# Chapter 12
# Migration

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## 1. Background

### *1.1. Defining Migration*

Migration has been defined as:

"the physical transition of an individual or a group from one society to another. This transition usually involves abandoning one social setting and entering a different one" (Eisenstadt, 1955)

"a relatively permanent moving away of . . . migrants, from one geographical location to another, preceded by decision-making on the part of the migrants on the basis of a hierarchically ordered set of values or valued ends and resulting in changes in the interactional set of migrants" (Mangalam, 1968)

"a permanent or semipermanent change of residence" (Lee, 1966)

Accordingly, migration refers to movement both within and across national borders. It encompasses internal migrants, such as agricultural workers, and immigrants, regardless of the manner or legality of their entry into a country. Importantly, it occurs as the result of a decision-making process undertaken by individuals that is premised on a set of values that may or may not be explicit. It is not only the movement of populations that affects health, but also the context in which that movement occurs. This chapter focuses on health issues arising in the context of population movement and the macrosocial factors that underlie that movement.

In 1990 migrants accounted for 15 percent of the population of 52 countries (Council of Europe, 2001). Estimates suggest that currently 175 million people, or 2.9 percent of the world's population, live either permanently or temporarily outside of their countries of origin (International Organization for Migration, 2003) and that by the year 2050, the number of international migrants will approach 250 million (International Labour Office, International Organization for Migration, and the Office of the United Nations High Commissioner for Human Rights [ILO, IOM, & OHCHR], 2001). These figures include migrant workers, permanent immigrants, and those who are seeking asylum or refugee status. The estimates do not include individuals who migrate across borders illegally, known

variously as "illegal," "undocumented," or "irregular" (World Health Organization, 2003); such individuals may migrate themselves; may be trafficked, a process that involves coercion or deception; or may be smuggled, meaning that their entry has been facilitated by others for profit (ILO, IOM, & OHCHR, 2001). Consequently, the figures underestimate the magnitude of migration and its demographic impact in various regions of the world (Council of Europe, 2000).

Individuals may migrate from one area to another for any number of reasons. Circumstances at the point of origin that may "push" individuals to leave include poverty, unemployment, persecution, internal civil strife, a change in government or regime, and/or natural disasters such as hurricanes. Individuals may feel a "pull" towards the intended destination as a result of perceived employment prospects, the ability to reunify with other family members, expectations of a better economic and/or political situation, freedom from persecution, and/or a safe haven from the ravages of manmade or natural disasters. Distinctions have been made between those immigrants who are "voluntary," such as students, tourists, and migrant workers, and those who are "forced" to migrate as a result of displacement due to internal conflict, environmental disaster, famine, or development projects (Loughna, n.d.).

The health of migrating individuals and groups, whether documented/regular or undocumented/irregular, voluntary or forced, may be shaped by each stage of the migration process. During the period preceding migration ("pre-migration stage"), before individuals have physically left their countries of origin, individuals have formed beliefs about health, illness, disease, treatment, and expectations of care that they will carry with them to their intended destinations. They may also have developed chronic or infectious diseases that they will bring with them. During the process of migration itself ("peri-migration"), individuals will be affected by the conditions that they confront and the experiences that they undergo during this process. Contrast, for example, how the health of two individuals may be differentially affected where one enters into the US legally as a corporate executive traveling as a first class passenger on an international airline and the second flees internal political turmoil and genocide in his country by paying smugglers to facilitate his escape through war-torn territories.

It is important to note, however, that the impact of factors identified at one stage of the migration process often have repercussions well into subsequent phases of migration. As an example, severe poverty during pre-migration affects individual and group health during this phase, but it also has implications for the manner of migration, the health risks associated with peri-migration, and the health conditions that may persist or ensue post-migration. Further, during the peri- and post-migration phases, the migration of individuals and groups may impact the health of the individuals with whom they come into contact. For instance, migrants with active tuberculosis can potentially transmit the disease to others, such as during the course of airline travel. Undiagnosed and untreated, they may further transmit the infection following their arrival to their new country. Similarly, those who were inadvertently exposed during their air travel may develop active infection and transmit it to others. Less frequently considered, but

no less important, is the impact of the individuals' departure on the health of the populations that they have left, as in the case of health professionals' emigration to more developed countries.

In this chapter, we utilize the framework of pre-, peri-, and post-migration stages to explore the impact of migration on population health. Within each phase of migration, we examine the historical, geographical, socioeconomic, cultural, and political contexts that frame the interplay of migration and health. Table 12.1 provides a summary of some of the factors that are encompassed within each domain. Although we explore a number of these within each context and stage of migration, it is beyond the scope of this chapter to provide a detailed examination of all such factors. We utilize trafficking as a case example to explore the intersectionality of the various factors throughout the migration process and their resulting health effects. Finally, we provide a series of recommendations intended to improve the well-being of migrant populations and the communities in which they reside.

## 2. Pre-Migration

### *2.1. Historical Context*

The effects of history may affect individuals' health before, during, and following immigration. Several scholars, for instance, have noted the impact of Jewish and Zionist history on individuals who wish to migrate from Israel (Knafo & Yaari, 1997). The historical culture may affect both their ability to emigrate, the stress that they feel during the process, and their mental health following migration:

> "In their homeland they would be called a *yored,* a derogatory nickname meaning "one who descends by leaving Israel," thereby shattering the basic tenets of Zionism. This is in contrast to *oleh*, one who ascends by immigration to Israel. The *yored* is perceived as a selfish and weak person, a failure and a traitor" (Knafo & Yaari, 1997).

Yet another example is provided by India and Pakistan. Many Indian Muslims within particular states of India are more likely to marry Pakistani Muslims than other Indian Muslims because they believe that those from Pakistan are more culturally and ethnically similar to themselves (Majumder & Jolly, 2003). The closing of the border between Pakistan and India in December 2001, following an attack on the Indian Parliament, prevented Indian Muslims from marrying and prevented cross-border families from joining each other. The closing of the border brought about severe emotional pain for those who have been separated from family members.

