

REVIEW ARTICLE OPEN ACCESS

Contextualizing migration and mental health in the post-COVID era

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Abstract

Background: The population of migrants all over the world is progressively rising. The major reasons for migration include the desire for self-actualization, moving to a place with more opportunities, tourism, and education, and escaping hardship and political unrest in the home country. In recent times climate change, insecurity, and economic hardship are top of the list. The global economy has suffered a major blow from the multiple waves of the lingering COVID-19 pandemic. To lessen the scourge of inflation and to restore economic stability, several countries are being forced to liberalize their immigration policies and therefore immigrants are welcomed in these nations. This review attempts to investigate how migration in the post-pandemic era affects migrants' mental health. **Main Text:** Migration and the COVID-19 epidemic both have beneficial and durable effects on the mental health of migrants and immigration laws have a direct impact on several health-related issues. Mental health disorders may develop at any point from the pre-migration phase to the post-migration settlement in the host nations. Factors such as host community, racism, marginalization, political climate, poor support, loss of social status, language barriers, undocumented status, climate change, mode of dressing in the host country, and several others may lead to mental health disorders among migrants. Unfortunately, there is limited access to care, and the services provided may not be culturally sensitive.

Conclusion: Despite the benefits gotten from migration like financial benefits and economic development of the native country and the left behind family members, migration has enormous psychological complications which have to be attended to. Access to specialists who are trained to provide culturally sensitive interventions and implement outreach programs to introduce the services to the migrants' community should be encouraged.

Keywords: Anxiety disorder, COVID-19 pandemic, Depression, Emigration, Immigration, Mental health, Post-Traumatic Stress Disorder, Psychosis, post-COVID, Substance Use Disorder

Background

So far COVID-19 pandemic is the most critical global health catastrophe in this era and it has posed the greatest threat to the human race since World War II. The COVID-19 pandemic being the 6th Public Health Emergency of International Concern (PHEIC), as declared by WHO on the 30th January 2020, has aroused public concerns following the H1N1 (2009), polio (2014), West Africa Ebola outbreak (2014), Zika (2016) and Ebola in the Democratic Republic of Congo

(2019) (1). These outbreaks have affected global health, economy, environmental and sociopolitical sectors tremendously with a ripple effect on equity and social advancement, innumerable fatalities, morbidities, and pressure on global public funds (1, 2). Of all the pandemics, COVID-19 was discovered to contribute more to human misery (1) and is identified as the principal cause of hospitalization and death, predominantly among the middle and old age population of a community. To curtail the spread during the

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active spread, nations of the world put certain measures in place like social distancing and locked down borders among others. Notably, after the restriction was relaxed, there was high inflation and increased unemployment from unproductivity and excess outflow used to manage affected victims and their families (1, 3), hence, threatening human society and the world economy (1).

The enormous migration of people within a region, whether intrastate, interstate or across international borders, has been a current global trend. The massive incessant movement of people from their homeland has been since antiquity with the ancient African migrants taking the lead. While the morbidity and mortality of the COVID-19 pandemic initially restricted global movement during the active phase, the same morbidity and mortality have contributed significantly to global movement as many countries relax migration rules and more schools welcome international students (4).

The COVID-19 infection and the measures to curtail its spread affected mental health, psychophysical conditions, well-being, social relations, and the global economic climate within societies COVID-19 Shortly after movement restrictions were relaxed, high-income countries (HIC) have been compelled to open their borders to economic migrants and students from other parts of the world particularly from the Low and Middle-income countries (LMIC) to revamp their plummeting economies. Humans are natural migrants, always moving from place to place for self-actualization, self-fulfillment, greener pasture, tourism, education, and many other reasons. As the saying goes, as long as humans exist, migration can never go into extinction.

