

Disordered migration processes and global health: impacts of the displacement of Venezuelans in the midst of the syphilis epidemic in Brazil

Processos migratórios desordenados e saúde global: Impactos do deslocamento de venezuelanos em meio à epidemia de sífilis no Brasil

Jane Francinete Dantas^{1,2,3} , Rosângela Maria Morais da Costa^{1,2,3} ,

Aliete Cunha Oliveira^{1,2,3} , Joaquim Luís Medeiros Alcoforado¹ 

ABSTRACT

Introduction: Various territorial crises have marked humanity, causing precarious and irregular population displacements with an impact on the health of the population assigned to the waiting territories. **Objective:** This study sought to assess the impacts of the recent displacement of Venezuelans, amid the syphilis epidemic in Brazil, in the period from 2016 to 2019. **Methods:** This was a qualitative study with bibliographic design, in which searches were carried out in the Notifiable Disease Information System (SINAN), in the Virtual Health Library (VHL), in Google Scholar, also going through databases referenced in the health area, such as Latin American Literature in Health Sciences (LILACS), Medical Literature Analysis and Retrieval System Online (MEDLINE) and Nursing Database (BDENF). **Results:** The study showed that the disorderly displacement of Venezuelans had an international and local impact, culminating in the precariousness and overload of essential health services, shortage of medicines and supplies, an increase in the number of patients, resurgence of the measles outbreak in Brazil and an increase in the incidence of sexually transmitted infections such as syphilis. It was found that in the SINAN compulsory notification forms, there is no specific field for nationality, which makes it difficult to identify foreigners with syphilis, as well as the planning and monitoring of coping measures. **Conclusion:** As this is a challenging, conflicting theme, perceived as transversal, with micro-territorial, macro-regional, national and international implications, there is a need for more studies from a transdisciplinary approach to understand, analyze, prospect and provide a structured proposal for confronting the problematic evidenced in this work.

Keywords: syphilis; epidemics; refugees; public policy.

RESUMO

Introdução: Várias crises territoriais marcaram a humanidade, causando deslocamentos populacionais precários e irregulares com impacto na saúde da população adstrita aos territórios de espera. **Objetivo:** Este trabalho buscou avaliar os impactos do recente deslocamento de venezuelanos, em meio à epidemia de sífilis no Brasil, no período de 2016 a 2019. **Métodos:** Trata-se de uma pesquisa qualitativa, com delineamento bibliográfico, na qual se realizaram buscas no Sistema de Informação de Agravos de Notificação, na Biblioteca Virtual em Saúde e no Google Acadêmico, percorrendo ainda bases de dados referenciadas na área de saúde, como a Literatura Latino-americana em Ciências da Saúde, a Medical Literature Analysis and Retrieval System Online e a Base de Dados de Enfermagem. **Resultados:** O estudo evidenciou que o deslocamento desordenado de venezuelanos teve impacto internacional e local, culminando na precarização e sobrecarga de serviços essenciais de saúde, desabastecimento de medicamentos e insumos, aumento do número de enfermos, ressurgimento do surto de sarampo no Brasil e elevação na incidência de infecções sexualmente transmissíveis, como a sífilis. Identificou-se que nas fichas de notificação compulsória do Sistema de Informação de Agravos de Notificação não existe um campo específico para nacionalidade, o que dificulta a identificação de estrangeiros com sífilis, assim como o planejamento e monitoramento de ações de enfrentamento. **Conclusão:** Por se tratar de uma temática desafiadora, conflituosa, percebida como transversal, com implicações microterritoriais, macrorregionais, nacionais e internacionais, há necessidade de mais estudos com base em abordagem transdisciplinar, no sentido de entender, analisar, prospectar e fornecer proposta estruturada de enfrentamento à problemática evidenciada neste trabalho.

Palavras-chave: sífilis; epidemias; refugiados; política pública.

INTRODUCTION

Several territorial conflicts have marked humanity since antiquity, culminating in the occurrence of precarious and irregular displacements. Over time, many individuals, willingly or not, move away from their territories, where they have a life story built on the socio-cultural context that characterizes them, migrating to other areas, fleeing conflicts or persecution, poverty or famine, or for climatic

reasons such as tsunamis, earthquakes, hurricanes and other natural disasters. Most of these migrants search for refuge or asylum.

These are phenomena that involve issues of displacement and mobility, extremely frequent in our society, accentuating inequalities, as well as challenging national and international jurisdictions. These phenomena occur in a heterogeneous way, with no observance of sequence or linearity in their migratory movements, almost always resulting in the constitution of a waiting area. In these cases, temporality is not always defined, and may be characterized by short or long waiting periods depending on the political nature of the displacement⁽¹⁾.

With regard to global health, even though there is agreement on the fact that it is understood as agreed by the various actors of the international community and guaranteed by the Refugee Convention

¹Universidade de Coimbra – Coimbra, Portugal.

