

Psychiatric disorders and psychosocial problems among immigrant students

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Background

Migration is associated with stress that may result in adverse physical and psychological health problems. It involves three phases. Each stage has its own risks, challenges, and difficulties. Mansoura University has a large number of foreign students from different nationalities who come to study in various scientific fields.

Aim

The aim of this study was to assess the presence of a group of various psychiatric disorders and psychosocial problems among a sample of immigrant students in Mansoura University and to compare them with a control group of Egyptian students. Moreover, this study aimed to identify factors related to migration (premigration, migration and postmigration stages) that may affect mental health of immigrant students.

Participants and methods

In this study, data were collected from 135 college students who completed the Adolescent Psychopathology Scale – applicable up to 19 years old – which evaluates the presence and severity of symptoms of psychological disorders and distress: the English version for immigrant students and the Arabic version for the Egyptian students. Moreover, an additional paper was added to the sheet introduced to the immigrant students to obtain data about their migration process.

Results

In our study, nonrefugee immigrants (education is the purpose of migration) had a lower risk of having psychiatric disorders or psychosocial problems than the compared group (the Egyptian students).

Conclusion

Nonrefugee immigrants are likely to differ from other immigrants on the basis of educational and economic status, linguistic capacity, migration experiences, being in groups and exposure to adversity and trauma through premigration, migration, and postmigration stages, which undoubtedly play a protective role for them against psychiatric and psychosocial problems.

Keywords:

immigrant students, psychiatric disorders, psychosocial problems

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Introduction

Mansoura University has a large number of foreign students from different nationalities who come to study in various scientific fields (1129 undergraduate and 738 postgraduate students in the academic year 2017/2018).

Adaptation to new cultural settings may be associated with stress that may result in adverse physical and psychological health problems (Anderson *et al.*, 2015).

The process of moving to live in a new country (migration) involves three phases; premigration, migration, and postmigration resettlement.

The first stage, premigration, includes taking the decision, preparing, and getting ready at all levels to move to a foreign country.

The next stage, migration, is the physical relocation of an individual or family to his new place of residence.

The last one, postmigration, aims toward integration of the immigrant into the new society (Priebe *et al.*, 2016).

Each stage has its own risks, challenges, and difficulties.

Low socioeconomic status (defined as low education level or low income) in the country of origin; lack of social support; political problems (commitment to a cause); to be a citizen of a developing country; to have a

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different color (Black) or religion, suggesting exposure to racism and discrimination; history of physical, sexual, or psychological trauma; personality structure; and ability to cope with stress, all of which are factors during the premigration stage that may increase the chance of developing psychiatric disorders (Liu and Zhang, 2017).

In concern to the stage of migration, migration itself can be difficult, with poor traveling or harsh living conditions, and the possibility of exposure to violence, with real concerns about the feasibility of migration (Song *et al.*, 2015).

However, in the postmigration stage, predictors of increased psychiatric disorders are unemployment, lack of family and social support, concerns about the left family, in addition to difficulties in learning a new language that may hinder communication with others (LeMaster *et al.*, 2017).

However, the crushing financial crises experienced by some immigrant families and the lack of support in their new societies were strongly linked to their mental illness, as mood, anxiety, and substance use disorders were significantly diagnosed among them (Kartal and Kiroopoulos, 2016).

Moreover, it was found that refugees who escape from the scourge of war in their countries (such as Syrians and Iraqis) are at high risk (10-fold increase) in diagnosis of post-traumatic stress disorder in addition to higher rates of depression, suicide, chronic pain, and other somatic complaints.

This may be strongly attributed to their exposure to war, violence, and forced migration (Wells *et al.*, 2016).

Based on the previous knowledge, the effect of each stage on the immigrants should be evaluated during studying psychiatric disorders and psychosocial problems among them, which may help to support and improve the mental health of this group of society.

Aim

The aim of this study was to assess the presence of a group of various psychiatric disorders and psychosocial problems among a sample of immigrant students in Mansoura University and to compare them with a control group of Egyptian students.

Moreover, this study aimed to identify factors related to migration (premigration, migration, and

postmigration stages) that may affect mental health of immigrant students.