Methods

A review of the literature and an additional critical review were conducted on the effects of migration on the mental health of the migrants from premigration to post-migration phase while focusing on the COVID-19 era and its impact on the mental well-being of the migrants in the host countries. A thorough database search was conducted by using PubMed, Mendeley, and Google Scholar. Full-text publications were included and journals from January 2020 to January 2022 were included. The following keywords were used: anxiety disorder, COVID-19 pandemic, post-COVID-19, Depression, emigration, immigration, immigration, mental health, Post-Traumatic stress disorder, psychosis, and substance use disorder.

Main text

Erin Blakemore documented that, 258 million people which was 3% of the world's population lived outside their home countries (6) while a United Nations document, "World urbanization prospects", stated that migration was the reason for massive global mobility of people from the countryside to the city from 30% in 1930 to 55% of the world population in 2018. The UN report also posited that by 2050 the urban population would increase to 68% and consequently, twothirds of the world's population would be urban by the middle of this century (7). It was also projected that the global urban population will be highly concentrated in China, Nigeria, and India and they will account for 35% of the world's urban population between 2018 and 2050 (7).

The recent alarming rate of movement of people across borders has a profound effect globally and across many sectors. In the year 2000, the International Organization for Migration (IOM) reported that 150 million persons were international migrants. By 2013, there was a staggering increase to 214 million migrants which is more than 40% of international migrants in 2000; this means 3.1% or approximately, one in every 33 persons were migrants globally (8). There was a progressive rise till 2018 when it was reported that 763 million persons were internal migrants and 258 million were international migrants (9). Currently, nearly one in seven persons is a labor migrant from LMICs to HICs searching for international job opportunities or internal employment from rural to urban areas. Migration is often defined based on the boundary crossed (national, international, political, and administrative), duration of stay (temporary or permanent). distance traveled (regional. intercontinental), reasons for relocating (war, education, economic, natural disasters) and the decision-making approach (voluntary, impelled, instigated or forced) (10). Migrants can also be given different tags for various reasons for relocation namely economic migrants, students, international adventurers. family reunions, climate migrants, and legally-defined migrants such as smuggled migrants (10). Among the varied reasons for migration, fleeing from the uninhabitable condition in migrants' native land and a bid to improve their quality of life (economic factor) has been the most common drive for relocation (11). However, in 2018, the World Bank gave a global report that over 143 million persons became "climate migrants" because of major disasters like floods, droughts,

famine, and food and water scarcity all over the world (9). Currently, environmental factors like poverty, conflict/political instability in the homelands, abuse of human rights, incessant war, colonialism, and abduction encourage global migration (9).

Although migration has provided many benefits to migrants, it also has some drawbacks. Migrants are forced to endure enslavement/extortion, persecution, xenophobia, and frustration from citizens of the host countries due to stretched resources in host countries and the emergence of the migrant crisis. Migration can also lead to increased mental disorders among migrants (12) compared to long-stayed or settled populations thereby contributing significantly to the impact on the global burden of diseases (13, 14). Migrants' health may also be pressured by the stress of the migration process (15) (15) particularly if it was a forced migration (12, 16) or when the migrant is exposed to certain risk factors such as poverty, insecurity, homelessness, and violence (17, 18, 19) (17-19). The culture, community, family, and personal factors may add to the burden of migration on the mental health of migrants (20) while fostering resilience in the other domains

Mental disorders among migrants may develop at every phase of the journey. These disorders may develop during the pre-migration/pre-departure phase, and migration phase including the time spent at the borders of the native and host countries, the travel and transit period, and the post-migration phase- when settling in host communities and when returning to the homeland when necessary.

At the pre-departure phase and the border, the stressors encountered range from the reasons for relocating, forceful displacement (12), situations/hostility in the home country, migrant's personality, age, skills deficits as well as compulsory medical screening required for economic migrants to settle in the host country otherwise unfavorable results will disqualify the migrants and forestall their dream of a better quality of life.

During the journey, migrants experience physical and environmental threats, they lack access to basic health services and they encounter violence and trauma thereby mounting more pressure on their already stretched mental health (22).