²Laboratory of Technological Innovation in Health, Universidade Federal do Rio Grande do Norte – Natal (RN), Brazil.

³Health Sciences Research Unit: Nursing, Nursing School of Coimbra – Coimbra, Portugal.

of July 28, 1951, defining that the responsibility must be shared by all, when faced with crisis involving people's health, it is still undisputedly observed that each situation is outlined according to the various political and economic interests of the entities involved in this process⁽¹⁾.

Recently in Brazil, a disorderly migratory movement has been evidenced, mainly aimed at the state of Roraima, involving the growing immigration of Venezuelan citizens, fleeing from the political and economic crisis that has arisen in their country. This migratory displacement was caused, in part, by the collapse of public services, food shortages, and lack of health care, among other factors prevalent in Venezuela.

In Roraima, with the increased demand for being on the border with Venezuela, a situation of precarious health was installed, configured by the overload of essential health services, high number of cases of infectious and transmissible diseases such as syphilis, acute clinical conditions of chronic illnesses, shortages in relation to medicines and supplies and, as a result, an increase in the number of sick people, the emergence of outbreaks and the recurrence of diseases that have already been eradicated in Brazil, such as measles.

Accordingly, the following questions arise. How to provide education, prevention and health promotion, diagnosis and treatment measures in such an adverse situation? How to prevent the establishment of the disease transmission chain in the area receiving these immigrants? How to manage the process involving the principles of global health in these areas? How to act strategically to minimize the incidence of sexually transmitted infections (STIs) in these areas, especially syphilis?

OBJECTIVE

The aim of this study was to assess the impacts of the recent displacement of Venezuelans amid the syphilis epidemic in Brazil, in the period from 2016 to 2019.

METHODS

To achieve the proposed objective, we carried out a qualitative study that sought, based on a literature review, to assess the impacts of the recent displacement of Venezuelans in the midst of the syphilis epidemic in Brazil, providing identification of sources capable of providing appropriate answers, greater familiarity and critical appreciation of the problem to be solved, with flexibility to approach and understand the structure of the field of study^(2,3).

The choice of bibliographic research was due to the fact that it allows coverage of a range of phenomena on a large scale, considering that in most specialized libraries it is possible to have online access to world scientific production through databases⁽⁴⁾.

In this context, this study was conducted through searches in the Notifiable Disease Information System (SINAN), Virtual Health Library (VHL), Google Scholar and in databases referenced in the health area, such as Latin American and Caribbean Health Sciences Literature (LILACS), Medical Literature Analysis and Retrieval System Online (MEDLINE) and Nursing Database (BDENF). For a better understanding of the problem and ease of analysis, the search of the databases was limited to the period from 2016 to 2019.

This time frame is supported by the assumption that it is possible to infer with greater certainty about the theme when seeking to highlight the impacts of the recent displacement of Venezuelans, amid the syphilis epidemic in Brazil, as well as other disordered migratory processes in global health. Nevertheless, in certain topics, a previous period is mentioned to establish some processes that started before this main period, considering that some important causal elements were the triggers of the crisis now established.

RESULTS

Data issued by the United Nations (UN) show that, worldwide, there are about 250 million international migrants, people who left their countries and now live in places different from those where they were born. The United Nations High Commission for Refugees (UNHCR) states that between 2010 and 2019, the number of individuals who moved due to persecution, internal conflicts and human rights violations in their places of origin exceeded 79.5 million⁽⁵⁾.

This forced displacement prompted 26 million people to seek refuge, with 20.4 million refugees under the jurisdiction of UNHCR and 5.6 million Palestinian refugees under the jurisdiction of the United Nations Agency for Assistance to Palestinian Refugees (UNRWA). However, these numbers related to the migratory process are much higher if we consider the displacements related to poverty and hunger, as well as those resulting from meteorological phenomena. Global population displacement reached the level of 2 million people seeking refuge in 2019 alone, with the United States, Peru, Germany, France and Spain being the countries with the highest number of asylum requests⁽⁶⁾.

In February 2018, in view of the calamity created by the disorderly displacement of Venezuelans to Brazil, the federal government, in cooperation with UN agencies and civil society organizations, instituted Operation Welcome. At the time, three Provisional Measures (No. 823/2018, No. 857/2018 and No. 860/2018) were enacted, which allocated a total of 280.3 million reais to promote assistance to Venezuelans in refugee situations. This operation constituted a coping strategy with a view to operationalize the emergency reception of refugees and migrants in situations of greater vulnerability, enabling the humanitarian response based on three structuring axes: border ordering, sheltering and interiorization.

In 2019, another 223.8 million reais were added to continue emergency humanitarian assistance through Provisional Measure No. 880/2019. By 2020, 261,441 Venezuelan refugees and migrants had been identified in Brazil. There were 90,788 asylum requests and 46,675 recognized refugees in Brazil, and 145,462 Venezuelans were already with temporary or permanent residence visa status in Brazil.

