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Family functioning and depression among Albanian migrants and Greeks in a rural area in Greece

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Abstract

***Background*:** Albanian immigrants consist a large ethnic minority group in Greece and a significant proportion of local population in many areas of the country, including rural areas, such as in the Cyclades Islands (1). Even though migrants and their families are to various degrees integrated in the life of local communities, the factors associated with family dynamics and their relation to common mental health issues have not been much studied. There is evidence supporting an association between aspects of family dynamics and depression in adults (2-3). The aim of the current study was to explore the relationship between depressive symptomatology and family functioning in Albanian immigrants in a rural area in Greece. A comparison between Albanians and Greek natives was also made, in order to investigate if there were differences between the two ethnic groups, regarding the specific dimensions of family functioning associated with depressive symptomatology.

Methods: The sample consisted of 204 adult service users, 105 (51,5%) Greeks and 99 (48,5%) Albanians, who sought help from the Mental Health Mobile Unit (EPAPSY-NGO) in Paros and Antiparos islands, during the years 2012-2016. The Family Assessment Device (FAD) (4-5) was used to assess perceived family functioning and the Centre for Epidemiologic Studies Depression Scale (CES-D) (6) was used to measure the current level of depressive symptomatology. Additional data was also recorded for every participant, including sociodemographic characteristics and psychiatric diagnosis (assigned by the psychiatrist).

Results: More Greek service users in comparison to Albanians were categorised as perceiving to have healthy family functioning in the domains of 'Communication' (25.5% vs 10.1%, $p<0.05$) and 'Affective Responsiveness' (21% vs 6.6%, $p<0.05$) (according to the cut-off scores of FAD). Irrespective of nationality, better family functioning was related to less depressive symptoms. In Albanians, the specific dimension of family functioning referring to 'Behaviour Control' was independently associated with the score in depression scale, while in Greeks the 'Problem Solving' dimension was found to be significantly associated with depressive symptomatology.

Conclusions: Differences were detected in certain domains of perceived family functioning between Albanian immigrants and Greek natives, regarding the categorization of healthy/unhealthy functioning. Association of family dynamics with depressive symptomatology was detected in both ethnic groups. Patterns of interaction in Albanian families, as expressed in roles, hierarchy, rules or standards, expectation of behaviour and discipline (Behaviour Control dimension of family functioning) were found to be related, independently of other factors, to depressive symptomatology. When working with migrants, it is important to evaluate different dimensions of family functioning and take them into consideration in order to improve prevention and intervention strategies developed by mental health services.

Key words: migration, transcultural psychiatry, rural areas, family functioning, depression

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Introduction

Greece has been a country with a great inflow of migrants during the last decades, a significant percentage of whom are from Albania (1, 7-8). Albanian migrants settled in big cities in Greece, but also in rural areas, such as Cyclades Islands, working mainly in the construction and tourism sector and consisting a great proportion of local population (1). However, there have been no studies among the Albanian population in this rural area (where only limited health services operate), regarding mental health needs and factors associated with common mental disorders (9), such as family functioning.

Internationally, the literature shows that different factors have been associated with mental health of migrants in different phases (premigration, migration and postmigration resettlement) including separation from extended family, exposure to trauma, uncertainty about future and migration or refugee status, unemployment, difficulties in acculturation and adaptation, discrimination and social exclusion (10). There are a few studies in Greece on factors related to mental health of migrants, as well as comparing the mental health status between migrants and natives (11-13). Acculturation strategies adopted by migrants have been studied most extensively, with findings showing the association of marginalization and separation with higher distress, dysphoria and psychosomatic problems in migrants in Greece (11-12), while integration was related to better adaptation (14) and less depressive symptoms (15-16). Other studies have shown that the reported levels of physical and mental health were better in Greek natives than Albanian migrants and returnees from the former Soviet Union, while higher scores of depression were also found in a research in Albanian and Bulgarian migrants, compared to the host population (17).