### *2.2. Geographical Context*

The cross-border utilization of health care on the US-Mexico border exemplifies the importance of the geographical context in which migration occurs and the

TABLE 12.1. Features of migration that may influence population health

| Context | Pre-migration stage | Peri-migration stage | Post-migration stage |
|---|---|---|---|
| Historical | History of settlement; formation of cross-border families due to political divisions of territories, e.g. India and Pakistan, Mexico and the US; political tensions between countries | History of migration across certain borders and attendant challenges in place to prevent migration, e.g., US-Mexico border | Extent to which receiving country has historically accepted immigrants |
| Geographical | Natural disasters, such as floods and hurricanes, resulting in disruption of health-related services, sewage, water supplies, etc. | Natural barriers, e.g. oceans, mountains, deserts, resulting in injury from exposure to elements | Geographical isolation, e.g. rural areas; rapid influx of migrants from rural to urban areas and resulting inadequacy of sewage systems, utilities, and health services; importation of disease from country of origin |
| Socioeconomic | High prevalence of poverty and unemployment; poor employment and economic prospects | Extent and nature of law enforcement efforts | Level of economy of receiving country; employment opportunities; extent to which ethnic economic networks have been developed |
| Cultural | Gender norms; health and illness beliefs; value of women and children | Gender norms; language | Gender norms; cultural differences between sending and receiving countries; extent to which homo-ethnic networks exist in receiving country; extent to which immigrants adapt norms of receiving culture and retain norms of original culture |
| Political | Armed conflict; political tensions between countries | Extent and nature of law enforcement efforts; armed conflict | Level of xenophobia, racism and discrimination in receiving country |

relationship between migration, health, and health service utilization. A study conducted among individuals residing in relatively rural, isolated areas along the US-Mexico border found that a large proportion traveled into Mexico for primary care services and for the purchase of prescription medications (Parchman, 2002). Individuals without health insurance and who spoke Spanish were more likely to utilize these cross-border services. Increasingly, health insurance companies in California are offering to pay for the health care services that their US resident insurees obtain in Mexico (Geis, 2005), further reflecting the benefits that geography may bring.

The geographical context may, however, portend disaster as well. The capacity of an area to survive and recover from the effects of a natural disaster is associated with the magnitude of destruction in the specific area and the socioeconomic conditions that prevail there at the time of the disaster (Martine, 1999). Hurricane Mitch is considered to have been the most powerful hurricane to hit Central America and the Caribbean during the last two centuries. The after effects of the storm included a lack of access to drinking water, sanitation, and the deterioration in conditions in health centers, as well as increases in the rates of infectious diseases. The storm's impact fell disproportionately on poor individuals, who suffered a high rate of mortality and were forced to flee their homes. Researchers observed an increase in sexual abuse, sexually transmitted diseases, and unwanted pregnancies as a result of both the diversion of health care services to deal with the emergency and the poor conditions that prevailed in places of shelter (Martine, 1999).

Natural disasters do not occur in a vacuum but within a cultural and socioeconomic context. Their ill effects often fall disproportionately on women, who bear the majority of responsibility for child care and other community and family responsibilities, and on the poor, who may live in more geographically vulnerable areas and less stable housing structures (Hannan, 2002). Because of gender-related constraints, such as lack of decision-making authority, lack of financial and physical capital, and presence of cultural norms relating to mobility, women may be unable to act on advance warnings of the approaching natural disaster. Natural disasters may result in men's migration due to the loss of jobs locally, leading to an increase in *de facto* female-headed households. Women may be forced to spend an increased proportion of their time each day queuing for supplies such as water and food, forcing children to assume the responsibility to care for each other and for any surviving animals, as well as attend to other household tasks (Hannan, 2002).

## *2.3. Socioeconomic Context*

Professionals constitute the largest proportion of economic migrants, and a sizable number of them are health care professionals (World Health Organization, 2003). Although migration is a personal decision, it is heavily influenced by the socioeconomic realities and the lack of opportunities for career advancement in the countries of origin (Bach, 2003).

The importance of the pre-migration socioeconomic context as both a "push" and "pull" factor is reflected in the numbers of health professionals who have left their native countries. Ghana has reported a 72.9% vacancy level for physicians in specialty areas, and Malawi reported a 52.9% vacancy level for nurses (World Health Organization, 2003). Over 70% of graduating nurses in the Philippines leave their country each year, contributing to the annual outflow of 15,000 nurses who migrate to over 30 countries (Adversario, 2003). It has been estimated that there are currently 30,000 unfilled nursing positions in the Philippines due to the emigration of nurses to other countries and the in-country funding shortages (Organisation for Economic Co-operation and Development, 2003).

Many physicians and nurses trained in India also choose to leave their home country to practice their profession elsewhere (Hindu Business Line, 2002; Khadria, 2002). In part, this decision may be premised on the expectation of larger incomes and increased material acquisition associated with life in Western industrialized nations (Mullan, 2006). However, it may also be attributable to the availability of more advanced medical technology and the existence of less chaotic commercial systems in the countries of intended migration (Mullan, 2006).

## *2.4. Cultural Context*

"Culture" has been defined as "a common heritage or set of beliefs, norms, and values" (United States Department of Health and Human Services, 1999). Such a definition gives the impression that culture is something that is static and that resides in the individual, however common the particular values may be. Rather,

> " . . . culture is constituted by, and in turn constitutes, local worlds of everyday experience. That is to say, culture is built up ("realized") out of the everyday patterns of daily life activities – common sense, communication with others, and the routine rhythms and rituals of community life that are taken for granted – which reciprocally reflect the patterning downward of social relations by shared symbolic apparatuses – language, aesthetic sensibility, and core value orientations conveyed by master metaphors. In these local worlds, experience is an interpersonal flow of communication, interaction, and negotiation—that is, it is social, not individual—which centers on agreement and contestation about what is most at stake and how that which is at stake is to be sought and gained. Gender, age cohort, social role and status, and personal desire all inflect this small universe in different ways. The upshot is culture in the making, in the processes that generate action and that justify practices. Thus the locus of culture is not the mind of the isolated person, but the interconnected body/self of groups: families, work settings, networks, whole communities." (Kleinman, 1996).