In April 2018, UNHCR and the International Organization for Migration (IOM) were urged by the UN Secretary General to assume the coordination of interagency operational responses focusing on the Venezuelan flow. As an initial measure, the Regional Response Plan for Refugees and Migrants was instituted, seeking to guarantee the social and economic inclusion of these migrants in the places of reception.

According to what is typified in Law No. 13.445/2017, citizens from the Bolivarian Republic of Venezuela who enter Brazil through border cities are considered immigrants. Also in accordance with

the aforementioned law, in its article 4, item VIII, access to public health and social assistance and social security services is guaranteed, under the terms of the law, without discrimination on grounds of nationality and immigration status⁽⁷⁾.

In view of the migratory crisis established, it is the Union's duty to safeguard the health of the local population through health surveillance and control measures, in a way that minimizes the risks inherent in the emergence of outbreaks and epidemics. In addition to these measures, it is necessary to guarantee access to health services. A study on the monitoring of migratory flow in the state of Roraima carried out by the IOM between April 13 and 17, 2019, with 636 Venezuelans interviewed along with 761 accompanying people in 322 family groups, showed that, among the various categories surveyed, in terms of health, most of these immigrants sought assistance in primary care units or hospitals. In addition, it is reported that 68% of these Venezuelans had not received any type of access to sexual and reproductive health services⁽⁸⁾.

In the city of Boa Vista, Roraima, in 2018, 596 cases of acquired syphilis, 162 cases of syphilis in pregnant women, and 49 cases and 2 deaths from congenital syphilis were reported. Among these notifications, 57 cases of acquired syphilis, 11 cases of syphilis in pregnant women and 6 cases of congenital syphilis were identified, including 2 cases in newborns, with 3 syphilis-related abortions and 1 stillbirth. Partial data, up to October 5, 2019, showed a 26% increase in acquired syphilis cases, more than 100% increase in syphilis cases in pregnant women and the same number of congenital syphilis cases reported in 2018, five in newborns and one in a 57-day-old child⁽⁹⁾.

The process of notifying foreigners through SINAN does not include in any of its notification/compulsory investigation forms a field for entering the nationality in the area destined for "individual notification". In the area designated for entering residence data, in field 30, there is the option to enter "Country if residing outside Brazil", but this only generates geographic residence data and cannot be used to identify the nationality of an individual, which can lead to underreporting of data referring to foreign citizens. In this case, data on Venezuelan refugees in a vulnerable situation can be underreported.

DISCUSSION

Disordered migration process and its impact as a global trend

Discussions about migratory processes, in the field of sociology, only became relevant as of the end of the 19th century and the beginning of the 20th century. Among the theories of international migration, through the eyes of Marx, Weber, Malthus and Durkheim, the migratory phenomenon was understood as a result of the gradual development of capitalism, marked by the emergence of industrialization, which fostered the desire for mobility and the increase in the urbanization process⁽¹⁰⁾.

In contrast, in the United States, at the beginning of the 20th century, sociologists saw population displacement as a "problem". The theoretical framework of this concept was a study called "The Polish Peasant in Europe and America", by Thomas and Znaniecki, in which the immigration process of about 2 million immigrants from Poland between 1880 and 1910 was analyzed.

Some concepts and paradigms that influenced the beginnings of urban sociology and sociology of deviation were derived from these studies, as well as reverberating in the thought of the Chicago School. The adaptation mechanisms as well as the processes of absorption, cultural change and assimilation of these immigrant groups inserted in American society were analyzed by scholars from the Chicago School, who inferred that the culture and values of the place would be assimilated, culminating in a Americanization of these immigrants without, however, implying the loss of culture and values innate to them, and based on this thought, the term melting pot originated⁽¹¹⁾.

However, this melting pot format received several contrary opinions over the years for not taking into account the divergences emerging from the processes that involved the colonialist and imperialist aspects that permeated the migratory flows. In the period after World War II, these concepts were once again questioned, given the accentuated ethnic conditions characteristic of each specific group of immigrants, who, despite not being in their places of origin, kept their ethnic characteristics as intangible goods, without assimilating in the new place where they were inserted.

On December 10, 1948, the UN General Assembly approved the Charter of the United Nations and the Universal Declaration of Human Rights, which reiterated the "principle that human beings, without distinction, should enjoy human rights and fundamental freedoms", ensuring the full exercise of their citizenship. In 1951, to review and define parameters agreed upon in previous international agreements relating to the status of refugees, the Refugee Convention was approved, aimed at ensuring the application of these instruments and the necessary protection to this group of individuals⁽¹¹⁾.

Through this convention, the definition of the term "refugee" was made clear as an individual who, due to the fear of being persecuted for reasons of race, religion, nationality, social group or political opinions, is found outside the country of their nationality and that they cannot or will not avail themselves of the protection of that country because of this fear. It can also be someone who does not have a nationality and is outside the country where they had their usual residence as a result of such events and cannot or does not want to return because of that fear⁽¹¹⁾.

