

## PERCEIVED DISCRIMINATION, A RISK FACTOR FOR DEVELOPING PSYCHOSES IN ROMANIAN EMIGRANTS?

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### Abstract

**Aim.** Investigating the relationship between the perceived discrimination and the psychotic symptom severity as well as the level of social functioning in Romanian migrants with psychotic disorders, considering that this is a major stressor which contributes to the feeling of alienation from the majority culture.

**Materials and methods.** The assessment included 70 patients admitted to the Cluj Psychiatric Hospital, from January 2007 to April 2010, diagnosed with acute psychotic disorder, schizophrenia and other schizophrenia-spectrum disorders, according to ICD 10 diagnosis criteria. The patients completed the migration questionnaire for socio-demographic variables and the level of discrimination perceived, the psychotic symptom severity being assessed through PANNS and GAF scales.

**Results.** The level of discrimination perceived by the subjects correlated neither with PANNS symptoms ( $r=-0.051, p>0.05$ ) nor with the social functioning level ( $r=0.029, p>0.05$ ). The social functioning level had significant negative correlations with the PANNS level of general symptoms ( $r=-0.41, p>0.05$ ). There are no differences between PANNS symptoms, social functioning and perceived discrimination according to age, gender or illness onset country. There are significant statistical differences between education categories concerning the general symptoms on PANNS scale, respectively the level of discrimination perceived, the lower level of education being associated with a highly perceived discrimination level. The subjects of rural origin perceived discrimination at a higher level than those from urban area ( $t=2.31, p<0.05$ ).

**Conclusions.** Discrimination is perceived more intensely by the subjects from the rural area and with a poorer educational level but this doesn't correlate with psychotic symptom severity.

**Keywords:** discrimination, migration, schizophrenia.

### Introduction

A great number of studies suggests that migration is a risk factor for schizophrenia and other psychotic disorders. Elevated risk was observed for a variety of ethnic groups, mostly for minorities and migrants experiencing cultural barriers. The reasons for this remain unclear and generally vary, from genetic explanations of neurodevelopment to social rationalizations [1].

In 1932 Odegard developed in Europe the first theory concerning the relationship between the migration status and mental illnesses. Astonished by the increasing number of mental disorders among Norwegian migrants in USA, he formulated the theory of "selective migration"

through which he considered that those deciding to emigrate belonged to the weakest segment of population and more prone to mental illnesses [2].

Later, this theory was refuted and scholars' attention focused on post-emigration social factors, such as racial discrimination, reduced opportunities, lack of friends, unemployment, legal matters, acculturation and lack of ability to understand the host country language [3,4].

The meta-analysis study conducted by Cantor-Graae and Selten reported a relative risk to develop schizophrenia of 2.9 at first-generation migrants, and of 4.5 at the second generation, compared with non-migrants and of 3.3 for migrants from developing countries [5].

Of the risk factors, in this study we paid a special attention to discrimination, defined as a separation, difference, clear distinction between more elements. It

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is a restrictive differentiation of legal rights for a part of a country's population, for an organization or for some countries towards others. Because of discrimination, a category of citizens of a country are deprived of certain rights on the basis of unfounded considerations [6].

A recent meta-analysis has revealed that discrimination is associated with an increased probability to develop clinical mental illness. Social defeat, defined as a chronic experience of social exclusion or an inferior position in society may lead to dopaminergic hyperactivity in the mesocorticolimbic system, which is also sensitized in schizophrenia [7].

Perceived discrimination is a major stressor, associated with a high risk of developing psychoses, contributing to the feeling of alienation from the majority culture [8].

On the grounds of these observations, the aim of this study was to investigate whether the perceived discrimination is associated with psychotic symptom severity as well as the level of social functioning among the Romanian migrants included in the study. In addition, it attempts to identify the features of Romanian migrants group more prone to feel discriminated.

### Material and method

The present study is part of the PhD thesis „Onset and evolution of psychosis in Romanian emigrants temporarily abroad”. The assessment included 70 patients admitted to the Cluj Psychiatric Hospital, between January 2007 - April 2010, diagnosed with acute psychotic disorder, schizophrenia and other schizophrenia-spectrum disorders, according to ICD10 diagnostic criteria, recently arrived home from work or studies abroad.

The inclusion of the patients in the study was done after the approval of the Ethical Committee of Iuliu Hațieganu University of Medicine and Pharmacy Cluj-Napoca and following the patient informed consent. Exclusion criteria were: substance induced psychosis, patients with relatives temporarily abroad, other types of psychotic disorders such as adaptation disorder, depression or bipolar disorder.

Participants were individually tested. They filled in the migration questionnaire for socio-demographic variables and migration history and the psychiatrist completed the psychotic symptoms assessment scales (PANSS) and the Global Assessment of Functioning Scale (GAF).