Family functioning refers to the structure, organization, and transactional patterns of the family unit, including the following dimensions, according to the McMaster Model (18-19): Problem Solving, Communication, Roles, Affective Responsiveness, Affective Involvement, Behaviour Control. Family functioning and change in family dynamics due to migration (separation from family members, changes in roles, acculturation gap between parents and children etc) have been recognised as significant factors associated with migrants' well-being and mental health (10, 20-21). However, family functioning has not been much studied, regarding its specific association with common mental disorders in migrants, such as depression, although generally depressive symptomatology has been associated with family dysfunction, in studies comparing samples of patients and control groups (2-3, 22).

Furthermore, cultural values have an important impact on emotional expression, interaction, engagement in interpersonal relationships, roles, structure in families and overall on family functioning (23-24). For example, differences exist between collectivistic and individualistic cultures, concerning the importance they place on family and love, emotional expression and responsiveness, dynamics in relationships (25). However, there are only few studies examining the impact of cultural characteristics on family functioning and mental health (23). Differences in family functioning have been found between patients suffering from depression in different cultural settings (26-27) and researchers concluded that while families with a member suffering from depression experienced difficulties in their functioning, the nature of the dysfunction appeared to be more specific to culture than to depression (23).

Only few studies have also focused directly to the interplay between family functioning and mental health in migrants, emphasizing mainly the role of acculturation in samples of Hispanic and Mexican-origin youth (28-30). Acculturation has been associated with increased family conflict and reduced family cohesion in Hispanic families (28-29), while family dysfunction has been linked to depressive symptoms in Mexican-origin youth (31), a diverse sample of Hispanic adults (32) and in Latino women (33). Furthermore, acculturation and enculturation in Hispanic students from Southern California were indirectly linked with depressive symptoms by way of family functioning, as greater family conflict and less family cohesion were associated with more depressive symptoms (N=1,922) (30).

Concerning Albanians, studies focusing on family values have shown that the conservative roles are kept (25). The traditional values such as the father as the protector, the woman

as subordinate, and the restriction in expressing emotions of intimacy were found to be more prevalent among Albanian immigrants than among Greeks (25, 34). It seems that Albanian society historically was organized according to patriarchal kinship structures (35) and there was a strong influence of Albanian culture on family functioning, through political, historical and anthropological characteristics of the country (36).

In conclusion, existing data on the association of family functioning and depression (a common mental disorder) in Albanians in comparison to natives is limited. To our knowledge, there is no study examining the possible links of aspects of family functioning to depressive symptomatology among Albanian immigrants. Furthermore, there is an emerging need to better understand the factors associated with mental health of Albanian migrants in rural areas in Greece, in order to improve the preventative and therapeutic interventions offered, within the limitations of the existing mental health services of the sector.

The aim of the present research project was to study the relationship between depressive symptomatology and family functioning in Albanian immigrants in Cyclades Islands in Greece. A comparison between Albanians and Greeks was also made, in order to investigate if there were differences concerning specific dimensions of family functioning associated with depressive symptomatology.

The following research questions were addressed: a. whether there is a statistically significant association between depressive symptomatology and family functioning in Albanian immigrants and native Greeks and b. if there are differences between the two ethnic groups regarding the specific dimensions of family functioning associated with depressive symptomatology.

Methods

Context

The present study was conducted in two islands belonging in Cyclades islands in Greece: Paros and Antiparos. The population of Paros island is 13.750 and the population of Antiparos 1211 residents (8). In 2015, around 1/5 of local population were Albanian immigrants, with or without the legal documents, and have migrated in these islands for permanent living (Office of Migrants in Syros, Municipality of Paros, oral communication, 2015).

These islands were selected for the study because of the great number of migrants from Albania living in this rural area, as well as the needs that were raised from the fact that most Albanians in these islands seek help concerning psychosocial difficulties, from the only mental health service operating in the area the last 15 years, the Mental Health Mobile Unit of NE Cyclades Islands (EPAPSY-NGO) (9, 37). Mental Health Mobile Units in Greece were developed, as part of the psychiatric reform, in order to serve population mental health needs in remote areas, in sectors with limited or without other mental health services, based on the main principles of community psychiatry (9, 38-39). Mobile Units provide diagnosis and therapeutic intervention for mental disorders and psychosocial difficulties in the population of the sector, in collaboration with Primary Health Care. Furthermore, a principal aim of the Units is needs assessment, as well as implementation of programmes in the field of mental health promotion.

