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CLINICAL PSYCHOLOGY & NEUROPSYCHOLOGY | RESEARCH ARTICLE

Migratory processes and psychiatric disorders in a sample of adolescents: A retrospective observational study

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Abstract: *Objective*: To analyze the clinical and socio-demographic features in a sample of 10–17 years-old immigrant inpatients with a psychiatric disorder. *Method*: One hundred and thirty-eight immigrant adolescents, 138 Italian controls age, gender, and diagnosis-matched were enrolled. Socio-demographic and clinical features were carried out from medical records. Immigrants were divided into three groups according to the migratory processes: first-generation participants immigrated alone (IAs) to reunite with their parents (58%); first-generation participants immigrated with their parents (IPs) (13.8%); second-generation participants (SGIs), born in Italy from immigrant parents (25.3%). *Results*: The onset of psychiatric symptoms in IAs occurred mainly after the first-year of stay in Italy (80.2%, $p = 0.036$, OR 5.25), while IPs were more likely to begin showing their symptoms 5 years after immigration. Moreover, IAs were more likely to be admitted to the emergency room for the first occurrence of an acute psychiatric disorder rather than for a chronic, previously-treated disease, when compared with SGIs and Italians. *Conclusion*: Among the immigrants, first-generation adolescents were the most likely to present a psychiatric acute disorder. When compared with Italians, immigrants were more likely to use the emergency room to access mental health services and tended to be hospitalized for an acute, previously unknown, disease.

ABOUT THE AUTHORS

The Child and Adolescent Mental Health Department of University of Milan-Bicocca— ASST of Monza is located in Monza, Italy. Since 80s, it is dedicated to the treatment of children and adolescents with psychiatric disorders. Our services include a hospital ward, a day hospital for eating disorders, short- and long-term residential and semi-residential therapeutic community, and specialized clinics. In addition, the research group has published several papers in the field of early onset psychosis, eating disorders and personality disorders, and entertaining collaborations with other Italian and International research groups.

PUBLIC INTEREST STATEMENT

In the last years, immigration has increased in Italy. The present paper is focused on a group of immigrant inpatients with a psychiatric disease aged between 10 and 17 years . We divided the participants enrolled according to the type of immigration. In a second time we compared the immigrant group to Italian controls, matched by age, gender, and type of diagnosis. The specific type of immigration was observed to be correlated to the latency time between the arrival to Italy and the first symptoms onset. In our study, participants immigrated alone tended to start their psychiatric disease after the first-year of stay in Italy, meanwhile participants immigrated with their family presented the symptoms onset mainly 5 years after their arrival to Italy. Moreover, all the immigrants tended to be hospitalized for an acute disease previously unknown to the services and to use emergency room more frequently, when compared with the Italian controls.

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1. Introduction

In the last decades, immigration has become a notable phenomenon in Italy, achieving a growth rate of 311, 5% in 2012, when compared with 2002. In a few years, Italy has turned from a traditionally Country of origin for emigrants to the fifth European Country for immigrants' presence. Differently from other countries, such as USA, Canada, and UK, the literature about immigrant children's mental health is actually poor (Caroppo et al., 2007; Margari et al., 2013). In Italy, as in other countries (Buron, Cots, Garcia, Vall, & Castells, 2008; Lindert, Schouler-Ocak, Heinz, & Priebe, 2008), immigrants tend to use emergency rooms more often, in comparison with natives (Bonvicini, Broccoli, D'Angelo, & Candela, 2011).

