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Immigration and Risk of Psychiatric Disorders: A Review of Existing Literature

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The United States has long been described as a melting pot of cultures, a country of immigrants. With over 41 million foreign-born U.S. residents—13% of the total population—the relationship between immigration and risk of psychiatric illness has significant public health implications (1). Historically, observations of socioeconomic disadvantage in immigrant groups shaped early theories causally linking immigration, stress, and mental illness. Multiple epidemiological studies over the past 30 years have provided evidence to the contrary for mood, anxiety, and substance use disorders, while demonstrating a different pattern for psychotic disorders.

PREVALENCE OF PSYCHIATRIC DISORDERS

Foreign-born Mexican Americans and Asian Americans have significantly higher lifetime prevalence rates of mood, anxiety, and substance use disorders than their U.S.-born counterparts. Rates of any drug use disorder are up to 8.3 times higher in U.S.-born Mexican Americans than in those who are Mexican-born (2–8). Asian immigrant women have lower lifetime rates of mood, anxiety, and substance use disorders, while Asian immigrant men have lower rates of only substance use disorders, compared to the U.S.-born population. English proficiency is strongly associated with lifetime depressive, anxiety, and substance use disorders but only in men, such that Asian men who speak English proficiently have lower lifetime and 12-month rates than non-proficient speakers (8). Risk is also lowest for foreign-born Asian Americans in the years before immigration and for immigrants who arrive in the United States after age 13. After arrival, risk rises to equal that of U.S.-born Asian Americans by 15 years, with the fastest pace of change for mood disorders (7). Immigrant Black Caribbean men have higher 12-month rates of mood and anxiety disorders than African American men, while Black Caribbean women have lower 12-month and lifetime rates of anxiety and substance use disorders than African American women. Rates also vary by ethnicity, such that Spanish Caribbean women have higher rates of mood and anxiety disorders compared to women from the English-speaking Caribbean, while Haitian men have lower rates of mood disorders compared to men from the English-speaking Caribbean. Generational status is associated with increased lifetime risk for all psychiatric disorders, such that lifetime prevalence rates for first-, second-, and third-generation immigrants are 19.3%, 35.27%, and 54.64%, respectively (9).

MIGRATION-RELATED FACTORS

Migration can be broadly described as occurring in three stages. The first, pre-migration, involves the decision and preparation to move. The second, migration, is the physical relocation of an individual or family. The third stage, post-migration, involves assimilation of the immigrant into a society. Assessment of risk for psychiatric illness in the immigrant population should evaluate an individual's experience in all three stages. Migration-related factors that may influence mental health outcomes in immigrant groups are summarized in Table 1 (10–13).

Pre-migration factors, including age, socioeconomic status, personality structure, and ability to cope with stress, among others, may be protective or could confer additional risk, as social roles and networks are disrupted during the migration process (10). Migration itself can be difficult, with poor traveling and living conditions and possible exposure to violence. Refugees are at significantly higher risk for psychiatric illness compared to the general population, with increased rates of depression, somatic complaints, and up to 10 times higher rates of post-traumatic stress disorder (10, 12). Culture shock and cultural bereavement may be additional vulnerability factors during migration, as individuals experience loss of language, social structures, and support, which can precipitate a grief reaction (13, 14). While grief can be a healthy response to a significant loss, it can also result in significant distress and functional impairment. Symptoms of bereavement should be recognized within a cultural context because culturally appropriate expressions of grief (such as hearing voices and seeing ghosts) may be misinterpreted when using Western diagnostic criteria.

Resettlement typically brings hope and optimism but also challenges, including isolation from social supports and difficulties resuming education or finding work. Housing may be inadequate and health care difficult to access. Immigrants are less likely to be referred to or seek out mental health treatment in particular. Appropriate services that are linguistically and culturally accessible can be challenging to find and to afford, and time away from work can be difficult to receive. Immigrants may wish to manage problems alone, worry that their concerns will not be understood in a cultural context, and fear stigmatization (10). Racism and discrimination are further obstacles to establishing

TABLE 1. Factors Related to Migration That May Impact Mental Health

Pre-Migration	Migration	Post-Migration
Age, developmental stage in children	Logistics of migration process (route, duration)	Stability of housing
Level of education	Group or single migration	Access to health care
Socioeconomic status	Exposure to violence	Availability of education and work
Linguistic capacity	Exposure to harsh living conditions	Social supports (ethnic density)
Reasons for immigration (voluntary or forced)	Nutrition	Exposure to racism and discrimination
Degree of preparation and control over migration	Separation of children from caregivers	Concern about family members left behind
Past psychiatric and family history	Uncertainty of outcome	Assimilation vs. separation from new culture
Personality structure	Culture shock	Acceptance by new culture
History of persecution or other trauma	Cultural bereavement	Discrepancy between expectations and achievement

a successful post-migration life. The significant culture change that immigration often brings can pose challenges in balancing assimilation or acculturation with maintaining cultural identity. Assimilation is defined as "a process by which cultural differences disappear as immigrant communities adapt to the majority or host culture and value system," which can be different from acculturation, defined as "the assimilation of cultural values, customs, beliefs and language by a minority group within a majority community [during which] both the immigrant and host cultures may change" (11, 15). In a study of Indian immigrants to the United States, better mental health was associated with a greater perception of acceptance by Americans and having a greater orientation toward and greater connection with U.S. culture (16).

