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Review Article

Comprehensive review on occurrence and risk of infectious diseases and implications in health of migrants in Latin America during the prevalence of COVID -19 pandemic

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Abstract

In recent years, there has been a significant influx of migrants in Latin America, with a particular focus on international migration. The migrants increased the danger of contracting infectious and tropical diseases like malaria, arboviral illnesses, HIV, tuberculosis, and negative health effects. Among freshly arriving migrants, hypothermia, cardiovascular events, pregnancy related difficulties, and hypertension are the most common health issues. Particularly in Latin America and the Caribbean, the legal landscape changed as a result of Argentina's 2004 and Brazil's 2017 national laws, which signaled advancements in the areas of health care and human rights through the creation of numerous obstacles for migrants. For migrants living in Latin American countries during the COVID 19 Epidemic, food insecurity and unemployment occurred. More than 5.5 million migrants arrived in this region from Latin America Countries (LACs), 4.6 million of whom presently reside in the Latin America region. This comprehensive review has covered infectious diseases connected to migration in Latin America, particularly during the prevalence of chronic infections, the epidemiological pattern occurring in various regions of Latin America, and health implications during the COVID-19 pandemic and beyond.

Keywords: Migrants; Latin America countries; World health organization; COVID-19; Infectious diseases.

Introduction

The frequent, extensive movement of a single living organism or a group of them is called migration. Seasonal variations, environmental factors, and the availability of water, breeding grounds, and food are a few factors that influence natural occurrences like migration [1]. Scheduled mobility carries a lower risk of infectious disease exposure during transit than irregular migration in both forced (refugees) and non-forced migration. Human migration can take place within a nation or across the international borders, and it can be voluntary or involuntary [2]. People migrated for a wide range of reasons including to pursue education or training, find better employment opportunities, avoid persecution or military conflict, or reunite the family [3]. The social economic and cultural dynamics of both the source and the destination can be significantly impacted by migration [4]. In addition to its political and social implications, the "migrant crisis" also includes a number of urgent health-related issues [5]. Foreign-born people living in Europe have a very different mortality pattern from the native populations, with higher rates of deaths from infectious diseases and lower rates from cancer or cardiovascular disorders [6].

Immigration is prevalent in South America. Throughout history, countries in South America, Central America, and the Caribbean, as well as Mexico, have welcomed immigrants from Europe and other continents [7]. Figure 1 shows that migration of Latin America that

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causes the infectious disease. Additionally, South America continues to accept immigrants and refugees from all over the world (Figure 2). Mexico accepted the migrants from Afghanistan after the Taliban seized power there in 2021. All the nations in South America, Central America, the Caribbean, and Mexico are together referred to as Latin America. Latin and South America have a long history of intra-regional migration, with people from Bolivia moving to Argentina, Haitians to Brazil, and Peruvians to Chile. Also, the region has a long history of welcoming people who are subject to political oppression [8].

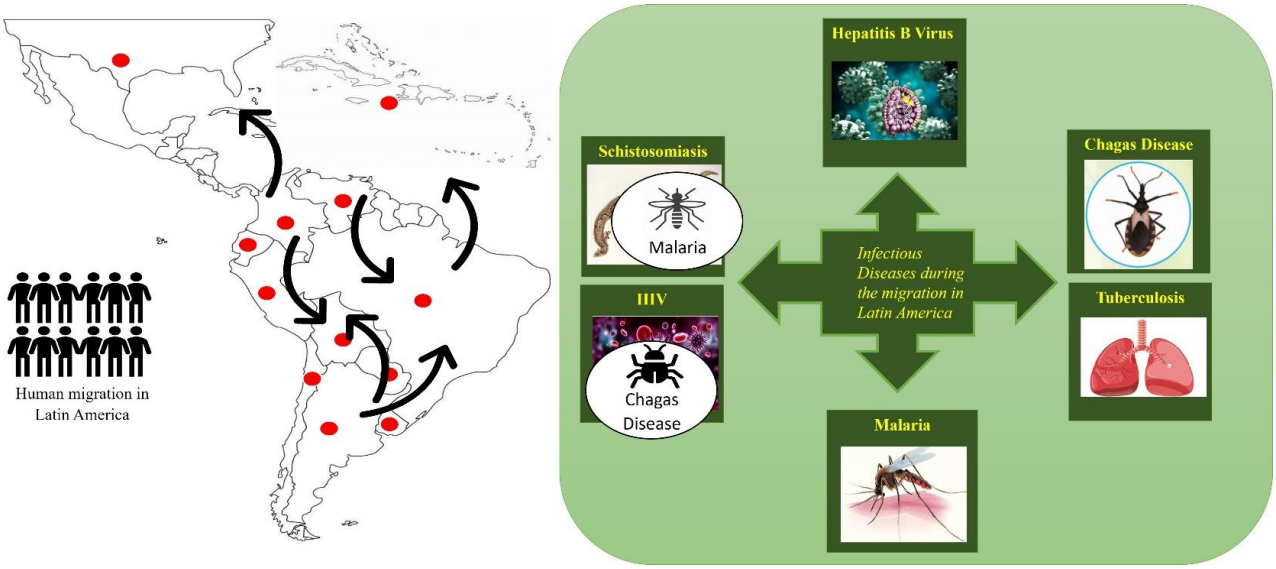

Figure 1: Schematic representation of the human migration in Latin America that imposing the risk of varied of infectious diseases

