JOURNAL OF PSYCHOPATHOLOGY 2020;26:41-45;
doi: 10.36148/2284-0249-374

Original article

Somatization and traumatic events in asylum seekers and refugees resettled in Italy

Lorenzo Tarsitani[1], Liliana Todini[1], Valentina Roselli[1], Riccardo Serra[1], Valentina Magliocchetti[1], Dunia D'Amore[1], Bianca Della Rocca[1], Massimo Pasquini[1], Paola Massetti[2], Massimo Biondi[1]

[1] Department of Human Neurosciences, Sapienza University of Rome, Italy; [2] Department of Public Health and Infectious Diseases, Sapienza University of Rome, Italy

SUMMARY

Objectives

Individuals who experienced a forced migration, such as asylum seekers and refugees, are at elevated risk of trauma-related psychological and somatic distress as compared to non-migrated counterparts. The relationship between traumatic events and somatization is poorly explored in this population. We aimed to assess the impact of traumatic events on somatization and the possible link with stress-related vulnerability in a sample of asylum seekers and refugees.

Methods

Asylum seekers and refugees referring to the Day Service of Migration Medicine of the Umberto I Hospital for routine screening of infectious diseases were consecutively recruited. The following instruments were administered: ad hoc questionnaire for the collection of socio-demographic and migratory variables, Somatic Symptom Scale 8 (SSS-8), Life Events Check List (LEC-5), Stress-related Vulnerability Scale (SVS).

Results

Eighty-five subjects were included (males = 80, 94%; mean age = 28.3; SD = 7.4). The mean score of SSS-8 was 5.3 (SD = 5.9), with 68% of participants reporting at least one clinically significant somatic symptom. The mean LEC-5 total score was very high (9.8; SD 3.2). Bivariate correlations among SSS-8 total score, LEC-5 total score and SVS Lack of Social Support subscale score were, respectively: r= 0.347 (p = 0.002), r = 0.539 (p < 0.001). Multivariate analyses confirmed the correlation between SSS-8 total score, LEC-5 total score (β = 0.491; p = 0.01) and SVS Lack of Social Support subscale (β = 1.236; p < 0.001) to be significant over and above sociodemographic and migration-related confounders.

Conclusions

Medically unexplained somatic symptoms were associated with the number of lifetime traumatic events and with post-migratory perceived lack of social support in asylum seekers and refugees.

Key words: forced migration, traumatic events, somatization, stress, perceived social support

Received: November 30, 2019
Accepted: January 17, 2020

Correspondence
Lorenzo Tarsitani
Department of Human Neuroscience, Sapienza University of Rome, viale dell'Università 30, 00185 Rome, Italy
E-mail: lorenzo.tarsitani@uniroma1.it

Conflict of interest
The Authors declare no conflict of interest

How to cite this article: Tarsitani L, Todini L, Roselli V, et al. Somatization and traumatic events in asylum seekers and refugees resettled in Italy. Journal of Psychopathology 2020;26:41-5. https://doi.org/10.36148/2284-0249-374

Introduction

In the last two decades, an increasing number of people are forcedly displaced worldwide. In 2019, Europe hosted the largest number of international migrants. Forced migration has grown noticeably faster than voluntary migration [1].

Forced migration is an important risk factor for the development of trauma-related psychological distress and a wide range of mental disorders [2,3].

Somatization is the presentation of physical symptoms or complaints which are not based on a medical condition and are considered as a response to psychosocial stress [4]. Medically unexplained somatic symptoms are the rule rather than the exception in primary and secondary care

and they are associated with considerable disability and costs [5], independently of psychiatric and medical comorbidity [6]. Somatization among immigrants often leads to under-diagnosis and misdiagnosis of mental disorders in medical settings, increasing the barriers to the already underutilized mental health services [7]. Unrecognized and untreated mental disorders can lead to increased symptom severity and consequent emergency referrals with harmful coercive interventions and worse outcomes [8].

Several studies suggest that immigrants from low- and middle-income countries tend to express emotional distress with somatic symptoms [9]. Ethnicity, geographic origins and cultural models can shape the tendency to experience somatic distress [10]. Language and cultural differences between health care providers and migrant patients affect clinical assessment and management [11], worsening the impact of somatization.

High levels of medically unexplained somatic symptoms were found in immigrants in primary care [12,13]. Somatization scores were found higher in immigrants referred to general medicine services as compared to native patients [14].