This definition underscores both that culture is a system shared by members of a defined group. Culture consists of elements that comprise "everyday patterns of daily life activities," such as language, diet, patterns of social interaction, health and illness beliefs, religious and spiritual beliefs and traditions, manners of dress, and gender roles, among others. When individuals emigrate from one country to another, they do not leave these aspects of their lives at the border. Rather, they

carry their beliefs, knowledge, and practices with them to their new homeland where, to varying degrees, they may preserve, modify, or eliminate them from their every day lives. Consider as an example the impact of health beliefs of several immigrant groups and the impact of such beliefs on illness detection and health care seeking behavior.

In absolute numbers, immigrants from the Philippines and Mexico are the two largest immigrant groups in the United States to develop tuberculosis (TB) (Zuber, McKenna, Binkin, Onorato, & Castro, 1997). Findings from focus groups conducted with Filipino immigrants in California and Hawaii indicate that participants attributed TB to environmental causes, such as cigarettes, alcohol, and unsanitary conditions; to imbalances of the body resulting from overwork, poor nutrition, worrying, and family problems and inheritance; and to contagion through touch, air, and shared utensils (Yamada, Caballero, Matsunaga, Agustin, & Magana, 1999). Although respondents perceived tuberculosis as highly contagious, they believed that medical treatment was not always necessary. In addition to modern medicine, they believed that this highly stigmatizing disease could be treated through improved diet, smoking cessation, improved sanitation, restoration of the body's balance, and the use of traditional medicines. Vietnamese focus group participants in a study based in Orange County, California, drew distinctions between transmissible physical TB, which was found to be similar to Western biomedical knowledge of TB, and non-transmissible psychological TB, characterized by fatigue, lethargy, and a loss of appetite (Houston, Harada, & Makinodan, 2002). These pre-existing conceptualizations of disease and illness may have adversely impacted infected individuals' ability to identify and respond appropriately to illness symptoms that require immediate care and that signal disease transmissibility. As a result, others around them may be at increased risk of disease transmission and the individuals themselves may be at increased risk of adverse consequences resulting from infection.

It is not surprising, therefore, that between 1985 and 1994, 98% of the 3,364 cases of TB reported among Asians in Los Angeles County, California, were among immigrants (Makinodan et al., 1999). The rate per 100,000 foreign-born Asians living in Los Angeles County was 162.1, compared to 2.6 per 100,000 among US-born Asians. In 1997, 39 percent of all TB cases nationally were reported to have occurred in foreign-born persons (Centers for Disease Control and Prevention, 1998). Although these data relate to individuals post-migration, after they have arrived in the US, it is likely that a substantial proportion of these persons had tuberculosis prior to their departure from their countries. Pre-existing health beliefs or availability of screening and care services may have contributed to interpretation of pre-migration symptoms and disease detection only post-migration.

## *2.5. Political Context*

Political conflict often brings about resulting economic hardship, dislocation, and ill health effects. The disruption occasioned by political factors occurs within a cultural and socioeconomic context, resulting in a disproportionate impact on more vulnerable segments of the society in which it occurs.

Armed conflict may bring military conscription of males within a household, leaving women to cope with decreasing access to food, health care, and other basic goods and services (El Jack, 2003). As communities break down during this process, women may become increasingly vulnerable to domestic violence (United Nations, 2002). Women may be forced to trade sexual "favors" for needed food supplies, leading to an increased risk for HIV and other sexually transmitted infections (Benjamin, 2001; Smith, 2002). Following the cessation of the conflict, the women may be seen as prostitutes who willingly provided these services and may be marginalized by their families and communities as a result. They may be further victimized by increasing violence from their surviving male partners, who suffer from guilt and anger at their own inability to protect them (El Jack, 2002).

The political context in which migration occurs may result in health effects in a much less dramatic way as well. Consider, for instance, the political context of TB control efforts associated with immigration. It has been estimated that over one-third of the world's population is currently infected with TB (World Health Organization, 2006); a single untreated person can infect between 10 and 15 people a year (World Health Organization, 2005b). The disease kills more people every year than any other infectious disease; in fact, someone dies of tuberculosis every 15 seconds (World Health Organization, 2005a,b). There are annually approximately 9 million new cases of tuberculosis and 2 million deaths attributable to tuberculosis worldwide, despite the availability of affordable, effective treatment (Jong-wook, 2006). The vast majority of incident cases occur in various parts of Africa, Asia, and newly formed states of the former Soviet Union. There is a 1 percent rise in tuberculosis cases worldwide each year and an increasing incidence worldwide of drug-resistant tuberculosis (Centers for Disease Control and Prevention, 2006; Jong-wook, 2006; World Health Organization, 2002, 2006). The increasing rates of TB are associated with poverty, an increase in HIV prevalence, falling living standards, and failing public health systems (Almeida & Thomas, 1996; World Health Organization, 2002).

These pre-migration circumstances may be exacerbated prior to migration as the result of inadequate attempts by destination countries to protect their citizens from disease transmission post-migration. As an example, US immigration law excludes from legal entry those seeking admission who have active tuberculosis infection. However, TB screening, to be conducted in the home country by US government-authorized physicians ("panel physicians") prior to the commencement of physical migration, is required primarily for those seeking to immigrate permanently, such as lawful permanent residents ("green card" holders), asylees, refugees, and several other specified groups. The screening requirement does not apply to the vast majority of foreign-born individuals seeking admission to the US each year, such as tourists, students, and business-persons here temporarily. Those who enter illegally circumvent these and all other procedures required for admission. Consequently, the findings of a recent study of culture-positive TB patients in the Dallas-Ft. Worth metroplex area of Texas should not be surprising. Researchers found that a greater proportion of nonimmigrants had multi-drug

resistant TB and were HIV-positive, compared to those with permanent resident status (Weis et al., 2001). Similar issues confront other countries, where a large proportion of incident cases of tuberculosis may be attributable to unscreened immigrants arriving from regions of the world that are characterized by a high prevalence of tuberculosis (Aebischer-Perone, Bovier, Pichonnaz, Rochat, & Loutan, 2005).

