Traumatic events, post-migration living difficulties and post-traumatic symptoms in first generation immigrants: a primary care study

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Abstract

Objectives. To study potentially traumatic events (PTE), post-traumatic stress disorder (PTSD), anxiety, depression, somatization and post-migration living difficulties (PMLD) in primary care immigrants.

Design. Patients self-rated transculturally validated questionnaires. Those with and without PTSD were compared on all variables. The influence of the number of PTE and of PMLD on PTSD was measured.

Results. 391 patients completed the questionnaires. Prevalence of PTSD was 10.2%. PTE and PMLD were frequent in the whole sample but more common in PTSD subjects. Either the number of PTE and of PMLD significantly increased the likelihood to have a PTSD.

Conclusions. PTE, PMLD, PTSD and related conditions (anxiety, depression and somatization) are frequent among immigrants in primary care, and either PTE and PMLD significantly influence resulting psychopathology. The implications in clinical practice are discussed.

INTRODUCTION

Civilian primary care research into post-traumatic stress disorder (PTSD) in Western populations found that lifetime traumatic events were common, 32.19% of patients having a PTSD [1]. Immigrants are particularly at risk for PTSD due to a history of multiple traumatic events [2-5]. Moreover, severe post-migration living difficulties (PMLD) such as delays in processing refugee applications, obstacles to employment, racial discrimination, and loneliness, can contribute to the onset/worsening of a PTSD and to long term difficulties in these patients [6-9]. While traumas, PMLD, PTSD, anxiety and depression have been extensively studied in refugees and asylum seekers (for a systematic review see [10]), they are more rarely addressed in primary care immigrants.

Available primary care studies on Latinos show high exposure to potentially traumatic events (PTE), including political violence, and related psychopathology (post-traumatic and depressive symptoms) [11, 12]. Similar data are expected in immigrants from other regions of the world. For example, Africans and Middle-Eastern subjects are also exposed to high rates of PTE and related distress [13-16] and consequently might be at risk of PTSD. Accordingly, the few studies directly measuring PTE and PTSD in primary care immigrants coming from these areas confirm significant rates of lifetime PTE and current PTSD [e.g., 5]. Finally, a preliminary study on about one hundred primary care immigrants from different regions of the world found at least one PTE in 51.48% of the patients, 15.84% of the total sample scoring positive for PTSD; high comorbidity between PTSD, depressive, anxiety or somatization syndromes was also reported [2].

Considering: a) that current migratory dynamics in Western countries ensure that general practitioners will be asked to provide health assistance for a growing number of patients coming from different places, and b) the importance of an early detection of posttraumatic distress in migratory primary care settings, more reliable evidence on this matter is needed.

This survey studies PTE, PMLD, PTSD and related psychopathology in a larger sample of first-generation primary care immigrants from different nations. The specific aims of the study are to examine: a) the rates and types of PTE and of serious PMLD; b) rates of current PTSD and its comorbidity with other psychiatric conditions (depression, anxiety, somatization); c)
METHOD
Participants

The study was carried out at the primary care outpatient service of the Caritas Health Service, a charity organization providing free medical assistance to immigrants and people in social difficulty. The inclusion criteria for the study were: a) being a first-generation immigrant; b) age 18 or older; c) being scheduled for a first medical examination at the primary care service; d) good comprehension of at least one of the study languages (see the list below). Language comprehension was evaluated by mother-tongue cultural mediators through pre-test interviews with patients; e) not having a significant, clinically evaluated cognitive impairment that might prevent the comprehension of the administered questionnaires.

Patients were randomly selected enrolling every 15th eligible patient. They were asked to complete a self-administered questionnaire and, if accepting, entered the study sample. To reduce possible selection bias, we included outpatients attending the clinic in the morning and the evening hours, as well as in different seasons of the year: the study was carried out in February-November 2009. All patients received free health assistance independently from having accepted or not to enter the study. All participants signed a declaration of informed consent. The study was approved by the local ethical committee.

Measures

All participants were asked to complete four self-administered paper-and-pencil instruments: the Harvard Trauma Questionnaire (HTQ) [17, 18], the Hopkins Symptom Checklist [HSCL-25; 19, 20], the 21-item Bradford Somatic Inventory (BSI-21) [21, 22], and the Post-Migration Living Difficulties Questionnaire (LDQ) [8]. These four instruments were selected because they were already tested in transcultural research, were easy to administer in a busy health assistance service, and were appropriate to study PTE, PMLD and the four clinical pictures we were interested to study (PTSD, somatization, depression and anxiety). We decided to focus on these four clinical conditions because PTSD, anxiety and depression were studied together in almost all the relevant literature on migration and PTSD. On the contrary, somatization was a more recent object of study in this kind of surveys but it was considered important due to reported high prevalence and significant correlation with PTE and PTSD [23-25].

