

Perspectives from a Psychiatric outpatient Service for Immigrants and Refugees in São Paulo, Brazil in a 15 year period.

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Abstract

Background Immigrants and refugees have specific mental health needs. Studies of immigrant psychiatric patients in Latin America are scarce. This article presents the profile of patients from an outpatient psychiatric service in Sao Paulo (Brazil) in order to better inform mental health service planning for immigrants and refugees.

Methods Exploratory study to characterize demographic and mental health profile of refugees and immigrants attending service from 2003 to 2018. Chi-square tests and logistic regressions were used to examine the association of demographic variables, exposure to violence, and immigrant status with psychiatric diagnosis. Cluster Analysis was used to identify sub-groups within the sample.

Results A total of 162 immigrants and refugees referred to the service obtained treatment, being 57.4% men, 59.8% refugees/asylum seekers, 51.9% black, 48.8% single, mean age of 35.9, 64.2% with ten years of education, 57.4% unemployed. Half of the sample (52.5%) were exposed to violence. The most common diagnosis was depression (54.2%) followed by PTSD (16.6%). Around 34% of the participants sought psychiatric care in six months upon arrival. Logistic regressions showed men were had decreased odds to present depression (OR= 0.34). Patients with PTSD were more likely to be refugees (OR= 3.9) and not having university degree (OR= 3.1).

In cluster analysis, a cluster of patients with PTSD were almost all black refugee men exposed to violence. Most patients diagnosed with psychotic disorders were also black refugee men.

Interpretation Data raises questions regarding sex differences and mental health care access. Refugees in Brazil are mainly black men, what might contribute to the profile found in the present study. Further investigation is needed to better understand treatment adherence and clarify the role of patient-health professional relationship in mental health outcomes.

Background

International migratory flows have increased worldwide in the last decades. Current estimates suggest that there are 244 million international migrants globally.¹ Most people migrate to countries from the Global North^A aiming for job opportunities. However, there is an extent of migration among countries from the Global South,² called South-South migration. This trend reflects the restrictions imposed by Northern countries on entrance and permanence of immigrants in their territories and economic issues. In 2015, there were 90.2 million South-born immigrants living in another Southern country, while in the Global North, there were 85.3 million South-born immigrants.³

In migratory studies it is important to make the distinction between immigrants, refugees and asylum seekers, because of different legal definitions and background. Immigrants, in general, are people who chose to migrate, usually for economic reasons. Refugees, on the other hand, fall under the category of forced displacement, since they leave their countries because of persecution and life threatening situations. Asylum seekers are people who have applied for the refugee status but are still waiting for the outcome of their application. Forced displacement reached high marks in the last years. According to the United Nations High Commissioner for Refugees (UNHCR), 70.8 million people were displaced by the end of 2018. Of these, 13.6 million people became displaced just during 2018.⁴

As part of the South-South migration trend, immigration has also increased in Brazil. According to the 2010 national Census, the number of immigrants increased 53% when compared to the 2000 Census.⁵ The number of new entrances has also increased there were 59,442 new registrations in 2010⁶ and 117,745 in 2015.⁷

The number of refugees and asylum seekers in Brazil is also on the rise. In 2010, there were 3,904 refugees and 10,145 in 2017 in Brazil.⁸ The number of asylum seekers also increased dramatically: from 966 new requests in 2010 to 33,866 in 2017. Today, the majority of refugees in Brazil are from Syria (39%), followed by people from the Democratic Republic of Congo (DRC) (13%).^{8,9} When considering asylum seekers, main nationalities have been changing every year: in 2010 the majority of

asylum seekers were from Colombians, in 2013 and 2014, were Haitians; and in 2017, Venezuelans.^{8,10} In Brazil, a person is considered a refugee when they are being persecuted due to their religion, nationality, ethnicity, political opinion, membership to a particular social group, or due to severe violation of human rights.¹¹ Any foreigner can apply for refugee status in Brazil, but application outcomes usually take a few years to be made.⁹ It is noteworthy that refugees and asylum seekers are allowed to have a social security number and work permit in Brazil.

The main destinations for immigrants arriving in Brazil are the Southern and Southeastern states. A higher level of industrialization and job opportunities might help explain the preference for Southern instead of Northern states in Brazil. Refugees and asylum seekers are concentrated mainly in the state of São Paulo⁹. Being the richest city in Brazil, Sao Paulo has more job opportunities and better infrastructure than other Brazilian cities.