Participants and methods

The study took place during the period from October 2017 to March 2018. A group of foreign and Egyptian students who were studying in Faculty of Medicine and Faculty of Nursing, Mansoura University were asked to join this study. They were given the choice to participate or not. The aim of the study was explained to them, clarifying that all the information obtained will be confidential and will not be shared with their colleagues or professors.

The age, sex, and nationality were the only personal information needed. A written consent was taken from them. Students who refused to participate were excluded (not interested, personal causes or afraid of being stigmatized, and felt the questionnaire is too long).

Inclusion criteria

The following were the inclusion criteria:

- (1) Foreign and Egyptian students studying in Faculty of Medicine and Faculty of Nursing, Mansoura University.
- (2) Age from 17 to 20 years (the accepted age according to the questionnaire).
- (3) English language proficiency (for immigrant students to be able to answer the questionnaire).

Exclusion criteria

The following were exclusion criteria:

- (1) Age more than 20 years.
- (2) Lack of English language proficiency (for immigrant students).

A total of 12 sheets were excluded because students drew designs or wrote comments instead of choosing an answer.

Finally, 135 sheets (67 from immigrant students and 68 from Egyptian students), containing the Adolescent Psychopathology Scale (APS) questionnaires, were available.

Data collection instrument

In this study, data were collected from 135 college students who completed the APS: the English version (Reynolds, 1998) for immigrant students and the Arabic version (Hamdy, 2007) for the Egyptian students.

The APS:

Purpose: The purpose is to evaluate the presence and severity of symptoms of psychological disorders and distress

Age: 12–20 years.

Time: 40–60 min.

Administration: individual or group.

The APS is a multidimensional self-report instrument designed to evaluate specific *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed. (DSM-IV) symptoms found in adolescents and to assess other psychological problems and behaviors that may interfere with an adolescent's psychosocial adaptation and personal competence.

It examines domains of psychopathology and psychosocial problems that may suggest the need for direct and expeditious intervention.

The APS measures four broad disorder-problem domains: clinical disorders (20 scales), personality disorders (five scales), psychosocial problem content areas (11 scales), and the response style indicator scales (four scales).

- (1) Clinical disorders: attention-deficit/hyperactivity, conduct, oppositional defiant, adjustment, substance abuse, anorexia nervosa, bulimia nervosa, sleep, somatization, panic, obsessive-compulsive, generalized anxiety disorder (GAD), social phobia, separation anxiety, post-traumatic stress, major depression, dysthymic, mania, depersonalization, and schizophrenia.
- (2) Personality disorder: avoidant, obsessive-compulsive, borderline, schizotypal, and paranoid.
- (3) Psychosocial problems: self-concept, psychosocial substance use difficulties, introversion, alienation boredom, anger, aggression, interpersonal problems, emotional lability, disorientation, suicide, and social adaptation.
- (4) Response style indicators: lie response, consistency response, infrequency response, and critical item endorsement.

In this study, the research members selected eight clinical disorders and four psychosocial problems to be assessed:

- (1) Clinical disorders: adjustment, substance abuse, sleep, somatization, panic, GAD, social phobia, and major depression.

- (2) Psychosocial problems: alienation boredom, aggression, suicide, and social adaptation.

Scoring

A basic component of APS scale interpretation is the examination of scales that are elevated to clinically relevant levels of symptomatology.

Using the APS standardization sample as the reference base:

- (1) *T* scores from 60 to 64 represent a subclinical symptom range.
- (2) *T* scores from 65 to 69 represent a mild clinical symptom range.
- (3) *T* scores from 70 to 79 represent a moderate clinical symptom range.
- (4) *T* scores of 80 and above represent a severe clinical symptom range.

This study aimed to identify factors related to migration that may affect mental health of immigrant students.

So, an additional paper (Kirmayer *et al.*, 2011) was added to the sheet introduced to the immigrant students to obtain data about their migration process.

- (1) Age.
- (2) Sex.
- (3) Education.
- (4) Reason of immigration (voluntary or forced).
- (5) Immigration was single or in a group.

Please answer the following questions by yes or no:

- (1) Past personal history of psychiatric illness.
- (2) Past family history of psychiatric illness.
- (3) Adequate linguistic capacity for the current country you live in.

In the current country you live in, is there ?