Even when screening is required, its effectuation may be problematic; inadequacies in the screening process may lead to further health problems during peri- and post-migration. A study among Tibetan immigrants in Minneapolis from 1992 to 1994 found that despite initial screening by US-authorized physicians in India prior to immigration to the US, 51% of the chest radiographs were abnormal (Truong et al., 1997). A comparison with the results from the chest radiograph evaluations conducted in India indicated that 79% of the Tibetans had unchanged readings, and 21% showed evidence of potentially progressive TB. In yet another instance, despite the screening by US government-authorized physicians and treatment administered through a US-monitored TB treatment program in a Thailand refugee camp, between 2004 and the present, 50 Hmong refugees arrived in the US with active TB infection. Five of the 30 individuals who migrated to California were found to be multi-drug resistant (MDR), and of these, at least one had acquired MDR-TB as the result of inappropriate treatment prescribed in this US-monitored treatment program (Centers for Disease Control and Prevention, 2005). Four of the five individuals arrived in California highly infectious, having traveled from their home country to the US via airplane, with the potential to infect others during transit (peri-migration) and following arrival in the US (post-migration).

The process of screening would-be migrants on the basis of health and the issues associated with such screening are not unique to the United States. It has been estimated that at least 60 countries now screen foreign-born visitors for HIV prior to entry across their borders, despite the lack of any evidence to indicate that HIV-infected immigrants create additional risk to native-born populations (World Health Organization, 1994, 2003).

## 3. Peri-Migration

### *3.1. Historical Context*

Historical context inevitably shapes the conditions under which migration is carried out. There have been numerous historic examples of dramatic and large scale movement between countries that were, to a large extent, facilitated by the host country; think, for example, of western European migration to the United States in the latter part of the 19th century. Conversely, however, historic precedent and circumstance can also conspire to make peri-migration circumstances treacherous and potentially harmful to migrants. For example, the history of migration between the Mexico-US border is fraught with the effects of the two countries' political relations and with the fluctuating views of the US on

acceptance or rejection of migrants. By the latter half of the 20th century and the early 21st century, the Mexico-US border had become a near militarized zone, with tremendous effort being expended by the US to control the border and to minimize migration across the border. This has increasingly forced those attempting border crossing to adopt dangerous routes, associated with greater mortality and morbidity.

## *3.2. Geographical Context*

Geographical factors may heighten the health risks of individuals intending to migrate. For example, the current circumstance of migration from Mexico into the US, as part of an increasingly hostile historic trajectory of rejection of possible migrants, as summarized above, involves navigating through polluted waterways, crossing through large desert areas, or traversing major high-volume, high-speed freeways. Not surprisingly, then, increased numbers of injuries and deaths have been reported in recent years among individuals attempting to cross into the United States illegally through the southern border areas of California, Arizona, New Mexico, and Texas. The morbidity and mortality associated with this migration process result from dehydration or hypothermia in the deserts, drownings in waterways, and injuries sustained by smuggled individuals during high speed car maneuvers by traffickers avoiding arrest by law enforcement officers (Cooper, 2005; Franklin, 2005; Marosi, 2005; Schleicher, 2005). The increased health risks associated with the geography of these illegal crossings is further heightened by smugglers' disregard for human life and their focus on economic gain, for instance in May 2003, 17 undocumented immigrants from Mexico and Central America were found asphyxiated in a tractor-trailer holding approximately 100 people that had been abandoned by smugglers in south Texas (Madigan, 2003; Romero, 2003); increasing hostility directed against would-be immigrants by populations along the border; and paramilitary law enforcement activities by civilian groups, such as the Minuteman, that assert their right to bear arms and defend the country from entrants (Schleicher, 2005).

Oceans also present barriers to immigration and may entail increased health risks.. In one example, the Honduran-registered ship, *Golden Venture*, ran aground off the Rockaway Peninsula in Queens, New York, after failing in its attempt to rendezvous with smaller ships to deliver its 289 Chinese passengers illegally to shore (McFadden, 1993). Ten of the passengers died from hypothermia or drowning. Others disappeared after receiving treatment at local hospitals (McFadden, 1993) and some were taken into custody by the immigration authorities.

## *3.3. Socioeconomic Context*

The socioeconomic status within countries that are traversed may indirectly impact the migration process. For instance, individuals who are fleeing their homelands for a place of safety may have to traverse several countries before they reach their intended destination. The intending immigrants may be subjected to

violent attacks associated with robbery. Such attacks against individuals crossing the border have, for instance, been documented at the US-Mexico border (Coronado & Orrenius, 2005).

## *3.4. Cultural Context*

Relatively little has been written relating to the impact of culture on the actual process of migration, as distinct from pre-migration, when the individual is in his or her homeland, and post-migration, following the individual's arrival at his or her final destination. It is conceivable, however, that cultural factors may be relevant to this period and its health effects.

Gender norms may impact the migration experience. Women who migrate to a country illegally may be victimized en route more easily than men. Women may have been socialized to seek protection from men, some of whom may not be trustworthy figures. Language differences between those who are migrating and individuals with whom they come into contact may reduce the immigrants' ability to obtain legitimate assistance or to utilize services that may be available.

## *3.5. Political Context*

Individuals who are forcibly displaced during periods of armed conflict may experience significant health effects even as they are in the process of internal migration. Women may be forced to serve in rape camps or provide the occupying forces with sexual services in exchange for food and protection (El Jack, 2003). A study of the effect of forced migration on HIV prevalence in Rwanda found that post-war, the HIV seroprevalence in both rural and urban areas was 11 percent, in contrast with the pre-war level of 1 percent in rural areas (where 95 percent of the population had lived) and 10 percent among pregnant women in urban areas (UNAIDS, 1998). HIV seroprevalence among those who had lived in refugee camps in Tanzania or Zaire was 9 percent, representing a 6- to 8-fold increase in the rates of HIV in the rural areas from which they had been displaced.

Individuals who traverse through one or more countries in their attempts to leave their homeland for their destination country may experience health effects in the intermediate country as a result of the existing political climate. As an example, individuals escaping from violence in their homeland in Central America who intend to seek refuge in Canada must travel through the United States. Recently, there have been efforts in the United States to increase the level of assistance from local police to enforce immigration laws. This would require that local law enforcement officers detain individuals suspected of being in the United States illegally and notify appropriate immigration authorities (Seghetti, Viña, & Ester, 2004). This could result in an erosion of public safety because individuals who are victims of or witnesses to crimes may be unwilling to reports these incidents to the police for fear of being arrested (American Civil Liberties Union, 2003).