Immigrants and refugees are a vulnerable group. Many stressors can be identified in different stages of migration. Once in a new country, they can be confronted with differences such as language and culture. They also have to deal with losses of significant relationships and social support networks. Some immigrants also face difficulties with documents and paper work, and experience discrimination and social exclusion.¹²

This population is exposed to situations of high psychological distress, which can be related to the development of mental illnesses. Refugees who have been exposed to violence, for instance, often have higher rates of mental disorders. Immigrants usually have lower rates of common mental disorders than locals at arrival. Nevertheless, over time, their rates become similar to the local population.¹³

Though widely discussed in Europe and North America, immigrant and refugee health is a field of very recent development in Brazil, with few publications and expertise. So far, there are no official programs or established training for mental health professionals focusing on these issues.

In Brazil, the access to healthcare is universal and free of charge, also for immigrants and refugees¹⁴. However, international migrants face specific barriers for accessing care, such as language, lack of information and structural barriers¹⁵, which justifies directed policies and implementation of specialized services.

In 1997, an outpatient psychiatric service for immigrants, refugees and asylum seekers was created as part of a service of the universal health system (Sistema Único de Saúde – SUS). The aim of the service was to facilitate access to mental health care and provide long-term care for immigrants, refugees, and asylum seekers in Sao Paulo. The service called *Programa de Psiquiatria Social e Cultural* (ProSol) was created through a partnership between Institute of Psychiatry of Universidade de Sao Paulo (IPq-HCFMUSP) with the Caritas Refugee Reference Center (CRRC), a program linked to Caritas, an international Catholic non-governmental organization (NGO) of humanitarian help. The CRRC provides legal, documental and social aid, orientations, referrals and psychological support for immigrants, refugees, and asylum seekers. The São Paulo State Secretary of Health supported the creation of the project. To date, ProSol is the only service specialized in immigrant and refugees mental health in the country.

In this study, we aim to present the profile of all patients attended between 2003 and 2018 in the ProSol. There are very few studies regarding the profile of immigrants and refugees attending psychiatric specialized care, and the existing literature comes primarily from Global North countries.^{16,17} Moreover, we will discuss the challenges and possibilities of service planning and organization. As ProSol is the only psychiatric reference center for refugees and immigrants in Brazil, the characterization of this specific population can be useful for planning future research, policies and, ultimately, implementing services specialized on immigrants and refugees' mental healthcare.

Methods

In order to characterize the demographic and mental health profile of all refugee and immigrant patients attending the ProSol outpatient service from January 2003 to December 2018, a retrospective cohort study based on electronic and paper-based

medical records was conducted.

All participants were registered on the local electronic database, implemented in 2003. The following data was extracted from the electronic database: age at first consultation, sex, skin color, educational level, nationality, marital status, follow-up period (calculated as the difference between the dates of first and last consultation), and all prescribed medications. Further information was gathered from paper-based medical records, including: number of children, employment status at first appointment, housing situation at first appointment, date of arrival in Brazil, reason to migrate, exposure to violence, service of referral, tobacco use, pain complaints, and ICD-10 psychiatric diagnoses on the last consultation.

Descriptive statistics for all the variables collected and for all participants were produced and data visualization was implemented using a combination of different software (i.e. SPSS Statistics v. 17.0-Chicago II and R). Estimate proportions within sub-samples were obtained with cross-tabulations. For all analyses, asylum seekers and refugees were considered as one group, since most asylum seekers in our sample were clearly refugees, just not yet officially recognized. Since an exploratory investigation for potential associations was designed, a threshold of 0.05 for p-value (uncorrected for multiple comparisons) was applied for all tests. For the categorical variables, a set of Chi-square tests were performed. Furthermore, for diagnostic categories with sufficient number of individuals logistic regressions were performed to test the association between diagnosis and characteristics shown to be relevant in literature (gender, exposure to violence, skin color, being a refugee). Finally, an unsupervised learning algorithm (k-means) was used to perform a cluster analysis to examine sub-group characteristics. The variables sex, skin color, refugee status, exposure to violence and ICD-10 psychiatric diagnosis were included. First, data was converted to numeric type and the number of clusters was determined using an optimization approach. Hence, the k-means was run for the optimized number of clusters (6) and each cluster profile was described.

Results

Demographic and Socioeconomic Profile

The total sample was 162 patients, being 93 (57.4%) men and 69 (42.6%) women. This number represents all immigrants and refugees attended at the service in the period. The largest ethnic groups in the sample described their ethnicity as Black (51.9%) followed by White (38.9%).