- (1) Stability of housing.
- (2) Poor nutrition.
- (3) Access to healthcare.
- (4) Uncertainty of outcome (financial problems).
- (5) Social support.
- (6) Exposure to violence.
- (7) Exposure to discrimination.
- (8) Discrepancy between expectations and achievements.
- (9) Political problems.

Results

Table 1 showed that the age of the immigrant students (19.33 ± 0.93 years) is significantly ($P < 0.001$) higher than the age of the Egyptian students (18.63 ± 1.05 years).

Table 2 showed that 52.2% of the immigrant students are studying in faculty of nursing, whereas 47.8% of them are studying in the Faculty of Medicine. Concerning the Egyptian students, 54.4% of them are studying in the Faculty of Nursing, whereas 45.6% of them are studying in the Faculty of Medicine.

Moreover, Table 2 revealed that the nationality of the participating students was as follows: 67 immigrant students (36 Nigerian and 31 Malaysian) and 68 Egyptian students.

Table 3 demonstrates factors related to migration that may affect mental health of immigrant students as follows: four (6%) students have past personal history of psychiatric illness, two (3%) have past family history of psychiatric illness, 15 (22.4%) students have adequate linguistic capacity for the current country, 57 (85.1%) students have stability of housing, 10 (14.9%) students have poor nutrition, 56 (83.6%) students have access to healthcare, 14 (20.9%) report uncertainty of outcome (financial problems), 45 (67.2%) students have social support, 10 (14.9%) students report exposure to violence, nine (13.4%) students report exposure to discrimination, 16 (23.9%) students feel discrepancy between expectations and achievements, and 11 (16.4%) students have political problems.

Overall, 66 (98.5) students reported voluntary immigration, and one (1.5%) student reported

forced immigration. Moreover, 54 (80.6%) students migrated within a group, whereas 13 (19.4%) migrated as single.

Table 4 shows that no cases of adjustment disorder or sleep problems were present among immigrant or Egyptian students. No substance abuse among immigrants, whereas one (1.5%) was detected among Egyptian students, with nonsignificant difference.

No somatization among immigrants group, whereas one (1.5%) was detected among Egyptian students, with nonsignificant difference (Table 5).

No panic disorder was diagnosed among immigrants, whereas three (4.4%) cases with mild panic symptoms and one (1.5%) case with moderate panic symptoms were detected among Egyptian students

Moreover, one (1.5%) case with mild GAD symptoms and one (1.5%) case with moderate GAD symptoms were detected among immigrants, whereas two (2.9%) cases with mild GAD symptoms and one (1.5%) case with moderate GAD symptoms were detected in Egyptian students.

No cases of social phobia were present among immigrant or Egyptian students.

A case (1.5%) with moderate depressive symptoms and three (4.4%) cases with mild depressive symptoms were present among immigrants, whereas two (2.9%) cases with moderate depressive symptoms were detected in Egyptian students (Table 6).

No alienation was present among immigrants, whereas a case (1.5%) with moderate symptoms was detected among Egyptian students.

No aggression symptoms were present among immigrants, whereas a case (1.5%) with mild symptoms was detected among Egyptian students

Table 1 Descriptive data of students (age)

	Immigrant (N=67)	Egyptian (N=68)	t	P
Age	19.33±0.23	18.63±1.05	4.081	<0.001*

*Significant $P < 0.05$.

Table 2 Descriptive data of students (sex, education, and nationality)

	Immigrant [n (%)]	Egyptian [n (%)]	χ^2	P
Sex				
Male	45 (67.2)	37 (54.4)	2.302	0.129
Female	22 (32.8)	31 (45.6)		
Education				
Faculty of Nursing	35 (52.2)	37 (54.4)	0.064	0.800
Faculty of Medicine	32 (47.8)	31 (45.6)		
Nationality				
Nigeria	36 (53.7)	–		
Malaysia	31 (46.3)	–		

Table 3 Factors related to migration that may affected mental health of immigrant students

	<i>n</i> (%)
Past personal history of psychiatric illness	4 (6.0)
Past family history of psychiatric illness	2 (3.0)
Adequate linguistic capacity for the current country	15 (22.4)
Stability of housing	57 (85.1)
Poor nutrition	10 (14.9)
Access to healthcare	56 (83.6)
Uncertainty of outcome (financial problems)	14 (20.9)
Social support	45 (67.2)
Exposure to violence	10 (14.9)
Exposure to discrimination	9 (13.4)
Discrepancy between expectations and achievements	16 (23.9)
Political problem	11 (16.4)
Reason of immigration	
Voluntary	66 (98.5)
Forced	1 (1.5)
Immigration was single or group	
Group	54 (80.6)
Single	13 (19.4)