In the Post-migration phase, the mental health of migrants in the host country depends on their residency status, culture and stress of acculturation in the host country, attitudes of neighbors (considering the social position, social support or exclusion), language competency, discrimination (19), occupational health and safety and also increased exposure to sexual exploitation (10) while for the second generation migrants, identity issues, prejudice, and discrimination are factors they may have to contend with (10). Even though migrants are the healthiest population in their country of origin (14) termed the 'healthy migrant effect,' the mental health of the next generation of migrants deteriorates with time (14).

Epidemiology of psychiatric disorders among migrants

Psychiatric disorders are a public health concern. This has necessitated the inclusion of global mental health in the Sustainable Development Goals. Due to migration, common psychiatric disorders encountered by migrants Depression, Anxiety, Post-Traumatic Stress Disorder (PTSD), Substance Use Disorders, and disorders with Psychotic varying gender predominance. Although some studies established a female dominance (13), an equivocal incidence rate of psychotic disorders in first-generation male and female migrants (males IRR 2.1, 95 % CI 1.7-2.6; females IRR 2.4, 95 % CI 1.9–2.9) (23) have also been documented. According to a multinational systematic review,

According to a multinational systematic review, the rate of psychiatric disorders reported by first-generation migrants (n = 24,051) was 35 % depression, 28 % anxiety, and 47 % PTSD (24) but among Venezuelan migrants in Peru, 23% had depression and 19% had anxiety (25, 26). PTSD was especially high in conflict-affected countries like Northern Ireland (8.8 %) and was particularly elevated among migrants compared to the 1-2% prevalence recorded in the settled population and globally (24, 27, 28). In another study, 5% of migrants had major depression, 4 % had anxiety disorders, 9% of the adult refugees had PTSD and 11% of the children had PTSD which was comparable to the rates found in the general population (29).

Furthermore, higher psychopathologies were reported among forced migrants. About 44 % of adult refugee/ asylum seekers had depression compared to 8-12 % of the general population (24). Out of 35 studies on refugees, 21 reported a higher prevalence of depression and anxiety (44 % and 40 % respectively) while 36% of PTSD was observed in 19 of 35 studies on refugees (24). In Iraq, 43% of adult refugees self-reported depression and 25% PTSD (30, 31), while in Syria, an estimated rate of 45% depression was

found among forcefully displaced refugees (32, 33). In another study, an average of 18% depression and 36% PTSD were reported among the refugee children of forced migrants (30). While Slewa-Younan et al. and Lindert et al. reported 25% and 36% respectively and the prevalence rates for PTSD among children of refugee and asylum seekers was 36% compared to 5% in the general population (24, 30, 31). Nonetheless, these reviews are self-reported and non-validated measures were used by the adult refugees and asylum seekers.

Apart from the abovementioned mental disorders, psychotic disorders affect 2% of asylum seekers (29) and are also found to be dominant among the minority group especially the first-generation black African and Caribbean migrants who have almost five times greater risk of psychotic disorders than the white British majority (33) outside the migration effects (34). The relative risk of developing clinical psychotic disorders among the first generation migrants when compared to the settled population is 2.3 (95 % CI 2.0-2.7) (23) and 2.7 (35). Psychosis is associated with more disadvantages, poverty, lack of social support, isolation, discrimination, lack of access to culturally appropriate medical services, and lack of opportunity (14). Also, the migration experiences are exaggerated in the context of well-established fundamental factors like childhood trauma, cannabis use, maternal complications, and urbanization (36). There is also an increased risk of mental disorders from discrimination in providing mental health services to migrants. Other challenges of migrants include racism, disproportionate levels of poverty, social exclusion, reduced social capital, high exposure to prejudices as well as the ethnic density effect of living in a neighborhood that is dominated by some minority ethnic group (14, 37, 38). However, the ethnic density effect may offer some advantages if there are strong social support networks (39), a reduction in the frequency of racism (40), and if there is access to culturally and religiously appropriate services (14, 40).