According to the data kept by the Mobile Unit, Albanian immigrants constitute around 10-12% of total service users seeking help from the Mobile Units, with almost 1/3 of the psychiatric demands every year being related to depression (9). There are no specialised mental health services for migrants in Cyclades Islands and no specific interventions have been implemented by the Mobile Units till now, focused on migrants (9).

On the other hand, clinical work with migrants in the islands has brought forward the need to understand better the mental health needs of this part of the population, in order to ameliorate the services provided. In 2011 a Family Therapy Unit has been developed in Paros, as part of the services provided by the Mobile Unit. Needs regarding understanding the dynamics of family functioning in Albanian migrants and the way they interact with psychopathology were raised. This fact made it necessary to study issues related to family functioning and psychopathology in Albanians, as well as to develop

culturally sensitive methods in order to work effectively with migrants (concerning diagnosis, therapeutic intervention, mental health promotion etc).

Sample

The sample consisted of 204 adult service users, 105 (51,5%) Greeks and 99 (48,5%) Albanians, who sought help for the first time from the Mental Health Mobile Unit in Paros and Antiparos islands, during the years 2012-2016. Females were 70 (66,7%) of Greeks participants and 66 (66,7%) of Albanians. The mean age for Greeks was 38,5 years (SD=9,5) and for Albanians 37,7 years (SD=10,2). Patients suffering from psychosis, developmental disorders and organic mental disorders were excluded. Service users suffering from affective disorders, neurotic, stress-related and somatoform disorders, as well as service users who belonged to the category Z03-Z99 'Factors influencing health status and contact with health services' according to ICD-10 Classification of Diseases (40), were included in the study. In the last category more often belonged service users who attended the Mobile Unit in order to get advice for psychosocial difficulties (asking to get marital counselling, parental counselling, support for socio-economic problems, psychoeducation when a member of a family suffered a severe psychiatric disorder etc (9).

According to the records kept by the Mobile Unit the last 5 years before the implementation of the present research project, the analogy of Albanian immigrants to Greeks seeking help from the Unit for the first time was 1/10. We aimed to include all Albanian service users, fulfilling the inclusive criteria, who sought help from the Unit for the first time during the years 2012-2016. 116 Albanians were informed for the study and were invited to participate. 99 accepted to participate (the response rate was 85%). In the case of Greeks, one every 10 persons phoning to the Unit for the first time during the period of the study, asking for an appointment with a mental health professional was informed about the study and asked to participate. 119 Greeks were informed and 105 accepted to participate (the response rate was 88%).

Measures

A. Family Assessment Device (FAD)

The Family Assessment Device (FAD) is a 60-item self-reported questionnaire (4-5), developed according to the McMaster Model of Family Functioning (41), with good psychometric properties (5, 42-43). It assesses family functioning on each dimension of the Model (Problem Solving, Communication, Roles, Affective Responsiveness, Affective Involvement, Behaviour Control). In addition, the FAD includes a General Functioning scale that measures the overall level of the family's functioning. There are four choices (strongly agree, agree, disagree, strongly disagree) for each of the 60 statements. Each FAD item is scored on a 4-point scale (including reverse items) with higher scores indicating poorer or worse family functioning (23). The Problem-Solving subscale assesses the ability of the family to identify and handle problems effectively in instrumental and affective areas. Communication evaluates the extent and effectiveness of verbal exchange among family members. Roles measures the repetitive patterns of behaviour by which family members fulfil family functions, and their effectiveness. The fourth dimension, Affective Responsiveness, assesses the ability to respond to a range of stimuli with the appropriate quantity and quality of feeling. Affective Involvement, another dimension, evaluates to what degree family members are interested in and invest themselves in each other. The sixth dimension, Behaviour Control, measures the family's ability to maintain discipline and standards of behaviour within the family. The last dimension, General Functioning, assesses the overall health/pathology of the family. Healthy/unhealthy cut-off scores were also first published in 1985 (44) and the mean scores of family dimensions for a variety of sample populations were published in 1990 (41).

