Journal of Public Health: From Theory to Practice
https://doi.org/10.1007/s10389-021-01575-1

ORIGINAL ARTICLE

Mental health in migrants contacting the mental health operational unit of the National Institute for Health, Migration and Poverty (NIHMP): preliminary data

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Received: 16 October 2020 / Accepted: 19 April 2021

Abstract

Aim Migration can lead to an increase in stress rates and can impact mental health, especially in certain migrant groups. Nonetheless, mental health needs and the importance of public health are not well captured in most studies using national samples. This study aimed to show the correlation between mental disorders, socio-demographic and cultural aspects among migrants.

Subject and methods One hundred nineteen migrants, applying for assessment to the Mental Health Operational Unit of the National Institute for Health, Migration and Poverty (NIHMP) in Rome, were recruited.

Results Migrants frequently reported mood disorders (mainly women). Men reported PTSD, somatization and adjustment disorders.

Conclusions Over time, diverse factors may produce a decline in an initially healthy migrant status. The research unveils a new focus on the psychopathology of migrants accessing the NIHMP, with important implications for migrants' mental health treatment and prevention.

Keywords Migration · Mental disorders · Depressive disorders · Anxiety disorders · Somatization · Post-traumatic stress disorder

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Published online: 17 May 2021

Introduction

The experience of migration can be stressful and impact on mental health; therefore, the prevalence of some mental disorders may be increased in specific migrant groups (Bhugra et al. 2014; Patel et al. 2017). Albeit the process of migration can be arbitrarily divided into three stages, i.e. pre-migration, migration and post-migration, the whole process can lead to a spectrum of mental health disorders. According to the stress–vulnerability model, on the one hand, we have stressors, including one or more of the following: the end of the links with their country of origin, the loss of social status and network, a sense of inadequacy because of language barriers, unemployment, financial problems, a sense of not belonging, feelings of exclusion and loss of interest in entering into a relationship with others. Hence, migrants might experience a condition similar to bereavement, caused by the loss of their previous social network, relationships and culture (Gramaglia et al. 2017). On the other hand, we have vulnerability-related issues, as individual and psychosocial variables, which may also play a role in determining mental health status (Lindert et al. 2008). Migration is not a homogeneous process, starting from the reason for migration, which can span from a choice of personal growth to political pressures, poverty, terrorism, displacement, war or religious reasons (Bhugra et al. 2014). Moreover, the migration-related stress experiences are deeply different in primary, secondary and tertiary migrants.

Overall, migrants might have higher prevalence rates of psychopathology than the host population, and particularly of psychosis and schizophrenia (Bhugra et al. 2014; Fearon et al. 2006). Notably, increased risk of psychosis also involves second-generation immigrants (Cantor-Graae and Pedersen 2007). Immigrants have a strongly increased risk for schizophrenia, which can be associated with stress factors, such as transculturation stress or culture shock, traumatic experiences before departure or during the migration journey, post-migration difficulties, including social isolation and exclusion (Fearon et al. 2006). In addition to schizophrenic psychosis, other psychiatric disorders which are often found in migrants are the following: affective disorders (Veling et al. 2008), including depression (which may not be easy to diagnose because in many languages there are no words to describe depression-related feelings) (Virupaksha et al. 2014), somatization disorders (Ferrari et al. 2015), post traumatic stress disorder (PTSD) (Bustamante et al. 2017), alcohol and substance-related disorders (Bécares et al. 2011). Last, a high frequency of self-harm behaviours has been reported in migrants and suicidal ideation, which is widely acknowledged to be a major risk factor for suicidal behaviour and suicide, seems to be particularly high in first-generation immigrants (Beutel et al. 2016).

The vulnerability of migrants regarding mental health is recognized. Nonetheless, mental health needs and the importance of public health interventions for many small communities are not well captured in most studies using national samples. In this research, we are trying to address this gap in the literature, focusing on the relationship between settlement experiences and mental health and wellbeing for migrants in Italy.