The Harvard Trauma Questionnaire is an instrument developed for Indochinese populations and later applied to other cultural groups [17, 18, 26]. The validity and reliability of the HTQ have been demonstrated in several studies [17, 27, 28]. The sections used in the present study included a scale listing nine traumatic events (material deprivation, war-like conditions, bodily injury, forced confinement and coercion, torture, being forced to harm others, disappearance, death or injury of loved ones, witnessed violence to others, and brain injury) and the 16 posttraumatic stress items originally derived from DSM-III-R criteria for PTSD [29]. The respondents were asked to indicate whether they had experienced any of the listed traumatic experiences and the extent to which they were bothered by each posttraumatic symptom in the previous week, ranging from 1 = not at all to 4 = extremely. According to the transcultural validation of the instrument [17], the cutoff was 2.5.

The Hopkins Symptoms Checklist, here administered in its 25-items version [20], is a screening instrument for depressive and anxiety symptoms extensively used in transcultural research [e.g., 30, 31]. Respondents had to rate, on a 1 to 4 range, the severity of their depressive (15 items) and anxiety (10 items) symptoms. According to previous transcultural research [30], the cutoff was 1.75.

The Bradford Somatic Inventory is a widely validated self-assessment questionnaire specifically designed for transcultural research [21, 22] and formerly used to assess somatization among groups of primary care immigrants similar to those studied herein [2, 24, 32]. The items of the BSI-21 evaluate whether some physical symptoms (e.g., headaches, fluttering or feelings of something moving in the stomach, choking sensations in the throat, aches or pains all over the body, and so on) were present in the last month, with possible answers ranging from absent (score 0) to present on more than 15 days in past month (score 2). According to previous research [22], a cutoff score of 14 was used to distinguish somatizers from non somatizers.

The Post-Migration Living Difficulties Questionnaire (LDQ) is a self-evaluated questionnaire used to assess recent adverse life experiences typical of migration [8]. It consists of a list of 24 possible post-migration living difficulties and respondents are requested to indicate the extent to which they were troubled by any of these living problems, ranging on a five-points scale from “no problem at all” to “a very serious problem”. According to previous studies [8, 33, 34], the number of serious or very serious problems was considered in the statistical analyses.

All instruments were translated from English into eight languages: Arabic, Bengali, Chinese, French, Italian, Portuguese, Romanian, and Spanish. These languages were selected because they were those spoken by the majority of patients according to the epidemiological data of our centre in the previous year. Content comparability was verified through blind back-translation procedures. In the specific groups of immigrants tested in our sample a psychometric validation of the instruments was not available. Nevertheless, the same assessment questionnaires had been successfully used in previous research on comparable populations of primary care immigrants [2, 23-25, 32].

Information on gender, age, length of stay in the hosting country, educational level, and immigrant status was collected from all participants.
Data analysis

Descriptive statistics were calculated and expressed as Mean ± Standard Deviation. The SPSS statistical program was used for bivariate and multivariate analyses.

We stratified bivariate analyses by presence/absence of PTSD. Student’s t tests, \( \chi^2 \) tests and Fisher tests were used to analyze differences in socio-demographic, general and psychopathological variables (rates of depression, anxiety and somatization) between subjects with PTSD and subjects without PTSD. Differences in the mean number of PTE and of PMLD were analyzed by means of Student’s \( t \) test. The number of PTE and PMLD was compared in the two groups by means of \( \chi^2 \) test.

Multiple logistic regression analyses were used to predict current PTSD. The influence of any pre-migratory and post-migratory event as well as the total number of PTE and of PMLD on the likelihood of reporting a PTSD was independently measured. Age, gender, duration of stay in Italy, educational level, migratory status, and presence of depressive, anxiety and somatization syndromes were all included as covariates.

