02$ ,  $d = .59$ ). Those who had not covered war previously were more likely to endorse violating their own moral code by failing to do something they felt they should have done (2.6 (SD = 1.53) vs. 1.94 (SD = 1.29),  $t = 1.97$ ,  $p = .053$ ,  $d = .47$ ). Those who endorsed not receiving the necessary support from their organisation were more likely to endorse seeing things that they perceived as morally wrong (5.70 (SD = .48) vs. 5.24 (SD = 1.29),  $t = 2.08$ ,  $p = .046$ ,  $d = .47$ ). Less control over resources required to report on the refugee crisis correlated significantly with MIES-R scores ( $r = -.3$ ;  $p = .027$ ) and depression on the BDI-II ( $r = -.23$ ,  $p = .053$ ).

**Table 2.** Work-related stressors (n = 80).

	Yes
Do you feel the economic pressures of the industry affect your work covering traumatic events?	43 (59.72%)
Do you have the time and resources to do your job properly?	39 (54.17%)
Is your workload greater than a year ago?	43 (59.72%)
Are you under pressure to compromise your personal ethics in the pursuit of meeting a deadline?	13 (18.06%)
Do editors handling your story/photos acknowledge the traumatic aspects of the assignment?	38 (52.78%)
How much control do you have over the resources required to do your job?	
Very little	18 (25.0%)
Some	32 (44.44%)
Quite a lot	21 (29.17%)
Complete	1 (1.39%)
Do you feel that your news organisation has given you the necessary support* to cover the refugee crisis?	68 (85%)

\*Acknowledging the stressful nature of the work, sufficient time off from work, reminders about access to confidential counselling, advice as to what was expected from journalists with respect to providing direct assistance to refugees.

Moral injury (MIES-R) scores correlated significantly with guilt ( $r = .30$ ,  $p = .01$ ), IES-R intrusion ( $r = .41$ ;  $p = .0001$ ), IES avoidance ( $r = .24$ ,  $p = .05$ ) and IES-R arousal ( $r = .33$ ,  $p = .006$ ), but not with BDI-II depression ( $r = .07$ ,  $p = .56$ ) scores. Guilt only correlated with IES-intrusion ( $r = -.33$ ,  $p = .004$ ) and not BDI-II depression ( $r = .09$ ,  $p = .45$ ). Greater guilt was endorsed by journalists covering the story close to home (4.98 (SD = 2.72) vs. 3.17 (SD = 2.98),  $t = -2.6$ ,  $p = .011$ ,  $d = .63$ ) and by those who had assisted the refugees (4.90 (SD = 2.78) vs. 3.05 (SD = 2.91),  $t = -2.5$ ,  $p = .014$ ,  $d = .65$ ). Scores on the MIES-R did not correlate with gender ( $r = .12$ ,  $p = .32$ ), age ( $r = .003$ ,  $p = .98$ ), education ( $r = -.08$ ,  $p = .48$ ), marital status ( $r = -.03$ ;  $p = .83$ ) or alcohol consumption in men ( $r = -.12$ ,  $p = .43$ ) or women ( $r = .30$ ,  $p = .11$ ).

Given that the MIES-R reflects two broad aspects of moral injury, namely as it pertains to the behaviour of others (questions 1 and 2) and self (questions 3, 4, 6 and 6) we reanalysed the data for each of these two symptom groups. The gist of the results remained essentially unchanged, apart from strengthening existing findings. For example, those journalists who endorsed having less time and resources to do their work reported what they saw as more morally compromised behaviour in others (10.28 (SD = 1.73) vs. 8.69 (SD = 2.67),  $t = 3.03$ ,  $p = .004$ ,  $d = .71$ ). Similarly those journalists who had not covered war previously endorsed more morally compromised behaviour related to self (9.04 (SD = 5.17) vs. 6.88 (SD = 3.90),

$t = 2.03$ ,  $p = .046$ ,  $d = .47$ ). Less control over resources needed to cover the refugee story now correlated more robustly with morally compromised behaviour witnessed in others ( $r = -.43$ ,  $p = .0001$ ).