More recently, in December 2018, the UN declared a Global Pact for Migration during a conference held in Morocco. This agreement was ratified by the United Nations General Assembly, by 152 of its member states. At the time, the pact was signed by only 164 of the 193 UN member states and is in force as a charter of principles, contemplating 23 recommendations, ensuring that the migration process takes place in a regular, orderly and safe manner. However, the signatories of this pact are not forced to fulfill these designations, having received repeated criticism from some countries such as Poland, Israel and the United States.

Some large flows, wrongly treated as a migration crisis, are actually the result of a humanitarian, economic or political crisis in the migrants' countries of origin. These crises end up imposing a forced displacement of individuals, driven by situations beyond their personal control, which drive them to migrate and seek refuge in safer places, with the possibility of human development.

It is noteworthy that currently 68% of all refugees in the world come from five countries, namely, Syria (6.6 million), Venezuela (3.7 million), Afghanistan (2.7 million), South Sudan (2.2 million),

Myanmar (1.1 million), with Turkey being the country that received the most refugees in the world, with a total of 3.6 million people in refugee situations⁽⁶⁾. Every day, 37,000 people leave their homes in search of refuge, where many of these migrants are placed in “waiting areas”, awaiting judicial measures to authorize legal stay in the place they wish to immigrate to or transit permission to continue in search of a place of refuge.

The word migrant designates anyone who moves within their own country and is also applicable to international movements, being a comprehensive and not simple term given the multiple factors that influence the breakdown of the intention and action of immigrating. When the individual moves from their country to another, they perform an “immigration” movement and, if this movement occurs within their own country, it is understood as “emigration”. All these movements have linked to them a priority demand in the field of global health; that is, many diseases that do not exist in certain areas can spread and microorganisms that are foreign to a given environment can proliferate, causing outbreaks, epidemics and overwhelming of health systems.

Population displacement as challenge for health systems

To promote sustainable development on the planet, the UN General Assembly instituted in 2015 a global action plan called “Transforming Our World: The 2030 Agenda for Sustainable Development”. This UN declaration presents in its scope 17 integrated and indivisible Sustainable Development Goals (SDGs), broken down into 169 goals, outlining an integrated action plan focused on social justice, economic growth and environmental sustainability⁽¹²⁾.

In the context of the 2030 Agenda for Sustainable Development, health and well-being are perceived as transversal and essential components for achieving the various SDGs. Nevertheless, health constitutes a foundation element for objective 3, “Health and Well-being”, stating in its premise that it is necessary to “ensure a healthy life and promote well-being for everyone, at all ages”. This SDG 3 is stated in its goal 3.d, “To strengthen the capacity of all countries, particularly developing countries, for early warning, reduction and management of national and global health risks”⁽¹³⁾. The SDGs and their respective targets came into effect on January 1, 2016, providing guidance and input for decisions to be taken over a fifteen-year period by all UN Member States.

All countries face specific challenges in achieving sustainable development to varying degrees, depending on various internal and external factors, mainly resulting from political, economic, social and health impacts. However, with regard to national public health policies, some of these countries are more vulnerable and have internal difficulties with regard to proposing and implementing a strategic agenda, in the face of an event such as the occurrence of disorderly migratory displacement of people.

In view of the vulnerability of these populations in transit, it is necessary to plan, monitor, execute and follow-up prevention and health promotion actions, to minimize the health risks inherent in the dismantling of health care networks as a result of the accumulation of demands in both primary and specialized care. In the sense of framing and aligning with SDG 3, as well as with its 3.d goal, one of the coping strategies is that each health system is able to offer a

rapid and effective response when the arrival of large groups of people in scenarios involving migrants, forced displaced persons and refugees, since, in the sphere of global health, migrants’ health has been identified as a neglected topic⁽¹⁴⁾.

A health aggravating factor in cases of large migratory flows is related to the disproportionality in relation to the quality of health of immigrants and local citizens. Most immigrants have a lower health condition than residents of the place where they seek refuge, mainly because of the malnutrition to which they are exposed due to poverty and hunger, psychological, mental and cognitive problems resulting from exposure to violence, and confinement and insecurity or problems arising from the use and abuse of alcohol and other drugs. Also noticed is the occurrence of chronic diseases, such as diabetes, hypertension and other cardiovascular entities, infectious and transmissible diseases, such as tuberculosis, hepatitis B and C, and especially STIs, such as syphilis and the human immunodeficiency virus (HIV) infection⁽¹⁵⁾.

This entire framework requires a differentiated response from health managers, which must be combined with the involvement of national, international, governmental and non-governmental players, to guarantee universal and equal access. It is essential that, during the reception period, a rigorous screening is started to identify the diseases and injuries, as well as to provide adequate care, avoiding the increase in morbimortality and the spread of infectious and transmissible diseases that have the potential to create a problematic situation of public health in the host territory.