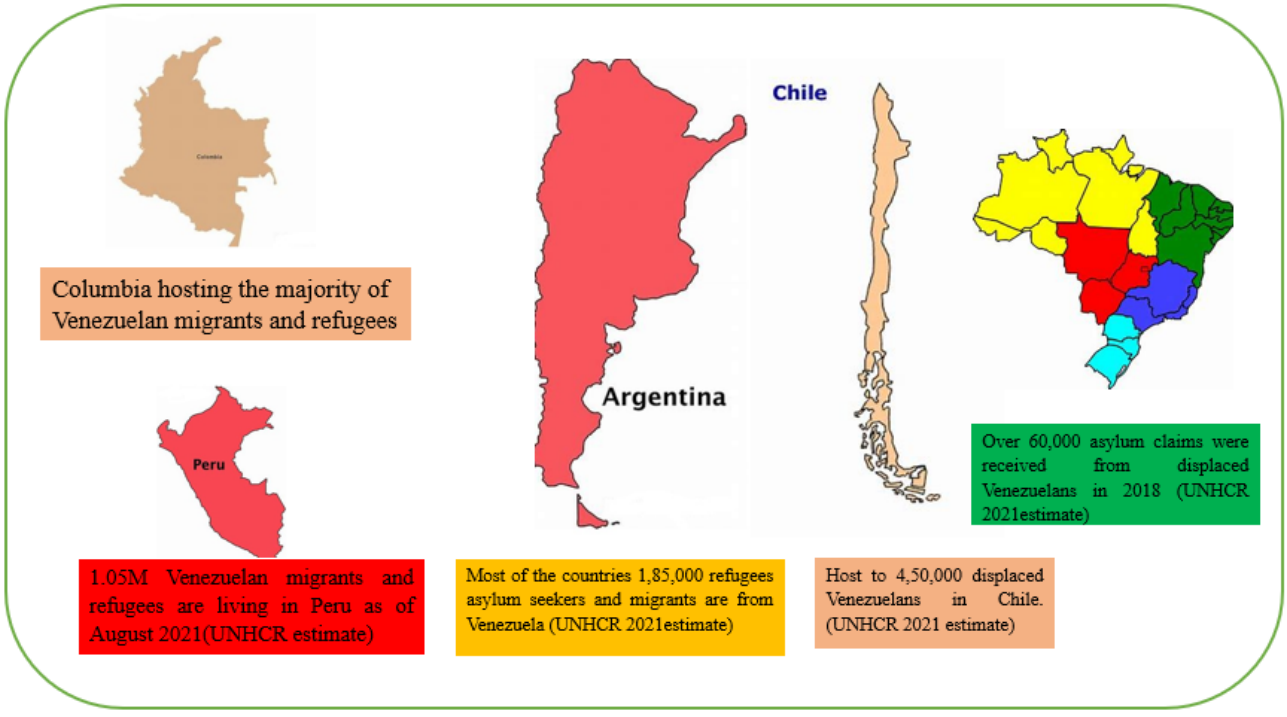

Figure 2: Source: Image from Google maps and all the information from Chatham house news in 06 October 2021

In South America, migration is not a recent phenomenon. The world is changing quickly due to migration, which is a key socioeconomic predictor of health [9]. Just as much as other regions, Latin America has in the past struggled with inconsistent human rights and health protection for migrants [10]. The World Health Organization (WHO) has acknowledged that migrants and refugees have a right to health, particularly about socioeconomic determinants of health. According to data from the Pan American Health Organization (PAHO), most socioeconomic disparities in Latin America have increased the number of fatalities from non-communicable diseases. In addition to non-contagious disorders like diabetes, cancer, and cardiovascular diseases, migrants' health also includes their mental, sexual, and reproductive health [11]. Migrant health issues are comparable to those that afflict the general population, even though some groups may experience them more frequently than others. Unintentional injuries, colds, burns, gastrointestinal illnesses, cardiovascular events, pregnancy complications, and delivery-related issues were the most common health issues among the recently arrived migrants [12]. Female migrants frequently experience challenges, including issues with pregnancy, delivery, and sexual and reproductive health [13]

Due to a political unrest, economic, and humanitarian crises, more than five million Venezuelans have left their native country since 2015. More than four million of these individuals have migrated to neighboring Latin American nations [14]. Alarming data on healthcare outcomes were revealed by the Venezuelan Ministry of Health in 2017, which made clear the challenging circumstances the nation is currently facing [15]. Almost 41,000 children received health help between January and June 2019, and over 75,000 carers received advice on how to feed their children properly. Most data about the health of Venezuelan migrants that have been published have dealt with infectious diseases such Zika, chikungunya, Chagas disease, measles, and diphtheria [16].