The FAD has been translated into around 25 languages and it has been widely used in several cross-cultural studies involving samples from different ethnicities (43). The FAD has been translated in Greek (45) and has been used in few studies in the Greek population (45-48). The Greek version of FAD has been recently validated in Greek sample, with good psychometric properties found (49). For the purpose of the current study FAD questionnaire was translated in Albanian by two

psychologists of Albanian origin, according to the method of back-translation (50).

B. The Centre for Epidemiologic Studies Depression Scale (CES-D)

The CES-D scale is a short self-report scale designed to measure the current level of depressive symptomatology in general population (6). It contains 20 items about symptoms that occurred in the week prior to the interview with response options from 0 to 3 that refer to frequency of the symptoms. The score ranges between 0 (best possible) to 60 (worst). Higher values indicate more symptoms and the cut-off point that has been typically recommended for depression caseness is 16 (51). However, more recent meta-analyses indicate as cut-off score 20, but this must be adapted to the cultural setting the study takes place (52).

The scale has been validated in the Greek population, with good psychometric properties (53, 54). It is suitable for use in samples of different ethnic groups and ages (52). It has been translated in Albanian and it has already been used in studies with Albanian immigrants, with good psychometric properties (17).

C. Questionnaire regarding psychosocial profile

A questionnaire was completed by the clinician assigned for every service user, including sociodemographic characteristics and psychiatric diagnosis. The socio-demographic variables were gender, age, ethnicity, family status, educational level, employment status, social insurance status. Psychiatric diagnosis was also included, according to the psychiatric evaluation conducted by the psychiatrist, based on criteria of the ICD-10 Classification of Diseases (40).

Internal consistency reliability was satisfactory for FAD and CES-D for the Greek and Albanian versions of the questionnaires (Table 1).

Table 1. Internal consistency reliability for FAD and CES-D

	Cronbach's a	
	Albanian version	Greek version
FAD		
Problem solving	0,77	0,80
Communication	0,73	0,78
Roles	0,72	0,75
Affective Responsiveness	0,72	0,79
Affective Involvement	0,79	0,77
Behaviour Control	0,80	0,75
General Functioning	0,75	0,89
CES-D	0,88	0,79

Procedure

The questionnaires were completed by every participant alone in an office of the Mobile Mental Health Service, after the first appointment with the clinician assigned for every case. The mean time needed to complete the questionnaire was 40 minutes. The next day, every participant was assessed and assigned with a clinical diagnosis by the service's psychiatrist, according to the criteria of the ICD-10 Classification of Diseases (40).

All participants gave informed consent in order to participate in the study. Ethical approval was obtained by the ethics committee of the Scientific Association for the Regional Development and Mental Health (EPAPSY). The study was performed in accordance with the ethical standards delineated in the 1964 Declaration of Helsinki.

Data was selected during the period 2012-2016.

Statistical analysis

Cross sectional analysis calculating mean scores, standard deviation (SD), median and interquartile range were used to describe quantitative variables. Frequencies were used to describe qualitative variables. Pearson's χ^2 test or Fisher's exact test were used to compare analogies. Student's t-test or non-parametric Mann-Whitney were used to compare quantitative variables between the two groups. Cronbach's alpha for each subscale of the FAD and for the overall score of CED-S were calculated. Pearson or Spearman r were used to test the relationship between two quantitative variables. Stepwise linear regression analysis was used to find independent fac-

tors associated with each measure. Kruskal-Wallis non-parametric test was used to compare quantitative variables between more than two groups. SPSS 19.0 was used to analyse the data.