Immigration represents a stressful process that could precipitate the onset of psychiatric disorders in vulnerable individuals (Stevens & Vollebergh, 2007), in particular in children and adolescents (Berry, 1997). Correlations between immigration and mental health in children are actually unclear (Aronowitz, 1984). Some studies describe a higher incidence of psychiatric disorders in some ethnic groups compared with natives (e.g. learning disabilities in Asians and Hispanics) (Georgiades, Boyle, & Fife, 2013), while others report similar results in immigrants and natives (Aronowitz, 1984; Zwirs et al., 2007). Moreover, some mental disorders, as PTSD and conduct disorders, seem to be more frequent in migrants, while others, such as ADHD, are more common in natives (Gaber, Boyrakhen, & Herpertz-Dahlmann, 2013). Perceived discrimination is generally correlated with mental problems and, in particular, with externalizing disorders (hyperactivity and conduct disorders), while internalizing problems (depression, anxiety, and somatization) are commonly linked to "ethnic" identity crisis (Oppedal, Roysamb, & Heyerdahl, 2005). Second-generation boys and first-generation girls seem to be particularly at risk for developing psychiatric symptoms (Oppedal et al., 2005). Moreover, boys may present with externalizing symptoms more frequently than girls, who are more likely to show internalizing ones instead (Margari et al., 2013; Zwirs et al., 2007).

Learning disabilities correlate with psychiatric disorders in all ethnic groups (Zwirs et al., 2007) with differences according to the specific ethnic group: for example, scholastic difficulties seem too often recur in the first-generation Africans and second-generation Asians and Hispanics (Georgiades et al., 2013).

Schizophrenia seems to be more common in migrants (Bhugra, 2004; van Os & Kapur, 2009; Veling, 2013) and in particular in Afro-Caribbeans (Eaton & Harrison, 2000).

It is well-known that three moments in life are characterized by a higher vulnerability to psychiatric disorders: birth, the beginning of school attendance, and adolescence (Moro, 2013; Rezzoug, Baubet, & Moro, 2013; Skandrani & Bouche-Florin, 2013). In particular, adolescence represents a critical transition time for the seeking for one own identity. In a cross-cultural context the identity definition may become even more complex. In fact, immigrant teenagers have to deal with their own cultural identity in the encounter with the one of the host Country, in a time in which they become able to analyze the different cultural codes they are exposed to Baubet and Moro (2010). Some adolescents may experience the need to make a choice between the cultures, instead of starting a process of integration. These teenagers face the impossible choice between "becoming Italian" or growing up according to their parents' culture. These cultural and identity conflict may determine the development of an identity crisis, representing an important risk factor for the onset of a psychiatric illness (Oppedal et al., 2005).

"Protective factors" that may reduce vulnerability and stress related to immigration (Oppedal et al., 2005; Rezzoug et al., 2013) seem to be represented by a supportive family (Skandrani &

Bouche-Florin, 2013), a regular school attendance (Rezzoug et al., 2013), the knowledge of both cultures (the host and the native one) (Birman, Trickett, & Vinokurov, 2002; Veling, 2013), language (Rezzoug et al., 2013), and the group of peers (Birman et al., 2002).

Even if the features described above seem to be transversal in adolescent migrants with psychiatric disorders all over the world, each host Country presents specific features according to its own peculiarity and history, and to the specific characteristics of its immigration flows (United Nations, Department of Economic & Social Affairs, Population Division, 2015).

To our knowledge, there are no Italian studies investigating the features of immigrant adolescent inpatients with a psychiatric disease.

1.1. Aim of the study

The aim of the present study was to analyze the socio-demographic (including the migratory history) and the clinical features (including the time of onset of the psychiatric disorders as regard as the age of migration) in a group of adolescent migrant inpatient participants.

2. Materials and methods

2.1. Participants

Data were carried out from the medical records of 196 immigrant adolescents, aged between 10 and 17 years-old, hospitalized at the Child and Adolescent Mental Health Department S. Gerardo Hospital, ASST Monza—University of Milano-Bicocca (Milano, Italy) between January 2010 and June 2013. The Child and Adolescent Mental Health Department of ASST of Monza, Italy is one of the three hospital ward dealing with children and adolescents with acute psychiatric disorders in the Lombardia Region, in the northeast of Italy. Although all the 196 subjects gave their written informed consent to participate to the study, we included in our sample only subjects with a psychiatric diagnosis and at least one immigrant parent.

Fifty-eight participants with a neurological diagnosis or a history of adoption or fostering were excluded from the analysis. One hundred and thirty-eight participants finally entered the study.

Age-, sex-, and diagnosis-matched Italian controls, hospitalized in the same period of time, were also enrolled.