Many infectious diseases that frequently affect people in Latin America (Table 1). Limited access to clean food and water, crowding, inadequate nutrition, and exposure to insect vectors are risk factors for these illnesses [17]. These exposures are partially reflected in the illnesses found in immigrants from Latin America. For instance, fecal pollution is widespread and raises the risk of enteric infections [18]. The spread of respiratory pathogens like Mycobacterium tuberculosis may be accelerated by overcrowding and inadequate nutrition [19].

The late arrival of the coronavirus disease of 2019 (COVID 19) in South America resulted in Brazil being the first country in the region to report the illness. More than 70,000 COVID 19 cases have been reported throughout Latin America [20] One of the places in the world most equipped to handle an outbreak is Cuba. While the situation in Venezuela is dire, there are no facilities for hand washing with soap in the hospitals. The rate of tuberculosis among inmates in the region is 35 times greater than that of the general population [21]. Migrants are among the groups most hit by the humanitarian crises in the region's LACs, which are badly affected by COVID 19 [22]. For migrants living in LACs during the COVID 19 pandemic, insecurity and anxiety have increased significantly due to unemployment, food insecurity [23].

2. Infectious diseases associated with migration i]n Latin America

2. 1. Tuberculosis

Robert Koch anticipated that when he discovered the tuberculosis (TB) bacillus, "this awful affliction of mankind" would be eradicated. Even a century later, TB kills more people than any other disease, especially those who have HIV [24]. Over the past ten years, new cases of TB have been found all over the world, and the death toll has remained horrendous. Latin American communities have suffered from tuberculosis for a very long time. This disease was introduced by European conquerors in the late fourteenth century, along with other diseases [25]. When someone with the pulmonary bacteria coughs, the bacteria are then released into the air and can transmit TB [26].

Table 1: Infection dieses considerations for the migrants who travels who travels in Latin America. Source: Division of disease control (DDC)

Disease	**Mode of Transmission**	**Incubation Period (Range)**	**Signs and symptoms**	**Initial evaluation**	**Treatment**	**Infection control precautions**
Chikungunya/Dengue/Chikungunya/Dengue/another arbovirus	Mosquito borne	Chikungunya 3-7 days and Dengue 4-8 days.	Fever, Joint pain, Head ache, muscle pain.	CBC, CMP Acute &convalescent serologies	Avoid mosquito bites during first week of symptoms	Standard
Cholera	Water Borne	2-3 days	Profuse, watery diarrhea, Nausea vomiting	CMP (cholera can cause severe electrolytes abnormalities acidosis	Supportive rehydration	Standard: Vaccine available for travelers to areas with active transmission
Hepatitis A	Person to person (Fecal - oral)	28 days	Jaundice, Fever, Nausea, Vomiting	CMP, Hepatitis serologies	Hepatitis A IG:<12 months; may be co administered w/vaccine for high risk person > 40 yrs	Standard: contact precautions if patient is diapers
HIV (Consider acute HIV in all travelers presenting with fever)	Person-to-Person (Sexual, blood borne; in utero	Acute seroconversion syndrome; 1-4 weeks post-exposure.	Fever, Sore throat, Rash.	HIV Ag/Ab HIV RNA qualitative if acute HIV infection is suspended	Viral load monitoring	Standard

An important factor in the spread of tuberculosis was urbanization. At least initially, during the post-arrival phase, migrants and refugees are more likely to live in major cities than in rural areas. Latin America is now regarded as one of the most urbanized continents in the world, and most of this urbanization took place in the 20th century. The rise of TB was mostly attributed to high population density, crowded living and working conditions, and the poor lifestyle associated with urbanization. It is becoming more difficult for national TB control and elimination programs (NTPs) in high-income nations to deal with the issue of illnesses among immigrants and people who were not born there.

2. 1. 1 The Epidemiology of Tuberculosis in Latin America

The number of TB cases attributable to recent transmission between native-born and immigrant populations can be calculated using molecular epidemiology studies [27]. Latin America reports 3% of the world's tuberculosis cases, with a 7.3% fatality rate. Incidence rates of tuberculosis were 46.2 per 100,000 individuals in South America in 2017 and 61.2 and 25.9 per 100,000 in the Caribbean and Central America (including Mexico) respectively [28]. Within Latin America, the epidemiology of tuberculosis differs per nation. In the Americas, Mexico, Brazil, and Peru together account for around half of all cases [12]. The incidence rates in Cuba, Costa Rica, Puerto Rico, and Jamaica are between 10 and 20 cases per 100,000 people [29].

The WHO ranks Brazil and Peru along with the 46 American countries and territories as having a high TB burden. The Pan American Health Organization, the National Tuberculosis Program, and other national and international organizations have significantly aided the fight against TB in Latin America [30]. Without a doubt, TB has spread around the world and is severely impacting those who are most susceptible, regardless of class, color, or gender. Nowadays, TB remains the most frequent infectious disease-related cause of mortality [14]. TB is a treatable illness, and it may be identified using quick and accurate procedures [31].

