Soc. Sci. **2015**, *4*, 1079–1086; doi:10.3390/socsci4041079

OPEN ACCESS

social sciences

ISSN 2076-0760

www.mdpi.com/journal/socsci

Article

Suffering Has No Race or Nation: The Psychological Impact of the Refugee Crisis in Hungary and the Occurrence of Posttraumatic Stress Disorder

Szabolcs Kéri

Katharina Schütz Zell Center for Trauma Sufferers, Budapest 1135, Hungary;
E-Mail: kerisz@nyiro-opai.hu; Tel.: +36-1-451-2600

Academic Editor: Martin J. Bull

Received: 20 September 2015 / Accepted: 10 November 2015 / Published: 12 November 2015

Abstract: The "European migrant crisis" is one of the greatest social, political, and cultural challenges since World War II. Hundreds of thousands of people exposed to multiple psychological traumas are trying to find shelter in Europe. It would be indispensable to gain more information about the mental health of these individuals. The aim of the present study was to explore the occurrence of Posttraumatic Stress Disorder among refugees arriving in Hungary. Participants received the Harvard Trauma Questionnaire-Revised (HTQ), which was validated against the Mini-International Neuropsychiatric Interview 6.0 (MINI). We interviewed 450 asylum seekers (332 male, 43% from Syria). There were 189 men (57%) and 85 women (72%) who received the diagnosis of PTSD. Altogether, 274 asylum seekers (61%) met PTSD criteria. Individuals from Syria, Afghanistan, and Iraq plus other countries displayed similar PTSD rates. The extremely high occurrence of PTSD in asylum seekers suffering from the global crisis calls for immediate attention and efforts to implement integrated solutions in Europe.

Keywords: refugee; Europe; Syria; Posttraumatic Stress Disorder

1. Introduction

During the past months, the "European migrant crisis" has gained worldwide attention and significance. According to the data of Eurostat, during the second quarter of 2015 (from April to June), 213,200 first time asylum seekers applied for protection in the European Union. A third of asylum seekers were from Syria and Afghanistan (approximately 44,000 and 27,000 individuals, respectively) [1].

These numbers have been steadily increasing. The first two countries in which the highest number of applicants were registered were Germany (38% of total first-time applicants) and Hungary (15% of total first-time applicants), with the highest rate of applicants relative to the population in Hungary (3317 applicants per 1,000,0000 inhabitants) [1]. Earlier data released by the United Nations High Commissioner for Refugees (UNHCR) revealed that 62% of the individuals who arrived in Europe by boat were from Syria, Eritrea, and Afghanistan, countries that are affected by war, political oppression, violence, and religious extremism [2,3]. Together with people coming from Darfur, Iraq, Somalia, and some parts of Nigeria, the proportion of migrants who have the right to qualify for asylum could rise to 70% [2,3].

A major issue in the literature is that the terms "migrant", "asylum seeker" and "refugee" are not consistently used, and the definition of these terms often remains unclear and ambiguous. Migrants can be defined by foreign birth/nationality, or by their movement into a country different from their origin to settle down or to seek new living circumstances for a transitional period. An asylum seeker is an individual who defines himself or herself as a refugee, but whose claim has not yet been officially evaluated and eventually accepted. According to the 1951 Geneva Convention (Article 1A2), a refugee can be a person who "owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it" [4].

Globally, millions of individuals have been forcibly displaced either within their home countries or across national borders [4]. War and mass violence obviously lead to a range of severe traumatic experiences, including the feeling that one's life is endangered, the terror of witnessing extreme aggression and torture, separation from family, and social exclusion and marginalization. The vast majority of refugees are victims of extreme violations of human rights and dignity, such as torture, war-related trauma, the murder of relatives and friends, and the destruction of human, material, and abstract community values. Several studies have shown that a pattern of profound and enduring changes in mood, cognition, and social relationship characterizes these individuals, which is defined as Posttraumatic Stress Disorder (PTSD) (e.g., [5–7]). Individuals with PTSD suffer from the persistent (duration: >1 month) re-experience of the traumatic events (recurrent, intrusive, and distressing recollections, including images, thoughts, perceptions, and dreams), persistent avoidance of stimuli associated with the trauma accompanied by the numbing of general responsiveness (avoiding thoughts, feelings, and activities, diminished social interest, detachment from others, and a restricted range of emotions), and increased arousal (irritability, sleep disorder, and impaired attention) [8]. Steel *et al.* [9] conducted a comprehensive meta-analysis including 181 studies reporting data from 81,866 refugees and other conflict-affected people from 40 different countries. The unadjusted weighted prevalence rate was 30.6% for PTSD and 30.8% for depression [9]. However, the results are not without controversy. For example, the rates of reported PTSD showed an extremely large intersurvey variability (0%–99%), which is partly explained by methodological factors (e.g., small sample size, non-random sampling, various self-report scales administered in different languages) and differences in the assessed populations (e.g., reported torture, cumulative exposure to potentially traumatic events, time since conflict, and assessed level of political terror) [9]. Therefore, further studies aiming at overcoming methodological limitations are necessary.