Therefore, this study aims to assess and describe the main features and psychopathological symptoms in a group of first-generation migrants contacting the National Institute for Health, Migration and Poverty for help.

Methods

Setting

The National Institute for Health, Migration and Poverty (NIHMP) was established by law in 2006, and in 2012, it was identified as the national referral centre for migration and poverty-related social and health care issues and transcultural mediation in the healthcare field. The NIHMP assists migrants in three different settings: (a) in emergencies, where primary assistance is provided to migrants in arrival areas, in close collaboration with other social and health care actors and under the supervision of the Prefectures involved; (b) in the initial process of social inclusion of newly arrived migrants; (c) in metropolitan areas when social exclusion is reported.

The NIHMP represents a referral point for Italian and migrant disadvantaged people, refugees, asylum seekers, homeless people, victims of prostitution trade, unaccompanied minors, women with female genital mutilations and victims of torture.

Participants

One hundred nineteen migrants were recruited (including 102 males and 17 females), in the period between the 1st of December 2016 and the 30th of November 2017, among those applying for assessment to the Mental Health Operational Unit of the National Institute for Health, Migration and Poverty (NIHMP) in Rome, Italy.

After the initial interview, migrants were informed about the design of the study and asked about their willingness to participate in the research, on a voluntary and anonymous basis, after signing informed written consent. Approval for the research was obtained from the Comitato Etico Istituto Superiore della Sanità (Prot. PRE/17) and informed consent was obtained from each participant, conforming to the Helsinki Declaration. Reporting is consistent with all ethical requirements.

Assessment

The research protocol was built ad hoc to gather relevant information about migrants' socio-demographic and clinical features, previous and current psychiatric diagnosis, including suicide attempts.

The face-to-face interview was performed by trained interviewers, in a single session. The interview consists of multiple modules covering demographic characteristics (for example, age, sex, marital status, education/training, employment, migrant status and self-reported socioeconomic status), lifestyles and behaviours, psychiatric symptoms, current and previous psychiatric diagnosis, the presence of psychiatric disorder in the family, individual and familiar suicide history and behaviour, childhood and adulthood trauma history were investigated as well.

Measures

Patients were asked to complete the following self-administered questionnaires and scales, translated and validated in English and Italian languages: Zung Self-Rating Depression Scale (SDS) (Zung 1965); Zung Self-Rating Anxiety Scale (SAS) (Zung 1971); Connor–Davidson Resilience Scale (CD-RISC) (Connor and Davidson 2003); Childhood Trauma Questionnaire (CTQ) (Liebschutz et al. 2018); Post-traumatic Stress Disorder Checklist for DSM-V (PCL-5)(Blevins et al. 2015); Beck Hopelessness Scale (BHS) (Beck et al. 1974); Beck's Suicide Intent Scale (SIS) (Aaron T Beck et al. 1979); Brief Aggression Questionnaire (BAQ) (Webster et al. 2014); Deliberate Self-Harm Inventory (DSHI) (Sansone and Sansone 2010).

Statistical analysis

A descriptive analysis of the sample was carried out. Patients' characteristics were summarized using absolute and relative frequencies for categorical variable and mean and standard deviation (SD) for continuous variable. Moreover, in between-group comparisons were carried out for male and female participants for psychiatric disorders.

SAS statistical software (version 9.4) was used for all analyses (SAS Institute 2008).

Results

Socio-demographic features

The sample included 102 (85.71%) males and 17 (14.29%) females; the mean age of the study population was 29.4 years ±10.52 (range 18–79), and the mean duration of stay in Italy at the time of enrolment was 3.96 ± 5.66 (range 0.08–30 years).

Table 1 reports the main socio-demographic features gathered with the interview.