2. 1.2. The Arrival of Tuberculosis in Latin America

Humans and tuberculosis have co-evolved [32]. There is strong evidence from pre-Columbian ceramic records that suggests mycobacterial sickness was the source of the typical thoracic gibbus deformity induced by Pott's disease of the spine [33]. A phylogenetic examination of a global collection of lineage 4 Euro-American strains most recently dated the arrival of the Euro-American lineage in Latin America to after the year 1500 [34].

2. 1.3. Migrants screening for Tuberculosis

Normal populations or high-risk groups are screened by evaluating symptoms and applying quick tests, examinations, or other procedures. The term "active TB case discovery" is sometimes used to describe TB screening. There are several ways to check for TB and to determine whether it’s need further testing. Symptom screening, chest X-rays, and molecular WHO-recommended rapid diagnostic tests (mWRDs) like Xpert MTB/RIF and Truenat on sputum are among them. A quick point-of-care blood test called C-reactive protein can also be performed to check for TB in HIV-positive individuals. It is possible to run several screening tests concurrently or one after the other. The screening of TB disease does not use tests for TB infection, such as the interferon-gamma release assay (IGRA) or the tuberculin skin test (TST, such as the Mantoux test) [26].

2.2 Chagas disease: A Latin American health issue that is now a global health issue:

Due to migration trends, the parasitic ailment Chagas disease, which is native to Latin America, is becoming a global health concern. *Trypanosoma cruzi (T. cruzi),* a protozoan that is endemic to 22 countries in the continental western hemisphere, is the protozoan that causes Chagas disease, according to the World Health Organization (WHO) [35]. The primary human infection vector is the kissing bug, a domestic and sylvatic insect of the subfamily Tritomina, whose habitat in the Americas ranges from the US and Mexico in the north to Argentina and Chile in the south. In addition, congenital transmission of *T. cruzi* to humans via the oral route, blood transfusions, organ transplants, and other methods are also feasible [36].

Chagas disease typically occurs in rural Latin American nations like Bolivia, Columbia, Argentina, or Mexico, where an estimated 6 to 7 million individuals have the ailment and another 70 million are at risk of developing [37]. Nifurtimox and benznidazole are recognized treatments for Chagas disease. Its effectiveness is excellent during the acute phase (even in congenitally infected infants), but less so during the chronic phase, when it is uncertain if the drugs are helpful in slowing the progression of the disease [39,40]. Chagas disease has spread around the world as a result of migration and specific methods of transmission. Spain is the non-endemic country outside of the Americas with the highest frequency of Chagas disease, with an estimated 65,000 sick persons, but less than 10% have gotten a diagnosis [41,42].

Overall, 275 instances were reported (85.4% in endemic countries, 47 (14.6%) in non-endemic countries). Among the endemic countries, Brazil recorded the most occurrences with 104 (32.3%), followed by Argentina with 48 (14.9%) and Bolivia with 26 (8.1%). In Mexico, Central America, and South America, where the disease affects between 6 and 8 million people, the majority of whom reside in areas with high rates of poverty and transmission, less than 10% of those with Chagas disease each year receive timely diagnosis and, consequently, effective treatment. The Pan American Health Organization (PAHO) is urging nations to increase efforts to detect all suspected instances of the disease on World Chagas Disease Day, April 14. 70% of persons affected are thought to be unaware of their infection. Finding and reporting every case is the topic for 2022 to eradicate Chagas disease. Dr. Marcos Espinal, Director of Communicable Diseases and Environmental Determinants of Health at PAHO, stated that efforts undertaken by countries in the region to prevent and manage vector transmission that started in the 1990s suggest that stopping Chagas disease is feasible.

2.3 Malaria Parasites were brought to the Latin America by human migration

Almost 80% of the 875000 malaria cases reported in the Latin American region were caused by four countries: Brazil, Columbia, Peru, and Venezuela. One of the biggest global public health issues is reducing and eventually eliminating malaria transmission. The World Health Organization (WHO) has created a detailed and ambitious plan for eradicating the illness by 2030(38). Nine of Latin America's 18 endemic nations indicated an increase in cases of more than 20% from 2015 to 2016 [39].

Malaria-affected countries redoubled their efforts and were able to mitigate the worst effects of Covid-related disruptions to malaria services after there was a noticeable increase in malaria cases and deaths in the first year of the COVID-19 pandemic, said Dr. Tedros Adhanom Ghebreyesus, Director-General of the WHO. "We have numerous obstacles, but there are numerous causes for optimism. There is every reason to hope for a world without malaria by stepping up the response, realizing and reducing the dangers, fostering resilience, and advancing research.

