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Post-migration living difficulties as a significant risk factor for PTSD in immigrants: a primary care study

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ABSTRACT

BACKGROUND: recent research shows that severe/very severe post-migration living difficulties (PMLD) have a negative impact on the mental health and social integration of refugees and asylum seekers. This study focuses on the role of PMLD in primary care "ordinary" immigrants.

METHODS: 443 primary care immigrants were asked to complete a self-administered questionnaire measuring the number and severity of pre-migratory potentially traumatic events (PTE), PMLD, and the current prevalence of a post-traumatic stress disorder (PTSD). The frequency of PMLD was assessed in the whole sample and compared in patients with and without PTSD. The effect of the number of PMLD on the risk of having a PTSD was studied by means of a regression analysis, adjusted by the number of PTE.

RESULTS: 391 patients completed the questionnaire and were enrolled into the study. The prevalence of PTSD was 10.2%. In the whole sample the most frequent PMLD were "no permission to work" (38.6%) and "poverty" (34.5%). All PMLD (except "communication difficulties") were more frequent in patients with a PTSD. The number of PMLD significantly increased the likelihood to have a PTSD independently from PTE.

CONCLUSIONS: severe/very severe post-migration living difficulties (PMLD) increase significantly the risk of PTSD in primary care "ordinary" migrants. Our hypothesis is that they have a retraumatizing effect on individuals who are already vulnerable and with a low capacity to handle resettlement stress due to their previous traumatic history. The implications in clinical practice and for immigration policies are discussed.

Key words: PTSD, Family medicine, Immigrants, Social difficulties, Ethnic minorities

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INTRODUCTION

Italy is a country with a rather recent history of immigration and with a significant number of first-generation immigrants. The migratory dynamics ensure that general practitioners are asked to provide health assistance for a growing number of individuals from diverse cultural and ethnic backgrounds. In this paper we call "ordinary" a representative population of immigrants living in Italy, who are mostly first-generation immigrants coming from different regions of the world. This population is highly heterogeneous, differing, for example, in their: a) migratory history and reasons (mostly economical, but also family-related, political, religious, etc.); b) social and

economical conditions (ranging from diplomats and managers to homeless and jobless individuals); c) migratory status in Italy (some have a regular visa for economical or other reasons, some are granted a refugee status, some are asylum seekers, some are irregular in the host country and have no identification documents); d) accessibility of the National Health System (NHS) (some are entitled to the full health care rights granted to Italian citizens, including the primary care service, others have access only to emergency and specialist care). As in many Western countries, in Italy some free-access medical services are supported/organized by non-governmental organizations (NGO), Charities and other non-profit agencies that address specifically those immigrants that find it difficult to access the National Health Service (NHS) because: a) their legal status does not permit them to access regularly in the National Primary Care Service; b) they experience difficulties in locating the service due to social difficulties and isolation, poor knowledge of the organization of the services and of their rights, or poor knowledge of Italian. The present study was performed in one of these services and consequently the studied population is a subset of the general population of ordinary immigrants with an expected higher prevalence of social difficulties.

Previous studies suggest that immigrants are at risk for Post-Traumatic Stress Disorder (PTSD) due to a history of multiple pre-migratory potentially traumatic events (PTE) (1-4). Moreover, severe post-migration living difficulties (PMLD) such as delays in processing refugee applications, difficulties in dealing with immigration officials, obstacles to employment, racial discrimination, and loneliness, can contribute to the onset/worsening of a PTSD and to long term difficulties in these patients (5-9). A significant effect of the post-migratory social difficulties on either the post-traumatic symptoms and the social integration process has been mostly shown in studies focusing on selected samples of immigrants (refugees, asylum seekers, detainees). To our knowledge there is only one study directly measuring the interrelation between PMLD and post-traumatic symptoms in primary care ordinary immigrants (4). In such a study, a diagnosis of PTSD was suggested in 15.84% of the patients. In the whole sample the PMLD were frequent, 84.15% of the patients reporting at least one serious/very serious post-migration living difficulty, with a mean number of PMLD for person of 5.42 ± 4.94. The most frequent PMLD were "no permission to work" (47.52%), "not being able to find work" (38.61%), "worries about family back at home" (34.65%), "poverty" (33.66%), "unable to return home in emergency" (32.67%), and "worries about not getting treatment for health problems" (32.67%). Moreover, a significant relationship between the number of PMLD and the scores at the questionnaire measuring post-traumatic symptoms was found (4). However, the study was only a preliminary survey on about one hundred patients, and considering the importance of these data for the understanding of the social factors underpinning PTSD in ordinary immigrants, more reliable evidence is needed.