Skin color and sex are summarized in Figure 1-A and a significant difference was observed in the distribution (chi-square test, $p=0.015$), indicating that men are predominantly black and women predominantly white in our sample. The histogram of distribution of age at first consultation is shown in Figure 1-B (mean age: 35.9 +/- 11.9 years; median: 34 years). Regarding marital status, 48.8% were single, 21.6% married and 18.6% divorced/separated/widowed; 43.8% had no children. Regarding education, 64.2% had at least ten years of formal education, with 32.1% with complete or incomplete University degree. 57.4% of the sample was unemployed; 36.4% were living in public shelters and 9.9% were living with friends, family or churches as a favor. (Figure 1-C), a total of 46.3% in this temporary housing situation.

Migration Characteristics and Violence Exposure

Refugees were 38.3% of sample and 22.2% were asylum seekers, making a total of 59.8%. Concerning reasons to migrate, around 33.3% migrated because of war and 11.7% because of political issues (information missing in 22.8% of the records). Regarding country of origin, 14.2% were from the Democratic Republic of Congo (DRC) and a similar percentage from Colombia (13.6%), followed by Nigeria (7.4%) and Syria (6.7%). Around 50% were from Africa, of which 28.4% were from DRC; 29.6% from Latin America with 45.8% from Colombia; 14.2% were from Asia/Middle East, of which 47.8% were from Syria and 17.4% from Irak. Countries of origin are mapped in Figure 2. More than half of participants were exposed to violence (52.5%), among those, 82.3% suffered violence prior to migrate. There is no evidence of association between sex and violence exposure ($p=0.8$).

Service Use and Compliance

The number of admitted patients has been steadily growing. The mean number of new patients per year (from 2003 to 2018) was 9.12. 34% sought psychiatric care in less than six months after arrival in Brazil and 42.6% in up to twelve months. Around 12.3% accessed care five years after arrival. Date of arrival in Brazil was missing in 23.5% of our sample. 42.6% did not spend more than three months in the service, 21.6% spent between four and twelve months in service. Only 13% stayed in service for more than five years.

Patients were mostly referred by CRRC (70.4%), followed by a public shelter that receives exclusively foreign women (7.4%). Factors associated with having the first appointment within six months upon arrival in Brazil were: having Post Traumatic Stress Disorder (PTSD) ($p < 0.0001$), being black ($p = 0.001$), being a refugee ($p = 0.022$) and living in temporary housing ($p < 0.0001$). Men were more likely than women to drop out after three months ($p = 0.018$) and six months ($p = 0.049$).

Psychiatric Diagnosis

Depression was the most frequent disorder (54.2%; 9.9% mild, 24.7% moderate, 3.7% severe and 7.4% recurrent), followed by PTSD (16.6%), psychotic disorders (13.6%), anxiety disorders (12.3%) and substance abuse disorders (9.3%). Tobacco use was reported by 13% of sample; 2.7% had no psychiatric diagnosis.

Over a third of the patients had comorbid disorders (35.8%). The most frequent comorbidity was depressive disorder (F32-33) and trauma related disorders (F43.1-43.9), accounting for 41.8% of cases of comorbidity and representing 14.8% of total sample.

Being a refugee ($p = 0.004$), living in temporary housing ($p = 0.022$), exposure to violence ($p < 0.001$), and first medical appointment 6 months upon arrival ($p < 0.001$) were associated with having PTSD.

Being black ($p = 0.004$) and being male ($p = 0.020$) were associated with having a psychotic disorder ($p = 0.004$). Anxiety disorder (F41) was also associated with being black ($p = 0.010$), unemployment ($p = 0.016$), living in temporary housing ($p = 0.044$) and not being exposed to violence ($p = 0.032$). Depressive disorder was associated with being female ($p = 0.007$). Substance use was associated to being male ($p = 0.008$) and tobacco use ($p < 0.001$). Pain was a complaint for 42% of the sample ($n = 68$). Logistic regressions results suggest that women have increased odds of having depressive disorders when compared to men (OR = 2.94 IC95% 1.43-5.88). For people with trauma related disorders (F43), they were eight times more likely to have been exposed to violence (OR= 8.1 - IC95% 2.9-22.1), three and a half times more likely to be a refugee or asylum seeker (OR= 3.5 – IC95% 1.18-7.8) and around three times more likely of not having university degree (OR= 3.2 – IC95% 1.28-8.2). For people with PTSD, they were 16 times more likely to have been exposed to violence (OR= 16.8 - IC95% 3.6-78.9), almost four times more likely to be a refugee or asylum seeker (OR= 3.9 – IC95% 1.18-12.76) and three times more likely of not having university degree (OR= 3.1 – IC95% 1.1-8.77).