The purpose of this study was to determine the occurrence of PTSD in asylum seekers who arrived in Hungary, one of the most seriously affected countries in Europe. Given that the "European migrant crisis" is probably the worst since World War II [10], it is essential to gain insight into the impact of this global event on mental health so as to better understand its nature and to facilitate actions to ameliorate the suffering of trauma-exposed asylum seekers.

2. Methods

2.1. Recruitment Procedure

Participants were enrolled at a Hungarian state border zone (Hungary-Serbia border near to Röszke) and urban transit zones (areas in Budapest at the three main rail stations) between June 2015 and September 2015. We used a random sampling method [11]. All people who initially agreed to participate in the interview ($N = 1296$) were assigned a number. The final list of participants was selected by using a random number table: some numbers indicated that the participant should be included in the interview, whereas other numbers indicated that the participant should not be selected. By using this method, every second individual from the initial sample was recruited. Supportive psychological interventions were available for those who were not included in the diagnostic interview. Individuals who did not report their country of origin were not included in the analysis.

2.2. Scales

PTSD symptoms were assessed with a 16-item subscale of the Harvard Trauma Questionnaire-Revised (HTQ), which is a widely used instrument in cross-cultural studies of refugees and other trauma-affected populations [12]. Each item was scored on a 1–4-point scale, and the final HTQ score was obtained by dividing the total points by the number of items. The HTQ cut-off score for PTSD was 2.5 [12], which was validated against the Mini-International Neuropsychiatric Interview 6.0 (MINI) [13] providing a DSM-IV (Diagnostic and Statistical Manual of Mental Disorders, 4th Edition) diagnosis of PTSD [8]. The number of potentially traumatic events (categories of events) was also assessed [12]. The interview was administered by trained clinical psychologists or psychiatrists (inter-rater reliability: $r > 0.8$). We provided a translated version of the interview (Modern Standard Arabic, collocquial language (*al-ʿāmiyya*), Farsi, Urdu) if the participant did not speak English. Therapists and social workers with experince in refugee care provided immediate supportive psychological interventions following the recommendations of the National Institute for Health and Care Excellence (NICE) [14]. The study was done in accordance with the Declaration of Helsinki, and it was approved by the institutional review board (No128/15).

2.3. Data Analysis

Data were analyzed using STATISTICA 12 software package (StatSoft Inc., Tulsa, OK, USA). In addition to general descriptive statistics, we calculated the proportion of PTSD cases in subsamples consisting of at least 100 individuals [11]. Spearman's correlation coefficients were calculated between HTQ scores, age, education, and the number of potentially traumatic events. Chi-square tests were applied to compare the proportion of individuals with PTSD in the three subsamples. The number of

potentially traumatic events in these subsamples was compared with Mann-Whitney U tests. The level of statistical significance was $\alpha < 0.05$.

3. Results

The socio-demographic characteristics of the participants are depicted in Table 1. Altogether, results are reported from 450 asylum seekers (332 male, 118 female). These individuals were randomly selected from those who agreed to be involved in the study ($N = 1296$). There were 210 asylum seekers who refused to participate (14% of those who were approached), and 198 individuals did not report their country of origin (13% of those who were approached).

Table 1. Socio-demographic characteristics of the participants.

Demographic and clinical measures	
Male/female ratio	332/118
Mean age (years)	32.0 (*SD* = 10.7; range: 18–55)
Mean education (years)	11.0 (*SD* = 7.3; range: 5–17)
Median number of potentially traumatic events	9 (range: 4–26)
Median score on the Harvard Trauma Questionnaire—Revised	2.9 (range: 1.5–4)
Country of origin	
Syria	195 (43%)
Afghanistan	110 (24%)
Iraq	58 (13%)
Somalia	26 (6%)
Eritrea	19 (4%)
Bosnia	15 (3%)
Nigeria	15 (3%)
Serbia	12 (3%)

The key finding was that 189 men (57%) and 85 women (72%) received the diagnosis of PTSD. Considering the whole sample, 274 asylum seekers (61%) were diagnosed with PTSD.