This survey was therefore focused on the association between PMLD and PTSD in a larger sample of ordinary immigrants visited in a primary care centre dedicated to immigrants having difficult access to the NHS.

The specific aims of the study are to: a) examine the frequency of PMLD in the whole sample; b) examine the differences in their distribution in patients with and without PTSD; and c) assess the influence of the number of PMLD on the risk of having a PTSD, adjusting for the number of PTE as a possible influencing variable.

METHODS

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. This outpatient service was selected for the study because it is situated close to the railway station, in an area with high density of immigrants, and also because it is one of the Italian sites for immigrants care with the longest history and the biggest expertise.

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 understanding of at least one of the study languages; e) being able to understand the administered questionnaires.

Based on a randomization list, every 15th patient who was on a first visit to our service was approached. Those fulfilling the inclusion criteria were requested to enter the study. Patients agreeing to the study were included in the study sample and were asked to complete self-administered questionnaires. 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. All patients received free health assistance independently from having accepted or not to enter the study. All participants signed a declaration of informed consent.

Four-hundred and forty-three patients were asked to fulfil the questionnaires. Of these, 31 patients (6.99%) refused and consequently were not enrolled in the study. The main reason to refuse was lack of time. Four-hundred and twelve patients accepted to enter the study. Of these, 391 (94.9%) duly completed the questionnaires and were included in the statistical analysis.

Measures

All participants were asked to complete a self-administered questionnaire including the two instruments analyzed in this study: the Harvard Trauma Questionnaire (HTQ (10, 11)), and the Post-Migration Living Difficulties Questionnaire (LDQ (5)). These instruments were selected because they were already tested in transcultural research and were appropriate to study PTE, PMLD and PTSD in a health assistance service like ours.

The Harvard Trauma Questionnaire was developed for Indochinese populations and later applied to other cultural groups. Its validity and reliability has been demonstrated in several studies (10, 13). 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 post-traumatic stress items originally derived from *DSM-IIIR* criteria for PTSD (14). The respondents were asked to indicate whether they had experienced any of the listed traumatic experiences in the past (it is implicit but not specified that they occurred in the pre-migratory phase), 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 (10), the cutoff for the diagnosis of PTSD was 2.5.

The Post-Migration Living Difficulties Questionnaire (LDQ) is a self-evaluated questionnaire used to assess recent adverse life experiences typical of migration (5). 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*". Accordingly to previous studies (e.g., 5, 15), only 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.

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, χ^2 tests and Fisher tests were used to analyze differences in socio-demographic variables between subjects with PTSD and without PTSD. Differences in the mean number of PMLD were analyzed by means of Student's t test. The number of PMLD was compared in the two groups by means of χ^2 test.

A multiple logistic regression analysis was used to evaluate the influence of the number of PMLD on the likelihood of reporting a PTSD. Age, gender, duration of stay in Italy, educational level, migratory status, and number of PTE were included as covariates.

RESULTS

Socio-demographic characteristics

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 4.35 ± 5.11 years. All patients were first-generation immigrants coming from several countries of Asia (22.1%), Africa (28.2%) and Latin America (6.7%), as well as from Eastern Europe (43.1%). The majority of subjects were Romanian (30.9%),

followed by Chinese (7.4%) and Bangladeshi (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 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 (26.8%); fifteen subjects (3.9%) were permission-seekers.