Cluster Analysis

For six clusters, a purity measure of 0.85 was obtained. Most clusters were comprised mainly by a single diagnostic category, but with anxiety disorders distributed across different clusters. Depressive disorders were separated in two clusters, differing in sex. The cluster including patients with PTSD has shown a remarkable homogeneity with almost all patients being black refugee men with a history of exposure to violence. A cluster comprising patients with psychotic disorders was also homogeneous with a majority of black refugee men. Finally, two clusters comprised anxiety disorders and other diagnostic categories.

Medication and Hospitalization

Antidepressants were the most prescribed medication (75.3%), followed by antipsychotics (27.2%) and benzodiazepines (16.6%). No medication was prescribed in 12.3% of cases. Hospitalization in inpatient services at the same hospital was necessary for 8.6% ($n = 14$) of all patients. 71.4% of these were hospitalized were due to an acute psychotic episode.

Discussion

To the best of our knowledge, this is the first study describing the sociodemographic and psychiatric profile of a clinical sample of immigrants and refugees in Latin America. Although the total number of patients seen in 15 years is small (n=162), the number of first appointments have had an exponential growth, with the majority of patients arriving after 2010. It is important to consider that this is a psychiatric specialized service. When the service begun, a very small number of people who were referred from CRRC actually came to the service. In the beginning, a psychiatrist from the service stayed at CRRC facility, developing a mental health department there. This process is described elsewhere.^{18,19}

Since the main source of referrals was CRRC, the majority of patients were refugees and asylum seekers (59.8%). Our sample is mostly composed by single man, in productive age (20-40 years), without children, from the African continent. This socioeconomic profile is similar to the one reported by the Brazilian Committee for Refugees.⁹

Systematic reviews and meta-analyses confirm that refugees are at substantially higher risk for having mental health problems than the general population.^{13,20} In our sample, PTSD was the only disorder more frequent in refugees than in immigrants. A potential explanation for refugees presenting higher levels of mental disorders is due to previous traumatic events related to war, which was the main reason to migrate for 33.3% of our sample. The majority of our sample has been exposed to violence (52.5%), especially before migration (82.3%), with no differences in proportions between immigrants and refugees. Having experienced violence was only related to PTSD and trauma related disorders but not to other diagnoses. Our findings corroborate the existing literature on increased rates of depression, chronic pain and other somatic complaints in refugees¹³.

Strong evidence shows that some groups of migrants have an elevated incidence of psychotic disorders after migration. Being black and migrant have been previously associated with the development of psychotic disorders or episodes^{21,22}. The diagnosis of a psychotic disorder was associated with accessing the service within six months upon arrival, as was PTSD.

We found sex differences in our sample regarding the diagnosis of depression: women were had increased odds of having a depressive disorder when compared to men. Women also had a better adherence to treatment. In the few Brazilian studies about access to general health care by immigrants, women usually seek more care than men and have better adherence, which is usually related to reproductive health issues.^{24,25}

ProSol service accepts referrals from NGOs and public shelters since these are the places that are close to the international migrant population. Immigrants and refugees face difficulties in accessing Brazilian public health services, because of language, culture, not understanding how the system works and high mobility. Therefore, being open for referrals from services other than primary or secondary healthcare services is important to guarantee access for this population. We provide consultations in different languages, schedule first appointments promptly, and keep close contact with the institutions providing aid for migrants and refugees.

The majority of patients did not stay longer than three months in the service. Professionals usually explain the relatively short duration of treatment due to socioeconomic barriers (eg: no money for transportation). But, in our study, unemployment and living in temporary housing were not associated to treatment duration. These categories might not be good measures for socioeconomic disadvantage experienced by this population, but this data can also indicate that structural barriers might not be the most important barriers in this case. We need to raise new hypotheses for understanding treatment adherence, considering language barriers, cultural barriers, doctor-patient relationship and stigma of mental illness. Particularly, the quality of the therapeutic relationship has been pointed out as having a great influence in the adherence to treatment of immigrants and minority patients.^{26,27}

For refugees and asylum seekers, trust building is a critical issue^{28,29}. Based in our clinical experience, if patients have had good relationships in the referring service, they were more likely to trust our outpatient service team. It is interesting to note that the highest number of first appointments took place in periods when there was a psychiatrist from ProSol also working at CRRC. Therefore, referrals from CRRC and reception of patients in the hospital were done by the same person. Another

advantage of having a psychiatrist at CRRC was that they could meet individuals in a place where mental health needs were not the main focus and talking to a psychiatrist was not stigmatizing.