Accordingly, a worrisome issue concerns the limited and inadequate access of key and vulnerable populations to the health system, as in the case of immigrants and refugees. These populations have a higher risk of acquiring STIs, due to cultural, economic, behavioral and social reasons. Homosexuals and other men who have sex with men, people who use alcohol and other drugs, transvestites and transgender people, sex workers, people deprived of liberty and migrants are recognized as part of these populations⁽¹⁶⁾.

Migrants and refugees, by their very condition, are vulnerable to contracting various STIs, such as chlamydia, gonorrhea, syphilis, trichomoniasis and also HIV. The practice of safe sex becomes more difficult given the often unhealthy conditions in which they live, as well as the lack of information about prevention methods and the difficulty in purchasing condoms, in addition to some cultural and social issues that favor the sexual abuse of the vulnerable.

According to the World Health Organization (WHO), 76% of Member States have created services and strategies for care aimed at these populations at greatest risk, but the agency recognizes that there is still no scalability and a large part of health care has been provided by non-governmental institutions. The WHO estimates that, annually, four clinically curable STIs account for 376 million new cases worldwide, including 127 million cases of chlamydia, 87 million cases of gonorrhea, 6 million cases of syphilis and 156 million cases of trichomoniasis. There is a higher incidence and prevalence in the age group 15 to 49 years of age, with the active cases in women being presented in **Figure 1A** and in men in **Figure 1B**.

WHO, through its member states, has established a global strategy and is committed to reduce by 2030 the global incidence of *T. pallidum* and *N. gonorrhoeae* infections by 90%, on the basis of epidemiological data from 2018⁽¹⁶⁾.

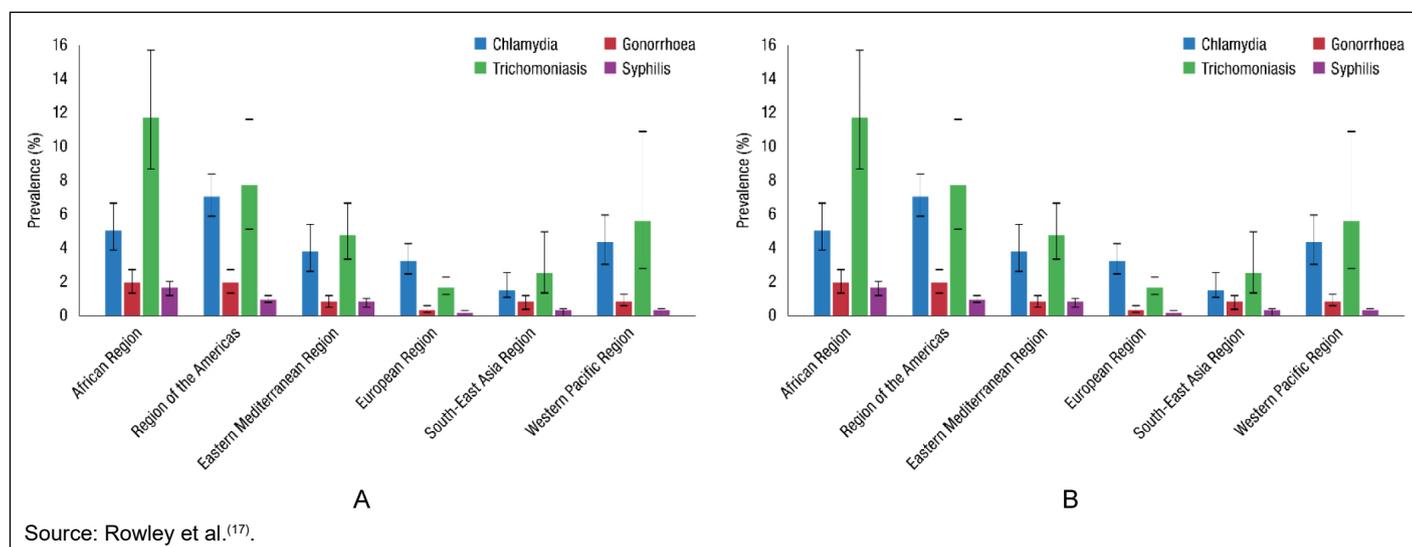


Figure 1 – Estimated prevalence of chlamydia, gonorrhoea, trichomoniasis and active syphilis in (A) women and in (B) men aged 15 to 49 in regions covered by the World Health Organization. 2009-2016.

The four STIs already mentioned together produce a great impact on the health, social and economic areas of the affected populations, where syphilis is the main one because it is a disease with a high rate of morbidity and high risk of fetal and congenital mortality. If not properly treated, it can lead to critical clinical consequences, especially in its late phase, ranging from disabling clinical conditions to death. Syphilis is also an element that facilitates the sexual transmission of HIV. In this universe, it is noteworthy that, since 2016, a syphilis epidemic has been declared in Brazil, a fact that coincided with the migratory wave from Venezuela.