The relationship between moral injury, on the one hand, and symptoms of PTSD (intrusion, avoidance, arousal) and depression, on the other hand, was then explored in a stepwise linear regression. The results reveal that only symptoms of re-experiencing/intrusion ( $\beta = 0.324$ ,  $p = .006$ ) and guilt ( $\beta = 0.267$ ,  $p = .021$ ) were statistically significant predictors of moral injury.

## Discussion

The results of this exploratory study reveal that moral injury in journalists covering the refugee crisis is associated with being a parent, working alone, no previous exposure to war, a recent increase in workload, a belief that organisational support is lacking and poor control over resources needed to report the story. A significant association was found between guilt and moral injury with guilt more likely to occur in journalists who reported covering the migrant story close to home and who divulged stepping outside their role as a journalist to assist migrants.

Before discussing these results in greater detail further comment is needed on the sample selection. Nine major news organisations took part in the study supplying the names of their journalists who

had been assigned this news story. The participation of such a broad array of organisations suggests that the group we studied is broadly reflective of the Western media covering this long running crisis. Furthermore, studies of email-driven research reveal that acceptance rates of 40% are considered acceptable, 50% good and 60% or more very good.<sup>15</sup> A participation rate of 70% in our study therefore bolsters the representative nature of the group studied.

The first observation of note is that the only demographic variable linked to moral injury is having children. In the broader trauma literature this sets moral injury apart from PTSD and depression which are known to correlate with sex and education,<sup>16</sup> but not with being a parent. The reason for this finding emerging in association with moral injury likely relates to the nature of the story covered and the particular vulnerability of refugee children.<sup>17</sup> Here one can postulate that journalists, through personal experiences as parents, have been sensitised to the helplessness of children, an observation starkly exposed and reinforced by the plight of the migrating masses. This self-referential connection is, in turn, the catalyst for an increase in symptoms of moral injury.

The linkage between moral injury and PTSD has been reported often in the trauma literature.<sup>18</sup> This is understandable given that the two share certain important characteristics, most notably their development following intense events that are associated with psychological problems.<sup>19</sup> There are also, however, important differences. PTSD is essentially a physiological disorder and regarded as a mental illness. It occurs in response to a life-threatening event directed at self and/or others.<sup>20</sup> The fear that comes from this exposure and which is rekindled with the subsequent re-experiencing phenomena drives the cardinal features of avoidance and arousal described above in the 'Methods' section. Moral injury, on the other hand, does not have this physiological underpinning and is not a mental illness, but instead is linked to a moral conflict in which one's behaviour or the behaviour of others is thought to be at odds with long-held moral beliefs. This aetiological underpinning can explain the close association between moral injury and guilt and shame,<sup>21</sup> two emotions that are not part of the diagnostic criteria for PTSD even though they may be associated with it.<sup>22</sup>

While the moral injury literature to date is almost exclusively military, the questions it asks are readily transferable to conflict journalism. Here our data support an association with the phenomenology of PTSD, most notable with the intrusion or re-experiencing symptoms. The fact that avoidance and arousal were not found to independently predict moral injury on the regression analysis may be due to the

fact that journalists covering the migration crisis did not endorse high levels of PTSD symptoms. Indeed, the IES-R averages for all three symptom clusters, namely intrusion, avoidance and arousal, fell in the 'little bit' or low category suggesting that few if any of the journalists had the full PTSD syndrome. This is not unexpected given that journalists were not exposed to personal threat in covering the migration of refugees. However, as defined, moral injury arises from the perception of moral failure in self or others in response to a particular event or events and it is the memory of these events, kept salient by re-experiencing, that stokes the moral hurt. Significantly, the other emotional variable that independently predicted moral injury alongside the intrusion/re-experiencing phenomenon in our study was guilt, an association that has been reported previously.<sup>23</sup>