Geographical origin

Of the migrants, 96 (80.67%) came from Africa, mostly from Western Africa ($N = 79$; 66.39%); 8 (6.72%) came from

Table 1 Socio-demographic characteristics/variables of the 119 participants included in the study

	N	%
Gender		
Male	102	85.71
Female	17	14.29
Education level		
Illiterate	15	12.61
Primary School	22	18.49
Secondary School	30	25.21
High School	33	27.73
Graduation	12	10.08
Missing	7	5.88
Employment status		
Student	2	1.68
Worker	19	15.97
Unemployed	94	78.99
Retired	1	0.84
Missing	3	2.52
Marital Status		
Single	86	72.27
Married	20	16.81
Legally separated	2	1.68
Divorced	6	5.04
Widower/widow	4	3.36
Missing	1	0.84
Social support		
Low	58	48.74
High	42	35.29
Missing	19	15.97
Socio-economic condition		
Low	89	74.79
Medium	17	14.29
High	1	0.84
Missing	12	10.08
Religion		
Muslim	56	47.06
Christian	48	40.34
*Other**	11	9.24
Missing°	4	3.36

*Other religion included: 6 Atheists, 1 Adventist, 1 Buddhist, 2 Hindus, 1 Jehovah's Witness

°Missing included answer refused

Eastern Europe (predominantly from Romania, Poland and Moldova); and 8 (6.72%) from South Asia (predominantly from India, Pakistan and Bangladesh), see Fig. 1.

Current and previous psychiatric diagnosis

Of the migrants assessed at the NIHMP, 83.19% ($N = 99$) were diagnosed with a psychiatric disorder; 5.88% (N = 7) of the participants had a previous psychiatric diagnosis (Table 2). The most frequently diagnosed psychiatric disorder was depression ($N = 35$, 35.35%), followed by trauma/stress-related disorders ($N = 24$, 24.24%) and adjustment disorder ($N = 16$, 16.16%).

Analysing gender differences (Fig. 2) showed that the most common psychiatric disorder among women was depressive disorder.

Clinical features

Of the participants, 71.43% ($N = 85$) reported a history of traumatic experiences during adulthood, especially imprisonment and physical violence (14.29% and 10.92%, respectively); 80.67% ($N = 96$) of migrants reported a history of stressful life-events, 14.29% ($N = 17$) presented agitation at the moment of the survey and 70.59% ($N = 84$) declared to suffer from insomnia and 42.86% ($N = 51$) from social isolation. The consumption of alcohol and drugs was present in 8.40% ($N = 10$) of the migrants sampled, and 30 patients (25.21%) had a current medical diagnosis. These results are summarized in Tables 3 and 4 and Fig. 3.

Self-harm behaviour and suicide attempt

Of migrants, 10.92% ($N = 13$) reported a lifetime history of at least one suicide attempt, and 7.56% (N = 9) of migrants had a family member who died from suicide; 7.56% (N = 9) reported a family history of suicide attempt and 7.87% (N = 8) a family history of psychiatric disorders. Attempted suicide was reported by 13 (19.92%) migrants; see Table 5 for details.

Table 2 Information about current and previous psychiatric disorders diagnosis in migrants' sample (N and %)

	N	*%*
Current psychiatric diagnosis		
Yes	99	83.19
No	14	11.76
Missing°	6	5.04
Type of psychiatric disorders (N=99)		
Adjustment disorders	16	16.16
Anxiety disorders	6	6.06
Bipolar and related disorders	2	2.02
Depressive disorder	35	35.35
Obsessive-compulsive and related disorders	2	2.02
Schizophrenia spectrum and other psychotic disorders	1	1.01
Sleep disorder	3	3.03
Somatic symptom and related disorders	6	6.06
Substance-related and addictive disorders	2	2.02
Trauma- and stress-related disorders	24	24.24
Missing°	2	2.02
Previous psychiatric diagnosis		
Yes	7	5.88
No	109	91.60
Missing°	3	2.52