Results

Sociodemographic data

Females were 70 (66,7%) of Greeks participants and 66 (66,7%) of Albanians. The mean age for Greeks was 38,5 years (SD=9,5) and for Albanians 37,7 years (SD=10,2). There was a statistically significant difference between the two ethnic groups regarding the educational level, being higher for Greeks (p<0.001). No statistically significant difference was found in family status between Greeks and Albanians. Greek participants, in comparison with Albanians, were more often full-time employed (56,3% vs 35.4%), and less often unemployed (17,5% vs 23.2%) or working part-time (11.7% vs 26.3%), to a statistically significant level (p=0.001). Furthermore, the percentage of Albanians without a social insurance was significantly much higher (24.2%) in comparison to Greeks (2,9%, p<0,001).

Sociodemographic data is given in Table 2, for each ethnic group (N=204).

Table 2. Sociodemographic data

		Ethnicity				P Pearson's x^2 test
	Greeks		**Albanians**			
	N	**%**	**N**	**%**		
Gender	Male	35	33,3	33	33,3	1,000
	Female	70	66,7	66	66,7	
Age (mean, SD)		38,5 (9,5)		37,7 (10,2)		0,563+
Educational level	Primary School	1	1,0	18	18,2	<0,001*
	High School	6	5,7	38	38,4	
	Lyceum	49	46,7	34	34,3	
	Technological Studies (after Lyceum)	30	28,6	4	4,0	
	University	19	18,1	5	5,0	
Family status	Single	22	21,0	15	15,2	0,228*
	Married	73	69,5	72	72,7	
	Separated	7	6,7	12	12,1	
	Widowed	2	1,9	0	0,0	
	Cohabiting	1	1,0	0	0,0	
						P Fisher's exact test
Employment status	Full-time job	58	56,3	35	35,4	0,001
	Part-time job	12	11,7	26	26,3	
	Student	1	1,0	3	3,0	
	Housewives	8	7,8	12	12,1	
	Retired	6	5,8	0	0,0	
	Unemployed	18	17,5	23	23,2	
Social insurance status	Greek National Health Service (EOPYY)	97	93,4	75	75,7	<0,001
	Other	3	2,9	0	0,0	
	No insurance	3	2,9	24	24,2	

*+Student's t-test ++Mann-Whitney test *Fisher's exact test*

Psychiatric diagnosis

No statistically significant difference was found between the two ethic groups, regarding psychiatric diagnosis. 33,3% of Greek service users and a higher percentage of Albanians, 45,5%, were suffering from Affective Disorders (no statistically significant difference between the two ethnic groups). 17,1% of Greek and 14.1% of Albanian participants were assigned a diagnosis of Neurotic, stress-related and somatoform disorders. 46% of Greeks and 35.4% of Albanians were assessed as belonging to the category Z00-Z99 of ICD-10, referring to Factors influencing health status and contact with services.

Psychiatric diagnosis assigned by the psychiatrist to every participant in the study is given in Table 3.

Table 3. Psychiatric Diagnosis

		Nationality				P Fisher's exact test
	Greeks		Albanians			
	N	%	N	%		
Psychiatric Diagnosis (ICD-10)	[F30-F39] Affective Disorders	35	33,3	45	45,5	0,288
	[F40-F48] Neurotic, stress-related and somatoform disorders	18	17,1	14	14,1	
	[Z03-Z99] Factors influencing health status and contact with health services	52	49.5	40	40.5	

Family functioning and depressive symptomatology

There was no statistically significant difference in the scores of FAD and CED-S between Albanians and Greeks (Table 4).

However, more Greek service users in comparison to Albanians were categorised as having healthy functioning in the domains of 'Communication' (25.5% vs 10.1%, $p<0.05$) and 'Affective Responsiveness' (21% vs 6.6%, $p<0.05$). In the rest dimensions of family functioning, no statistically significant difference was detected between the two ethnic groups, regarding the healthy/unhealthy dimension.