Post-migration living difficulties

Two hundred and eighty-eight patients (73.65%) reported experiencing at least one serious/very serious PMLD, the most common being "no permission to work" (38.6%), "poverty" (34.5%), "not being able to find a work" (33.8%), "unable to return home in emergency" (32%), "worries about family back at home" (29.9%) (Table 1). The mean number of PMLD in subjects having experienced them was 6.48 (±4.73). It should be specified that in the Italian context, no permission to work refers to the permission to legally work, which is related to the legal status and thus is impossible for the undocumented immigrants. However, it is not uncommon that illegal immigrants find a job that being not regulated by a contract is more risky and unprotected.

Post-Traumatic Stress Disorder

In the whole sample, 40 patients (10.2%) showed HTQ symptoms scores exceeding the clinical cut-off for PTSD. There was no difference in gender, age, length of stay in Italy, educational level, and migratory status in subjects with PTSD compared to those without PTSD (Table 2).

Relationship between PMLD and PTSD

The number of PMLD was significantly higher in patients with PTSD (Table 1). All the PMLD except "communication difficulties" were significantly more frequent in patients with PTSD (Table 1). As shown in Table 3, PMLD significantly increased the risk of having a PTSD, also after adding covariates (including the number of PTE).

DISCUSSION

This study addressed the role of serious/very serious post-migration living difficulties (PMLD) in a sample of 391 first-generation primary care immigrants and compared the relative frequency of PMLD in patients with and without a diagnosis of PTSD.

We found high rates of exposure to post-migration serious living difficulties (PMLD), and a significant association between such exposure and PTSD.

Specifically, 73.65% of patients reported at least one serious/very serious post-migration living difficulty (PMLD), with a mean number of 6.48 PMLD in patients experiencing them. This evidence confirms that PMLD are a common problem among immigrants, particularly those referring to Charity organizations (4). The selection of patients on the basis of their difficult access to the National Health Service facilities is very likely to be a powerful factor responsible for this high frequency of PMLD. In fact, patients with a difficult access to medical assistance are also more likely to experience other social difficulties. A comparison with an unselected sample of ordinary immigrants is thus strongly needed in further research.

The evidence that the most common PMLD were related to job difficulties and poverty, which confirms previous studies on smaller samples (4), might be interpreted as a challenge to the usual debate focused on strictly cultural factors (e.g. communication difficulties, belonging to different cultural backgrounds, defense of the traditional identity). Our findings show that the main concerns for migrants referring to our centres are related to four major groups of PMLD: job/economical problems, worries about the home country (about the family still there, about the impossibility to return back in case of emergency), isolation (separation from the family, loneliness), and concerns about medical assistance. The last point was somehow expected in a sample of primary care patients. The other three groups of PMLD suggest that general social/economical difficulties and the migratory threat to the dynamics of the familiar mutual support are

TABLE 1

SERIOUS/VERY SERIOUS POST-MIGRATION LIVING DIFFICULTIES (PMLD) IN THE WHOLE SAMPLE AND IN PATIENTS WITH AND WITHOUT A PTSD