Table 5 Psychiatric disorders (panic, generalized anxiety disorder, social phobia, and depression) among immigrant and Egyptian students

Panic [<i>n</i> (%)]				
Normal	67 (100.0)	64 (94.1)	4.062	0.131
Mild	0 (0.0)	3 (4.4)		
Moderate	0 (0.0)	1 (1.5)		
Generalized anxiety disorder [<i>n</i> (%)]				
Normal	65 (97.0)	65 (95.6)	0.326	0.850
Mild	1 (1.5)	2 (2.9)		
Moderate	1 (1.5)	1 (1.5)		
Social phobia [<i>n</i> (%)]				
Normal	67 (100.0)	68 (100.0)		
Depression [<i>n</i> (%)]				
Normal	66 (98.5)	63 (92.6)	3.396	0.183
Mild	0 (0.0)	3 (4.4)		
Moderate	1 (1.5)	2 (2.9)		

No suicide was present among immigrants, whereas seven (10.3%) cases with mild symptoms were detected among Egyptian students.

All students in both groups were socially adapted.

Discussion

Mansoura University has a large number of foreign students from different nationalities who have come to study in various scientific fields.

The researchers in this study supposed that this group of students would be prone to many psychological disturbances as adaptation to new cultural settings may be associated with stress that may result in adverse physical and psychological health problems.

Table 4 Psychiatric disorders (adjustment, substance abuse, sleep problems, and somatization) among immigrant and Egyptian students

	Immigrant [<i>n</i> (%)]	Egyptian [<i>n</i> (%)]	χ^2	<i>P</i>
Adjustment				
Normal	67 (100.0)	68 (100.0)		
Substance abuse			0.993	0.319
Normal	67 (100.0)	66 (98.5)		
Mild	0 (0.0)	1 (1.5)		
Sleep				
Normal	67 (100.0)	68 (100.0)		
Somatization			0.993	0.319
Normal	67 (100.0)	67 (98.5)		
Mild	0 (0.0)	1 (1.5)		

Table 6 Psychosocial problems among immigrant and Egyptian students

	Immigrant [<i>n</i> (%)]	Egyptian [<i>n</i> (%)]	χ^2	<i>P</i>
Alienation boredom			0.993	0.319
Normal	67 (100.0)	67 (98.5)		
Moderate	0 (0.0)	1 (1.5)		
Aggression			0.993	0.319
Normal	67 (100.0)	67 (98.5)		
Mild	0 (0.0)	1 (1.5)		
Suicide			7.274	0.007*
Normal	67 (100.0)	61 (89.7)		
Mild	0 (0.0)	7 (10.3)		
Social adaptation				
Normal	67 (100.0)	68 (100.0)		

*Significant $P < 0.05$.

The aim of this study was to assess the presence of a group of various psychiatric disorders and psychosocial problems among a sample of immigrant students in Mansoura University and to compare them with a control group of Egyptian students.

Moreover, this study aimed to identify factors related to migration (premigration, migration and postmigration stages) that may affect mental health of immigrant students and to examine the presence of a relation between these factors and the various psychiatric disorders and psychosocial problems that had been detected among those students.

Concerning descriptive data of the students, the mean age of the immigrant students (19.33 ± 0.93 years) is significantly ($P < 0.001$) higher than the mean age of the Egyptian students (18.63 ± 1.05 years), which may be owing to differences in the educational system, such as age of admission to the nursery and primary education. The high age in the immigrant students in comparison with the Egyptians may play a role in making them more mature and tolerant to deal with problems. Moreover, the immigrant students being in

the age of 19.33 ± 0.93 years will make it easier for them to develop social network in the new country, which is the same opinion in another recent studies (MacPherson and Gushulak, 2010; Hansson *et al.*, 2012).