2.3.1 Current malarial situation

2.3.1.1 Brazil

For many years, Brazil had been recording the greatest number of malaria cases in Latin America, but starting in 2015, this situation has been changed. Venezuela had the unfortunate distinction of having the highest estimated prevalence of malaria in the region, as a result of the deepening economic and political crisis [38]. The percentage of *P. falciparum* cases has been steadily declining over the Brazilian Amazon since a few years ago (Table 2). In 2010, an effective epidemiological technique was created to locate malaria outbreak using an automated algorithm [40]. P. vivax was found to be the primary casual pathogen by this method for almost all outbreaks, the majority of which take place in areas with minimal or interrupted transmission where the danger of reintroduction is considerable. In order to respond as promptly as possible, local control managers were to be activated. In 2014 and 2015, there were 112 and 111 outbreaks, respectively [41]. Although the value of this technology in reducing transmission has not been verified, it has shown promise and could find broad application in Brazil.

2.3.1.2 Columbia

In 2016, Colombia had the third-highest number of cases in Latin America (83,227) and 15.3% of all cases (38). Malaria is a serious public health concern due to fluctuating transmission, zones of low steady transmission, and endemic-epidemic patterns including several hotspots [42]. Colombia achieved significant progress against malaria between 2000 and 2014 (a 50–75% drop in cases), mostly as a result of initiatives like diagnostic health posts and vector control. The Colombia Malaria Initiative concluded in 2015, however, and the number of cases more than doubled between that year and the next.

Colombian vector control projects use pesticides, larvicides, and Insecticide Treated bed Nets (ITNs) to minimize human-vector contact. In order to create and put into practice efficient vector control interventions, some research teams on mosquito vector biology assessed the ecology and biology of the vector species, improved species identification, spatiotemporal distribution, biting behavior and

preferences, and natural Plasmodium infection [43]. The Integrated National Adaptation Pilot Programme and the Integrated Surveillance and Control System at the local level in Colombia both include the deployment of a full early warning system in four pilot sites. Giving fresh information on malaria incidence and seasonality, vector species existence and abundance, entomological indicators and feeding frequency, climate parameters, information on the human population, and some data on vector contagion has proven success [44].

Table 2: Number of malaria cases of *Plasmodium Vivax* and *P. falciparum* in Brazil, Columbia, Peru and Venezuela (2014-2017)

Country	Number of malaria positive cases (2017)		Number of malaria positive cases (2016)		Number of malaria positive cases (2015)		Number of malaria positive cases (2014)	
	P. falciparum	*P. vivax*	*P. falciparum*	*P. vivax*	*P. falciparum*	*P. vivax*	*P. falciparum*	*P. vivax*
Brazil	172,876	21,017	110,343	13,829	122,743	15,445	117,009	22,234
Columbia	22,405	29,404	32,635	49,974	21,987	26,061	20,129	20,634
Peru	40,564	12,697	41,287	15,319	49,287	12,569	54,819	10,416
Venezuela	246,859	53,330	179,554	61,034	100,880	35,509	62,850	27,843

2.3.1.3 Peru

According to the most recent WHO data, Peru recorded 56,606 cases of malaria in 2016, accounting for 14.3% of all cases in the area and 73% of which were *P. vivax* (38). After the Global Fund Malaria Project "PAMFRO," which successfully lowered the annual incidence to 1 case/1000 population for 2010 and 2011, stopped getting international financial support, this estimate has been steadily rising [45].

2.3.1.4 Venezuela

The general breakdown of Venezuela's healthcare system as a result of economic and political mismanagement has damaged the social repercussions [46]. A malaria epidemic has been attributed to a number of factors, including financial constraints that prevented the purchase of malaria-related supplies (such as insecticides, medications, diagnostic tools, mosquito nets, etc.), epidemiological surveillance, reporting activities, vector-control and disease-treatment efforts, high internal migration linked to illegal gold mining, and underlying malnutrition as a result of a general lack of service provision and implementation. *P. vivax* accounted for 76% of cases of malaria in 2016, while *P. falciparum* (18%), *P. malariae* (less than 1%), and *P. vivax/P. falciparum* combo infections (6%), respectively, were the next most common causes.

In recently published reports, the prevalence of *P. vivax* or *P. falciparum* among migrants varies depending on the origin of the migrants, with *P. falciparum* being more common than *P. vivax* among migrants from Latin America. Researchers speculate that this may be because liver hypnozoites, which act as a reservoir for Plasmodium, continue to exist. However, some (62.5%) had previously been diagnosed with *P. vivax* malaria, although the efficacy and compliance of earlier antimalarial treatments were not completely established. It is known that immigrants from Latin America are more likely to contract *P. vivax*. It's intriguing that none of the instances of malaria come from the state of Bolivar, where internal migration for gold mining has been a major source of malaria in Venezuela recently. Notwithstanding the limitations of a retrospective investigation, we stress that P. vivax malaria is the most common Plasmodium among immigrants from South America, which is alarming for disease control programme.