Socio-demographic data (gender, date of birth and age at hospitalization, educational level, and type of school and parental marital status) were carried out from medical records for both groups. The parental couple was considered steady if they were married or lived together at the moment of the hospitalization. For IAs, parental couple was considered steady if parents were married or in a stable relationship, even though they lived in different countries.

Only for the immigrants' group, information on the language spoken (knowledge of both Italian and native language) and the immigration history were also considered. These data included information about: type of immigration (first-generation children migrated alone in order to reunite to their family—IAs—or migrated with their parents—IPs—and second-generation immigrants—SGIs), years of stay in Italy, parents' and children's nationality. If the immigrant children arrived in Italy through a family reunification, the type of reunification (reunited to both parents, only to mother, to a new family unit when the reunion happened to one of the parents who had been living with a new partner) was included.

Clinical variables such as diagnosis, duration of the hospitalization, time between the onset of symptoms and the access to the Psychiatric ward, and number of previous hospitalizations were collected for immigrants and controls. Particular importance was given to: (1) latency time between the arrival in Italy and the onset of symptoms in the first-generation immigrant group; (2) type of

admission at the hospital (through emergency ward, sent by a general practitioner or by a specialist of a psychiatric clinic); (3) reason for hospitalization (an acute psychiatric illness or an aggravation of a chronic disease, known to the services).

Use patterns of mental health care services before the admission included in the database were: (1) admission to psychiatric or psychological outpatient clinic; (2) psychotherapy; (3) psychiatric rehabilitation center; (4) access to social services.

Parents and participants were told the purpose of the study and a written informed consent to participate was obtained. The research was reviewed and approved by the institutional review board of our hospital (San Gerardo Hospital of the ASST of Monza, Italy).

2.2. Statistical analysis

Continuous variables were expressed as mean and standard deviation (SD) and they were analyzed through the ANOVA test. Discrete variables were expressed as percentage and were analyzed by Pearson Chi-square test and by the Fisher test, when the cells frequencies were less than five. Simple logistic regressions were used to explore associations between variables and outcomes. The significance level was set at $p < 0.05$. The *R* 3.0.1 software package was used.

3. Results

3.1. Sample

Socio-demographic, educational and parental marital status features and type of diagnosis of the immigrants and controls are summarized in Table 1.

Table 1. Socio-demographic, educational and parental marital status features and type of diagnosis of immigrant subjects (main group and three subtypes) and controls

	First-Generation Immigrants		Second-Generation Immigrants	*p*	Immigrants *n* = 138	Italians *n* = 138	*p*
	IA *n* = 80	**IP *n* = 19**	**SGI *n* = 35**				
Male (%)	32 (40)	11(58)	19 (54)	n.s.	64 (46.4)	64 (46.4)	n.s
Mean age at hospitalization (SD)	14.4 (2.4)	13.5 (3.5)	11.8 (4.7)	*n.s.*	13.6 (3.4)	14.3 (3.08)	*n.s.*
Diagnoses: *N* (%)				n.s.			n.s.
Personality disorders	21 (26.3)	5 (26.3)	8 (22.9)		36 (26.1)	36 (26.1)	
Psychosis	18 (22.5)	5 (26.3)	9 (25.7)		33 (23.9)	33 (23.9)	
Depressive sindrome	13 (16.2)	2 (10.5)	5 (14.3)		20 (14,5)	20 (14,5)	
Conduct disorders	9 (11.2)	2 (10.5)	4 (11.4)		15 (10.9)	15 (10.9)	
Anxiety disorders	8 (10)	1 (5.3)	4 (11.4)		13 (9.4)	13 (9.4)	
Somatization disorders	8 (10)	1 (5.3)	2 (5.7)		11 (8)	11 (8)	
Eating disorders	3 (3.8)	3 (15.8)	3 (8.6)		10 (7.2)	10 (7.2)	
Parental couple:							
Cohabiting parents *N* (%)	28 (35)	15 (78.9)	16 (48.5)	0.002*	62 (45.6)	100 (72.5)	0.000°
School attendance *N* (%)	47 (62.7)	17 (89.5)	21 (72.4)	n.s.	88 (66.7)	84 (63.6)	n.s.