Only a limited number of studies have been performed so far, which showed high rates of somatic complaints in refugees, ranging from 27 to 84% [11]. Lifetime exposure to traumatic events is very high in asylum seekers and refugees.

Non-immigrated patients with somatization disorders report more traumatic events with respect to non somatizers [15]. Hence, high levels of somatization following forced might be explained by trauma. Strong associations among somatization symptoms, Posttraumatic Stress Disorder [16] and complex Posttraumatic Stress Disorder [17] were shown in asylum seekers and refugees. Victims of torture and inter-human violence have a high risk of both somatization and post-traumatic symptoms [18]. However, mediating and moderating variables of the relationship between trauma and somatization are scarcely investigated.

A study on both voluntary and forced immigrants in primary care showed that patients with somatization reported more stress due to post-migratory living difficulties [19]. Post-migratory perceived stress and lack of social support might play a role in the relationship between pre-migratory traumatic events and somatization in the host country.

To date, the relationship between traumatic events and somatic symptoms, and the possible role of post-migratory stress in refugees in the general population remains unclear. There is also a lack of research on the impact of traumatic events in African refugees despite an over-representation in Europe [20].

The aim of this cross-sectional study was to assess the impact of traumatic events on somatic symptoms and the possible association with post-migratory stress-related vulnerability in a non-clinical sample of asylum seekers and refugees.

Methods

Participants

Asylum seekers or refugees referring for the first time to the Day Service of Migration Medicine of the Umberto I University Hospital in Rome for routine screening of infectious diseases were recruited from November 2017 to February 2019. Inclusion criteria were written informed consent and age 18 or older. Individuals with clinical signs of mental disorder during the assessment were referred to the Migration Psychiatry Service of our Hospital. Cultural mediators were involved when needed. This study is part of a larger epidemiological investigation which was approved by the Local Ethical Committee.

Measures

An *ad hoc* questionnaire was administered for the collection of socio-demographic and migratory variables. The Somatic Symptom Scale 8 (SSS-8) [21] was developed as an abbreviated 8-item version of the Patient Health Questionnaire 15, to assess the presence and severity of common somatic symptoms. Somatic symptoms assessed include stomach or bowel problems, back pain, headache, chest pain, asthenia and others. Each item is scored 0 to 4, with higher scores indicating greater presence and subjective impact of somatic symptoms.

The Life Events Checklist (LEC-5) [22] assesses the lifetime presence of an individual's exposure to 16 serious traumatic life events (e.g. fire or explosion, transportation accident, physical assault, sexual assault, life-threatening illness or injury). It has been widely used in cross-cultural settings and it is strongly associated with psychopathology.

The Stress-related Vulnerability Scale (SVS) [23] is a 9-item self-administered rating scale, scored on a 4-point Likert scale. It yields scores on three subscales, named 'Tension', 'Demoralization', and 'Reduced Social Support', respectively. Higher scores indicate greater subjective stress-related vulnerability. The SVS was used in both clinical [24] and non-clinical [25] samples.

Statistical analysis

Bivariate analyses were conducted for continuous variables in order to demonstrate the correlations between LEC-5 and SSS-8, SVS Lack of Social Support Subscale, sociodemographic and migration related variables. In order to test these correlations, we first analyzed the multivariate correlations between SSS-8 total score as a dependent variable and LEC-5 total score,

TABLE I. *Bivariate associations.*

	1	2	3	4	5	6	7	8	9	10	11	12
Age	1											
Sex	-0.11	1										
N children	0.40**	0.08	1									
N siblings	-0.01	0.18	-0.13	1								
Route	0.16	0.07	0.15	-0.10	1							
Prison	-0.09	-0.22*	0-.27*	0.06	-0.21	1						
Friends in Italy	-0.14	0.04	-0.06	-0.01	0.09	-0.24*	1					
Connationals in Italy	0.339**	-0.22*	0.10	-0.13	0.08	0.11	-42**	1				
SSS total	0.26*	-0.07	-0.13	-0.07	-0.06	0.10	-0.025	0.24*	1			
SVS total	0.24*	0.09	-0.14	-0.07	-0.02	0.01	0-.09	0.20	0.78**	1		
SVS supp	0.15	-0.02	-0.11	-0.12	-0.05	0.14	-0.17	0.23	0.54**	0.82**	1	
LEC total	-0.07	-0.15	-23*	-0.09	-0.13	0.31**	0.12	0.04	0.35**	-25*	-18	1