# 4. Post-Migration

## *4.1. Historical Context*

There is some suggestion in the literature that addiction to various substances has been internationalized as the result of migration. Substances traditionally or frequently used in countries of origin have been brought to the new homeland for use or sale. As an example, coca, originally produced and used extensively in Brazil and Peru before the Inca empire, is now widely used in the United States. Smoking tobacco had been grown in the tropical and subtropical regions of the Americas. It was later cultivated by the Spaniards in Santo Domingo, by the Portuguese in Brazil, and by the British in Virginia. Merchants then exported it to European nations. Opium and hashish, once used widely throughout various Asian countries, came to the Americas both via Europe and directly across the Pacific (Berlinguer, 1993).

Various diseases have "migrated" from their places of origin with their hosts to become diseases within the country of immigration. Examples include the introduction of influenza into Santo Domingo by the Spanish in 1493 (Guerra, 1993), the introduction of syphilis from the Americas following the return of Columbus and his crew to Naples in 1494 (Berlinguer, 1993; Curtin, 1993), and the introduction of smallpox into the Americas in 1510 from Africa through the illegal slave trade (Henige, 1986; Lipschutz, 1966; Naranjo, 1992).

## *4.2. Geographical Context*

Although significant research has addressed the geographical context post-migration, relatively little of that research has examined its health implications. The settlement of foreign-born persons in the United States provides an example of the geographical context post-migration and its interplay with other factors.

Approximately 72 percent of foreign-born persons arriving in the US between 1970 and 1980 migrated to six states. One out of every four settled in California (Isserman, 1993). Specific settlement patterns have been linked to various migrant groups. Ninety percent of Mexicans appear to settle in only three states: California, Texas, and Illinois. Twenty-seven percent of European immigrants settle in New York and New Jersey, while almost 40 percent of Asian immigrants to the United States travel to California.

These apparent concentrations of individuals from the same nation is believed to be a function of a desire of displaced persons to recovery their "community," whether in a physical or in a social sense (Shami, 1993). Successive contingents of immigrants from the same country of origin may join already-established communities, where they may be more likely to find employment and mutual support (Allen & Turner, 1996; Portes & Rumbaut, 1990).

## 4.3. Socioeconomic Context

The economic realities within the countries receiving migrants clearly affect immigrants' ability to obtain needed medical care. As an example, although applicants for asylum in the UK theoretically have free access to the National Health Service, research suggests that there exists a scarcity of government-funded resources for asylum seekers. (Connelly & Schweiger, 2000; Ramsey & Turner, 1993; Woodhead, 2000). Similar difficulties confront undocumented immigrants in Australia, Germany, Spain, and Switzerland (Harris & Telfer, 2001; Scott, 2004; Torres & Sanz, 2000). In Sweden, undocumented immigrants, known as *gömda*, are eligible for only "immediate health care," which refers to urgent care at a hospital emergency department and generally excludes primary health care and maternity care (Medecins Sans Frontieres, 2006). When *gömda* are able to access care, they are confronted with significantly higher charges for the services than would be charged to Swedish nationals. There may be significant interplay between these socioeconomic realities and political factors. In a 2005 study involving 102 *gömda,* 67 percent of the respondents reported a high or very high risk of being arrested if they were to present to a hospital, and this fear deterred them from seeking medical care and treatment for both chronic conditions, such as asthma, and infectious disease, such as tuberculosis (Medecins Sans Frontieres, 2006).

## 4.4. Cultural Context

Some have suggested that the psychological health of immigrants depends to a large degree on the magnitude of the cultural differences that exists between their country of origin and their adopted country, as well as the extent to which social networks have already been established by others who have immigrated from the same homeland (Akhtar, 1999). "Intramural refueling," whereby new immigrants are supported by a "homo-ethnic community" of co-nationals, occurs through visits to ethnic markets, participation in religious and cultural events, and attendance at cultural and religious centers (Akhtar, 1999).

Immigrants' health may also be affected as they adopt, to varying degrees, behaviors and perspectives of their adopted country's culture. This process of acculturation is "a long-term fluid process in which individuals simultaneously move along at least two cultural continua (or dimensions) and whereby individuals learn and/or modify certain aspects of the new culture and of their culture of origin" (Marin & Gamba, 1996).

As an example, immigrants to Israel display a decreased rate of pancreatic and stomach cancer as compared to their non-immigrating counterparts (Iscovich & Howe, 1998). This has been attributed to post-migration increased consumption of fruits and vegetables and decreased ingestion of highly salted, smoked, and preserved meats. Exposure to a "diabetogenic environment" following immigration has been linked to an increase of type I diabetes among Ethiopian and Yemenite immigrants to Israel (Weintrob et al., 2001; Zung et al., 2004).

Studies of HIV risk within the United States have consistently found that immigrants who are less acculturated to US culture have lower levels of knowledge about HIV risk (Shedlin, Decena, & Oliver-Velez, 2005). However, research suggests that as individuals become more familiar with US norms relating to sexual behavior and substance use, they are more likely to adopt risky behaviors, such as increased substance use and an increased number of sexual partners (Marin & Flores, 1994).

## *4.5. Political Context*

Stigma, racism, xenophobia, and/or discrimination may affect the health of migratory populations (ILO, IOM, & OHCHR, 2001). As an example of a discriminatory action that is both racist and stigmatizing, a hospital located in Texas near the US-Mexico border was alleged to have security personnel wear uniforms similar to those of the US Border Patrol in an effort to discourage Latinos from utilizing hospital services (Perez, 2003). Such an action could well affect immigrants' willingness to access care, regardless of their legal status.

Fear of immigrants may lead to discrimination, which may provide an unspoken motivation for further political actions that may impact the health of the immigrant population and, oftentimes inadvertently, the native population as well. Reforms to the immigration and welfare laws of the United States provide an excellent example of how fears of immigrants and their economic impact may serve as the underlying basis for political action.