Recent forced displacement of Venezuelans in Brazil

The Brazilian Unified Health System (SUS) is one of the largest and most complex public health systems in the world. SUS is responsible for ensuring universal, comprehensive and free access for the entire population, from primary care for hypertension to cardiovascular surgery. Through the Health Care Network (HCN), these actions and services are developed following the three levels of care, that is, primary, secondary and high complexity, in addition to urgent and emergency services, hospital care, epidemiological surveillance, health and environmental, as well as pharmaceutical assistance activities.

The management of health actions and services involves the three federal entities: the Union, states and municipalities, spheres of power that are articulated in a solidary and participatory manner. However, SUS is still unable to serve the Brazilian population in its entirety, causing a lack of health care in many areas of Brazil, especially in the North region of the country. An aggravating factor to this problem, especially in the state of Roraima, was the intentional massive arrival of Venezuelans, turning into a forced and disorderly migratory movement, marked by the flight of these people in search of refuge, in view of the situation of political and economic crisis going on in their country.

Roraima is the northernmost state in Brazil, bordering the Cooperative Republic of Guyana and Venezuela, where the municipality

of Santa Elena de Uairén borders the Brazilian municipality of Pacaraima, the main gateway for immigrants from Venezuela. The Bolivarian Republic of Venezuela is a federal presidential republic, governed by the 1999 Constitution, with Nicolás Maduro as its current president. This country is at a delicate and tense political moment, given the self-proclamation of Juan Guaidó as interim president of the country in 2019. Juan Guaidó was until then president of the National Constituent Assembly.

Amid all this political upheaval, there was, over time, a social and economic decline resulting from the nationalization of industries, a previous price control, a growing inflation and, on top of this, the destruction of the country's economy, with poverty rates reaching 82%. Many complaints related to political persecution and cases of torture against political opponents of chavista president Nicolás Maduro were sent to the UN Security Council, which declared the country a “state of exception and economic emergency”⁽¹⁸⁾.

According to UNHCR data, with the intensification of the Venezuelan totalitarian regime, there has been an increase in the number of refuge and asylum requests. By the end of 2019, around 4.5 million Venezuelans had moved to other regions, mainly those surrounding Venezuela. This migratory movement is estimated at 93,000 refugees, 794,500 asylum seekers and 3.6 million Venezuelans dispersed across several countries⁽⁶⁾.

This migratory displacement was caused, in part, by the collapse of public services in Venezuela, disrupting the entire chain of public and private services to the population. Due to shortages and food scarcity, a large part of the population was been left without access to basic food products, leading to poor clinical states of malnutrition⁽¹⁸⁾. These immigrants entered the borders of Brazil in search of refuge, jobs and consequent improvement in quality of life (Figure 2).

Brazil, as a host country, has faced since the beginning of Venezuelan immigration, around 2016, an extreme population increase, leading to the insertion of informal Venezuelan workers in the labor market, and in turn, a high rate of unemployment for Brazilians, given the excess supply of labor at a value below the market average.

This disparity in the earnings of natives and foreigners led to the segregation of immigrants, triggered acts of xenophobia, racism and prejudice, culminating in physical violence (Figure 3). It was also observed, in the cities affected by the displacement, an increase in the number of beggars and in the number of people living on the streets.

On May 24, 2017, the new Migration Law No. 13.445 was enacted in Brazil, which started to regulate the Brazilian migration policy based on its principles of “humanitarian reception”, “non-criminalization of immigration” and “promotion of regular entry and document regularization” for immigrants. This law seeks to ensure legal immigrants the fundamental rights governed by the Brazilian Constitution, with illegal immigration as the biggest legal challenge in this confrontation⁽²¹⁾.

One of the Brazilian federal government’s actions to deal with this situation was the creation of the Federal Emergency Assistance Committee in 2018, which, at the time, decreed a state of social emergency and instituted actions aimed at assisting and welcoming Venezuelans. Several governmental and non-governmental agencies, together with UNHCR humanitarian aid, have been striving



Source: PSTU⁽¹⁹⁾.

Figure 2 – Venezuelan immigrants in search of work in the Brazilian labor market.



Source: Portal G1 Roraima⁽²⁰⁾.

Figure 3 – Venezuelan immigrants sheltered in a unit of the State Department of Finance, after being expelled from the streets of Pacaraima, northern Roraima.

to develop activities to incorporate these immigrants into the local labor market (Roraima), to allocate them to other areas in Brazil through a program of internalization or, as a last resort, offer support for them to return to Venezuela. Despite all efforts, there is still an atmosphere of animosity, uncertainty and insecurity on both sides of the border⁽²¹⁾.

Incidence of syphilis in Roraima cities bordering Venezuela and its association with the Venezuelan immigration flow

Syphilis is classified as an infectious-contagious, chronic, systemic, and endemic STI, with the potential to assume an epidemic proportion, as soon as prevention and control measures fail. Despite being a disease neglected until a few years ago, it is in evidence today. Recognition as a disease occurred in the 15th century, but its etiological agent, the bacterium *Treponema pallidum*, subspecies *pallidum*, was only identified for the first time in 1905 by Fritz Richard Schaudinn⁽²²⁾. Syphilis is a curable bacterial infection that manifests only in humans, with the possibility of treatment through the administration of penicillin, an accessible and low-cost drug.