SPECIAL CONSIDERATIONS

The finding of lower rates of mood, anxiety, and substance use disorders in immigrant groups compared to their U.S.-born counterparts is not universal. In addition to the differences seen in Black Caribbean immigrants, individuals from Cuba, Puerto Rico, and Western Europe do not significantly differ in their risk of mood or anxiety disorders compared to the U.S.-born population (17–19). The relationship between immigration and mental illness may be different in these groups for as yet unclear reasons. Alternatively, methodological differences or lack of statistical power associated with a small sample size may account for the lack of significance.

There is also strong evidence of a two- to three-fold increased risk of schizophrenia in immigrants to Eastern and Western Europe from the Caribbean, Africa, Asia, the Middle East, and Australia (20–23). This increased risk persists into the second generation, suggesting that migrant status is an important risk factor for psychotic disorders, one that approximates the risk associated with cannabis use, perinatal complications, or urbanicity (24). Furthermore, immigrants from countries where the majority of the population is black have significantly higher rates of psychosis, which not only persist but increase in the second generation (20–21). In the absence of increased rates of psychosis in source countries, this suggests that racism and discrimination may play a role in increasing risk for psychosis (14). Another contributing hypothesis is that of social defeat. The long-term experience of stress associated with social exclusion or having a subordinate position in society is theorized to result in sensitization of the mesolimbic dopamine system, increasing risk for psychotic disorders (20–22). There may also be a protective effect of social support in areas of higher ethnic density, which is supported by studies demonstrating relatively lower rates of schizophrenia in nonwhite ethnic minorities that represent larger proportions of the population (13, 20).

The selective migration hypothesis in which mentally healthier individuals are theorized to more likely make the decision to migrate and successfully navigate the immigration process may help explain the lower rates of mood, anxiety, and substance use disorders in immigrant groups compared to their

KEY POINTS/CLINICAL PEARLS

- The relationship between immigration and mental health has significant public health implications, and historically immigration status has been linked to increased mental illness.
- Immigrants to the United States generally have lower rates of mood, anxiety, and substance use disorders compared to the U.S.-born population, with increasing risk of psychiatric illness with longer duration of residence in the United States and generational status.
- Immigrant groups from across the world have higher rates of psychotic disorders compared to natives, with risk persisting into the second generation.
- Close consideration should be given to pre-migration, migration, and post-migration factors in a culturally competent assessment of first- or second-generation immigrant patients.

U.S.-born counterparts (5). However, this theory has been challenged not only by the increased rates of psychosis among immigrants but also by the finding of lower rates of psychiatric disorders in Asian countries (7). To further test this hypothesis, consistent methods assessing risk in immigrant populations and their countries of origin are needed.

The pattern of increasing risk of psychiatric illness with longer duration of residence in the United States speaks to the role of post-migration factors in this process, specifically acculturative stress (18). However, acculturation has also been associated with improved mental health in Indian immigrants (16). Additionally, we may expect older age at immigration to be associated with higher acculturative stress because these individuals have already established social networks and cultural identities, while immigrants arriving as children typically have an easier time learning English and establishing friendships at school (8). That younger age at immigration is associated with increased risk of mood and anxiety disorders suggests that the timing of exposure to American culture and developmental stage of the individual may be important.

CONCLUSIONS

Immigrants to the United States generally have lower rates of mood, anxiety, and substance disorders compared to the U.S.-born populations. Younger age at immigration is associated with increased risk of mood and anxiety disorders, while risk for substance use disorders is lower among immigrants regardless of age at immigration. Longer duration of residence in the United States and generational status are associated with increased risk of psychiatric illness. In contrast, immigrant groups from across the world have higher rates of psychotic disorders compared to natives, with risk persisting into the second generation. Multiple factors encompassing all three stages of migration—pre-migration, migration and post-migration—likely interact to influence mental health outcomes. Psychiatric assessment and treatment of patients who are first- or second-generation immigrants should include consideration of an immigrant's unique experience in all three stages in a culturally sensitive context.

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