Closing remarks

Professionals working with immigrants need to be aware of geopolitical situations since the profile of immigrants arriving for care will depend on these trends. Also, being informed about legal issues (documentation) and support network available is essential, since this population usually lacks crucial information to access basic services. Providing healthcare for immigrants and refugees brings particular challenges. In Brazil, this discussion is quite recent, due to the increase of international migration only in the last decade. Services that provide care for this population not only have to develop their own strategies to guarantee access, but also to overcome language and cultural barriers. In mental health, some barriers might be harder to overcome than in general healthcare, given the central role of language for a proper psychiatric evaluation and the fact that mental illnesses might be explained by different and sometimes conflicting culturally variable models (religious, environmental, psychological, biological etc).

Limitations and future research

The present study used a retrospective observational design with an exploratory statistical framework and, shedding light to potential associations to be further explored in specifically designed prospective studies. Critically, no causal inferences can be drawn. Though covering an extended period of time, we had a relatively small sample. However, it is important to emphasize the lack of quality data in mental health of immigrants and refugees living in countries from the Global South and the expected growth of service demands in these settings. Future investigations using combinations of qualitative methodology and hypothesis-driven analysis are warranted to further the understand the barriers to care, reasons to seek help for mental health needs, concepts of adequate care, explanatory models for mental illness and the most influential factors in recovering from mental illnesses in the particularly vulnerable populations of migrants and refugees in the global South.

Footnote

A. The term "Global North" refers to high-income countries in Europe, North America and Oceania. It is a consequence for the preference of use of the term "Global South" in Social Sciences to refer to regions of Latin America, Asia, Africa and Oceania, to countries that were called "Third World" or "underdeveloped". The choice of using these terms to characterize differences between countries shifts the focus from development or cultural differences to geopolitical relations of power.²

Declarations

Declarations

Ethics approval and consent to participate

Ethical approval for the present study and data collection was granted by the Hospital das Clínicas from Universidade de São Paulo Ethics Committee (ID 2.126.447)

Consent for publication

Not applicable

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Competing interests

All authors declare they have no competing interests.

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Authors' contributions

LAC analyzed and interpreted the data, being a major contributor in writing the article. LHA contributed in data analysis and on final revision. PLA performed the data collection and helped with the written part of analysis. CLAS made substantial contributions to study's conception and design. FLN contributed in writing and revising the manuscript. CEB contributed in data analysis, writing and final revision. All authors read and approved the final manuscript.

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Not applicable

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Map of countries of origins. The color scale refers to quartiles of distribution. Note that the vast majority of patients emigrate from West-Coast African and South American countries.