We calculated the percentage of asylum seekers with PTSD in subsamples comprising at least 100 individuals. The percentage of PTSD in Iraqi individuals ($N = 58$) is shown separately for information purposes, but it is not included in the analysis.

The results are presented in Table 2. When the three groups ($N > 100$) were compared with chi-square tests, there was no significant difference in the proportion of PTSD cases ($p > 0.1$). Similarly, Mann-Whitney U tests did not reveal significant differences in the number of potentially traumatic events ($p > 0.1$).

Table 2. Posttraumatic Stress Disorder (PTSD) and potentially traumatic events in three subsamples and in Iraqi asylum seekers.

Subsamples	**Number of Individuals with PTSD**	**Median Number of Potentially Traumatic Events**
Syria (*n* = 195)	127 (65%)	9.4 (range: 5–26)
Afghanistan (*n* = 110)	65 (59%)	8.3 (range: 5–24)
Iraq (*n* = 58)	38 (66%)	9.6 (range: 8–26)
Iraq plus other countries (*n* = 145)	82 (57%)	8.8 (range: 4–26)

Finally, we calculated the correlations between HTQ scores, demographic variables (age, education), and the number of potentially traumatic events. There was a significant positive relationship between HTQ scores and potentially traumatic events ($R = 0.40$, $p < 0.01$). The other correlations did not reach the level of statistical significance ($-0.1 < R\text{s} < 0.1$).

4. Discussion

The high occurrence of PTSD in asylum seekers in the "European migrant crisis" is consistent with results from previous studies conducted in Western countries [15–18], although such a remarkably high proportion of PTSD is an unusual and novel finding. The meta-analysis of Fazel *et al.* [15] revealed that only 9% of refugees were diagnosed with PTSD (total sample: $N = 6743$), whereas in a later analysis on a larger sample, the prevalence was 30.6% (total sample: $N = 81{,}866$) [9]. Lindert *et al.* [19] found a substantial difference between economic (labor) migrants and refugees: prevalence for depression was 20% among labor migrants and 44% among refugees, and very similar values were reported for anxiety. In Iraqi refugees located in Western countries, PTSD prevalence ranged from 8 to 37.2% and depression prevalence ranged between 28.3%–75% [20]. Meta-analytic evidence from the former Yugoslavia suggests that forced displacement represents a significant risk factor in the development of stress- and trauma-related disorders in addition to war exposure and trauma [21].

Given that we used standard methods and we recruited a considerable sample, the most likely explanation for our novel observation of very high occurrence of PTSD may be the special situation of asylum seekers in this global crisis. It is important to note that a relatively high proportion of individuals refused to participate in the interview or did not report the country of origin, possibly because of fears of persecution and prohibition from continuing their journey to Western European countries. The political uncertainty of future echoed by the mass media, multiple traumatic events before and during migration, poor psychosocial support, unmet expectations and disappointment, cultural cringe, stigmatization, and fear of rejection in the refugee determination process may play a major role in the development of PTSD. For example, Staehr and Munk-Andersen [22] reported that a combination of long waiting time and refugee determination process rejection was associated with higher rates of suicidality. Others indicated that the acceptance of asylum claims was related to the reduction of PTSD, mood, and anxiety symptoms [23–25]. In 98 adult asylum seekers in Australia, Hocking *et al.* [26] demonstrated that pre-migration trauma, social factors, and post-migration stressors were related to PTSD and depression, with a special reference to unemployment and refugee determination process rejection. Specifically, unemployed asylum seekers were more than twice as likely to develop major depressive disorder, whereas individuals experiencing at least one rejection were 1.35 times more likely to receive the diagnosis of PTSD for each additional rejection [26]. Each and every rejection can be considered as a psychological re-exposition to trauma and a future threat to be deported to the environment of terror in the war- and violence-affected country, or to the highly traumatic and hopeless milieou of long-term refugee camps. These risk factors may show an extreme occurrence and detrimental constellation in the current "European migrant crisis", which requires special attention regarding the mental health of asylum seekers.

Another key observation was that there was no significant difference in PTSD rate and the number of potentially traumatic events among the three large subsamples ($N > 100$): asylum seekers from Syria,

Afghanistan, and Iraq plus other countries. These results suggest that despite a considerable heterogeneity of cultural and social features in asylum seekers and war-exposed individuals from different countries, PTSD rate and trauma exposure may be quite homogeneous in the current global crisis, possibly due to similar pre- and post-migration stressors and traumas. Nevertheless, this conclusion should be treated with caution because we did not have an adequate sample size to separately investigate each country of origin, and to take into consideration a sufficient number of modulator variables.