Notes: IA = first-generation subjects immigrated alone to reunite with their parents, IP = first-generation subjects immigrated with their parents, SGI = second generation subjects born in Italy from immigrant parents. SD = standard deviation, n.s = not significantn, *n* = number, *p* = level of significance.

*Pearson Chi[2] value = 12.252; *df* = 2; °Pearson Chi[2] value = 19.563; *df* = 1.

Immigrant children were subdivided into three groups according to the type of immigration: reunited immigrants (IAs, *n* = 80, 58%), immigrated with the family (IPs, 19, 13.8%) and second-generation participants (SGIs, 35, 25.3%). Four cases whose typology of immigration was unknown were excluded from the analysis carried out among the immigrant participants but were included in the comparison between cases and controls.

In the IA group, 39 participants (49%) reunited only to the mother, 13 (16%) reunited to both parents, 10 (12.5%) came to Italy with the mother in order to reunite to the father, 7 (9%) reunited to a new family unit, 5 (6%) reunited only to the father, and 2 (2.5%) arrived in Italy with the father in order to reunite to the mother. In 4 cases (5%) the type of family reunion was unknown.

Age at arrival in Italy, children and parents' nationality, the levels of knowledge of the native and of the second language in the three groups of immigrant children are summarized in Table 2.

Even though no differences were found regarding age and gender between the three groups, the SGIs were younger than the first-generation group and males predominated in IPs and SGIs.

The diagnoses did not differ in the migrants' groups, with personality disorders and psychosis representing half of the diagnoses.

Table 2. Age at arrival in Italy, children and parents' nationality, knowledge of first and second language in the three groups of immigrants

	First-generation immigrants		Second-generation immigrants	*df*	Chi² value	*p*
	IA *n* = 80	IP *n* = 19	SGI *n* = 35			
Age at arrival:						
Mean, SD	11.9 (2.6)	10.8 (3.3)	/			n.s.
Provenience origin of the subject *N* (%) :				8	39.672	≤0.001
East Europe	19 (23.75)	6 (31.6)	6 (17.1)			
South America	32 (40)	6 (31.6)	1 (2.8)			
Africa	19 (23.75)	1 (5.2)	10 (28.6)			
Asia	10 (12.5)	3 (15.8)	3 (8.6)			
Other countries		3 (15.8)	12 (34.3)			
Unknown			3 (8.6)			
Parental couple:						
Parents with different nationality *N* (%)	0	2 (10.5)	12 (44.4)	2	40.382	≤0.001
Knowledge of Italian:				4	48.957	0.000
Nonspeaker;	6 (7.5)	1 (5.5)	4 (11.8)			
As second language;	60 (75)	10 (55.6)	2 (5.9)			
As first language	14 (17.5)	7 (38.9)	28 (82.3)			
Knowledge of native language:						
Speaker: *N* (%)	70 (98.6)	14 (93.6)	3 (25)	2	56.159	0.000

Notes: IA = first-generation subjects immigrated alone to reunite with their parents. IP = first-generation subjects immigrated with their parents, SGI = second generation subjects born in Italy from immigrant parents, SD = standard deviation, n.s = not significant, *n* = number, *p* = level of significance.

No difference in the age at arrival was found between the first-generation groups. However, IPs were younger than IAs when they came to Italy.

Differences emerged in the nationality of the immigrants (p = 0.001). IAs came mainly from South America, IPs arrived from South America and East Europe, while SGs came from Africa or other countries.

Almost half of the SGIs' parents had different nationalities (12, 44.4%), while FGIs parental couples came mainly from the same countries (100% of IAs and 17, 89.5% of IPs) (p = 0.00). In the majority of the couples with different nationalities, one of the parents was Italian.

Within the migrant groups, IAs were more frequently characterized by divorced parents (52, 65%) when compared to the SGIs (14, 51.5%) and IPs (4, 21.1%) (p = 0.002).

The parental couples of migrants (74, 54.4%) were divorced more frequently than the Italian couples (38, 27.5%) (p = 0.000, OR 0.32). The IAs tended to have divorced parents more frequently than Italians (OR = 0.2) and IPs (OR = 0.14).