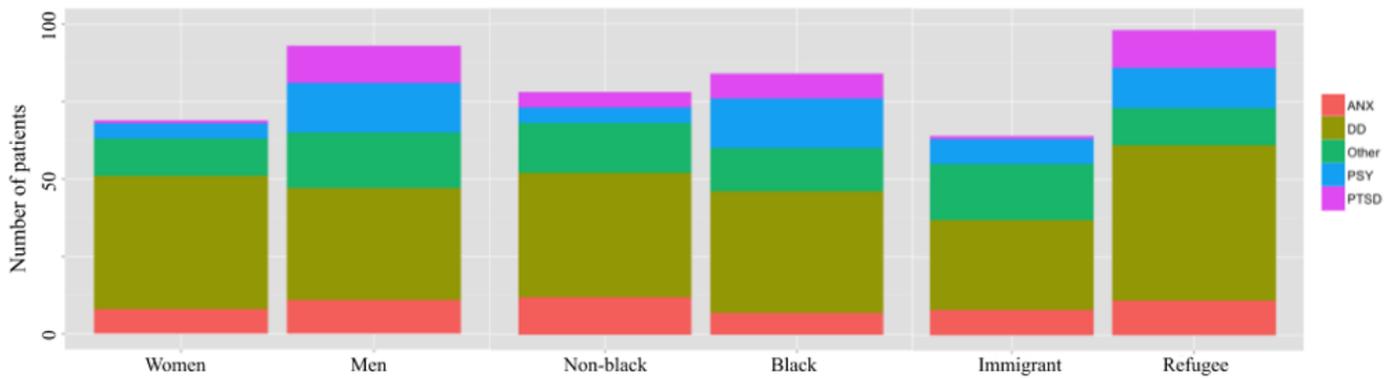


Figure 3

Profile of primary ICD-10 based psychiatric diagnoses of all immigrant and refugee patients. In agreement with global prevalence, depressive disorder corresponds to roughly half of the diagnoses. Note the increased prevalence of psychotic disorders and PTSD in black men in relation to women. Regarding migratory status, increased prevalences of depressive disorders and PTSD were observed for refugees when compared with non-refugee immigrants. ANX: anxiety disorders; DD: depressive disorders; PSY: psychotic disorders; PTSD: post-traumatic stress disorder.

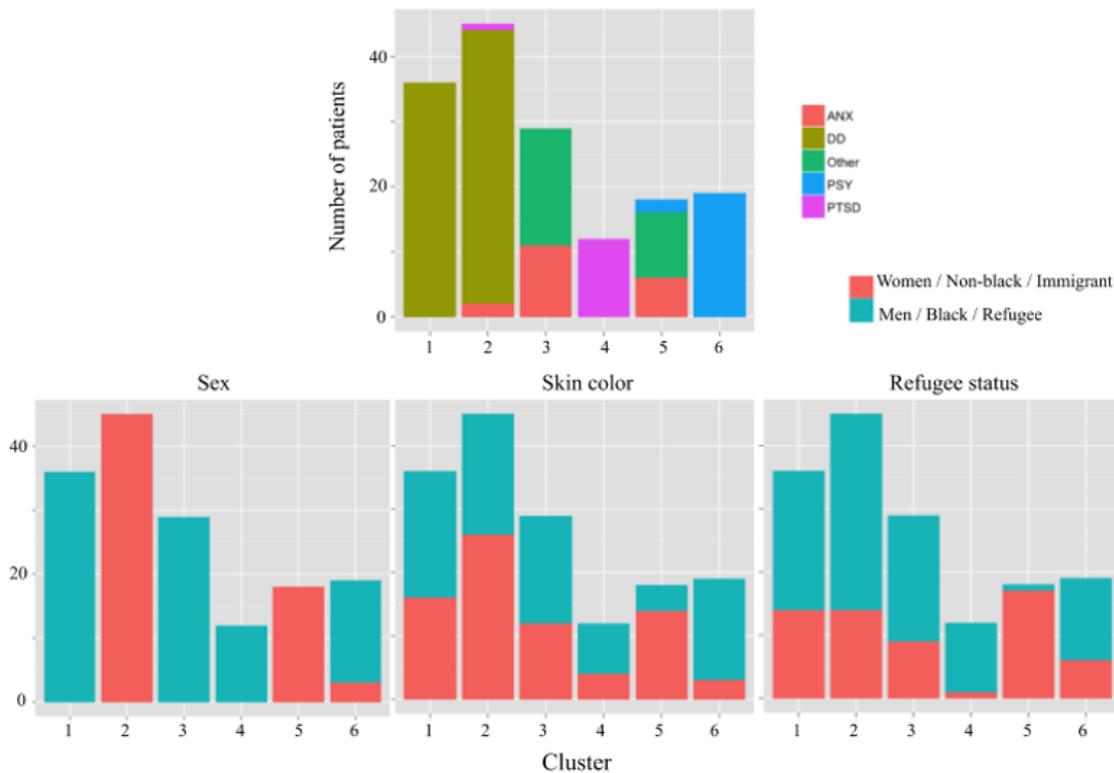


Figure 4

Results of cluster analysis. Clusters 1 and 2 comprises respectively men and women diagnosed with depressive disorders. Cluster 3 and 5 include patients with anxiety disorders or other ICD-10 diagnoses (e.g. obsessive compulsive disorder, somatoform disorders) but with fewer than three patients in the sample. Cluster 4 include patients with PTSD and cluster 6

patients with psychotic disorders, which were mainly black refugee men. ANX: anxiety disorders; DD: depressive disorders; PSY: psychotic disorders; PTSD: post-traumatic stress disorder.