Table 4. FAD and CES-D scores for Greeks and Albanians

FAD	Nationality				P Student's t-test
	Greeks		Albanians		
	Mean score	SD	Mean score	SD	
Problem Solving	14,62	3,15	14,65	3,05	0,947
Communication	21,97	3,69	22,37	2,49	0,413
Roles	28,37	4,32	28,69	3,27	0,587
Affective responsiveness	16,21	3,15	16,68	2,42	0,251
Affective involvement	15,42	2,76	14,91	2,32	0,174
Behaviour Control	21,68	3,35	22,11	2,38	0,376
General Functioning	30,04	6,33	30,89	4,44	0,318
CES-D	24,44	11,26	27,13	11,85	0,118

Table 5 describes the percentages of healthy and unhealthy family functioning of participants in all FAD dimensions, for Greeks and Albanians, according to cut-off scores (23, 42, 44).

Table 5. Healthy and unhealthy family functioning for Greeks and Albanians

		Nationality				P Pearson's x2 test
	Greeks		Albanians			
	N	%	N	%		
Problem Solving	Healthy functioning	41	40,6	28	34,6	0,405
	Unhealthy functioning	60	59,4	53	65,4	
Communication	Healthy functioning	26	25,5	8	10,1	0,009
	Unhealthy functioning	76	74,5	71	89,9	
Roles	Healthy functioning	27	27,0	14	17,5	0,131
	Unhealthy functioning	73	73,0	66	82,5	
Affective Responsiveness	Healthy functioning	21	21,0	6	6,6	0,004
	Unhealthy functioning	79	79,0	85	93,4	
Affective Involvement	Healthy functioning	39	40,2	46	51,7	0,116
	Unhealthy functioning	58	59,8	43	48,3	
Behaviour Control	Healthy functioning	5	5,0	2	3,2	0,709*
	Unhealthy functioning	95	95,0	60	96,8	
General Functioning	Healthy functioning	21	21,6	9	11,4	0,072
	Unhealthy functioning	76	78,4	70	88,6	
*Fisher's exact test						

There was a statistically significant correlation between the scores in almost all dimensions of family functioning and CES-D score for Albanians and Greeks (p<0.001). Independently of nationality, better family functioning was related to less depressive symptoms (Table 6).

Table 6. Correlation coefficients between family functioning and depressive symptomatology

FAD		CES-D)	
		ΕΛΛΗΝΕΣ	ΑΛΒΑΝΟΙ
Problem Solving	R	0,34	0,42
	P	0,001	<0,001
Communication	R	0,47	0,42
	P	<0,001	<0,001
Roles	R	0,18	0,27
	P	0,077	0,024
Affective Responsiveness	R	0,42	0,27
	P	<0,001	0,018
Affective Involvement	R	0,29	0,09
	P	<0,001	0,440
Behavior Control	R	0,35	0,27
	P	<0,001	0,049
General Functioning	R	0,47	0,57
	P	<0,001	<0,001

Factors associated with depressive symptomatology

Multiple linear regression models were used, having as dependent variable the score on CES-D scale (stepwise method). Independent variables included sociodemographic variables, psychiatric diagnosis and score in different dimensions of FAD.

In Albanians, the dimension of family functioning referring to 'Behaviour Control' and the psychiatric diagnosis were independently associated with the score in depression scale. Specifically, the worse level of family functioning in the domain 'Behaviour Control' was associated with more depressive symptoms. Furthermore, the participants with a diagnosis belonging in the category of Affective Disorders [F30-F39] had 4,41 units higher score in CES-D, and the participants with a diagnosis of Neurotic, stress-related and somatoform disorders had 2,23 units higher score in CES-D, showing more depressive symptoms, in comparison with participants who took a diagnosis referring to Factors influencing health status and contact with health services [Z03-Z99].

Table 7 shows the factors associated with depressive symptomatology in Albanian participants.