Differences in the knowledge of both Italian (p = 0.000) and native language (p = 0.000) emerged among the immigrants. The first-generation group tended to speak Italian as a second language (75% of IAs and 55.6% of IPs), while the SGIs tended to speak it as their first language. Despite the better knowledge of the Italian language, the SGIs tended to know the parental languages less (3, 25%) when compared to IAs (70, 98.6%) and IPs (14, 93.6%).

Furthermore, in the first-generation groups an analysis was carried out in order to verify whether the knowledge of Italian was connected to the years of residence. Participants with a longer stay were characterized by a better knowledge of Italian (p = 0.000).

No differences emerged in school attendance between the three immigrant groups and in the comparison between migrants and Italians.

3.2. Clinical features
Clinical features in the three immigrant groups, and in Italian controls, are described in Table 3. No differences were found regarding sex, age at hospitalization, and diagnoses. Psychosis and personality disorders were the prevalent diagnoses among the migrant groups and in comparison with Italians.

3.3. Latency time between arrival in Italy and symptoms' onset in the first-generation group
As regards IAs, 8 (10.5%) presented with psychiatric symptoms before the arrival in Italy, 7 (9.2%) had the onset of symptomatology in the first year after immigration, 22 (29%) had the onset between the first and the second year, 20 (26.3%) 3–5 years after arrival, for 19 (25%) the onset happened after 5 years of residence.

In the IPs group, 1 (5.55%) presented with psychiatric symptoms before the arrival, 2 (11.1%) had the onset of symptomatology in the first year after immigration, 1 (5.55%) had the onset between the first and the second year, 3 (16.7%) 3–5 years after arrival, for 11 (61.1%) the onset happened after 5 years of stay (Figure 1). Significant differences emerged between IAs and IPs (p = 0.036).

The statistically significant difference was confirmed also after excluding participants with psychiatric symptoms at the moment of arrival in Italy (p = 0.029).

IAs tended to have the onset of symptoms in the first year after arrival five times more frequently than IPs (OR = 5.25).

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Table 3. Clinical variables in the three immigrant groups and in comparison Immigrants vs. Italians.							
	IA *n* = 80	IP *n* = 19	SGI *n* = 35	p	Immigrants	Italians	p
					n = 138	*n* = 138	
Access to hospital:							
N							
Emergency department use	43 (53.8)	8 (42.1)	16 (45.7)	n.s.	71 (51.4)	52 (37.7)	0.002[a]
Symptoms:							
N (%)				*0.014[b]*			*0.001[c]*
Acute psychiatric disease	35 (44.3)	9 (47.4)	6 (17.1)		52 (38)	27 (19.6)	
Aggravation of a chronic disease	44 (55.7)	10 (52.6)	29 (82.9)		85 (62)	111 (80.4)	
Health care services:							
N (%)							
Outpatients clinic	26 (32.5)	8 (42.1)	13 (37.1)	n.s.	48 (34.8)	62 (44.9)	n.s.
Therapeutical communities	12 (15)	4 (21.1)	10 (28.6)	n.s.	26 (18.8)	20 (14.5)	n.s.
Pharmacological treatment	44 (55)	11 (57.9)	19 (54.3)	n.s.	75 (54.3)	63 (45.7)	n.s.
Psychology	51 (63.7)	14 (73.7)	26 (74.3)	n.s.	92 (66.7)	96 (69.6)	n.s.
Psychotherapy	13 (16.7)	3 (15.8)	10 (28.6)	n.s.	27 (19.6)	71 (51.4)	0.000[d]
Social services	21 (26.2)	14 (73.7)	15 (42.9)	n.s.	42 (30.4)	33 (23.9)	n.s.

Notes: IA = first-generation subjects immigrated alone to reunite with their parents, IP = first-generation subjects immigrated with their parents, SGI = second generation subjects born in Italy from immigrant parents, SD = standard deviation, n.s = not significant, *n* = number, *p* = level of significance.