On August 22, 1996, the US Congress passed the Personal Responsibility and Work Opportunity Reform Act (PRWORA) and the Illegal Immigration Reform and Responsibility Act (IIRAIRA). PRWORA created two classes of immigrants for the purpose of determining eligibility for publicly funded benefits, including medical care deemed to be of a nonemergency nature, such as prenatal care. The national implementation of this restrictive legislation followed the 1994 attempt of California voters to implement Proposition 187, which would have barred undocumented individuals from utilizing publicly funded benefits, including Medicaid (Palinkas & Arciniega, 1999; Ziv & Lo, 1995). Unlike the California legislation, which was enjoined by the California Supreme Court as unconstitutional, the federal law was successfully implemented.

Pursuant to this federal legislation, immigrants who obtained their legal permanent resident status prior to August 22, 1996, the date of the law's enactment, were to be known as "qualified aliens." Individuals who obtained their legal permanent resident status after the date of enactment were to be classified as "nonqualified aliens." Such individuals were largely ineligible to receive publicly funded benefits, including Medicaid-funded services, for a period of five years following their receipt of their legal status. Exceptions were created for certain classes of immigrants, including refugees, asylum seekers, immigrants with 40 quarters of qualifying work history, and noncitizens who had served in the United States military. Somewhat later, an exception was created for specified noncitizens whose need for publicly funded medical care was attributable to domestic violence. Nonqualified

aliens were subject to a deeming requirement, whereby the income of the US citizen or permanent resident individual(s) who sponsored them for immigration would be considered in calculating eligibility for the benefit.

In addition to the restrictions that were imposed on the receipt of benefits by certain legally immigrated individuals, the federal legislation specified that states may not provide nonemergency services to nonqualified aliens, including undocumented persons, without first passing new state legislation providing for the use of state funding for this coverage. Relatively few states have passed such legislation; in those that have, benefits are generally available to only a few, specified classes of particularly disadvantaged and/or vulnerable nonqualified immigrants, such as the disabled, the elderly, victims of torture, pregnant women, and children (National Immigration Law Center, 2002).

The impact of restrictive legislation such as Proposition 187, PRWORA, and IIRAIRA on immigrants' utilization of health services and the health of immigrant communities remains somewhat unclear. Asch and colleagues (1998) reported that the passage of Proposition 187 in California may have discouraged immigrants in Los Angeles County from seeking screening and/or early treatment for tuberculosis infection. Legislation that increases the fear of detection by immigration authorities may exacerbate delays in seeking care for tuberculosis (Asch, Leake, & Gelberg, 1994). Such delays have implications for not only the immigrants who are directly impacted by the legislation, but for others in their communities, as well, due to the manner of tuberculosis transmission.

The passage of Proposition 187 was also found to be associated with a decrease in new walk-in patients at an ophthalmology clinic at a major public inner-city hospital in Los Angeles County (Marx et al., 1996) and a decrease in patients at an STD clinic (Hu et al., 1995). However, Loue and colleagues (2005) found no statistically significant difference in time between onset of gynecological illness and seeking of care or length of time between seeking care and receipt of care among women of Mexican ethnicity of varying immigration status in San Diego County. Another study of immigrants of various nationalities, languages, and immigration status in Cuyahoga County, Ohio, similarly found no effect of the reform laws on immigrants' ability to access care (Loue, Faust, & Bunce, 2000). A high proportion of respondents in this latter study, however, had entered the US as refugees, and as such, they were not subject to the restrictions on their receipt of publicly funded health care.

The effort by the US House of Representatives in 2006 to reform U.S. immigration law has the potential to exacerbate delays in seeking treatment by both documented and undocumented persons and, consequently, may inadvertently facilitate the transmission of communicable diseases in the destination communities. The Border Protection, Antiterrorism, and Illegal Immigration Control Act of 2005, if adopted in its current form, would criminalize the presence of any individual who has entered the country illegally and establish minimum prison sentences for those convicted of being in the country illegally (Sensenbrenner, 2005). Such a provision would likely intensify individuals' fear of detection, leading to increased delays in seeking treatment (Asch et al., 1994). Confinement

in prison is also likely to facilitate disease transmission, in view of the substandard medical care that prevails in many of these facilities (Bone et al., 2000).

Reliance on international law as a basis for the provision of medical care to undocumented/irregular migrants is likely to prove futile. Only two international treaties expressly recognize the rights of such persons to health care: the Convention on Migrant Workers (1990) and the Rural Workers' Organizations Convention (1975). Additionally, although the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (1990) assures all immigrant workers and their families the right to emergency medical care, regardless of their legal status, it does not provide for follow-up care or disease prevention for undocumented/irregular persons. Additionally, these treaties are not self-executing, meaning that the signatory countries must take further action within their own borders to implement the treaty provisions.

## 5. A Case Study of Intersectionality: Trafficking

Trafficking has been defined in a number of ways through various protocols and conventions, as indicated in Table 12.2, below. Although the trafficking of women and children is often associated with sexual exploitation, trafficking does not always result in involuntary sex work. Individuals may be drafted into involuntary servitude in factories, domestic situations, sweat shops, and other commercial enterprises. The lack of international consensus regarding the definition of trafficking limits the effectiveness of international collaborative efforts to halt trafficking in human beings and to protect the health of those who are victimized.

As can be seen from Table 12.2, the concept of trafficking overlaps with that of illegal migration. Some individuals may actively enlist the aid of traffickers to cross into another country. The individuals may be motivated by any number of reasons, such as a search for economic opportunities, flight from persecution and/or torture, or reunification with family members who migrated previously. Regardless of their motive, the trafficked individuals may be caught up in a small- or large-scale enterprise that focuses on the trafficking of human beings as commodities.