Moral injury has also been linked to depression, suicidal ideation, hopelessness, pessimism and anger.<sup>24,25</sup> While we failed to find these correlates in our sample, we did find that guilt independent of depression was strongly associated with moral injury. The depression findings and PTSD data therefore suggest that moral injury should be viewed as a distinct psychological set of beliefs that may overlap partly with the phenomenology of current trauma response syndromes as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM5).<sup>10,26</sup> As others have noted, moral injury is not a mental disorder and as such does not require a threshold for diagnosis. Rather, it should be conceptualised as dimensional in which the individual's sense of having lost his or her moral compass can manifest as guilt, shame and self-defeating behaviours.<sup>27</sup>

A notable finding to emerge from our study was the degree to which moral injury was linked to perceived organisational and work-related factors. While association is not synonymous with causality, these findings should be of interest to news organisations dispatching journalists to cover the migration story. A significant increase in workload and a lack of organisational support are two factors that could be remedied where necessary. Similarly, in the search for factors that could mitigate the development of moral injury previous research has highlighted an individual's state of mind<sup>28</sup> and moral judgement prior to military deployment.<sup>29</sup> This approach could be readily applied to journalists as well. Here our data give clues as to where attention might be directed, namely on journalists with children, with no prior war experience and with a proclivity to provide direct assistance to the migrating refugees.

It is germane to note that the moral injury literature contains no studies looking at humanitarian aid workers, physicians, social workers, UNHCR



personnel and other first responders working in zones of conflict. To the best of our knowledge, our journalist study is therefore the first to examine this phenomenon outside a military setting. One could plausibly argue that journalists, as opposed to other first responders, might be particularly vulnerable to moral injury given that the primary nature of their work, namely to bear witness and record events, means they are relatively more removed from providing direct help and succour to distressed people than the other professions engaged in humanitarian aid efforts. How to reconcile taking photographs or writing about people in extremis rather than putting down one's camera or pen and helping is not a new challenge for journalists. What is 'new', however, is turning the spotlight on the profession and finding that moral injury can arise as a consequence of this dilemma.

Our study comes with certain limitations, most notably the absence of structured interviews, the narrow range of psychological inquiry and a truncated version of the MIES. Nevertheless, these data are the first to address the question of moral injury in the Fourth Estate where trauma research has historically lagged well behind the military. On one level, the relatively low scores on conventional psychometric measures like the IES-R and BDI-II are reassuring. However, as the literature reminds us, moral injury is a different construct from DSM-defined trauma response syndromes and can potentially come with its own set of long-term maladaptive behaviours<sup>21</sup> and adjustment problems.<sup>30</sup> It is with this in mind that our data should be interpreted.

### Declarations

**Competing Interests:** HS is Director of INSI.

**Funding:** Funding for the study was provided by INSI.

**Ethical approval:** The study was approved by the Research and Ethics Board at Sunnybrook Health Sciences Centre, fully affiliated with the University of Toronto.

**Guarantor:** AF

**Contributorship:** All the authors were involved in the study design, data collection and analysis and manuscript preparation.