	ALL (N=391)		PTSD (N=40)		NO PTSD (N=351)		
Number of PMLD	M	SD	M	SD	M	SD	STUDENT'S T TEST
	4.77	4.96	10.98	6.07	4.07	4.29	*
PMLD (ITEMS)	N	%	N	%	N	%	X^2
Communication difficulties	54	13.8	9	22.5	45	12.8	*ns*
Discrimination	55	14.1	10	25	45	12.8	***
Separation from family	98	25.1	19	47.5	79	22.5	***
Worries about family back at home	117	29.9	25	62.5	92	26.2	***
Unable to return home in emergency	125	32	25	62.5	100	28.5	***
No permission to work	151	38.6	29	72.5	122	34.8	***
Not being able to find work	132	33.8	27	67.5	105	29.9	***
Bad job conditions	86	22	18	45	68	19.4	***
Being in detention	34	8.7	8	20	26	7.4	**
Interviews by immigration	26	6.6	6	15	20	5.7	*
Delays in processing your application	57	14.6	14	35	43	12.3	***
Conflict with immigration officials	28	7.2	7	17.5	21	6	**
Fears of being sent home	92	23.5	19	47.5	73	20.8	***
Worries about not getting treatment for health problems	101	25.8	27	67.5	74	21.1	***
Poor access to emergency medical care	76	19.4	25	62.5	51	14.5	***
Poor access to long term Medical care	73	18.7	21	52.5	52	14.8	***
Poor access to dentistry care	80	20.5	17	42.5	63	17.9	***
Poor access to counselling services	48	12.3	18	45	30	8.5	***
Little government help with welfare	65	16.6	17	42.5	48	13.7	***
Little help with welfare from Charities (eg. Red Cross, St Vincent de Paul, etc)	31	7.9	11	27.5	20	5.7	***
Poverty	135	34.5	25	62.5	110	31.3	***
Loneliness and boredom	90	23	27	67.5	63	17.9	***
Isolation	64	16.4	20	50	44	12.5	***
Poor access to the foods you like	60	15.3	15	37.5	45	12.8	***

PMLD = serious/very serious post-migration living difficulties; PTSD = Post-Traumatic Stress Disorder; The statistical comparison is between PTSD and no PTSD; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

common and notable factors in the self-perception of our immigrants' main living difficulties. As a consequence, we recommend that future studies should be more focused on these variables.

About 10% of our patients scored positive for current PTSD, a finding consistent with previous reports (2, 4, 16). In this study subjects with and without a PTSD had similar gender distribution, age, educational level and migratory status, while they differed significantly in the likelihood of having experienced PMLD. In particular, those patients with a diagnosis of PTSD were significantly more likely to have experienced at least one serious or very serious PMLD, and all the PMLD except communication difficulties were significantly more frequent in PTSD patients. Finally, the number of PMLD significantly increased the risk of having a PTSD and such an increased risk persisted after considering possible covariates including the pre-migratory

TABLE 2

SOCIODEMOGRAPHIC VARIABLES IN PATIENTS WITH AND WITHOUT A PTSD

	PTSD (N=40)		NO PTSD (N=351)		
Gender	**N**	**%**	**N**	**%**	X^2
Men	23	57.5	222	63.2	*ns*
Women	17	42.5	129	36.8	
Age	**M**	**SD**	**M**	**SD**	**STUDENT'S T TEST**
	37.78	10.95	37.56	11.51	*Ns*
Duration of stay in Italy (years)	**M**	**SD**	**M**	**SD**	**STUDENT'S T TEST**
	4.49	7.07	4.05	4.83	*Ns*
Educational level (years)	**M**	**SD**	**M**	**SD**	**STUDENT'S T TEST**
	11	4.33	10.55	4.13	*Ns*
Migratory status*	**N**	**%**	**N**	**%**	X^2
Neo-communitarians	19	47.5	114	32.5	*Ns*
Regular visa	8	20	96	27.4	
Permission seekers	2	5	13	3.7	
Undocumented	10	25	126	35.9	

*Neo-communitarian status denotes having come from Eastern European countries recently admitted to the European Union; Permission-seekers are those individuals that applied for a regular visa but had not yet received a reply at the time of the study.

traumas. These findings are consistent with previous studies that stressed the role of PMLD in increasing the risk of posttraumatic symptoms in detained immigrants, asylum seekers and refugees with temporary protection visa, also showing that severe PMLD and consequent psychopathology were reduced in "regular" immigrants and in refugees with permanent protection visa (15, 17). Our study extends this evidence beyond the high-risk populations of refugees, asylum seekers and detainees studied in previous research. In fact, our data confirm preliminary evidence (4) that the PMLD are significant risk factors for PTSD even in ordinary primary care immigrants.