Aetiological factors

The mental health of migrants can be negatively influenced by family, community, political climate, and also from factors relating to the host country like poor social support (14).

Possible contributory factors of psychiatric disorders during the migration phase include experiences of loss (e.g., relationships, assets, support), bereavement, trauma (14), status loss

relative to differences in wealth (e.g., inflation and/or currency rates), and education (e.g., degrees not transferring into a new country and/or loss of professional status), mode of transportation (41, 42), pregnancy (43), social degradation (44) and traveling with children (45). Migrant children may be shielded from the effects of risk factors on their mental health and the benefit of migration may also outweigh the stress encountered during this journey (46).

Apart from the above-mentioned aetiological factors, migrants may experience depression, life stresses, isolation, youthfulness, alcohol use, and financial challenges (14) while PTSD develops from direct exposure to or witnessing a traumatic event (14). Educated male migrants are more vulnerable to anxiety because of loss events occurring pre- and during migration contributing to mental health in context (47). On the other hand, marital status, education, higher income, and living with families are associated with high subjective well-being.

Psychotic illnesses can arise from stronger genetic heritability and environmental risk factors like heavy cannabis use and pervasive experience of childhood abuse or neglect (14). Isolation and discrimination often experienced by migrants are also implicated in developing psychotic disorders (48). Migrants' mental adjustment in the host country may be affected by the country of origin. According to research, firstgeneration migrants from Black race-dominated countries have a greater risk of developing psychotic disorders (23) (IRR 4.0 95 % CI 3.4-4.6) than those who migrate from Whitedominated countries (IRR 1.8, 95 % 1.6-3.1) or other races (IRR 2.0 95 % 1.6-2.5). Also, migrating from countries with huge socio-political challenges is more likely to cause anxiety as the immigrants settle in the host country even though anxiety and depression may be responsible for migration in the first instance (49).

Apart from issues from the host countries, the mental health of migrants especially the first-generation group may be affected by the economy (GNP), socio-demographic factor, and geographical factor/urbanization of the host country (23, 24, 39). The Host country GNP may predict the prospect of migrants getting paid jobs and may affect the rates of depression and anxiety of economic migrants but does not affect refugees and asylum seekers who migrate for safety. As migrants arrive in the host countries, they may experience downward social mobility due to the possibility of scaling down the socioeconomic ladder from a higher social status

job they had in their home country to a lower status in the host (50, 51). Due to the professional unrecognized and academic credentials from native countries in some host countries, immigrants have limited options for employment, leaving them with low-income jobs and such may experience distress over demotion in socioeconomic status (SES) that was previously held in their native country (52), while those who had lower SES and credentials in the country of origin may not be affected (52). More so, an undocumented immigrant who is more likely to have minimal education is often limited to low-paying jobs that are usually less than the minimum wage earned in their host country (53). Undocumented immigrant just like other migrants is more likely to receive abusive treatment and be underpaid because of their legal status (53). They are particularly vulnerable to discrimination because there is no legal defense to withstand these injustices (53). Furthermore, limited working and living conditions sometimes lead to anger and frustration (54).

The immigrants' harsh working and living conditions in the host countries may contribute significantly to their mental well-being. They are likely to be underemployed, have unstable job security, endure abusive working conditions and although they work more than required, they are exploited and underpaid (46, 55) with increasing vulnerability stress to and other psychopathologies. psychological More oppression may arise from law enforcement agents trailing, racist and discriminatory comments, meting harsh actions for minor violations (56) and the readiness to detain and/or deport undocumented migrants. Migrants who develop mental or physical illnesses are less likely to receive medical assistance (52).

Social mobility may be associated with a decline in personal autonomy, control, and self-respect and possible self-blame for the occupational causing stress, depression, decline substance use compared to migrants who maintain stable socio-economic positions or those who moved upward in the host country (Crude OR: 1.56; 95 % CI 1.04-2.33) (37, 50). Therefore, the higher the GNP, the lower the rate of depression among labor migrants (14 % in higher GNP host countries vs. 31 % in lower GNP host countries) compared to a lower rate among the refugees (40 % in higher GNP host country compared to 42 % in lower GNP host country) (24).