The PANSS scale was used in order to measure the psychotic symptom severity. This is divided in positive symptoms (delirious ideas, hallucinations), negative symptoms (blunted emotion, lack of spontaneity, difficulties in abstract thinking) and general (anxiety, depression, social avoidance, lack of attention).

Social, occupational and psychological functioning was assessed through GAF scale which is a numeric scale (0 through 100). In order to assess the level of discrimination perceived by the patients, they were asked whether they had felt unfairly treated or insulted because of one's

cultural background. There were five possible choices, from “strongly disagree” to “strongly agree”.

The descriptive study in the first part was conducted in order to define the sample of patients as regards the homogeneity, clarifying the following aspects: gender (men/women), the age of sample patients at the age at illness onset, the number of hospitalizations, the area of residence, the level of education, the marital status, the legal status, the family medical history, the discharge diagnosis distribution, the country where illness occurred, the country where they have worked, the period spent abroad and the type of work performed abroad versus country of origin.

Subsequently, we followed the psychotic symptom evolution from the admission through PANNS and GAF scales and we correlated the PANNS symptoms, with the social functioning and the discrimination perceived. The statistical analysis was performed using SPSS application, 18 version. Pearson's r coefficient of parametric correlation was used, which has variations between -1 and 1. The statistically significant values were considered those of  $p < 0.05$ , with 95% confidence interval.

### Results

The gender distribution was 78.57% males and 21.43% women, almost half of them (45.71%) between 26-35 years, 70% from the urban area and generally from middle and lower class. The most frequent diagnosis was acute psychotic disorder - 42.86% of cases, 55 (71%) of patients were at their first admission, closely followed by paranoid schizophrenia.

The first episode began while they were at work/studies abroad for most of the subjects, 74.29% in Spain. As to the level of education, 40% of the group had graduated from a vocational school and only 27.14% had higher education. While in their native country 44.29% did qualified labor, 68.57% registered social regression abroad, performing non-skilled exhausting labour.

As for the period spent abroad before developing the illness, most of them had spent less than 6 months - 34.29%, followed by those who had spent between 1-5 years - 32.06%. The majority of the subjects were single, did not have relatives abroad and worked without a job contract.

The level of discrimination perceived by the subjects correlated neither with PANNS symptoms ( $r = -0.051$ ,  $p > 0.05$ ) nor with the social functioning level ( $r = 0.029$ ,  $p > 0.05$ ). Moreover, it can be noticed that the level of social functioning correlated significantly negatively with the PANNS general symptom level ( $r = -0.41$ ,  $p > 0.05$ ) (Table I).

The results of the study evidenced a dependence on the categories of age, gender or the country where the illness occurred.

From Table II it can be observed that there are statistically significant differences between categories of education regarding the general symptoms on PANNS scale ( $F = 2.84$ ,  $p < 0.05$ ), respectively the level of discrimination

perceived ( $F=4.96$ ,  $p<0.01$ ). As F test is omnibus (it identifies only the significant differences without identifying the pairs of significantly different categories), we used the post-hoc analysis to identify the education groups, among which the significant difference showed by the F test value was found. Thus, it was reported that, as regards the PANNS symptoms, differences appear in the primary school- vocational school, primary school-higher education, respectively, for the variable perceived discrimination, the

differences appear for the couples primary school-higher education, vocational school-high school, and vocational school-higher education respectively, in all cases the low level of education being associated with a higher level of discrimination perceived.

We can also observe that (Table III) the area of residence was only associated with differences regarding the level of discrimination perceived ( $t=2.31$ ,  $p<0.05$ ). The subjects from the rural area perceived themselves as

**Table I.** The matrix of correlation of PANNS symptoms with the level of social functioning and of the discrimination perceived.

	Negative symptoms on PANNS scale	Positive symptoms on PANNS scale	General symptoms on PANNS scale	Social functioning levels on GAF scale	Have you ever felt discriminated because of your nationality?
Negative symptoms on PANNS scale					
Positive symptoms on PANNS scale	-.214	1			
General symptoms on PANNS scale	.365**	.248*	1		
Social functioning levels on GAF scale	-.128	-.217	-.410**	1	
Have you ever felt discriminated because of your nationality?	-.051	.007	.059	.029	1

\*\* Significant correlations of  $p<0.01$ ; \* Significant correlations of  $p<0.05$ .

**Table II.** Comparison of PANNS symptoms, of social functioning and of perceived discrimination depending on the educational level of the subjects.