Concerning factors related to migration that may affect mental health of immigrant students, 94% of students have no past personal history of psychiatric illness, whereas 97% have no past family history of psychiatric illness. Moreover, 85.1% of students have stability of housing, 85.1% of students do not suffer from poor nutrition, 83.6% of students have access to healthcare, 79.1% report certainty of outcome (no financial problems), 67.2% of students have social support, 98.5% of students report voluntary immigration, and 80.6% of the students migrate within a group.

All the previous results highlight that these immigrant students have many positive factors that help them adapt and succeed in their new society, confirming the findings of recent studies (Bourque *et al.*, 2012; Businelle *et al.*, 2014)

However, a few portion of them have problems related to migration such as follows: 22.4% of the students only have adequate linguistic capacity for the current country which may be overcome through being in groups and having strong social support; 14.9% of students report exposure to violence; 13.4% of students report exposure to discrimination; 23.9% of students feel discrepancy between expectations and achievements; 16.4% of students have political problems; 1.5% of students report forced immigration; and 19.4% of migrated as single.

These negative aspects are considered anyway less than what can be faced in many countries as immigrants may be exposed to violence and discrimination up to serious degrees, consistent with the results of similar study (Oh *et al.*, 2014).

In concern to studying the presence of a group of various psychiatric disorders and psychosocial problems among immigrant and Egyptian students, the results represented an amazing surprise for researchers.

For immigrant students

Clinical disorders

No cases of adjustment disorder, sleep problems, substance abuse, somatization, panic disorder, or social phobia were detected among immigrant

students. However, 1.5% ($n=1$) of the immigrant students had moderate depressive symptoms, 1.5% ($n=1$) of the cases had mild GAD symptoms, and 1.5% ($n=1$) had moderate GAD symptoms.

Psychosocial problems

No alienation boredom, aggression, suicide, and social adaptation problems were detected among immigrant students.

For Egyptian students

Clinical disorders

- (1) No cases of adjustment disorder, sleep problems, or social phobia were detected among Egyptian students.
- (2) Substance abuse was detected among one (1.5%) Egyptian student, with nonsignificant difference.
- (3) Somatization was detected among one (1.5%) Egyptian student, with nonsignificant difference.
- (4) Mild panic symptoms were present in three (4.4%) Egyptian students, and one (1.5%) had moderate panic symptoms.
- (5) Mild GAD symptoms were present in two (2.9%) Egyptian students and one (1.5%) had moderate GAD symptoms.
- (6) Mild depressive symptoms were present in 3 (4.4%) Egyptian students and two (2.9%) had moderate depressive symptoms.

Psychosocial problems

Moderate symptoms of social alienation were present in one (1.5%) Egyptian student and moderate symptoms of aggression in one (1.5%) Egyptian student. Mild symptoms of suicide were present in seven (10.3%) Egyptian students, with high significance in comparison with immigrant students. No problems were detected in social adaptation in Egyptian students. The previous results were different from those of some recent studies (Kerkenaar *et al.*, 2013; Guardia *et al.*, 2016) in which psychiatric disorders are more common in immigrants. However, other recent studies (Anderson *et al.*, 2015; Tunstall *et al.*, 2015; Bas-Sarmiento *et al.*, 2017) are in agreement with our results, highlighting the selective migration hypothesis, in which mentally healthier individuals are theorized to more likely to make the decision to migrate and successfully navigate the immigration process, which may help explain the lower rates of mood, anxiety, and substance use disorders among those immigrant.

Conclusion

In our study, nonrefugee emigrants (education is the purpose of migration) had a lower risk of having

psychiatric disorders or psychosocial problems than the general population.

Nonrefugee migrants are likely to differ from other immigrants on the basis of educational and economic status, linguistic capacity, migration experiences, being in groups and exposure to adversity and trauma through premigration, migration, and postmigration stages), which, undoubtedly, play a protective role against psychiatric and psychosocial problems.

Limitations

Our findings should be interpreted in light of a number of limitations:

- (1) The limited number of study and control groups.
- (2) Study and control group were only college students.
- (3) Students were only from Faculty of Medicine and Faculty of Nursing, Mansoura University; therefore, other faculties should be included.
- (4) Immigrant students were of just two nationalities: Nigerian and Malaysian; therefore, other nationalities should be included.
- (5) No refugees were included.

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Conflicts of interest

There are no conflicts of interest.

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