During the process of migration, several immigrants relocate with unrealistic expectations

of the opportunities available to them in the host countries (52) with no adequate preparation for the possible challenges they may encounter in the host country. For instance, they may be confronted with accommodation issues due to a lack of required documents like a valid driver's license and social security card soon after getting to the host country (53).

In the pre-migratory phase, forced migration is particularly harmful to the mental health of migrants due to inadequate preparation for the journey (18). Having an elaborate migration plan and sound reasons for choosing a destination country may be protective against mental health disorders even when done under forceful circumstances. The mental health of migrants is protected by pre-migration resiliency that is linked to voluntary migration and having good social support during the journey whereas being able to choose the destination country before migrating for a specific reason may enhance a sense of preparedness (57). In addition, women who have the opportunity to choose the destination country for safety and respect while trying to escape insecurity have decreased odds of depression and anxiety while the reverse is the case for men who bear the perceived burden of protecting the family against insecurity and xenophobia. Relatedly, the length of the migration journey may be associated with increased stress and the amount of time spent in a city is associated with attachment to the new city (58) which predicts better overall health (59).

The experience of migration and associated psychological distress may influence postmigration mental health (60). The effects of events preceding migration will likely increase in the post-migration phase as migrants seek initial integration (53). At the initial settlement stage, the inability to work during asylum processes or inadequate state benefits were found to negatively influence mental health over and above social support (18). However, in forceful displacement, there is a significant burden of common mental health disorders during asylumseeking (33) and the migration journey. Asylum seekers and refugees are perpetually under great psychological strain for fear of deportation while refugees still worry about the ongoing conflict in their home countries.

During the post-migration phase, immigrants encounter acculturative distress as they navigate the process of integrating the two different cultures (native and host country) and societies (53) with an increasing probability of seeking mental health services (61). During the

acculturative stage, emigrants may face distress from conflicting beliefs of the host countries, deportation, language barriers, separation from family, poor social support system/social capital, and discrimination (62, 63). The exposure of long-stayed immigrants, who were tagged "Healthy migrants" due to their health status before migration, to acculturative stress gives rise to poor health in the host countries, a phenomenon known as the "immigrant paradox" (64).

Sometimes struggling to adjust to a new environment, new people, language, and traditions (53) and whether may be inevitable. Migrants may experience culture shock, culture difficulty adjusting to the clashes. clothing/fashion styles, religious practices, the assertiveness of migrants especially children and young adults, climate changes, and even jet lag. In these circumstances, social participation and cohesion may contribute to immigrants' sense of well-being and mental health outcomes. Despite the benefits of social ties, they can be taxing when immigrants feel guilty for accepting help from others (65). Immigrants' parents may struggle to fulfill their duties and responsibilities, which can lead to misunderstanding and confusion (52), role shifts, and conflicts in family hierarchies (52). When immigrants must rely on others, including their children, for language interpretation, conflict can arise and as a result of the reversed parent-child hierarchy caused by role shift, parental self-esteem may suffer (52). Also, parents who are in mixed-status families (children born in the country to undocumented parents) may struggle with family hierarchies, especially if their children threaten to report their parents' immigration status.

During acculturation, couples settle into a new culture at different paces thereby fostering extensive differences in family values and conflict (52). In this case, changes in gender roles may challenge the traditional norms of the immigrants causing domestic abuse (53). Families may never enjoy healthy communication about their well-being and progress. For undocumented migrants, the discussion may be centered around the incessant fear of deportation and the unsecured future (56). Also, unfavorable political discussions are avoided in the house so as not to frighten the younger ones (66).