°Missing included answer refused

Discussion

During the migration process, people leave or flee their habitual residence to go abroad to seek opportunities or safer and better prospects. Sometimes migration can be voluntary, other time involuntary, but in most cases, it is a combination of

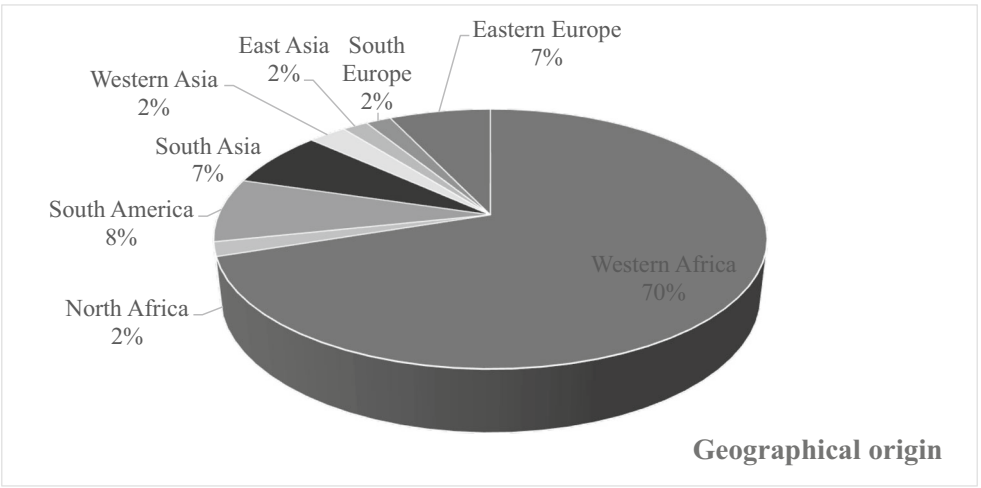

Fig. 1 Representation of geographical origin of migrants' sample

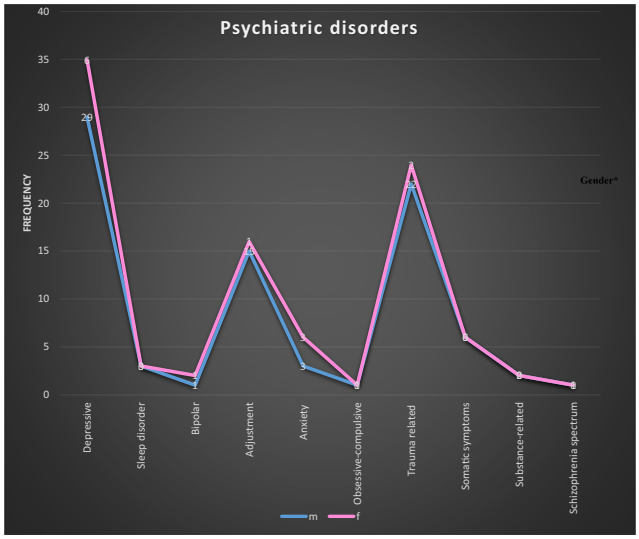

Fig. 2 Frequency of psychiatric disorders among women and men. *Gender: Male *N* = 83 (70%); Female N = 13 (11%), Missing§ *N* = 23 (19%), § = interview not completed

choices and constraints (IFRC 2016). Although there are common reasons for migration, people migrate for unique reasons and frequently decide to leave their country when it is untenable to remain in a given situation. Many migrants might encounter risks during their journey, and some of these risks can be life-threatening. In any case, diverse factors (Aglipay et al. 2013; Blair and Schneeberg 2014; Stafford et al. 2011) such as initial health status, age, sex, marital status, language skills, a region of birth, experiences of discrimination (Gonzalez et al. 2010), the acculturation process and the duration of residence in the host country (Ali et al. 2004) may produce over time a decline in an initially healthy migrant status. However, the risk of a psychiatric disorder is not the same for all migrant groups (Ali et al. 2004; Wittig et al. 2008) and available studies are not fully consistent regarding the finding of higher rates of mental diseases in migrants as