Compared variables	Education	N	Mean	Ab.Std.	F	p
General symptoms on PANNS scale	primary school <sup>1 2</sup>	6	53.83	5.23	2.84	0.04
	vocational school <sup>1</sup>	28	46.50	6.82		
	high school	17	50.24	6.46		
	higher education <sup>2</sup>	19	47.84	5.68		
Social functioning levels on GAF scale	primary school	6	24.33	5.43	0.24	0.86 ns
	vocational school	28	25.18	5.44		
	high school	17	24.06	5.94		
	higher education	19	25.37	4.06		
Have you ever felt discriminated because of your nationality?	primary school <sup>1</sup>	6	1.33	.52	4.96	0.001
	vocational school <sup>2 3</sup>	28	1.46	.79		
	high school <sup>2 3</sup>	17	2.18	1.01		
	higher education <sup>1</sup>	19	2.47	1.31		

<sup>1 2 3</sup> pairs of categories in which the significant difference showed by the F test was found.

**Table III.** Comparison of PANNS symptoms, the social functioning and perceived discrimination depending on the area of residence of the subjects

Compared variables	Area of residence	N	Average	Ab.Std.	t	p
General symptoms on PANNS scale	urban	49	49.04	6.44	1.25	.22 ns
	rural	21	46.90	6.79		
Social functioning levels on GAF scale	urban	49	24.39	5.38	-1.24	.22 ns
	rural	21	26.05	4.47		
Have you ever felt discriminated because of your nationality?	urban	49	2.06	1.16	2.31	.02
	rural	21	1.52	.75		

**Table IV.** Comparison of PANNS symptoms, social functioning and perceived discrimination depending on the presence/absence of a job contract.

Compared variables	Job contract	N	Mean	Ab.Std.	t	p
General symptoms on PANNS scale	Yes	31	48.13	6.50	-.31	.76 ns
	No	39	48.62	6.71		
Social functioning levels on GAF scale	Yes	31	27.42	5.26	4.06	.001
	No	39	22.87	4.10		
Have you ever felt discriminated because of your nationality?	Yes	31	2.10	1.19	1.37	.18 ns
	No	39	1.74	.97		

discriminated at a greater extent than those from the urban area. This result is in accordance with the one obtained in case of the variable level of education.

The subjects who worked abroad without job contract (Table IV) presented a more reduced level of social functioning ( $M=22.87$ ,  $SD=4.10$ ) as compared to those who held a job contract ( $M=27.42$ ,  $SD=5.26$ ) and this difference was statistically significant ( $t=4.06$ ,  $p<0.01$ ).

### Discussion

The discrimination itself is not such an important risk factor to justify a psychosis outbreak, but we cannot rule out its important contribution in the psychopathogenetic process. Although it does not correlate with psychotic symptom severity, most of the patients felt discriminated at different levels, as resulted from the questionnaires completed individually.

In the specific literature, the minority status of the psychotic migrants is associated with the perceived discrimination and with the severity of psychotic, anxious and depressive symptoms, suggesting that social stressors may influence the expression of particular psychotic symptoms [9].

At present there is a consensus concerning the multifactorial etiology of schizophrenia, an individual may carry a genetic predisposition but this vulnerability is expressed only in presence of certain environmental factors (in our case, the migration with its different alleged stressors) which may produce mutations or influence the genetic expression [10].

A first study performed on the same sample of patients reported that subjects had a low educational level, financial difficulties, lack of family support, regressed professionally, were not accustomed with physical effort and did not benefit from medical care abroad, so they were exposed to multiple stressors [11].

From a psychoanalytic point of view, we can explain the reaction resulted from emigration also through identification. The child identifies with his mother and, as he grows, he identifies with his parents, family, caste, community and his country. He idealizes the beloved object. The persons who identify themselves with their country cannot handle appropriately the separation from it. The poorer the social integration, the more difficult is to deal with this mourning [12].

Apparently, the patients of rural origin have a more intense perception of the social isolation consequent to discrimination. As they live in an environment where belonging to a community and to the group rules is important, the fear of rejection and of loss of interpersonal relationship leaves traces on their mental stability.

If for the subjects from the urban area, with higher education but with no experience in the work field, the

professional regression is a major risk factor, the subjects from the rural area are more often prone to lose their family point of reference and feel excluded from the new cultural environment.

The low educational level of most of the patients coming from the rural area contributes to the reinforcement of the perception of discrimination and is correlated negatively with the ability to adapt to the new environment. Furthermore, the lack of a job contract seems to play an unsettling role in the life of psychotic emigrants, leading to the reduction of social functioning level.

### Conclusions

Discrimination is perceived more intensely by subjects from the rural area and with a lower level of education but this does not correlate with psychotic symptom severity.

Discrimination is an important stressor but cannot justify by itself the outbreak or the severity of a psychotic episode which involves a multifactorial etiology.

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