### *5.1. Pre-Migration*

#### 5.1.1. The Legal Landscape and Implications for Health

Governments and agencies have adopted varying approaches to trafficking, which have been classified into six distinct perspectives (Foundation of Women's Forum, citing Marjan Wijers, Foundation Against Trafficking in Women, 1998) based upon their views towards trafficking, immigration, and sex work. The perspective that is ultimately adopted by a government or agency may have implications during the pre-, peri-, and/or post-migration phases for the health of both the

TABLE 12.2. Definitions of trafficking.

| Use of Definition | Definition of Trafficking |
|---|---|
| Archivantikul, 1998 | A child who is recruited and transported from one place to another across a a national border, legally or illegally, with or without the child's consent, usually but not always organized by an intermediary: parents, family member, teacher, procurer, or local authority. At the destination, the child is coerced or semi-forced (by deceptive information) to engage in activities under exploitative and abusive conditions. |
| Bangladesh National Women Lawyers Association | All acts involved in the recruitment and/or transport of a woman (or child) within and across national borders for work or services (or marriage) by-means of violence or threat of violence, abuse of authority or dominant position, debt bondage, deception or other forms of coercion (Ali, 1996). |
| Consultation Workshop of the Resistance Network, Bangladesh, 1999 | Trafficking in women consists of all acts involved in the procurement, transportation, forced movement, and/or selling and buying of women within and/or across borders by fraudulent means, deception, coercion, direct and/or indirect threats, abuse of authority, for the purpose of placing a woman against her will without her consent in exploitative and abusive situations such as forced prostitution, forced marriage, bonded and forced labour, begging, organ trade, etc.<br>Trafficking in children consists of all acts involved in the procurement, transportation, forced movement, and/or selling and buying of children within and/or across borders by fraudulent means, deception, coercion, direct and/or indirect threats, abuse of authority, for the purpose of placing a child against his or her will without consent in exploitative and abusive situations, such as commercial sexual abuse, forced marriage, bonded and forced labour, begging, camel jockeying and other sports, organ trade, etc. |
| Global Alliance against Trafficking in Women | All acts involved in the recruitment and/or transportation of a woman within and across national borders for work or services by means of violence or threat of violence, abuse of authority or dominant position, debt-bondage, deception or other forms of coercion (Archivantikul, 1998). |
| International Office of Migration (1999) | Trafficking occurs when a migrant is illicitly recruited and/or moved for the purpose of economically or otherwise exploiting the migrant, under conditions that violate their fundamental human rights. |
| United Nations' Protocol to Prevent, Suppress, and Punish Trafficking in Persons, Especially Women and Children | The recruitment, transportation, transfer, harbouring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability . . . or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. Exploitation shall include, at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation . . . forced labour or services, slavery or practices similar to slavery, servitude, or the removal of organs (United Nations Office for Drug Control and Crime Prevention, 2000). |
| US Agency for International Development | The recruitment of girls/women by means of violence or threat, debt bondage, deception or coercion to act as sex workers under menace of penalty and for which the individual has not offered themselves voluntarily (Gazi et al., 2001, quoting Matt Friedman) |
| US President's Interagency Council on Women | All acts involved in the recruitment, transport, harboring, or sale of persons within national or across international borders through deception or fraud, coercion or force, or debt bondage for purposes of placing persons in situations of forced labor or services, such as forced prostitution or sexual services, domestic servitude, or other forms of slavery-like practices |

persons who have been trafficked and individuals with whom they come into contact. These approaches are explicated below:

(a) The moral approach views trafficking as an evil that must be controlled. This approach focuses on the punishment of all parties involved, which may result in the stigmatization and punishment of the victims, as well as the perpetrators.
(b) The criminal approach seeks to improve international police cooperation and increase the effectiveness of prosecutions. This approach subordinates the interests of the trafficked women and children and may result in women being indicted for prostitution and/or illegal entry into the country (Foundation of Women's Forum, citing Marjan Wijers, Foundation Against Trafficking in Women, 1998).
(c) The immigration perspective seeks stricter control of national boundaries and may also seek to regulate marriage between citizens and foreigners. The interests of the state are paramount. Individuals who are voluntarily trafficked may be identified as illegal immigrants and dealt with as illegal entrants pursuant to a country's immigration laws. As an example, although US immigration law offers some potential recourse for individuals who have been involuntarily trafficked and forced into sex work, the interests of the government in controlling the illegal activity are clearly dominant. A maximum of 5,000 "T" visas are available each year to individuals who are or who have been the victim of a severe form of trafficking in persons, are physically present in the United States or various territories, are under the age of 15 or have complied with any reasonable request for assistance in the investigation or prosecution of trafficking, and would suffer extreme hardship involving unusual or severe harm upon removal from the United States (Victims of Trafficking and Violence Protection Act, 2000). This visa allows the individual to remain in the United States only for a temporary period of time. Additionally, even though the issuance of the visa is based on the individual's cooperation in the investigation or prosecution of the trafficking, witness protection is not generally provided to the trafficked individual. The benefit is potentially available only to those who have been involuntarily brought into the country; this does not encompass individuals who were voluntarily smuggled, even though they may have been victimized by their smugglers. Alternatively, a "U" visa, which also allows an individual to remain in the United States only temporarily, is potentially available to up to 10,000 persons each year who have suffered substantial physical or mental abuse as a result of having been the victim of trafficking or various other enumerated offenses; possesses information about the crime; and are, have been, or are likely to be helpful to law enforcement authorities in the investigation or prosecution of the crime, which must have been in violation of US law or committed in the US or a designated territory or possession (Victims of Trafficking and Violence Protection Act, 2000). Again, witness protection is generally unavailable.
(d) The human rights perspective sees prostitution itself or conditions under which women engage in commercial sex work (deceit, abuse, violence, etc.) as violative of human rights.

(e) The public order approach views trafficking as a problem of public order and/ or public health and focuses on control, such as that effectuated through medical examinations, as a solution.
(f) The labor perspective holds that trafficking in women is the result of women's relatively low social and economic status and advocates the establishment of increased economic rights and opportunities for women as a solution (Foundation of Women's Forum, 1998, citing Marjan Wijers, Foundation Against Trafficking in Women).

Only the public order approach is explicitly concerned with the health of those who are trafficked and the communities to which the trafficked persons arrive. While the human rights perspective is concerned with the conditions of commercial sex work and, accordingly, the health implications of such, the remaining approaches focus on issues related to economic, political, and legal concerns; the associated health issues do not warrant attention within these schema.