Table 3 Frequency and percentages of comorbidities among the migrants' subsample affected by organic disease

Comorbidities*	*N*=30	%
Chronic pain or algie	4	13%
Cancer	2	7%
Ocular problems	2	7%
Injuries or trauma	4	13%
Gastrointestinal and genital disturbs	4	13%
Hepatitis or HIV	2	7%
Alopecia or ear loss	2	7%
Headache (Cefalea, migraine)	4	13%
Metabolic or cardiovascular disease	6	20%

*Comorbidities N = 30 (25%); Absence of comorbidities *N* = 81 (68%); Missing° value N = 8 (7%)

°Missing included answer refused

Table 4 Description of traumatic experiences in adulthood, risk behaviour and previous suicide attempts

	N=119	%
Trauma in adulthood		
Yes	85	71.43
No	20	16.81
Missing°	14	11.76
Stressful event		
Yes	96	80.67
No	13	10.92
Missing°	10	8.40
Consumption of alcohol and drugs		
Yes	10	8.40
No	87	73.11
Missing°	22	18.49
Agitation		
Yes	17	14.29
No	81	68.07
Missing	21	17.65
Insomnia		
Yes	84	70.59
No	25	21.01
Missing	10	8.40
Social isolation		
Yes	51	42.86
No	49	41.18
Missing	19	15.97
Suicide attempts		
Yes	13	10.9
No	94	78
Missing	12	10.1

°Missing included answer refused

compared to non-migrants (Abebe et al. 2014; Kerkenaar et al. 2013; Labour Migration Branch 2013). Briefly, the migration process is a complex phenomenon that must be dealt with from several perspectives. To capture the full extent of concerns related to migration, the description of a sample of migrants offered by the current study is deliberately broad.

The recruitment procedure adopted has the potential to include in the sample not only migrant workers with a regular residence permit but also stateless ones and migrants deemed irregular by public authorities (including refugees and asylum seekers), even though a limit consists of the fact that there is no data available about the legal status of migrants.

Overall, the results from this study unveil a new focus on the psychopathology of a migrant population accessing the mental health unit of the NIHMP, with important implications for migrants' mental health treatment and prevention. Moreover, information has been gathered on the socio-