2.4 HIV

When Morbidity and Mortality Weekly Report (MMWR) released the first five cases of Pneumocystis carinii pneumonia (later known as *P. Jirovecii*) among young gay males that had emerged since October 1980, on June 5, 1981, it was the first report of AIDS. By 1984, the majority of Latin American (LA) countries had reported instances and had started to plan their responses. Early in the 1990s, Brazil and Argentina were the first non-high-income countries to introduce free public antiretroviral

programmes, laying the groundwork for a global public health approach to treatment [47]. Early in the HIV epidemic, intravenous drug use was a common method and is now barely 2% due to shifting drug use patterns. Future situational complications may result from the introduction of new illicit drugs [48]. The ratio of male to female illnesses is rising, with cisgender women making up only 23% of infections in 2019 (UNAIDS data 2020).

The region's labour markets, healthcare system, and educational system are being burdened by high migration rates, notwithstanding successes in the battle against humanitarian crises. The progress against HIV has mostly stagnated due to the marginalization of important populations, conflicting public health goals, and inadequate government investment in health systems. Recently, there have been more new infections (UNAIDS data 2020). The rate of mother-to-child HIV transmission decreased from 20% [12-24%] in 2010 to 15% [12-18%] in 2019 due to ongoing advances in HIV testing and antiretroviral treatment coverage among pregnant women in the area. In certain nations, efforts to stop HIV transmission from mother to child have made headway (UNAIDS data 2020).

2.5 Hepatitis A Virus (HAV)

Globally, about 1.5 million cases of hepatitis A virus (HAV) infection are reported each year; however, the actual number of infections, when accounting for the significant number of asymptomatic infections in young children and the high rates of underreporting, is likely to range between 100 and 120 million each year [49]. Because the virus is spread by direct contact between people as well as contaminated food or water, areas with poor sanitation and unstable access to clean water tend to have higher infection rates (50). There is no specific treatment for hepatitis A available aside from supportive care [51]. Several countries in Latin America are either now moving from high to intermediate or even low levels of HAV endemicity, according to socioeconomic indices and surveillance data. Hepatitis A produces over 1.5 million new cases and 7,000 fatalities annually; HEV causes over 20 million new cases and over 70,000 fatalities annually [52]. These ailments have the greatest impact on low-income countries [53]. The World Health Organization does not recommend any HEV vaccine, although it does recommend that children over one living in areas with intermediate- and low-endemic hepatitis A receive the vaccine

3. Interventions to prevent the spread of infectious diseases and the control measures

People are more prone to experience intermittent or uncertain sources of wholesome food and water while travelling to foreign countries, especially when they are faced with challenging and occasionally dangerous situations [54]. In addition, essential public services like transportation and power are susceptible to failure. In these circumstances, people can be more likely to make poor food preparation decisions, use tainted or unhealthy components, or consume expired food [55]

Refugees and migrants frequently get sick while travelling, especially in densely crowded places. Living conditions may result in unclean conditions for obtaining, storing, or cooking food, and overcrowding increases the risk of illness outbreaks that are transferred by tainted food and water [56]. These ailments include, but are not limited to, salmonellosis, shigellosis, campylobacteriosis, norovirus infections, and hepatitis A virus infections. Little children, expectant mothers, the elderly, immunocompromised individuals, especially those with HIV/AIDS, and pregnant women are particularly susceptible to contracting these infections [57]. As happened in Germany when refugees ate toxic mushrooms, those who go hunting for food in new areas face the risk of being hurt by harmful plants and fungi that resemble edible species from their own nations.

Basic standards for water, sanitation, and hygiene are frequently not upheld when refugees and migrants move. Drinking water is frequently insufficiently available in acceptable quantities, and its source or treatment are unknown. Moreover, hand-washing with soap and personal hygiene, including laundry, are frequently disregarded at border or arrival stations. The lack of trash cans and regular garbage removal in receiving facilities puts migrants' health at danger because rodents, flies, and mosquitoes can readily find places to reproduce. While people are residing in camps where these illnesses can quickly reach epidemic proportions,

especially in unplanned settlements, it is vital to halt the emergence and spread of waterborne and foodborne disorders among refugees and migrants. It is crucial to educate food producers, as well as refugees and migrants, about safe food handling practices, such as the "Five Keys to Safer Foods" published by the WHO [58]. Facilities for water, sanitation, and hygiene at border crossings and receiving centers should be thoroughly assessed. Access to sanitary facilities, including handwashing, and enough safe drinking water are critical for limiting the spread of water- and food-borne diseases. When required, portable water treatment, disinfection, and storage facilities as well as packaged water, trucked water, and/or these other types of emergency water sources may be built. The microbiological quality of drinking water must be closely monitored by local authorities; chemical pollution is typically not a major concern in an emergency. Always keep a soap dispenser with enough soap handy to the restrooms.

3. WHO recommendations for immunization of migrants and refugees

After vacationing in a cholera-endemic nation, a citizen of that nation is just as likely to spread vaccine-preventable diseases to the local population as are refugees and migrants. Even though vaccines are widely accessible in every country in the region, many people choose not to benefit from immunization because of false beliefs about vaccines. Others may have trouble getting access to immunization services [26]

The WHO Regional Office for Europe does not routinely collect information on transmission of vaccine-preventable diseases among refugee's sand migrants or on their vaccination coverage; however, well-documented outbreaks of measles have originated by transmission from migrants, mobile populations, international travelers and tourists alike. The European Vaccination Action Plan 2015-2020 has as one of its goals ensuring that everyone has equitable access to vaccination. The strategy exhorts all nations in the region to guarantee that refugees, migrants, foreign travelers, and marginalized people are eligible for and have access to vaccination services and information that are culturally relevant.