Table 7. Factors associated with depressive symptomatology in Albanian participants

		β*	SE**	P
Behaviour Control (FAD)		1,98	0,70	0,008
Psychiatric diagnosis according to ICD-10	[Z03-Z99] Factors influencing health status and contact with health services (ref.)			
	[F30-F39] Affective Disorders	4,41	1,28	<0,001
	[F40-F48] Neurotic, stress-related and somatoform disorders	2,23	1,60	<0,001
*dependent coefficient **standard error of dependent coefficient				

In Greeks, gender, family status, psychiatric diagnosis and family functioning in the dimension of 'Problem Solving' were independently associated with the score of CES-D. More specifically, females had 4,67 units higher score in comparison to males. Married or cohabiting participants had 5,78 units higher score in comparison to participants who did not belong in this category. Worse level of functioning in the dimension of 'Problem Solving' was associated with more depressive symptoms. Participants with a diagnosis of Affective Disorders [F30-F39] had 4,23 units higher score in CES-D and participants with a diagnosis of Neurotic, stress-related and somatoform disorders [F40-F48] had 2,14 units higher score in CES-D, showing more depressive symptoms, in comparison to participants with a diagnosis in the category referring to Factors influencing health status and contact with health services [Z03-Z99].

Table 8 shows the factors associated with depressive symptomatology in Greeks.

Table 8. Factors associated with depressive symptomatology in Greeks

		β*	SE**	P
Gender	Male (ref.)			
	Female	4,67	1,41	0,002
Married/co-habiting	No (ref.)			
	Yes	-5,78	1,60	0,001
Problem solving (FAD)		0,57	0,19	0,005
Psychiatric Diagnosis according to ICD-10	[Z03-Z99] factors influencing health status and contact with health services (ref.)			
	[F30-F39] Affective Disorders	4,23	1,28	<0,001
	[F40-F48] Neurotic, stress related and somatoform disorders	2,14	1,60	<0,001

**dependent coefficient **standard error of dependent coefficient*

Discussion

Regarding the sociodemographic profile, Albanian participants in the study had lower educational level and were more often unemployed, part-time working and uninsured, in comparison to Greek participants. The difference in educational level could be attributed to the difficult socio-economic circumstances most migrants faced in Albania before immigrating and the problems concerning education for migrants in Greece (55). Furthermore, the greater number of unemployed and uninsured people in the sample of migrants, maybe depicts the socio-economic difficulties of Albanians, as well as the fact that many migrants do not obtain the legal documents for living permanently in Greece and keep working without social insurance (7).

No statistically significant difference was found between Greeks and Albanians. concerning the frequency of the diagnostic categories (Affective Disorders, Stress-related disorders, Factors influencing health status and contact with services), assigned by the psychiatrist. In a study in Italy regarding migrant pathways to Community Mental Health Centres, common mental disorders in migrant service users were 70% (56), which was higher in comparison with the percentage of these disorders in native service users (47.5%,) (57). However, the context in which the current study was conducted is much different, as it took place in a rural area, without any other mental health services (in public or private sector).

Concerning perceived family functioning, although there was no difference between Albanians and Greeks, Albanians were categorised as having more often less functional family functioning in the domains of 'Communication' and 'Affective Responsiveness' in comparison to natives ('unhealthy functioning' as indicated by the cut-off scores of FAD). This is an interesting finding, as differences in certain dimensions of family functioning could be associated with cultural, socio-anthropological characteristics defining the patterns of interaction in families (23) or the effect of changes in dynamics because of migration (10).

In Albanian families, the patriarchal structure, the traditional values concerning the roles of men and women (36), the higher level of interdependency (in emotional and financial level) between family members, as well as the lower levels of emotional expression and intimacy (25,33) could be some factors associated with greater dysfunction in the dimensions of family functioning referring to 'Communication' and 'Emotional Responsiveness'. In the same direction, the traditional perception that expressing emotions, especially for a man, depicts weakness and lack of emotional control, is more often observed in societies based on collectiveness, where lower emphasis is placed on self-disclosure for enhancing intimacy (58). In addition, research indicates that Albanian immigrants are less likely to express their negative emotions, including the expression of anger, compared to Greeks (34). The impact of the financial crisis on family relationships in Albanian immigrants have also been indicated, showing greater levels of emotional dependency after the crisis (59).

Furthermore, migration, acculturation and their impact on family dynamics, could also be associated with dysfunction in certain family dimensions (10). Albanians and other immigrants often seem to wobble between the modern and the traditional, the dependent and autonomous (34), which could have an impact on family communication and emotional expression between family members. Possible changes in roles

and acculturation gap between family members (i.e. parents and teenagers) could also play a significant role in family dynamics for migrants (10).