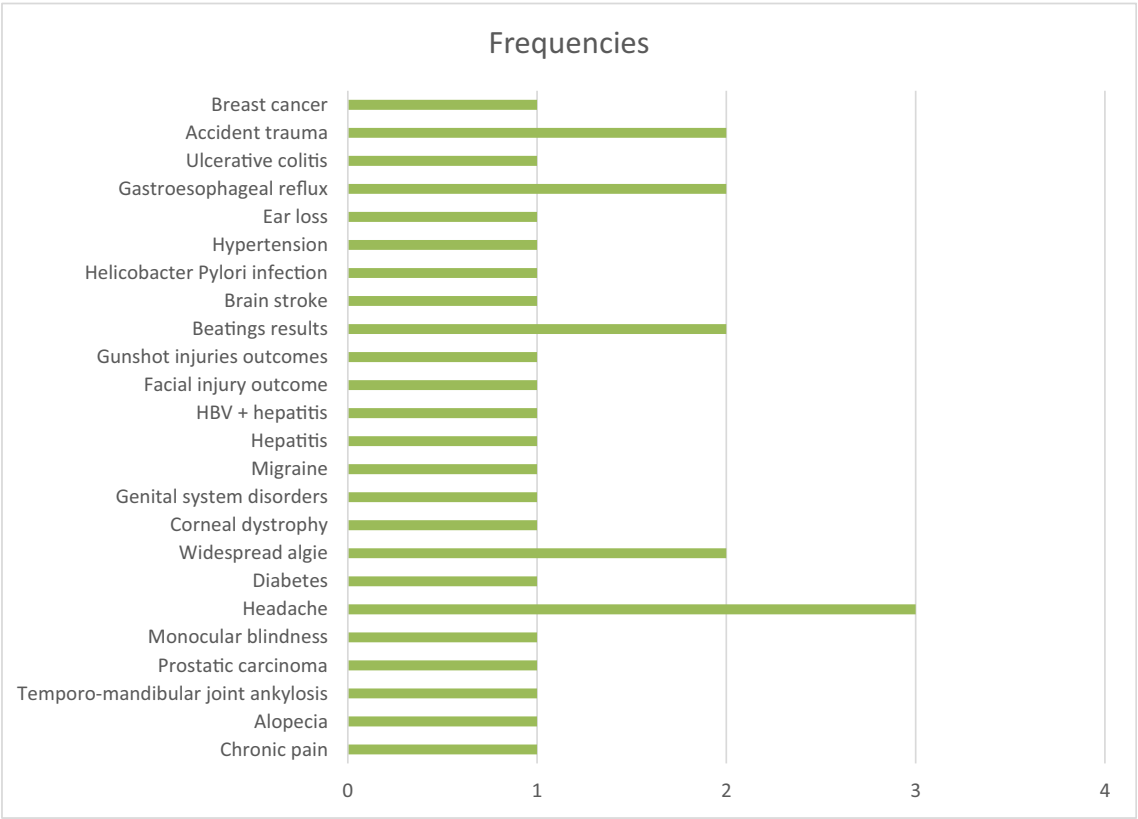

Fig. 3 Specification of comorbidities

Table 5 Features of migrants' suicide attempts

	N (=13)	%
Lethal means access		
No	3	23.08
Missing	10	76.92
Number of previous suicide attempt		
1	8	61.54
2	2	15.38
3	1	7.69
10	1	7.69
Missing	1	7.69
Violent suicide attempt		
Yes	4	30.77
No	4	30.77
Missing°	5	38.46
Method of suicide attempt		
Drowning	1	7.69
Hanging	1	7.69
Drug intoxication	1	7.69
Cutting injury	2	15.38
Missing	8	61.54

°Missing included answer refused

demographic characteristics, psychiatric diagnoses and self-injurious attempts via a semi-structured interview.

From the descriptive statistical analyses of the migrants' sample, it emerged that the international migrants (i.e. a person who is living in a country other than his or her country of birth) who took part in our study, were mostly young men (84%) of working age. These data are in line with the International Labour Organization (ILO) (Labour Migration Branch 2013). The above-mentioned report shows migrant workers account for 72.7% of the 206.6 million working-age migrant population (15 years and over). The majority – 83.7 million – are men, with 66.6 million women migrant workers (Labour Migration Branch 2013).

The migrants who participated in the study had been in Italy, on average, for approximately four years. Most participants came from West Africa (specifically, one fifth from Nigeria). A provisional estimate released by the National Institute of Statistics (ISTAT) in 2016 (ISTAT – Italian National Institute of Statistics 2014) pointed to the largest number of immigrants from Romania (45,000), followed by Pakistan (15,000), Nigeria (15,000) and Morocco (15,000). Compared to 2015, the immigration of Cingalese (−18%), Chinese (−17%) and Bengalis (−14%) to Italy was decreasing.

Our results show that in migrants, mood disorders represent a relevant mental health concern (46.15%), with a greater frequency in females. This data is in line with literature: the

worldwide lifelong depression prevalence is estimated to be 5.8% for men and 9.5% for women. In a cross-sectional study of a multi-ethnic working population, Sieberer et al. (Sieberer et al. 2012) found that first- and second-generation female migrants were more likely to suffer from depressive features compared with non-migrant females. Both females and males in the sample frequently present with PTSD, mood disorders and anxiety disorders, without significant difference between genders, in line with literature suggesting PTSD as a common disorder in migrants (Silove et al. 2000).