This disease is characterized by a high rate of transmission, and its contagion can be carried out in various ways. The most common way of transmission is the horizontal form, which occurs through sexual intercourse with an infected person, or vertical, when the pregnant woman, inadequately treated or untreated, transmits the disease to the fetus via the placental route or during vaginal delivery⁽²³⁾. The highest probability of contagion is observed in the early stages of the disease, given the large number of treponemas present in the lesions, whether in hard chancre (primary syphilis) or in cutaneous-mucosal lesions (secondary syphilis), in which spirochetes penetrate mucous membranes directly or through skin abrasions. In the latent and late stages of syphilis, the risks of transmission are gradually reduced⁽²⁴⁾.

Illness due to syphilis during pregnancy has serious consequences. The rate of vertical transmission of syphilis, intrauterine, is estimated at up to 80%, and factors such as the stage of the mother’s disease (mainly in the primary and secondary phases) and the time of intrauterine exposure are preponderant for fetal involvement, which may imply occurrence of 30 to 50% of fetal death, prematurity or neonatal death. WHO estimates that each year there are around 300,000 fetal and neonatal deaths only related to syphilis, with a goal by 2030 to reduce up to 50% of cases of congenital syphilis per 100,000 live births, in 80% of its Member States⁽²⁵⁾.

From an epidemiological point of view, studies show that when prevention, diagnosis and treatment measures are not started early, the disease evolves to late stages with potential involvement of vital organs, such as the heart and the central nervous system, leading to serious complications, such as neurosyphilis, blindness, aortitis and death in some cases. Also, in relation to comorbidities, there is an increase in the prevalence of co-infection cases associated with HIV⁽¹⁶⁾.

Data related to the notification of syphilis incidence in the state of Roraima are scarce. Only one study carried out in Boa Vista analyzed the STI and HIV/AIDS notifications of Venezuelan immigrants from January to December 2018. The study identified the occurrence

of 416 notified cases. Data from SINAN in the department of epidemiological surveillance of the Municipal Health Department of Boa Vista were evaluated, which showed a predominance in men, with 228 (54.8%) cases, compared to 188 (45.2%) in women, of whom 43 were pregnant. Regarding the nature of the infection, 64 of these notified cases corresponded to syphilis, that is, 15.45% of the total notifications.

When analyzing the SINAN notification forms, such as the individual notification form, the acquired syphilis investigation form, the syphilis in pregnant women investigation form and the congenital syphilis investigation notification form, it was observed that there was no filling field for the item “nationality”. This fact enables under-reporting and hinders the prompt identification of cases of syphilis in foreign refugees in Brazil, presenting a complication in the process of investigation and follow-up of these people affected by the disease, especially immigrants in a situation of greater vulnerability.

Inter-federal project Rapid Response to Syphilis in Care Networks and confrontation actions in Roraima

The control and elimination of syphilis are complex processes that involve different structures in the health system, depend decisively on the willingness and political will of managers at national, regional and local levels, in all levels of power, as well as on the involvement of health workers, representatives of civil society, educational institutions and society as a whole. In Brazil, for many years, syphilis was part of a group of neglected diseases and conditions, without government incentives, which led to the scarcity of actions related to its prevention and control. Something else that contributed to inadequate care for syphilis is related to the world production process of penicillin raw material, which led to shortages in several countries, including Brazil.

In Brazil, in 2016, due to the exponential increase in the number of cases of acquired syphilis, syphilis in pregnant women and congenital syphilis, an epidemic state was declared by the Brazilian government. With the analysis of comparative data, it was observed that acquired syphilis showed an increase in detection rate from 2 cases per 100,000 inhabitants in 2010 to 58.1 cases per 100,000 inhabitants in 2017. For syphilis in pregnant women, there was an increase in the incidence from 10.8 cases per thousand live births in 2016 to 17.2 cases per thousand live births in 2017, and in relation to congenital syphilis, there was an increase from 21,183 cases in 2016 to 24,666 in 2017. In this scenario, the Agenda of Strategic Actions for the Reduction of Congenital Syphilis in Brazil was instituted, and in 2017, the Agenda of Strategic Actions for the Reduction of Syphilis in Brazil, as well as the implementation of the inter-federal project Rapid Response to Syphilis in Care Networks, also called the Sífilis Não (Syphilis No) project⁽²⁶⁾.