**Acknowledgements:** None

**Provenance:** Not commissioned; peer-reviewed by Nirmala Pradhan

### References

- Feinstein A and Nicolson D. Embedded journalists in the Iraq war: are they at greater psychological risk? *J Trauma Stress* 2005; 18: 129–132.
- Buchanan M and Keats P. Coping with traumatic stress in journalism: a critical ethnographic study. *Int J Psychol* 2011; 46: 127–135.
- Pyeovich C, Newman E and Daleiden E. The relationship among cognitive schemas, job related traumatic exposure and posttraumatic stress disorder in journalists. *J Trauma Stress* 2003; 16: 325–328.
- Feinstein A, Owen J and Blair N. A hazardous profession: war, journalists, and psychopathology. *Am J Psychiatry* 2002; 159: 1570–1575.
- Feinstein A, Audet B and Waknine E. Witnessing images of extreme violence: a psychological study of journalists in the newsroom. *JRSO Open* 2014; 5: 1–7.
- UNHCR, <http://www.unhcr.org/figures-at-a-glance.html> (2016, accessed 1 February 2018).
- Thomas SL and Thomas SDM. Displacement and health. *Br Med Bull* 2004; 69: 115–127.
- McCullin D. *Unreasonable behaviour*. New York: Alfred Knopf, 1991.
- Gilbertson A. *Bedrooms of the fallen*. Chicago, IL: University of Chicago Press, 2014.
- Drescher KD and Foy DW. When they come home: posttraumatic stress, moral injury, and spiritual consequences for veterans. *Reflect Pract Form Supervis Min* 2008; 28: 85–102.
- Weiss D and Marmar CR. The impact of event scale-revised. In: Wilson JP and Keane TM (eds) *Assessing psychological trauma and PTSD: a practitioner's handbook*. New York: Guilford Press, 1997, pp.399–411.
- Steer RA, Ball R, Ranieri WF and Beck AT. Dimensions of the Beck Depression Inventory-II in clinically depressed outpatients. *J Clin Psychol* 1999; 55: 117–128.
- Nash WP, Carper TL, Mills MA, Au T, Goldsmith A and Litz BT. Psychometric evaluation of the moral injury events scale. *Mil Med* 2013; 178: 646–652.
- Bondy SJ, Rehm J, Ashley MJ, Walsh G, Single E and Room R. Low risk drinking guidelines: the scientific evidence. *Can J Public Health* 1999; 90: 264–270.
- Hamilton MB. *Online survey response rates and times: background and guidance for industry*. Cambridge, MA: Tercent Inc 2003, p.298.
- Halligan SL and Yehuda R. Risk factors for PTSD. *PTSD Res Quart* 2000; 11: 1–8.
- Devi S. Unaccompanied migrant children at risk across Europe. *Lancet* 2016; 38: 2590.
- Drescher KD, Foy DW, Kelly C, Leshner A, Schutz K and Litz B. An exploration of the viability and usefulness of the construct of moral injury in war veterans. *Traumatology* 2011; 7: 8–13.
- Jinkerson JD. Defining and assessing moral injury: a syndrome perspective. *Traumatology* 2016; 22: 122–130.
- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorder*. 5th ed. Washington, DC.
- Litz BT, Stein N, Delaney E, Lebowitz L, Nash WP, Silva C, et al. Moral injury and moral repair in war veterans: a preliminary model and intervention strategy. *Clin Psychol Rev* 2009; 29: 695–706.
- Alliger-Horn C, Zimmermann PL and Schmucker M. Guilt, shame and compassionate imagery in war. Traumatized German soldiers with PTSD: a pilot study. *J Clin Med* 2016; 5: 1–2.

23. Stein NR, Mills MA, Arditte K, et al. The STRONG STAR consortium. A scheme for categorizing traumatic military events. *Behav Modif* 2012; 36: 787–807.
24. Gaudet CM, Sowers KM, Nugent WR and Boriskin JA. A review of PTSD and shame in military veterans. *J Hum Behav Soc Environ* 2016; 26: 56–68.
25. Bryan AO, Bryan CJ, Morrow CE, Etienne N and Ray-Sannerud B. Moral injury, suicidal ideation, and suicide attempts in a military sample. *Traumatology* 2014; 20: 154–160.
26. Shay J. Casualties. *Daedalus* 2006; 140: 179–188.
27. Maguen S and Litz B. Moral injury in veterans of war. *PTSD Res Quart* 2012; 23: 1–6.
28. Bowker MH and Levine DP. Beyond the battlefield: “moral injury” and moral defence in the psychic life of the soldier, the military and the nation. *Org Soc Dyn* 2006; 16: 85–109.
29. Nazarov A, Jetly R, McNeely H, et al. Role of morality in the experience of guilt and shame within the armed forces. *Acta Psychiatr Scand* 2015; 132: 4–19.
30. Currier JM, Holland JM and Malott J. Moral injury, meaning making and mental health in returning veterans. *J Clin Psychol* 2014; 71: 229–240.