The psychological wellbeing of Iranian journalists: a descriptive study

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Summary
Objective: Iran ranks 173 out of 180 countries on an index of press freedom. The purpose of the study was to assess the psychological wellbeing of Iranian journalists and document the stressors encountered in their work.
Design: A secure website was established and participants were given their unique identifying number and password to access the site.
Setting: Newsrooms in Iran and the diaspora.
Participants: Responses were received from 114 journalists (76%) of whom 65.8% were living in the diaspora. The mean age was 37.8 years (SD = 7.30) and 57% male.
Main outcomes measures: Type of stressor and behavioural data: Impact of Event Scale-revised for posttraumatic stress disorder, Beck Depression Inventory-II for depression.
Results: Stressors include arrest (41.2%), torture (19.3%), assault (10.5%), intimidation (51.4%) and family threatened (43.1%). Eighty nine (78.1%) journalists had stopped working on a story because of intimidation. Arrest, torture, intimidation and family threatened were associated with more intrusive and arousal PTSD symptoms (p < .01 to .001) and assault and intimidation with more depressive symptoms (p < .05). Almost a third of Iranian journalists regularly used barbiturates, with use correlating with symptoms of intrusion (p < .0001), avoidance (p < .01), arousal (p < .0001) and depression (p < .0001). 46.5% of Iranian journalists were not receiving therapy for their distress.
Conclusions: The findings, the first of their kind, provide data highlighting the extraordinary degree of danger confronted by Iranian journalists, their emotional distress in response to this and their proclivity to self-medicate with barbiturates.

Keywords
Posttraumatic stress disorder, Iran, journalism

Introduction
Media watchdogs are unanimous in their assessment of how the Islamic Republic of Iran treats journalists. Reporters without Borders ranks the country 173 out of 180 on an index of press freedom.1 The Committee to Protect Journalists (CPJ) has deemed Iran one of the world’s worst jailers of journalists.2 According to Canadian Journalists for Free Expression (CJFE), the regime in Iran has since its establishment in 1979 imprisoned, tortured and killed hundreds of writers, journalists, bloggers and internet activists. Additional state-sponsored interference includes banning publications, harassing family members of exiled journalists and bringing the internet to a slow crawl.3

While the stress on Iranian journalists has been clearly documented, what is not known is the degree to which this affects their psychological wellbeing. This question takes on added importance given a literature that has emerged over the past decade highlighting the psychological difficulties that can affect journalists whose work exposes them to threat. A detailed study of journalists covering the war in Iraq revealed prominent symptoms of posttraumatic stress disorder and depression linked to frequency of exposure to life-threatening events.4 Subsequent research among journalists exposed to work-related trauma has demonstrated the mediating role of guilt in the evolution of these PTSD type difficulties.5

While the early journalist-trauma literature focused on Western journalists, more recent studies have looked further afield. A study of Kenyan journalists6 found that seven years on from the ethnic violence that erupted following the 2007 General Election, prominent symptoms of emotional distress remained, particularly in those who had been attacked and injured. These data overlap with those reported in an UNESCO funded study of Mexican journalists exposed to drug-related violence.7 Here the most striking finding was the robust association between PTSD and depressive symptoms on the one hand and threat directed at the families of journalists by the drug cartels, on the other. Significantly, one in four journalists had stopped working on a story because they were too traumatized to continue.

The Mexican data give clues as to what may be found in Iranian journalists given that both groups share an important similarity, namely a hazardous
work environment that cannot be separated from the broader societal environment in which they and their families live. However, Mexico and Iran are two very different countries of course. This introduces a note of caution into extrapolating data from one to the other. Nevertheless, it is reasonable to hypothesize from the current literature that in the context of significant threat, symptoms of distress are likely to occur in journalists exposed to violence, wherever their locale. It is with this in mind that we undertook an explorative study of the emotional wellbeing of Iranian journalists.

Methods
Sample selection
The Iranian state controlled media could not be approached for assistance with a study probing the psychological health of journalists harassed by the government. We therefore had to look beyond the mainstream media in the country. Given the degree to which the Iranian secret service monitors the press, there are a limited number of journalists who are prepared to cover political news and retain their independence without toeing the party line. They are known to one another and have established a virtual group (n = 451) to keep in touch and offer support when needed. We then selected every third name in the sample for a final tally of 150 journalists for inclusion in the study.