*SSS = Somatic Symptom Scale 8; SVS = Stress-related Vulnerability Scale; S Lack of Social Support S supp = SVS Lack of Social Support Subscale; LEC = Life Events Checklist; * = p < 0.05; ** = p < 0.013.*

SVS total score, SVS Lack of Social Support subscale and possible confounders as independent variables in a stepwise multivariate regression model. Secondly, a multivariate regression model was built including SSS-8 total score as a dependent variable and LEC-5 total score, SVS Lack of Social Support subscale and possible confounders as independent variables. The alpha value was set to.05; all tests were two tailed. Data were analyzed with the Statistical Package for Social Sciences (SPSS), version 17.0.

Results

Eighty-five subjects were included in the study. Two subjects denied the consent to participate. The mean age was 28.3 (SD = 7.4) (range 18-49 years); 80 (94.1%) were males. Participants had a mean education level of 8.5 years of study (SD = 4.1). The mean length of stay in Italy was 19 months (SD = 18 months). Participants were asylum seekers or refugees coming from Sub-Saharan African countries (80%), North African countries (7%) and Asia (13%). The most represented countries of origin were Nigeria (21%) and Eritrea (16%). Sixty-five immigrants (77%) arrived in Italy trough the Central Mediterranean route and 37 (44%) of them were detained for migration-related reasons.

All samples reported at least one lifetime traumatic event, with 13% reporting 5 or less traumatic events, 55% between 6 and 9 and 32% more than 9. The most common traumatic events were "combat or exposure to war-zone" (80%), followed by "witnessing sudden violent death" (79%), "physical assault" (78%) and "assault with a weapon" (77%). The mean LEC-5 total score was 9.8 (SD 3.2).

The mean score of SSS-8 was 5.3 (SD = 5.9), with 68% of participants reporting at least one clinically significant somatic symptom.

SVS mean score was 8.88 (SD = 5.44; min = 1.0; max = 22.0) with the highest score in the SVS Lack of Social Support subscale (mean=4.73; SD= 2.14; min = 1.0; max = 9.0) followed by SVS Demoralization subscale (mean =2.25; SD = 2.16; min = 0; max = 9.0).

As shown in Table I, the bivariate model showed significant correlations between SSS-8 and LEC-5 ($\beta = 0.539$; $p < 0.001$), SVS total scores ($\beta = 0.778$; $p < 0.001$), SVS Lack of Social Support subscale ($\beta = 0.539$; $p < 0.001$) and age ($\beta = 0.264$; $p = 0.015$).

The stepwise multivariate linear regression model showed SVS Lack of Social Support subscale to represent the second most predictive variable in the model after the SVS total score ($\beta = 1.092$; SE = 0.352; $p = 0.003$; tables available upon request). Further multivariate analyses were carried out including only this subscale. The final multivariate model predicting SSS total score (Tab. II) shows a significant predicting role for age ($\beta = 0.244$; SE = 0.083; $p = 0.005$), LEC total score ($\beta = 0.491$; SE = 0.184; $p = 0.010$) and SVS Lack of Social Support subscale ($\beta = 1.236$; SE = 0.270; $p < 0.001$).

Discussion

This cross-sectional observational study on young immigrated asylum seekers and refugees in Italy shows a significant association among pre-migratory traumatic

TABLE II. *Multivariate model predicting SSS total score*

	B	SE	p
Nationality	-0.162	0.077	**0.039**
Age	0.244	0.083	**0.005**
Gender	0.568	2.282	0.804
Marital Status	-0.451	0.775	0.563
N children	-1.174	0.641	0.072
N siblings	-0.025	0.171	0.885
Prison	-1.490	1.244	0.235
Friends in Italy	0.535	1.352	0.694
Route	-0.243	0.556	0.664
Connationals in Italy	0.198	0.560	0.724
SVS supp	1.236	0.270	**0.000**
LEC total	0.491	0.184	**0.010**

SVS supp = SVS Lack of Social Support Subscale; LEC = Life Events Checklist. Significant p values are highlighted in ***bold****.*

events, post-migratory reduced social support and somatic symptoms. To our knowledge, this is the first study to assess the role of both traumatic events before migration and post-migratory perceived vulnerability on somatic symptoms in forced immigrants in Europe.