[a]Pearson Chi^2 value = 5.910; *df* = 1

[b]Pearson Chi^2 value = 19.563; *df* = 1.

[c]Pearson Chi^2 value = 8.529; *df* = 2.

[d]Pearson Chi^2 value = 29.081; *df* = 1.

Figure 1. Latency time between the arrival in Italy and the onset of symptoms for the first generation immigrants.

Notes: FGI = first-generation immigrants, IA = first-generation individuals, immigrated alone, IP = first-generation individuals, immigrated with their parents.
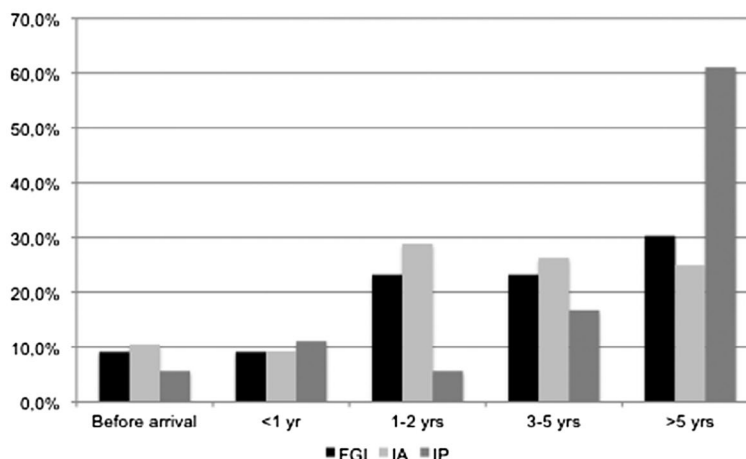

3.4. Access to hospital

No differences were found between the three immigrant groups when considering the typology of access to hospitalization, with the Emergency department being the most used (53, 8% of IAs, 42.1% of IP, and 45.7% of SGIs). The distribution for typology of access in immigrants and Italians is summarized in Figure 2.

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Figure 2. Distribution for typology of access in immigrants and Italians.

Notes: Emergency = emergency ward; GP = general practitioner; Local outpatients = child and adolescent mental health outpatient clinics located outside San Gerardo Hospital; Hospital clinic = Child and Adolescent Mental health Clinics located in the San Gerardo Hospital area; Deferable emergency = subjects sent by GP to the child and adolescent mental health ambulatory for and evaluation within 72 h.
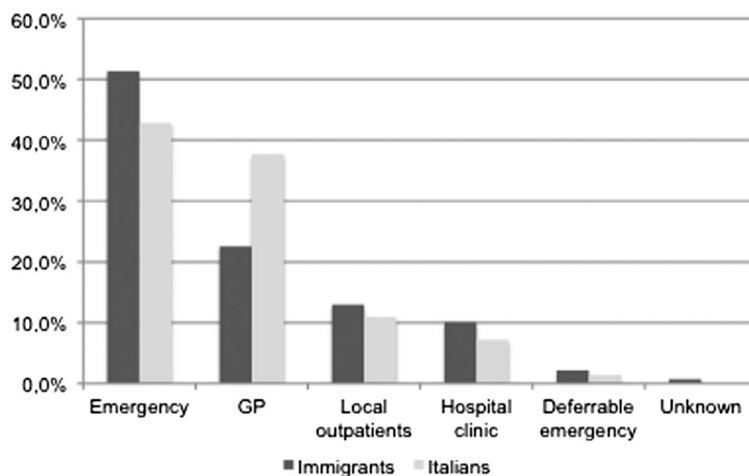
Differences emerged between immigrants and Italians ($p = 0.002$): immigrants used the emergency department more frequently (71, 51.4%), while Italians were admitted to hospital mainly after general practitioner advice (59, 42.8%).

3.5. Hospitalization
No differences in the number of admissions, in the duration of the hospitalization and in the latency time between the onset of symptoms and admissions were found in the three migrant groups and between immigrants and controls.