A secure website was established for the study. All participants were given their unique identifying number and a password with which to access the site. The study was administered in Farsi with results translated into English. The following data were collected:

- Demographic (age, gender, marital, level of education), work related (years employed as a journalist, type of journalism) and where the journalist resided (in or outside Iran). Journalists were also given a number of questions pertaining to potential stressors that they may have been exposed to in their line of work. These included whether they had been intimidated, arrested, tortured, assaulted, had their families threatened and had to stop a story because of threat.

- A subjective perception of the degree of stress associated with work as a journalist was captured on a simple analogue scale (zero = no stress through 10 = severe stress).

- Behavioural data were obtained with two self-report psychometric questionnaires. They are considered robust and valid instruments for recording psychopathology that can arise following traumatic events. The scales were:

  - The Revised Impact of Events Scale (IES-R) contains 22 questions that closely follow the DSM-IV criteria for posttraumatic stress disorder. 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 in Iran. Persian versions of the IES and IES-R have been validated and used previously. 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 = Not at all; 1 = A little bit; 2 = Moderately; 3 = Quite a bit; 4 = Extremely, respectively. 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', score between 1.0 and 1.99 reflects ‘moderately’, 2.0–2.9 equals ‘quite a bit’ and >3.0 equals with ‘severely’. Cronbach’s α for the intrusive, avoidance and arousal scales were .99, .79 and .84, respectively.

  - The Beck Depression Inventory Revised (BDI-II) was used to capture depressive symptomatology. A Persian version of the BDI-II has been validated and used previously. The 21 questions were scored in a Likert way, namely 0-1-2-3 and summed to give an overall index of depression. By convention, scores from 0 to 13 were deemed minimal, 14 to 19 mild, 20 to 28 moderate and >28 severe. Cronbach’s α for the BDI-II was .91.

  - Data on past psychiatric history included whether journalists had received psychological treatment and the reason for the treatment (personal or conflict related).

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.

Ethics
The study received approval from the Research and Ethics Board at Sunnybrook Health Sciences Centre, affiliated to the University of Toronto.

Results
Demographic and work data
Of the 150 journalists approached, 114 (76%) completed the questionnaires. Their mean age was 37.8 years (SD = 7.30) while 65 (57%) were male and 64 (56%), 37 (32.5%) and 12 (10.5%) were married,
single and divorced, respectively. The group had worked on average 14.84 (SD = 5.8) years as journalists. Thirty nine (34.2%) of the journalists were living in Iran, 75 (65.8%) in the diaspora while 14 (12.3%) preferred not to divulge their location.

The percentage of journalists subjected to specific threats were as follows: arrest (41.2%); torture (19.3%); intimidation (defined as threat in the absence of torture, assault or arrest) (61.4%); assault (10.5%) and family threatened because of work done by a journalist (53.1%). Eighty nine (78.1%) journalists had had to stop work on a story because of intimidation, assault or torture while 70 journalists (61.4%) reported having been placed under surveillance by the state at some point. It was common for journalists to endure multiple threats shown by the following significant correlations: torture with assault (r = .41; p = .0001), arrest (r = .49; p = .0001) and family threatened (r = .28; p = .002), intimidation with arrest (r = .34; p = .0001); arrest with assault (r = .29; p = .002) and family threatened (r = .29; p = .002); under surveillance with arrest (r = .21; p = .027) and family threatened (r = .25; p = .008). Journalists who had been forced to leave Iran were more likely to have been intimidated (x^2 = 4.03; p = .045) and to have had their families threatened (x^2 = 11.92; p = .001). There were no demographic differences between the Iranian journalists residing in and outside Iran.

Only three journalists endorsed no form of threat to self or family.