This study is not without limitations. First, the cross-sectional design is not suitable for detecting causal relationships among variables. Second, because of serious limitations in our interview conditions (lack of time and resources, constant pressure, stress and even ongoing trauma-exposure at borders and transit zones), we were not able to carry out a formal diagnostic procedure for co-morbid disorders such as major depression and other anxiety disorders. Due to the same reasons, we were not able to collect many pieces of important information. Finally, the assessment was carried out according to the DSM-IV criteria because new instruments for DSM-5 were not readily available [27].

5. Conclusions

In summary, our cross-sectional data suggest that almost two-third of asylum seekers in the global "European migrant crisis" may meet the diagnostic criteria of PTSD. These data highlight the importance of social, humanitarian, and mental health services for asylum seekers, calling for an end to criminalization and dehumanization against these individuals. As pointed out by Grant-Peterkin *et al.* [28]: "Asylum seekers are often highly vulnerable, particularly if they have mental health disorders; we have a professional duty of care to ensure that their needs are appropriately met. The evidence is overwhelming from across the globe: immigration detention can be highly deleterious to both physical and mental health. Many alternatives to immigration detention exist, and these should be explored before vulnerable people are placed in such facilities. The medical profession must ensure that it does not become complicit in a system that prioritises deterrence over protection of refugees and asylum seekers".

Acknowledgments

I am indebted to the participants who devoted their time and effort to complete the interview. I am also indebted to all psychologists, social workers, and assistants at the Center who contributed to this study.

Conflicts of Interest

The author declares no conflict of interest.

References

1. Eurostat. "Over 210,000 first time asylum seekers in the EU in the second quarter of 2015." 2015. Available online: http://ec.europa.eu/eurostat/documents/2995521/6996925/3-18092015-BP-EN.pdf (accessed on 20 September 2015).

2. Kingsley, Patrick. "10 Truths about Europe's Migrant Crisis." *The Guardian*, 2015. Available online: http://www.theguardian.com/uk-news/2015/aug/10/10-truths-about-europes-refugee-crisis (accessed on 14 August 2015).
3. UNHCR. "Refugees/Migrants Emergency Response—Mediterranean." 2015. Available online: http://data.unhcr.org/mediterranean/regional.php (accessed on 20 September 2015).
4. UNHCR. "Convention and protocol relating to the status of refugees." Available online: http://www.unhcr.org/protect/PROTECTION/3b66c2aa10.pdf (accessed on 24 October 2015).
5. De Jong, Joop T. V. M., Ivan H. Komproe, Mark van Ommeren, Mustafa El Masri, Mesfin Araya, Noureddine Khaled, Willem van de Put, and Daya Somasundaram. "Lifetime events and posttraumatic stress disorder in 4 post-conflict settings." *Journal of the American Medical Association* 286 (2001): 555–62.
6. Mollica, Richard F., Keith McInnes, Charles Poole, and Svang Tor. "Dose-Effect relationships of trauma to symptoms of depression and post-traumatic stress disorder among Cambodian survivors of mass violence." *British Journal of Psychiatry* 173 (1998): 482–88.
7. Shrestha, Nirakar Man, Bhogendra Sharma, Mark van Ommeren, Shyam Regmi, Ramesh Makaju, Ivan Komproe, Ganesh B. Shrestha, and Joop T. V. M. de Jong. "Impact of torture on refugees displaced within the developing world: Symptomatology among Bhutanese refugees in Nepal." *The Journal of the American Medical Association* 280 (1998): 443–48.
8. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed. Washington: American Psychiatric Publishing, 1994.
9. Steel, Zachary, Tien Chey, Derrick Silove, Claire Marnane, Richard A. Bryant, and Mark van Ommeren. "Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: A systematic review and meta-analysis." *The Journal of the American Medical Association* 302 (2009): 537–49.
10. BBC News. "Europe migrant crisis." 2015. Available online: http://www.bbc.com/news/world-europe-32395181 (accessed on 20 September 2015).
11. Chambers, Ray L., and Chris J. Skinner, eds. *Analysis of Survey Data.* New York: Wiley, 2003.
12. Mollica, Richard F., Laura S. McDonald, Michael P. Massagli, and Derrick Silove. *Measuring Trauma, Measuring Torture: Instructions and Guidance on the Utilization of the Harvard Program in Refugee Trauma's Versions of the Hopkins Symptom Checklist-25 (HSCL-25) & the Harvard Trauma Questionnaire (HTQ).* Cambridge: Harvard Program in Refugee Trauma, 2004.
13. Lecrubier, Yves, David V. Sheehan, Emmanuelle Weiller, Pierre Amorim, Irene Bonora, K. Harnett Sheehan, Juris Janavs, and Geoffrey C. Dunbar. "The Mini International Neuropsychiatric Interview (MINI). A short diagnostic structured interview: Reliability and validity according to the CIDI." *European Psychiatry* 12 (1997): 224–31.
14. NICE. "Post-traumatic stress disorder: Management." 2005. Available online: https://www.nice.org.uk/guidance/cg26 (accessed on 12 April 2015).
15. Fazel, Mina, Jeremy Wheeler, and John Danesh. "Prevalence of serious mental disorder in 7000 refugees resettled in western countries: A systematic review." *Lancet* 365 (2005): 1309–14.
16. McLeod, Alison, and Martin Reeve. "The health status of quota refugees screened by New Zealand's Auckland Public Health Service between 1995 and 2000." *New Zealand Medical Journal* 118 (2005): 1–17.