3.6. Reason for hospitalization
Among the immigrant participants, the SGIs tended to be hospitalized for an aggravation of a chronic, psychiatric disease previously known to services (29, 82.9%) more frequently than IAs (44, 55.7%) and IPs (10, 52.6%). In fact, almost half of IAs (35, 44.3%) and IPs (9, 47.4%) were admitted for a previously unknown illness with acute and explosive symptoms ($p = 0.014$).

Immigrants were hospitalized for an aggravation of a chronic disease (85, 62%) less frequently than Italians (111, 80.4%) ($p = 0.001$). IAs are admitted for a chronic, previously treated disease less frequently than SGIs (OR = 0.26) and Italians (OR = 0.31). IAs show an acute, explosive presentation of symptoms more frequently than Italians and other immigrant groups.

3.7. Use of services
No differences between the immigrant groups were observed regarding the services and treatments used before admission. Immigrants used local outpatient services less frequently than Italians did ($p = 0.085$, OR = 0.65) and underwent psychotherapy less frequently than Italians ($p = 0.000$; OR 0.23).

4. Discussion
Our sample of immigrants was miscellaneous for ethnicity, culture, and socio-demographic characteristics. Since it is well-known that the type of immigration could lead to different mental disorders (Eaton & Harrison, 2000; Georgiades et al., 2013; Margari et al., 2013; Oppedal et al., 2005), we decided firstly to divide the group of immigrants in three subgroups according to the immigration history.

In the SGIs Africans predominated, meaning a longer immigration history in Italy, if compared with other ethnic groups.

South Americans were predominant in the FGIs and they tended to arrive in Italy mainly through family reunion. Generally, South Americans reunite only to their mothers. The number of divorced parental couples found in this group confirmed this fact.

On the contrary the most cohabiting parental couples were found within the IP group.

In our first-generation immigrant group, participants were mainly preadolescent, age in which integration could be demanding, especially in the scholastic environment. (Georgiades et al., 2013) As reported in the literature (Berry, 1997), a younger age at the moment of immigration could be protective.

In the SGIs parents often came from different countries and, in 75% of the total, one of them was Italian. This "double" origin could facilitate the integration of the child but, if the integration of the parents' cultures is not fulfilling, the underage child might experience vulnerability. The immigration-associated trauma act intensely on adolescence when individuals have to integrate their "double" origin in order to develop their identity (Georgiades et al., 2013).

Languages spoken by the immigrants can be considered an maker of integration (Bhugra & Jones, 2001; Georgiades et al., 2013). As expected, subjects of the second-generation were characterized by a better knowledge of Italian when compared to first-generation's ones. On the other hand, the second generation tended to lose the ability to speak the native languages.

After the arrival, an immigrant person starts to integrate. Literature reports that a fulfilling integration could reduce the vulnerability and improve resilience and creativity (Georgiades et al., 2013; Zwirs et al., 2007). However, when integration is not satisfying, individual vulnerability can increase and facilitate the onset of disorders (Berry, 1997; Caroppo et al., 2007). In view of the above, for the first generation we decided to analyze the latency time between the arrival in Italy and the onset of symptoms. Symptoms started to occur after one-year of stay for 80.2% of the reunified participants, while 61.1% of the participants, who migrated with the family had the onset of symptomatology mainly after five years of residence. This difference could not be linked to the age of children at the time of immigration since no difference between the groups was found regarding age. We suppose that this difference in the latency time of symptoms onset could be explained by the type of immigration and its effects on the individual's vulnerability (Caroppo et al., 2007). Firstly, the people who migrated with the family could be helped by the family itself during their integration (Jasinskaja-Lahti & Liebkind, 2000; Skandrani & Bouche-Florin, 2013) but, after a while, their vulnerability increased. This happened mainly during adolescence since in this period individuals have to create their identity, integrating sexual development, major cognitive skills and their affiliations to two different cultures in order the "create" their own original personality. Literature reports that, when this process fails, adolescents may experiment an "ethnic identity crisis" in which symptoms are more likely to appear (Bhugra & Jones, 2001; Hermans, 2001; Skandrani & Bouche-Florin, 2013).

We hypothesized that in our sample, participants, immigrated with the family could experiment a long and cumulative stress in which individual vulnerability, immigration-associated trauma and the failure of integration may play a major role (Berry, 1997; Zwirs et al., 2007).