The economic benefits of the home countries are enormous despite the much-emphasized brain drain. There are some mutual benefits enjoyed by both the host and the countries from migration. The sustained transnational tie improves the economic growth of the native countries, and it

encourages a sense of belonging and identity preservation for migrants in their home country thereby retaining their native culture, increasing self-efficacy and the immigrant's well-being (67). Despite the numerous advantages, immigrants also suffer stress, financial strains, and frustrations from transnational ties (67).

Also, migration may cause a loss of culture and support system from the native country (52). The social networks provide solidarity, compassion, and safety and are instrumental to migrants' emotional and financial support and well-being (52, 56, 68). The social network also helps navigate tyrannical conditions, and economic hardship, and provides information about beneficial resources and how to access them (68) (68). Transitioning into a new country is easier when surrounded by ethnic-like communities (52) and when the community renders support with babysitting, providing information and moral assistance, and ensuring that the immigrant adapts conveniently to the new environment (68). The children of Immigrants battle discrimination (69) from people of similar descent, other ethnic/racial groups (55), and for lack of English proficiency (55). They are scared of law enforcement agents and teachers dreading their immigrant status may be exposed if they are undocumented (55). As a result, they perceive hostility in school and the environment may not be conducive to learning. They are lonely and distrustful (70) and as they grow older they may be anxious, confused, and frustrated (70). Nevertheless, the prevalence of mental disorders among children of immigrants is lower compared to the rate among natives of the host country as they are highly predisposed than immigrants' children to psychiatric disorders such as major depressive episodes, any depressive disorder, social phobia, posttraumatic stress disorder, any anxiety disorder, alcohol dependence, alcohol abuse, drug dependence, drug abuse, and any disorder (71).

Despite the high rate of mental disorders among migrants, immigrants scarcely use mental health services () (61) compared to those who were already acculturated and those who were documented. Identified barriers to mental health service utilization include ignorance about mental health and fear of an invasion of privacy, embarrassment, denial, pride (72), language and cultural barriers (52, 55), fear of exposure, fear of rejection, discrimination, maltreatment (61) and fear of deportation (52). Other factors are poverty or insurance, limited availability of culturally sensitive care providers and services, non-

availability of transportation, lack of knowledge of services, the fear of being labeled as mentally ill/stigmatized, family members feeling ashamed, and fear of social criticism (72). Some may also withhold information from themselves or the medical personnel when they visit the facilities, thereby hindering effective mental health assessments and treatment.

Conclusion

In conclusion, migration has many privileges like financial benefits and economic development of the native country and the family members left behind. Despite the many benefits, migration has enormous psychological complications. The initial "healthy migrant effect" or the "Immigrant Paradox" soon disappears after migration and is closely followed by poorer mental health even in subsequent generations (73). While settling down in the host country or upon return to the home country, some health problems especially mental health challenges acquired in the host country may arise (10), however, the migration process can also be associated with positive mental health in some situations (74). Therefore, understanding the relationship between migration and mental health is critical for public health promotion and ill-health prevention. Urbanization may have a huge impact on the migrants' mental health from the stress of relocation, acculturation, cultural alienation, socioeconomic struggles, and family separation (74). To care for the health of migrants, there is a need for the availability of culturally sensitive specialists who are trained to provide culturally sensitive interventions and implement outreach programs to introduce the services to the migrant community (53). These interventionists should be sensitive to the challenges, socio-political needs, and mental health concerns of immigrants and their peculiar experiences (53).

List of abbreviations

COVID-19: Coronavirus disease 2019

HIC: High income country

LMIC: Low and middle income country

UN: United Nations

WHO; World Health Organization SES: Socioeconomic Status GNP: Gross National Product

OECD: Organization for Economic Cooperation

and Development)

PTSD: Post traumatic stress disorder

IOM: International Organization for Migration

Declarations

Ethics approval, and Consent to Participate Not applicable.

Consent for publication

The author gave consent for the publication of the work under the creative commons Attribution-Non-Commercial 4.0 license.

Availability of data and materials

The data and materials associated with this review are publicly available.

Competing interests

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