A very high exposure to serious traumatic events (a mean of 9.8) was reported by our sample, which mainly consisted of young men immigrated from Sub-Saharan Africa trough the Central Mediterranean route. Another study that assessed the number of serious traumatic experiences in Africans migrated to Europe found a comparable mean of 9 events with a higher SD [20]. The several on-going conflicts in various African countries might explain these figures. Moreover, the Central Mediterranean route of migration is *per se* a complex and severe traumatic event with high risk of human rights violations and death [26]. The same study by Steel and collegues [20] found a greater number of traumatic events in men, which is in line with the prevalence of men in our sample.

The high levels of reported somatic complaints in our non-clinical and non-help seeking sample confirm the high rates of somatization found in refugees worldwide [11,16,18]. Age was found as an independent predictor of somatic symptoms, which may originate from somatic diseases instead of unexplained symptoms in older subjects [27]. However, no serious clinical condition was found on clinical assessment in our sample.

The role of traumatic events as predictors of somatic symptom levels is in line with all the studies showing the relationship between trauma and psychopathology [11,15], being somatization a response to psychological stress by definition [4].

According to the new insight on the relevance of post-migratory living difficulties in mental health of refugees [19,20], the role of SVS Lack of Social Support subscale as an independent predictor of levels of somatic symptoms presence and impact suggests that post-migratory living difficulties might mediate the impact of trauma on somatization. A bulk of data demonstrated that perceived social support reduces the noxious effects of stress on health in the general population [28]. Post-migratory living difficulties, such as social isolation and loneliness, are associated with the onset of post-traumatic stress disorder in refugees [19]. Social-related support in the host country might buffer the effect of pre-migratory traumatic events on somatization.

A note of caution about the generalizability of our findings is warranted. First, the representativeness of our sample, which consisted of young, mainly male refugees was likely limited. Also, as we studied subjects mainly immigrated from Africa, our findings might not generalize to other cultures and this issue needs to be addressed in future investigations. Also, SVS measures general perceived stress-related vulnerability, including reduced social support. A more specific assessment of post-migratory living difficulties is needed in future investigations on their role in somatization in refugees exposed to traumatic events.

In conclusion, we found that medically unexplained somatic symptoms were predicted by the number of lifetime traumatic events and by post-migratory perceived lack of social support in asylum seekers and refugees. Somatization is associated with considerable disability and it often leads to under-diagnosis of mental disorders and inadequate treatment. Somatic symptoms should be detected and treated early in traumatized forced migrants.

References

1 United Nations. International Migrant Stock 2019. Dep Econ Soc Aff 2019.

2 Tarsitani L, Biondi M. Migration and mental health: new challenges. Riv Psichiatr 2016;51:45-6. https://doi.org/10.1708/2246.24192

3 Turrini G, Purgato M, Ballette F, et al. Common mental disorders in asylum seekers and refugees: umbrella review of prevalence and intervention studies. Int J Ment Health Syst 2017;11:51. https://doi.org/10.1186/s13033-017-0156-0

4 Lipowski ZJ. Somatization: the concept and its clinical application. Am J Psychiatry 1988;145:1358-68. https://doi.org/10.1176/ajp.145.11.1358

5 Mayou R, Kirmayer LJ, Simon G, et al. Somatoform disorders: time for a new approach in DSM-V. Am J Psychiatry 2005;162:847-55. https://doi.org/10.1176/appi.ajp.162.5.847

6 Barsky AJ, Orav EJ, Bates DW. Somatization increases medical utilization and costs independent of psychiatric and medical comorbidity. Arch Gen Psychiatry 2005;62:903-10. https://doi.org/10.1001/archpsyc.62.8.903

7 Ferrari S, Burian R, Hahn E, et al. Somatization among ethnic minorities and immigrants: why does it matter to consultation liaison psychiatry? J Psychosom Res 2015;79:85-6. https://doi.org/10.1016/j.jpsychores.2015.02.011

8 Tarsitani L, Pasquini M, Maraone A, et al. Acute psychiatric treatment and the use of physical restraint in first-generation immigrants in Italy: a prospective concurrent study. Int J Soc Psychiatry 2013;59:613-8. https://doi.org/10.1177/0020764012450985

9 Lanzara R, Scipioni M, Conti C. A clinical-psychological perspective on somatization among immigrants: a systematic review. Front Psychol 2019;9:2792. https://doi.org/10.3389/fpsyg.2018.02792