Saunders et al. (Saunders et al. 2018) and Jurado et al. (Guerrero, 2000) underlined that despite the migrant population being vulnerable concerning health problems, in many European countries migrants (especially asylum seekers and undocumented migrants) may fall outside the available health and social services, usually only being entitled to emergency health services.

The most frequent psychiatric diagnosis was depressive disorder. Women seemed to be suffering from depressive disorders and anxiety disorders, while men for PTSD, somatization disorders and adjustment disorders. Furthermore, a significant percentage of the migrants reported abuse and/or neglect history in childhood. The low rates of consumption of alcohol and drugs (8.40%), suicide attempts (10.92%) and psychotic disorders (1.01%) are in contrast with the recent literature (Carta et al. 2005) that shows higher rates of schizophrenia (Bourque et al. 2011; Hogerzeil et al. 2017), suicidal behaviour (Virupaksha et al. 2014), alcohol and drug abuse (Littlewood and Lipsedge 1988) in migrants compared to natives. On the other hand, the current results are consistent with reports of higher risk of anxiety and depression and difficulties to access psychiatric facilities for immigrants (5.88% had a previous psychiatric disorder) (Saunders et al. 2018; Gramaglia et al. 2016).

Some limitations should be underscored. First, owing to the sample size, this study should be considered a pilot study. Second, even though migrants completed the very rich and complex research protocol described above, details about the results of the self-administered questionnaires were discussed elsewhere, in the publication originating from this research project (Gambaro et al. 2020).

Conclusion

Albeit preliminary, the current results suggest that mental health issues in migrants deserve careful attention. Indeed, the research project is continuing the recruitment of migrants and their assessment via screening tests such as the WHO-5 Well-Being Index (World Health Organisation 1998). The World Health Organization-Five Well-Being Index (WHO-5) is a short self-reported measure of current mental wellbeing (Topp et al. 2015). Migrants who access the NIHMP, who screen positive at the WHO-5 Well-Being Index are offered a psychiatric consultation. During the visit, the assessment scales, already used in this study, will be filled in and the migrant's history will be collected. Based on the data collected during the visit, a possible pharmacological therapy and/or psychotherapy will be proposed. Thereafter, patients will be recalled for follow-up sessions and re-assessment, after 14, 28 and 58 days. Treatment efficacy, effectiveness and possible side effects will be monitored.

Abbreviations NIHMP, National Institute for Health Migration and Poverty; SDS, Zung Self-Rating Depression Scale; SAS, Zung Self-Rating Anxiety Scale; CD-RISC, Connor–Davidson Resilience Scale; CTQ, Childhood Trauma Questionnaire; PCL-5, Posttraumatic Stress Disorder Checklist for DSM-V; BHS, Beck Hopelessness Scale; SIS, Beck's Suicide Intent Scale; BAQ, Brief Aggression Questionnaire; DSHI, Deliberate Self-Harm Inventory; ILO, International Labour Organization; ISTAT, National Institute of Statistic; WHO-5, Well-Being Index

Availability of data and material The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request. The data that support the findings of this study are available on request from the corresponding author, EG. The data are not publicly available due to their containing information that could compromise the privacy of research participants.

Authors' contributions MS and PZ contributed to the conception and design of the work, DM, MM and EG, developed and implemented the methods of this manuscript, CV and EG prepared the manuscript, CA and FB performed the statistical analysis, MS, CG, CM, GC and PZ revised it critically for important intellectual content.

Funding Open access funding provided by Università degli Studi del Piemonte Orientale Amedeo Avogrado within the CRUI-CARE Agreement. The author(s) received no specific funding for this work.

Declarations

Ethics approval and consent to participate Approval for the research was obtained from the Comitato Etico Istituto Superiore della Sanità (Prot. PRE/17) and informed consent was obtained from each participant, conforming to the Helsinki Declaration, in written form.

Consent for publication Not applicable.

Competing interests The authors declare that they have no competing interests.

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