17. Silove, Derrick, Zachary Steel, Patrick McGorry, and Peter Mohan. "Trauma exposure, postmigration stressors, and symptoms of anxiety, depression and post-traumatic stress in Tamil asylum-seekers: Comparison with refugees and immigrants." *Acta Psychiatria Scandinavica* 97 (1998): 175–81.
18. Hallas, Peter, Anne R. Hansen, Mia A. Stæhr, Ebbe Munk-Andersen, and Henrik L. Jorgensen. "Length of stay in asylum centres and mental health in asylum seekers: A retrospective study from Denmark." *BMC Public Health* 7 (2007): 288–93.
19. Lindert, Jutta, Ondine S. von Ehrenstein, Stefan Priebe, Andreas Mielck, and Elmar Brähler. "Depression and anxiety in labor migrants and refugees—A systematic review and meta-analysis." *Social Science and Medicine* 69 (2009): 246–57.
20. Slewa-Younan, Shameran, Maria Gabriela Uribe Guajardo, Andreea Heriseanu, and Tasnim Hasan. "A systematic review of post-traumatic stress disorder and depression amongst Iraqi refugees located in Western countries." *Journal of Immigrant and Minority Health* 17 (2015): 1231–39.
21. Porter, Matt, and Nick Haslam. "Forced displacement in Yugoslavia: A meta-analysis of psychological consequences and their moderators." *Journal of Traumatic Stress* 14 (2001): 817–34.
22. Staehr, Mia Antoni, and Ebbe Munk-Andersen. "Suicide and suicidal-behavior among asylum seekers in Denmark during the period 2001–2003. A retrospective study." *Ugeskr Laeger* 168 (2006): 1650–53.
23. Silove, Derrick, Zachary Steel, Ina Susljik, Naomi Frommer, Celia Loneragan, Tien Chey, Robert Brooks, Dominique le Touze, Mariano Ceollo, Mitchell Smith, *et al*. "The impact of the refugee decision on the trajectory of PTSD, anxiety, and depressive symptoms among asylum seekers: A longitudinal study." *American Journal of Disaster Medicine* 2 (2007): 321–29.
24. Davis, Rebecca Meghan, and Henry Davis. "PTSD symptom changes in refugees." *Torture* 16 (2006): 10–19.
25. Silove, Derrick, Ingrid Sinnerbrink, Annette Field, Vijaya Manicavasagar, and Zachary Steel. "Anxiety, depression and PTSD in asylum-seekers: Associations with pre-migration trauma and post-migration stressors." *British Journal of Psychiatry* 170 (1997): 351–57.
26. Hocking, Debbie C., Gerard A. Kennedy, and Suresh Sundram. "Mental disorders in asylum seekers: The role of the refugee determination process and employment." *Journal of Nervous and Mental Disease* 203 (2015): 28–32.
27. Schnyder, Ulrich, Julia Müller, Naser Morina, Matthis Schick, Richard A. Bryant, and Angela Nickerson. "A comparison of DSM-5 and DSM-IV diagnostic criteria for Posttraumatic Stress Disorder in traumatized refugees." *Journal of Traumatic Stress* 28 (2005): 267–74.
28. Grant-Peterkin, Hugh, Theresa Schleicher, Mina Fazel, Sarah Majid, Katy Robjant, Greg Smith, and Cornelius Katona. "Inadequate mental healthcare in immigration removal centres." *British Medical Journal* 349 (2014): g6627.