10 Kirmayer LJ, Sartorius N. Cultural models and somatic syndromes. Psychosom Med 2007;69:832-40. https://doi.org/10.1097/PSY.0b013e31815b002c

11 Rohlof HG, Knipscheer JW, Kleber RJ. Somatization in refugees: a review. Soc Psychiatry Psychiatr Epidemiol 2014;49:1793-804. https://doi.org/10.1007/s00127-014-0877-1

12 Aragona M, Tarsitani L, Colosimo F, et al. Somatization in primary care: a comparative survey of immigrants from various ethnic groups in Rome, Italy. Int J Psychiatry Med 2005;35:241-8. https://doi.org/10.2190/2G8N-MNNE-PGGP-PJJQ

13 Aragona M, Rovetta E, Pucci D et al. Somatization in a primary care service for immigrants. Ethn Heal 2012;17:477-91. https://doi.org/10.1080/13557858.2012.661406

14 Bragazzi NL, Del Puente G, Natta WM. Somatic perception, cultural differences and immigration: results from administration of the modified somatic perception questionnaire (MSPQ) to a sample of immigrants. Psychol Res Behav Manag 2014;12:518-27. https://doi.org/10.2147/prbm.s55393

15 Roelofs K, Spinhoven P. Trauma and medically unexplained symptoms. Towards an integration of cognitive and neurobiological accounts. Clin Psychol Rev 2007;27:798-820. https://doi.org/10.1016/j.cpr.2007.07.004

16 Kounou KB, Brodard F, Gnassingbe A, et al. Posttraumatic stress, somatization, and quality of life among Ivorian refugees. J Trauma Stress 2017;30:682-9. https://doi.org/10.1002/jts.22244

17 Aragona M, Catino E, Pucci D, et al. The relationship between somatization and post-traumatic symptoms among immigrants receiving primary care services. J Trauma Stress 2010;23:615-22. https://doi.org/10.1002/jts.20571

18 Van Ommeren M, Sharma B, Sharma GK, et al. The relationship between somatic and PTSD symptoms among Bhutanese refugee torture survivors: examination of comorbidity with anxiety and depression. J Trauma Stress 2002;15:415-21. https://doi.org/10.1023/A:1020141510005

19 Aragona M, Pucci D, Carrer S, et al. The role of post-migration living difficulties on somatization among first-generation immigrants visited in a primary care service. Ann Ist Super Sanita 2011;47:207-13. https://doi.org/10.4415/ANN_11_02_13

20 Steel JL, Dunlavy AC, Harding CE, et al. The psychological consequences of pre-emigration trauma and post-migration stress in refugees and immigrants from Africa. J Immigr Minor Heal 2017;19:523-32. https://doi.org/10.1007/s10903-016-0478-z

21 Gierk B, Kohlmann S, Kroenke K, et al. The Somatic Symptom Scale-8 (SSS-8): a brief measure of somatic symptom burden. JAMA Intern Med 2014;174:399-407. https://doi.org/10.1001/jamainternmed.2013.12179

22 Gray MJ, Litz BT, Hsu JL, et al. Psychometric properties of the life events checklist. Assessment 2004;11:330-41. https://doi.org/10.1177/1073191104269954

23 Tarsitani L, Battisti F, Biondi M, et al. Development and validation of a stress-related vulnerability scale. Epidemiol Psichiatr Soc 2010;19:178-82. https://doi.org/10.1705/496.5891

24 Mandarelli G, Tarsitani L, Ippoliti F, et al. The relationship between alexithymia and circulating cytokine levels in subjects undergoing upper endoscopy. Neuroimmunomodulation 2010;18:37-44. https://doi.org/10.1159/000315529

25 Armando M, Fagioli F, Borra S, et al. Mental uneasiness, perceived stress and help-seeking in a non-resident university student sample. Epidemiol Psichiatr Soc 2009;18:154-60.

26 UNHCR. Central Mediterranean Route Situation, 2018.

27 van Driel TJW, Hilderink PH, Hanssen DJC, et al. Assessment of somatization and medically unexplained symptoms in later life. Assessment 2018;25:374-93. https://doi.org/10.1177/1073191117721740

28 Lakey B, Cohen S. Social support theory and measurement. In: Cohen S, Underwood LG, Gottlieb BH, eds. Social support measurements and intervention: a guide for health and social scientists. New York: Oxford University Press 2000, pp. 29-52. https://doi.org/10.1093/med:psych/9780195126709.003.0002