In 2022, inconceivable amount of 248, 284 persons crossed the Darién Gap, of which 150,327 were Venezuelan nationals. Once the Biden administration announced an agreement with Mexico to use Title 42 to remove Venezuelan migrants into Mexican territory on October 12, migration drastically decreased. However, the number of migrants has started to rise once more, from 16,632 in November 2022 to 20,297 in December to 24,634 in January (Figure 3).

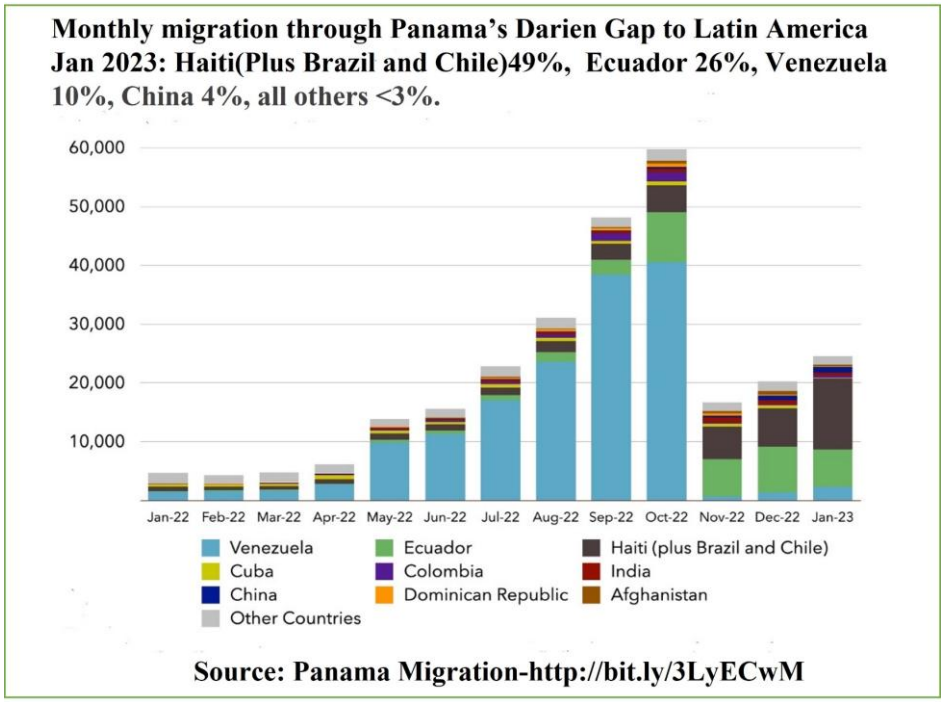

Figure 3: Number of international migrants passing through the Panama region to Latin America

The figure 3 depicts the percentage of migrants passing through Panama's Darien Gap to Latin America in 2022-2023, broken down by country of origin. The largest group of migrants (49%) were from Haiti, with smaller groups coming from Brazil and Chile. Ecuador accounted for 26% of migrants, while Venezuela made up 10%. A small proportion of migrants (4%) came from China, with all other countries combined accounting for less than 3%. The figure 3 highlights the significance of the Darien Gap as a major transit point for migrants seeking to enter Latin America and underscores the need for effective border control and immigration policies to manage the flow of people across the region.

In 2020, UNICEF plans to assist 1.29 million people, including groups of Venezuelan migrants and 633,000 children from the most vulnerable host communities in Brazil, Colombia, Ecuador, Guyana, Peru, and Trinidad and Tobago. As of June, these countries were home to 77% of the region's poor. 5.1 million Venezuelans had left the country by the end of June 2020, with 4.3 million of them being hosted in countries in South America and the Caribbean. The Venezuelan refugee and migration crisis remains one of the worst migration calamities. The COVID-19 outbreak has had a particularly negative impact on the Caribbean and South American nations. Venezuelan migrants and refugees are among the groups most at danger from COVID-19's socioeconomic effects and health consequences.

UNICEF announced its 2020 Humanitarian Action for Children (HAC) appeal in December 2019, requesting US$ 65.6 million. UNICEF has been providing life-saving humanitarian aid and long-term access to essential services during the first semester of 2020. 1.29 million people including 633,000 kids from the most vulnerable Venezuelan immigrant groups and underprivileged host communities in Brazil, Colombia, Ecuador, Guyana, Peru, and Trinidad and Tobago are considered beneficiaries. UNICEF had $22.8 million available as of June 2020, with $13.8 million collected in 2020 and $8.9 million carried over from 2019. UNICEF is appreciative of the kind donations from public and private contributors as well as international funds. The outcomes achieved as of June 2020 in terms of protection, education, health, nutrition, water, sanitation, and hygiene would not have been possible without the ongoing support of important partners like the United States Bureau of Population, Refugees, and Migration (BPRM), ECHO, Sweden, Canada, Norway, the Danish and Spanish Committees for UNICEF, and private donations raised at the country level (figure 4)

The figure 4 represents the indicator of a key measure of progress towards a particular goal or objective and may be linked to a specific program or initiative by UNICEF. The figure 4 also provides a snapshot of the current state of performance, allowing stakeholders to assess progress and identify areas for improvement.