**Psychiatric data**

The average rating on the simple analogue stress scale was 7.72 (SD = 1.86). A comparison of PTSD (intrusion, avoidance and arousal) and depressive symptoms according to threat is shown in Table 1. Medium to large effect sizes were present for arrest, torture and intimidation in relation to intrusion and arousal PTSD type symptoms. Assault and intimidation were associated with higher depression scores while threat directed against family was linked to more intrusion symptomatology. Journalists in the

| Threat Type | IES-R Intrusion M | SD | d | IES-R Avoidance M | SD | d | IES-R Arousal M | SD | d | BDI-II M | SD | d |
|-------------|------------------|----|---|-------------------|----|---|-----------------|----|---|------------|----|---|
| Arrest      |                  |    |   |                   |    |   |                 |    |   |            |    |   |
| No (n = 67) | 2.03             | .96| .54| 1.62              | .79| .35| 1.54            | .94| .83|            | 14.87| 9.71| .31|
| Yes (n = 45)| 2.49             | .71|    | 1.87              | .61|    | 2.30            | .89|    |            | 18.42| 12.81|    |
| Torture     |                  |    |   |                   |    |   |                 |    |   |            |    |   |    |
| No (n = 90) | 2.13             | .91| .62| 1.71              | .75| .11| 1.73            | .97| .71|            | 15.41| 10.18| .37|
| Yes (n = 22)| 2.63             | .69|    | 1.79              | .66|    | 2.4             | .93|    |            | 19.91| 14.13|    |
| Intimidation|                  |    |   |                   |    |   |                 |    |   |            |    |   |    |
| No (n = 44) | 1.94             | .82| .54| 1.53              | .76| .44| 1.48            | .87| .65|            | 13.63| 9.16| .41|
| Yes (n = 68)| 2.40             | .90|    | 1.85              | .70|    | 2.09            | .99|    |            | 18.01| 12.01|    |
| Assault     |                  |    |   |                   |    |   |                 |    |   |            |    |   |    |
| No (n = 100)| 2.19             | .91| .40| 1.72              | .74| .08| 1.80            | .99| .54|            | 15.58| 10.48| .52|
| Yes (n = 12)| 2.51             | .68|    | 1.78              | .70|    | 2.32            | .93|    |            | 22.25| 14.85|    |
| Family threat|                |    |   |                   |    |   |                 |    |   |            |    |   |    |
| No (n = 53) | 2.00             | .91| .49| 1.67              | .75| .18| 1.69            | .99| .35|            | 16.00| 9.90| .05|
| Yes (n = 58)| 2.43             | .84|    | 1.80              | .71|    | 2.03            | .98|    |            | 16.53| 12.34|    |
| Surveillance|                  |    |   |                   |    |   |                 |    |   |            |    |   |    |
| No (n = 40) | 2.10             | .94| .22| 1.74              | .73| .01| 1.76            | .96| .14|            | 17.68| 11.90| .18|
| Yes (n = 69)| 2.30             | .87|    | 1.73              | .75|    | 1.90            | 1.0 |   |            | 15.59| 10.88|    |
| In Iran     |                  |    |   |                   |    |   |                 |    |   |            |    |   |    |
| No (n = 73) | 2.31             | .88| .30| 1.84              | .68| .44| 1.98            | 1.0 | .36|            | 16.47| 11.74| .05|
| Yes (n = 39)| 2.04             | .91|    | 1.52              | .78|    | 1.63            | .95|    |            | 15.97| 10.06|    |

*d* = Cohen’s effect size; BDI-II = Beck Depression Inventory-revised; IES-R = Impact of Events Scales-revised.

*p < .05.

*p < .01.

*p < .001.

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Table 1. The association between various forms of threat and psychiatric symptomatology.
diaspora endorsed more avoidance PTSD symptoms. Moderate and severe degrees of depression were endorsed by 25 (21.9%) and 17 (14.9%) journalists, respectively. There was a strong correlation between total depression scores on the BDI-II and intrusion ($r = .59; p = .0001$), avoidance ($r = .31; p = .001$) and arousal ($r = .66; p = .0001$) symptoms elicited on the IES-R.

The mean weekly consumption of alcohol for men was 4.18 (SD = 6.0) units and for women 2.31 (SD = 3.17) units. Drug usage was as follows: cannabis (2.7%), cocaine (1.8%), LSD (1.8%), heroin (2.3%) and barbiturates (30.6%). Barbiturate use correlated significantly with intrusion ($r = .34; p = .0001$), avoidance ($r = .24; p = .01$), arousal ($r = .38; p = .0001$) symptoms on the IES-R and depressive symptoms on the BDI-II ($r = .40, p = .0001$).