RESULTS

Four-hundred and forty-three patients were asked to fulfill the questionnaires. Of these, 31 patients (6.99%) refused, lack of time being the most frequent reason. Four-hundred and twelve patients accepted to enter the study. Of these, 21 (5.09%) did not complete the questionnaires due to fatigue or inattention and were excluded. A total of 391 (94.9%) duly completed the
The mean age was 37.58 ± 11.44 (range 18-79 years); 245 (62.7%) were males. Patients had a mean education level of 10.6 years of study (± 4.15). The mean length of stay in Italy was 4.09 (range 2 months - 35 years, in 69.3% of patients length of stay being less than five years). Patients were first-generation immigrants coming from several countries of Asia (22.1%), Africa (28.2%), Latin America (6.7%) and Eastern Europe (43.1%). The majority of subjects were Romanian (30.9%), followed by Chinese (7.4%) and Bangladeshhi (6.1%). Patients were also categorized according to their “migratory status” in: patients with regular visa, neo-communitarians, undocumented patients (illegal), and permission seekers. The majority of subjects (133 patients; 34.3%) were “neo-communitarians” (subjects from countries of Eastern Europe which had recently entered the European Union): even without a legal status, due to European rules they were not at risk of being expelled. One-hundred and thirty-six patients (35.1%) had no legal status (undocumented), and lived illegally in Italy, usually in poor social conditions. During the study, neo-communitarians and undocumented subjects were in similar poor socio-demographic conditions and both faced difficult access to free health assistance. One-hundred and four subjects had a regular residence permit (undocumented), and lived illegally in Italy, usually in poor social conditions. During the study, neo-communitarians and undocumented subjects were in similar poor socio-demographic conditions and both faced difficult access to free health assistance. One-hundred and four subjects had a regular residence permit (undocumented), and lived illegally in Italy.

In the whole sample, 40 patients (10.2%) showed HTQ symptoms scores exceeding the clinical cut-off for PTSD. All PTSD patients had at least another psychiatric diagnosis: depression 97.5%, anxiety 92.5%, somatization 80%.

Gender, age, length of stay in Italy, educational level, and migratory status were not statistically different in subjects with PTSD compared to those without PTSD (Table 1). The number of both PTE and “serious” or “very serious” PMLD were significantly higher in patients with PTSD (Table 1). They were also significantly more likely to exceed the cut-off for depressive, anxiety and somatization syndromes (Table 1). All the PTE and “serious” or “very serious” PMLD (with the exclusion of “communication difficulties” and “interviews by immigration”) were significantly more frequent in patients with PTSD. Among PTE, “torture” was the event with the most relevant effect on the likelihood of having PTSD (OR: 7.26, IC 95%: 2.38-22.2, p = 0.001), followed by “forced confinement and coercion” (OR: 4.56, IC 95%: 1.71-12.16, p = 0.002). The most relevant PMLD were “loneliness and boredom” (OR: 1.9, IC 95%: 1.33-2.73, p = 0.000), “poor access to emergency medical care” (OR: 1.71, IC 95%: 1.29-2.29, p = 0.000), and “poor access to counselling services” (OR: 1.64, IC 95%: 1.21-2.23, p = 0.002).

As shown in Table 2, there was a significant positive correlation between either PTE and PMLD exposure and the likelihood to exceed the cut-off for PTSD. Such positive correlations remained significant after adding several covariates (including psychiatric comorbidity).
the odds ratios being 1.31 with a confidence interval of 1.08-1.6, and 1.19 with a confidence interval of 1.09-1.30, respectively.

**DISCUSSION**

This study found that potentially traumatic events (PTE), post-migration serious living difficulties (PMLD), and related psychopathology (PTSD, depression, anxiety and somatization) are common in first generation immigrants attending primary care services dedicated to migration and poverty.

Specifically, 60.6% of patients reported at least one PTE, multiple PTE being frequent. As expected, the most common trauma reported was “material deprivation” (32.7%), which is often one main reason to emigrate. The other most frequent PTE were, respectively, “disappearance, death or injury of loved ones”, “bodily injury”, “war-like conditions”, “witnessed violence to others”, “torture”, and “forced confinement and coercion”. Such kind of PTE are usually reported with high frequency in selected populations of immigrants like refugees and asylum seekers, while previous findings on primary care immigrants are conflicting. This study reports levels of PTE consistent with those reported in primary care Latinos [11], lower than those found in asylum seekers [34] and in some [35, 36] but not all [34] samples of refugees, higher than in regular immigrants [34] and primary care Mexican immigrants [12]. Although differences in the assessment methods might have influenced this variability, the characteristics of the samples are also important: study populations reporting lower rates of traumatic events were mainly based on regular, “documented” immigrants, while Eisenman et al. [11], Carrer et al. [2], and the present study selected mixed samples with a significant number of undocumented immigrants (about 35% in our study).