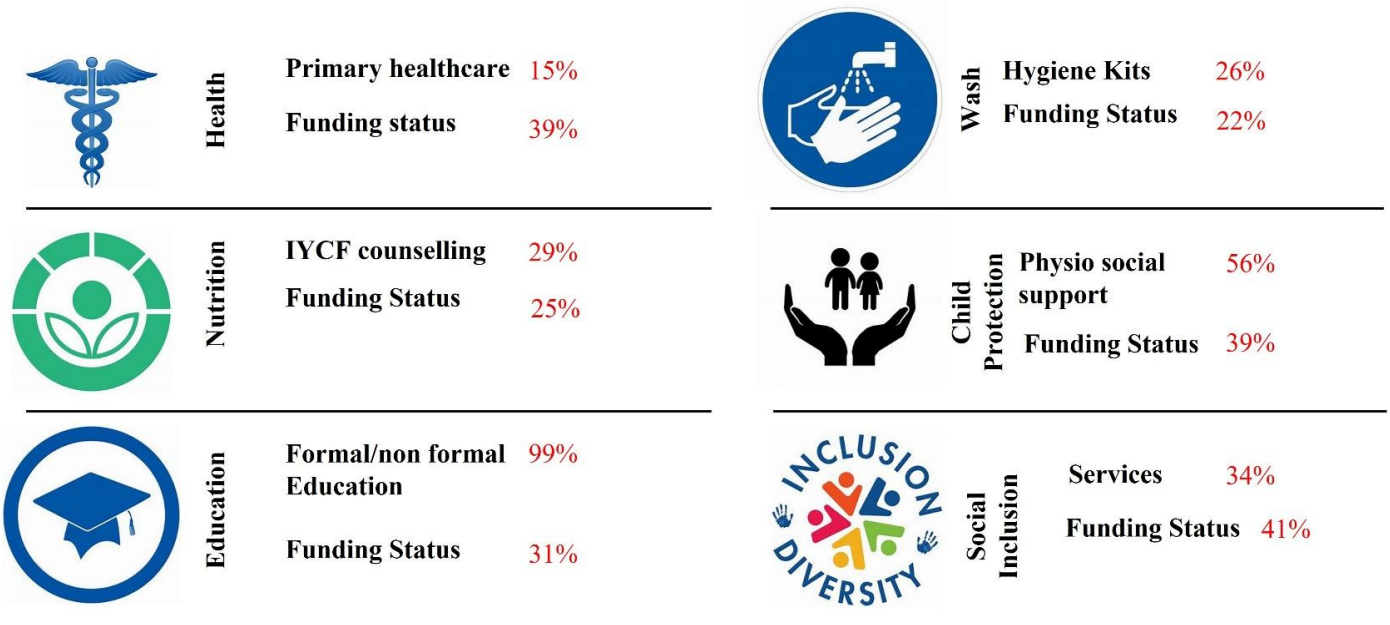

Figure 4: Funding allotted for the migrants by UNICEF for different sector

Conclusions

Although the health systems in the nations that accept migrants can identify and treat prevalent infectious illnesses and NCDs, they should be ready to do the same for refugees and migrants. The International Health Rules of 2005 mandate that all countries set up effective systems for illness surveillance, reporting, and investigation, case management, and response. Europe is ready to react if a rare, exotic infectious agent is brought in, as shown by the responses to imported cases of Lassa fever, Ebola virus disease, Marburg virus disease, and MERS over the previous ten years. Countries have mechanisms for contact tracking, a trained health team, treatment facilities including isolation units, and strong laboratory capability. The goal of PAHO is to increase the capacity of medical staff to diagnose and treat the illness in all suspected populations, particularly in mothers and infants, in order to stop mother-to-child transmission of Chagas disease and three additional diseases promptly and effectively. The PAHO aspires to totally eradicate Chagas disease and other infectious diseases by the year 2030. The World Health Organization (WHO) recently revealed data showing that malaria prevention, testing, and treatment services were mostly maintained in 2021 all throughout the world. The Global Malaria Report for this year estimates that 619 000 people worldwide died from malaria in 2021, down from 625 000 in the pandemic's first year. Before to the pandemic, in 2019, there had been 568 000 fatalities. Malaria cases continued to climb between 2020 and 2021, but at a slower rate than in the period 2019 to 2020. In 2021, there were 247 million cases of malaria worldwide, up from 232 million in 2019 and 245 million in 2020.

Conflict of interest

Author declares there are no conflicts of interest.

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