In terms of seeking treatment, 61 (53.5%) journalists had sought out a psychiatrist or psychologist. Of these journalists, 37 (60%) divulged that the reason was related to what they had experienced as a journalist.

Discussion

The most significant result to emerge from the study was the significant degree of threat endured by Iranian journalists be it assault, arrest, torture and intimidation. The threat extended to family as well, most notably in the almost two-thirds of journalists who had gone into exile. What these hazards translated into were moderately high levels of PTSD symptoms, particularly those of intrusion and arousal. Furthermore over a third of journalists reported depressive symptomatology that fell in the moderate to severe range, a percentage that increased in those who had been threatened or assaulted.

These results add to a growing body of evidence highlighting the emotional toll on journalists whose work exposes them to a motley collection of malign forces be they in foreign war zones or those that are closer to home. The threat may be diverse, but the responses are generally consistent in keeping with a robust construct validity linking frequency and severity of symptoms to the magnitude of the stressor. The strong effect sizes in the present study add support to this and suggest, at least with respect to Iranian journalists, that arrest and torture, not necessarily synonymous given their modest correlation coefficient, are among the most injurious to their emotional well-being. These findings are in accord with data from individuals other than journalists too.

Another notable finding was the higher rate of avoidance symptomology in journalists who had fled Iran. While our study was purely descriptive and did not address causality, one possible explanation for this finding could be that the very act of leaving the country was one way of avoiding not only the direct threats, but also the memories and recollections associated with those threats. Another possible explanation is that journalists in the diaspora, cut off from the support of family and friends back home, are more psychologically vulnerable and therefore at risk for greater psychopathology.

Another striking statistic to emerge was the high rate of barbiturate use in our sample. Barbiturates, while widely used in the West in the 1950s, quickly fell out of favour with the introduction of the safer benzodiazepines in the 1960s. These drugs, highly addictive and potentially fatal in overdose, are seldom prescribed in the West for these reasons. The fact that they are widely available in Iran and clearly widely used, at least by Iranian journalists, likely reflects the impact of sanctions on the Iranian pharmaceutical industry and the effects of an academic boycott on the practice of contemporary medicine in Iran. Most tellingly, use correlated significantly with all four behavioural markers of PTSD and depression suggesting an attempt at self-medicating feelings of distress. At best, these sedating agents might temporarily dampen symptoms but cannot alleviate them in the long term. Their addictive quality is attested to here by Iranian journalists continuing to use them even in the diaspora.

If the threat and response data fit together as expected, what is more challenging to determine is the generalizability of these results. To begin with, studies of response rates to email driven research projects have concluded that 40% is considered acceptable, 50% good and 60% or more, very good. With these yardsticks in mind, our 76% rate passes muster. A good response rate is not, however, synonymous with ensuring that the sample is representative of the broader group being studied. To achieve this aim, however, would entail obtaining the cooperation of the mainstream media in Iran. Such an option in Iran is impossible. By necessity our attention has therefore shifted to a smaller group of journalists thereby introducing a potential source of bias into our data. Just how strong this bias is remains unclear. A country does not find itself rated 173 out of 180 on a world index of press freedom without the media in general being harassed.

Another challenge is interpreting data like these by taking into account cultural nuances. Both rating scales used, namely the IES-R and BDI-II, although developed in the United States, have previously been used and validated in Iranian samples. While this ethnic approach is considered acceptable within a transcultural context, we recognize certain
limitations, particularly extrapolating too broadly at the expense of local influences. That said, an exhaustive review of the IES-R used in translation across diverse nationalities and cultures indicates strong concordance with respect to internal consistency, test–retest reliability and subscale correlations.\textsuperscript{18}

In summary, our study shows that Iranian journalists are subject to an array of severe stressors which in turn are associated with clinically significant symptoms of depression and PTSD and a history of substance abuse in the form of barbiturates. Furthermore, as our data show, many journalists are not receiving treatment for their distress. All of which begs the question, what can be done to help those in need? Given that there is no end in sight to the state orchestrated harassment currently meted out to journalists in Iran, our focus is now on encouraging the networks used to recruit the sample to disseminate the study’s results together with a message that the kinds of emotional distress detected here are treatable and should not be ignored.

Declarations

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