Our hypothesis is that PTE might be more similar in undocumented immigrants, refugees and asylum seekers than in documented immigrants, and this might explain while studies focused on mixed populations have reported levels of PTE which are intermediate between the high levels found in refugees and the lower levels found in “regular” immigrants. Further studies comparing PTE in refugees, undocumented and regular economic immigrants are needed to test this hypothesis.

In any case, our data provide evidence that a substantial proportion of primary care immigrants should be considered at risk due to their traumatic history, and thus in need of protection and heal.

According to such a psychotraumatic risk, we found that 10.2% of our patients scored positive for current PTSD, a finding consistent with previous reports [2, 5, 11]. Moreover, the number of PTE significantly increased the risk of PTSD independently from covariables. This is in line with previous research showing a “cumulative” effect of trauma, in the sense that a greater number of traumatic experiences is an additional risk factor increasing the vulnerability to psychopathology either in Western citizens [37, 38] and in adult non-Western populations [24]. Finally, although all PTE significantly increased the likelihood of having a PTSD, two of them ("torture" and “forced confinement and coercion”) were more relevant than the others. This suggests that not only the number of PTE, but also qualitative features like the kind of experience might be relevant for the onset of subsequent PTSD. Further studies should address possible differences in the intrinsic psychotraumatic effect of PTE, for example distinguishing intentional (i.e., man-made) from non-intentional (e.g., material deprivation) traumatic experiences.

In our study the PTSD always co-occurred with depression, anxiety and/or somatization. This confirms early reports of high comorbidity between such syndromes [2] and supports previous suggestions that in case of histories of recurrent traumatic events the PTSD is part of a complex psychic and existential reaction presenting with many interrelated symptoms [39, 40]. However, our finding that somatization does not increase significantly the likelihood of having a PTSD when the interaction with the other variables is considered contrasts previous findings [24], suggesting that the relationship between somatization and PTSD may be particularly complex and more problematic than previously thought.

Finally, we found that serious/very serious PMLD were more frequently reported in patients with PTSD and that their number significantly increased the risk of having a PTSD. This is in line with previous research on either refugees/asylum seekers [e.g., 6-9] and primary care immigrants [2, 41]. In our PTSD sample the most relevant PMLD were “loneliness and boredom”, “poor access to emergency medical care”, and “poor access to counselling services”, suggesting that social isolation and perceived lack of medical and welfare support are key factors for the mental health of psychotraumatized patients. This is particularly relevant because in our study all patients (the “undocumented” and “neo-communitarians” groups included) actually had the right to receive emergency medical care from the National Health Service, and to access counselling services (including those organized by non governmental and charitable organizations). This suggests that it is not the abstract possibility, but rather the actual ability to find the appropriate information and to use it in order to concretely access the needed service, that might be particularly problematic in these vulnerable patients. Accordingly, programs aimed to facilitate pathways to care for patients with PTSD should be implemented.

The limitations of our study include potential transcultural measurement error and sampling bias. Although widely used in previous transcultural research and translated with standard back-translation procedures aimed at preserving conceptual equivalence, their psychometric performance in the current study was not tested.

Moreover, the generalization of our findings is restricted to those Western first-line primary care services specifically dedicated to immigrants in difficult social conditions. Indeed, they cannot be directly generalized to: a) all the primary care services, because in our sample the number and severity of PMLD were probably higher than in the general primary care population; b) the general population of immigrants, because our subjects were selected in a medical context; c) selected samples...
of high-risk immigrants (e.g., refugees, asylum seekers, detained) because the migratory status of our patients was quite heterogeneous.

Other limitations include the lack of a psychiatric diagnostic interview to confirm the results of the self-administered questionnaires.

CONCLUSION

In conclusion, this study found significant rates of PTE, PMLD, and consequent psychopathology in primary care patients visited in a Western service dedicated to immigrants in social difficulties. Accordingly, general practitioners (particularly those working in services for immigrants) should pay particular attention to the screening of PTE, PMLD and current psychopathological distress in first generation immigrants, independently from having or not a status of refugee. An early detection may offer the opportunity to reduce psychopathological morbidity, to avoid the risk of iatrogenic effects in non-recognized PTSD and to implement either first-line PTSD treatment approaches and collaborative care approaches with mental health consultants.

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Conflict of interest statement

There are no potential conflicts of interest or any financial or personal relationships with other people or organizations that could inappropriately bias conduct and findings of this study.

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