On the other hand, IAs could have to deal firstly with a precocious trauma when their parents left them in the native Country in order to come to Italy, as it has been described in literature (Berry, 1997; Bhugra & Jones, 2001). Then, at the time of reunification, children had to leave their caregivers and, when they arrived in Italy, they had to start to interact with their parents again. Furthermore, they had to start their social integration process. Immediately after their arrival this group of immigrants faced a double overwhelming stressful condition that may have played a role as a trigger of a psychiatric disorder in vulnerable people, determining the onset of symptoms (Caroppo et al., 2007; Zwirs et al., 2007).

However, in all of the three groups, the trauma connected to migration might has been added to the pre-existing growth difficulties causing the symptoms onset (Zwirs et al., 2007).

Moreover, the groups did not differ in the latency time between the onset of symptoms and the hospitalization.

Differences were found between the first-and second-generation regarding the reason of hospitalization. SGIs were hospitalized for an aggravation of a chronic disease, whereas IAs and IPs were admitted for an acute and previously unknown disease. This could be due to a worse knowledge of Italian health services and for possible cultural differences in mental health service use. Moreover, Italian health Services may not be sufficiently equipped to provide the necessary information and accessibility to migrant people who do not speak Italian.

No differences were found between the three groups regarding diagnoses, with psychosis and personality disorders being the most frequent as reported by literature (Progetto Prisma Final Report, 2005).

4.1. Comparison between migrants and Italians

Generally, when compared to Italians, migrants were characterized by having cohabiting parental couples less probably than others, in particular this was observed for IAs. Although our migrant sample was made up of participants with mental disorders, literature reported that a cohabiting couple could facilitate the children's integration (Jasinskaja-Lahti & Liebkind, 2000; Zwirs et al., 2007).

Even though we matched cases and controls by diagnosis, some differences in the reason of hospitalization and use of services emerged. First-generation participants (in particular IAs) were hospitalized more frequently for acute disorders, while Italians and second-generation ones were admitted mostly for an aggravation of a chronic disease. We hypothesize that this finding could be due to the fact that:

> IAs had to immediately deal with the trauma and the stress related to immigration. This could cause their acute symptomatology in which their social difficulties were added up to their vulnerability. (Calderoni, 2008)

As reported by the literature (Bonvicini et al., 2011; Buron et al., 2008), independently from the type of generation, migrants used emergency services more frequently when compared to natives. Immigrants seemed to ignore the services provided by the local outpatient clinics, as confirmed by the less frequent use of our local Child and Adolescence Psychiatric Outpatient Clinic, in comparison to Italians. This fact could represent a worse knowledge of Italian health care systems and could be related to a poor integration. In fact, IPs, who presented with the onset of symptoms mainly after five years of stay and SGIs tended to use our outpatient clinic more frequently than IAs.

Meanwhile, migrants underwent psychotherapy less frequently than Italians, literature reported that 50% of migrants request an "alternative" treatment in their countries of origin for themselves or their relatives, indicating the need of a different therapeutic approach with children and adolescents belonging to other cultures (Assion, Zarouchas, Multamäki, Zolotova, & Schröder, 2007).

A limitation of our study is the lack of information on socio-economic status, on income and on neighborhood variables, that might represent a bias when studying the occurrence of mental problems in this specific population. Another limit is the lack of measures of experienced stigma and discrimination that, as socio-economic status, could equally or even more impact on mental health of immigrant adolescents. Moreover, the lack of an adjustment made on account of the multiple comparisons is another limitation of our study. Finally another limitation is the lack of *post hoc* tests to interpret the results of significant between group differences.

In conclusions, our research contributed to outline the socio-demographic and psychiatric features of immigrant children inpatients of a Child and Adolescent mental health ward. Furthermore, our results showed that a latency time exists between the arrival in Italy of the children and the occurrence of the psychiatric symptomatology, thus identifying a precious time frame in which possible preventive intervention could be implemented in order to reduce the occurrence of acute and severe psychiatric onset in this population. These results must be confirmed by expanding the sample.

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