In the current study, family functioning in both ethnic categories, Albanian migrants and Greek natives, was associated with the levels of depression. Greater dysfunction in family functioning was related to more depressive symptoms. These results are in accordance with international research, showing the interplay between family functioning and depressive symptomatology (60, 61, 62). Especially in migrants, greater conflict and lower cohesion in families, were associated with more depressive symptoms (63).

Furthermore, in Albanians, the dimension referring to 'Behaviour Control' was found to be independently a significant prognostic factor of depressive symptomatology, as more rigid or chaotic patterns of behaviour control were associated with more depressive symptoms. On the other hand, in Greeks, another factor was found to be significant concerning the association with depressive symptomatology, referring to 'Problem Solving'.

Family dynamics and patterns of interaction in Albanian families, as expressed in roles, hierarchy, rules or standards, expectation of behaviour and discipline seem to be related to depressive symptomatology. This could be attributed to the fact that family members may react using more rigid patterns of control in the case of a member suffering from depression, as a way of protection or due to certain perceptions related to mental health issues. On the other hand, rigidness in family rules and control and the consequent restriction of personal choices, could act as an additional risk factor to depressive symptomatology, in combination with other factors (individual, social, biological, psychological, etc.).

Maybe due to different reasons, in the case of Greeks, another dimension of family functioning, related to the ability to resolve effectively practical and affective issues of problems, was found to be independently associated with depressive symptoms. This is a finding that needs further research in order to better understand the relation of Problem Solving dimension with depression. An important area of research could be the association of this finding with financial crisis and its impact on family dynamics in Greek families. Greeks also face difficulties concerning the socio-economic situation the last years and need to manage the concurrent practical and emotional issues in different levels (64). It seems that Greek people perceiving their families as less functional in the way these difficulties are resolved, have a greater possibility to present with greater depressive symptomatology.

Strengths and limitations

To our knowledge, this is the first study in Albanian immigrants, showing the association of certain dimensions of family functioning with depressive symptomatology. It is also the first study in Greece, comparing Albanians to natives, concerning the relationship of family functioning with depression.

A basic limitation of the study is related to the use of measures in samples with different cultural backgrounds (65). Although the measures used had satisfying internal consistency, they were not validated in an Albanian sample. This is an important issue to take into consideration when interpreting the results, especially regarding the definition of 'healthy and unhealthy' dimensions of family functioning. Furthermore, the results of this study cannot be generalised, as it is not population based and it was conducted to service users of a mental health unit, in an island with specific socio-economic and anthropological characteristics. Self-reported questionnaires also have limitations in what people report and evaluate. Other limitations are associated with the cross-sectional studies generally, as they do not give information about the direction of causality between variables studied and there is also a bias concerning participants that do not accept to participate (66). Finally, the size of the sample is an extra limitation.

Implications for research and practice

The current study has potential implications in clinical work with Albanian migrants and natives, as family functioning was recognised to be an important factor associated with

depressive symptomatology, regardless of origin. Certain dimensions of family functioning were also indicated as independent prognostic factors of depression in the Albanian ethnic group. When working with migrants, it is important to evaluate dimensions of family functioning and take them into consideration in prevention and intervention strategies.

Qualitative methods of research would be useful in order to study in depth the dimensions of family functioning that could act as risk or protective factors for depression and for the effectiveness of therapy in Albanian migrants, taking into consideration the socio-cultural characteristics of this ethnic group. Studies to validate the measures translated in Albanian would also be useful, as these questionnaires could be widely used in research and clinical practice. Longitudinal studies conducted in the first period of immigration and some years later, could also shed more light in the way family dynamics change over time, due to migration and acculturation process and the way they are associated with psychopathology. Finally, studies including Albanian control groups living in Albania, could give more information about the possible differences and similarities with Albanian migrants in other countries, regarding the dimensions studied in the current research project.

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