TABLE 3

INFLUENCE OF THE NUMBER OF PMLD ON THE RISK OF HAVING A PTSD

	B	SE	OR	IC 95%
Number of PMLD	0.22	0.04	1.24*	1.14-1.35

Logistic regression analysis. Age, gender, duration of stay in Italy, educational level, migratory status, and number of potentially traumatic events included as covariates. PMLD = serious/very serious post-migration living difficulties. * $p < 0.001$.

The following limitations of the study should be considered:

First, although the Harvard trauma list and the PMLD Questionnaire are designed to assess pre-traumatic and post-traumatic events, respectively, the patient reads the time frame considered in the general presentation but do not specify the timeframe in which the event effectively occurred.

Secondly, being this a cross-sectional study, the evaluation of PMLD as a possible risk factor for PTSD is based on the theoretical assumption that the relation is from events to symptoms. In fact, longitudinal studies assessing the temporal relationship between the available measures are needed.

In conclusion, this study found: a) that about three quarters of the ordinary immigrants visited in primary care centres dedicated to immigrants with difficulties in accessing the normal healthcare facilities report serious post-migration living difficulties (PMLD); b) that about 10% of patients are to be considered cases of PTSD; c) that primary care immigrants with PTSD report significantly higher levels of PMLD than those without a PTSD; d) that the number of PMLD is a significant risk factor for PTSD. The main implications of this evidence are two.

In clinical practice, previous research suggested that in some cases primary care physicians tend to under-identify mental health problems (18), that this tendency is particularly strong in immigrants presenting with somatization (19, 20), and that somatization being significantly

correlated to either PMLD and PTSD (21, 22) might be considered as a possible way to express a covert PTSD. Accordingly, our finding suggests that clinicians working in primary care should be trained: a) to consider PMLD among the risk factors to be assessed; b) to be more sensitive and actively inquire about posttraumatic symptoms; c) to familiarize with easy-to-handle selective screening instruments for their assessment; d) to implement first-line PTSD treatment approaches and collaboration with mental health consultants; and e) to facilitate the involvement of the social services in the management of immigrants in difficult living conditions.

The second implication is on the role of health professions in monitoring the interplay of immigration policies and mental health outcomes. We found that serious PMLD including discrimination, isolation and boredom, as well as material difficulties (unemployment/bad job; poor access to social and health assistance; problems with the request of permission/protection) were significantly related to PTSD. Although the pre-migration traumatic exposure is certainly an earlier key risk factor for subsequent onset of a PTSD, in many cases the posttraumatic symptoms arise only in the host country. In our observation, this is due to serious PMLD having a retraumatizing effect on individuals who are vulnerable and with a low capacity to handle resettlement stress due to their previous traumatic history (which is consistent with studies showing that those who have already suffered other traumatic experiences are more vulnerable to new traumas (23, 24)). Moreover, our findings support preliminary evidence that this applies not only to refugees and other high risk subpopulations, but also to ordinary primary care immigrants in social difficulties (4). In the present study a significant part of the sample was of undocumented, illegal immigrants who are at high risk because they face serious living difficulties without having access to the social protection and are also more exposed to the risk of being arrested only for their legal status (all the available scientific literature being concordant in asserting that detention is a fundamental retraumatizing factor (25)). While the eradication of the causes of pre-migratory traumas would be a powerful primary prevention but it is very difficult to be accomplished in practice, recent research suggests that those politics enhancing the social protection of immigrants in the host country are powerful instruments reducing PMLD and consequent posttraumatic psychopathology (6, 8). As a consequence, based on the reported evidence, we suggest that increasing the levels of social protection is very important not only at the humanitarian level, but also as a sanitary action of concrete mental illness prevention, and that this applies not only to refugees but also to the ordinary immigrants that are more exposed to social risk factors.

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