### 5.1.2. Other Pre-Migration Factors

Numerous factors, outlined in Table 12.3, may underlie the voluntary or involuntary trafficking of individuals. During the pre-migration stage of the trafficking

TABLE 12.3. Pre-migration factors influencing the incidence of trafficking in women and children.

| Factor | Examples |
|---|---|
| Historical context | Formation of cross-border families due to political divisions between nations, e.g. U.S-Mexico, Pakistan-India, and frequent cross-border traffic for commercial reasons (Gazi et al., 2001) |
| Geographical context | Natural disasters such as flooding or drought, leading to increased poverty, separation of families and search for employment (Gazi et al., 2001) |
| Socioeconomic context | High prevalence of poverty leading to search for employment outside of country, sale of children by families; high prevalence of female-headed households; low levels of education limiting economic opportunities (Gazi et al., 2001); difficulty accessing the formal labor market in country of immigration (International Organization for Migration, 2003) |
| Cultural context | Cultural norms promoting early and arranged marriage of girls; vulnerability of women to abuse/sale by relatives due to dissatisfaction with bridal dowry (Nagi, 1993); stigma and ostracism of women who have been deserted or divorced by their husbands; mores dictating female dependency on men; desire of migrant men abroad for sex workers with common cultural and linguistic background (Gazi et al., 2001); sexual harassment and demanded sexual favors in the workplace making payment for sex a desirable alternative (Foundation of Women's Forum, 1998) |
| Political context | Collapse of the Soviet Union with resulting economic hardships and dislocation (Cwikel et al., 2004; Foundation of Women's Forum, 1998); corruption of law enforcement personnel, facilitating trafficking; lack of shelter and support for women in distress (Gazi et al., 2001); illegality of prostitution and probable prosecution and/or deportation of trafficking victims for legal and/or immigration violations (International Organization for Migration, 2003) |

process, the situations of those who will be trafficked are often characterized by poverty or disrupted relationships (Zimmerman et al., 2003).

## *5.2. Peri-Migration*

The peri-migration stagespans the period from the individual's voluntary or involuntary departure with a trafficker to his or her arrival at the destination. During this stage, individuals may experience a variety of adverse health consequences, including accidental or intentional injury, communicable disease, hypothermia, and even death. These conditions may result from the process of immigration itself, which is often effectuated through reliance on dangerous modes of transportation that have been designed to evade discovery.

## *5.3. Post-Migration*

The post-migration stage begins when the individual arrives at the location where he or she is put to work. The period extends through custody by legal authorities, if that should occur, and/or integration into the destination site and re-integration upon return to the country of origin.

During this period, the individual may be the target of coercion, violence, exploitation, debt-bondage, or other forms of abuse. He or she may be subjected to physical violence, deprivation of food, human contact, and valued items. The individual may be held in solitary confinement, forced to use drugs and/or alcohol, and deprived of earnings. Adverse health consequences may include traumatic injury, depression, posttraumatic stress disorder, unwanted pregnancy, sexually transmitted infections, and involuntary sterilization (World Health Organization, 2003). During custody by law enforcement authorities, individuals are rarely provided with health assistance, and the conditions in which they are held are often inadequate.

Consider, as an example, the situation of those held in forced labor in the United States. Forced labor has been found to exist in at least 90 cities and is most prevalent in five sectors of the economy: prostitution and sex services (Luna & Tran, 2004; McCormick & Zamora, 2000; Pacenti, 1998; United States Department of Justice, 2003b), domestic service, agriculture (Greenhouse, 2002; United States Department of Justice, 2002, 2003a; Viotti, 2003), factory/sweatshop work, and restaurant and hotel work. Forced labor operations are concentrated in the states of California, Florida, New York, and Texas. Between 2000 and 2005, the press reported 131 cases of forced labor involving 19,254 men, women, and children, most of whom were immigrants (Free the Slaves and the Human Rights Center of the University of California, Berkeley, 2005). Although victims of forced labor came from 39 countries as of December 2003, the majority came from China, Mexico, and Vietnam (Free the Slaves and the Human Rights Center of the University of California, Berkeley, 2005).

The trafficking of human beings for the purpose of forced labor continues due to a variety of factors that exist at the US destination. In the case of forced labor

in the sex industries, these conditions include ties to organized crime; the absence of safe, legal, and timely mechanisms for immigration to the US; and a demand for cheap sexual services (Free the Slaves and the Human Rights Center of the University of California, Berkeley, 2005). A desire for cheap services similarly drives the demand for forced labor in the domestic, agricultural, and factory service sectors. In addition, within the domestic and agricultural sectors, legal protections for workers are weak, and there is inadequate monitoring of work conditions. Manufacturers may operate within the informal economy and attempt to evade the enforcement of US labor laws.

The largest concentrations of trafficking survivors who have received federal assistance are located in California, Oklahoma, Texas, and New York (United States Department of Justice, 2004). The majority of these individuals are originally from India, Vietnam, Indonesia, Tonga, Zambia, and Thailand (United States Department of Justice, 2004). Reports from survivors detail forced prostitution, the commercial exploitation of children, and the use by captors of violent beatings, withdrawal of food, and attacks by dogs as means of exerting control (Free the Slaves and the Human Rights Center of the University of California, Berkeley, 2005). Although the health effects of these conditions have not been well-documented, it is believed that survivors suffer from a broad range of adverse health effects that include physical injury and disability from beatings, post-traumatic stress disorder and other mental health conditions, and infectious diseases that include hepatitis B and C, HIV, and other sexually transmitted diseases (Free the Slaves and the Human Rights Center of the University of California, Berkeley, 2005).

## 6. Future Directions

A substantial body of literature exists pertaining to the health status of immigrants in their adopted countries, the differences in health status existing between those who have migrated and those who remained in their countries of origin, and risk factors for specific illnesses and syndromes within immigrant populations. However, relatively little research has focused on the health effects resulting from the interplay of macrosocial factors within the context of migration. Even for human trafficking, which has been the focus of substantial research efforts, we know little about this interaction during the actual transit process.

This chapter provides a framework for the conduct of such research throughout the process of migration, beginning prior to the point of departure (pre-migration), through the transit period (peri-migration), until arrival at the destination country (post-migration). Examples have been provided to demonstrate the interplay of migration with various macrosocial factors to ultimately impact, either directly or indirectly, the health of the migrating individuals or those with whom they come into contact. We suggest that this framework can be used to guide further research into the influence of particular elements of the immigration experience and circumstance. This will allow greater understanding of the impact that migration

has on population health (of both host and country of origin) and will help to illuminate possible avenues for intervention.

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