In 2017, after an audit, the Federal Court of Accounts issued a ruling recommending to the Ministry of Health: to reverse the high syphilis detection rates reported in 2016 by implementing systematic monitoring and evaluation in the health care services of municipalities; institute measures and actions aimed at the care of key populations at risk for acquired syphilis and also pregnant women and their partners; make efforts to strengthen coordination between states and municipalities to eliminate congenital syphilis, as well

as to identify the main causes involved in late diagnosis and inadequate treatment of pregnant women affected by syphilis; and design a strategic action plan train health professionals in the prevention, diagnosis and treatment of syphilis⁽²⁶⁾.

It was approved in January 2017 through the Annual Budget Law (LOA) No. 13,414 (published in the DOU, on January 11, 2017), the incorporation of R\$ 200 million for the Ministry of Health to use to provide rapid response to syphilis actions, thus creating the inter-federal project Rapid Response to Syphilis in Care Networks. In July 2017, the operational design of the project was carried out, and in October 2017, the project was agreed upon by the Tripartite Inter-Management Commission and officially launched. In November 2017, the research to analyze the syphilis situation in Brazil began, and then institutional supporters were selected to be allocated in priority municipalities with the highest incidence of syphilis to act, in addition to other activities, as field researchers, collecting epidemiological data on site. The general objective of the project was defined to reduce acquired syphilis in pregnant women and eliminate congenital syphilis in Brazil.

The rapid response to syphilis in care networks follows the guiding principles of the WHO Global Strategy, setting up an inter-federal technical cooperation project involving the Pan American Health Organization (PAHO), the Ministry of Health, state and municipal health departments, as well as the Universidade Federal do Rio Grande do Norte (UFRN) through its units: Laboratory of Technological Innovation in Health (LAIS), Department of Distance Learning (SEDIS) and Center for Studies in Public Health (NESC).

The project is innovative, in the sense of establishing a national induction strategy of a structuring character, with a view to promoting joint, integrated and collaborative actions between the areas of surveillance and health care in the country. In an inter-federal and shared way, the actions unfold under four categories of cooperation or structuring axes, namely: surveillance, management and governance, educommunication and comprehensive care.

The structuring axis of surveillance is responsible for strengthening strategic information systems for health surveillance, for qualifying epidemiological information, notification and investigation, and for clinical-laboratory follow-up with closure of cases of acquired syphilis, syphilis in pregnant women and congenital syphilis. Management and governance is the structuring axis responsible for strengthening the integration and interdependence of state and municipal managers, intersectoral actions in the country, as well as collaborative governance and management in the operationalization of the rapid response to syphilis. One of the innovations of this project is the creation of a national situation room, which centralizes information from across the country, enabling decision-making by managers and the strengthening of management and professional practice, also collaborating with the generation of knowledge in the area of syphilis and providing tools for monitoring the development of the project.

In the field of educommunication, an ecosystem promotes the interaction of the areas of education and communication, facilitating the sharing and dissemination of administrative, of monitoring and of public interest information. Educational actions are mediated by technology, with a focus on training and improving health professionals, managers, health system users and the general population⁽²⁶⁾.

Comprehensive care encompasses in its scope the operationalization of the care line for acquired syphilis, for children exposed to syphilis and with congenital syphilis at their different levels of complexity in care networks, including points of prevention and intervention aimed at key populations and increased diagnostic and treatment coverage.

The project is operated by two lines of induction: support and technical cooperation. Line 1 refers to actions of universal scope and Line 2 to actions with key states and municipalities⁽²⁶⁾. As induction actions in Line 1, there is the purchase and distribution of crystalline penicillin and benzathine and rapid test for syphilis; strengthening the laboratory structure for diagnosing the most prevalent STIs, in this case, chlamydia, gonorrhea and syphilis; the implementation of situation rooms in all states and the Federal District; the carrying out of national prevention campaigns; the development of education tools and the dissemination of strategic information to municipal and state managers, helping decision-making; and finally, the development of studies and research aimed at fighting syphilis.

In Line 2, the several induction actions with the municipalities particularly included: inter-federal technical cooperation for the installation/implementation of municipal and regional committees to investigate the vertical transmission of syphilis; cooperation for the evaluation of actions to fight syphilis in the respective municipal plans/health programs; inter-federal technical cooperation for the installation/implementation of syphilis epidemiological surveillance situation rooms at the municipal level; inter-federal technical cooperation to strengthen the health care networks and the different spaces of care production, aiming at the implementation of syphilis care lines, also with intervention in key populations (sex workers, homosexuals, men who have sex with men and transsexuals), among others who have materialized during the three years of the project.

Through the Syphilis No project, it was identified by the initial diagnosis made by the institutional supporter that in Roraima and in Boa Vista, the investigation process of syphilis cases was not carried out until 2017. Also, at the time of initial diagnosis, the Committee for Investigation of Vertical Transmission of Syphilis had not been implemented. When any information related to syphilis was included in the death certificate, the case was referred to STI coordination for further investigation. The Syphilis Project was not essential in the state of Roraima to strengthen actions to reduce vertical transmission, as it allowed managers to understand that vertical transmission not only of syphilis but also of HIV and viral hepatitis B and C constitutes a serious public health problem.

As a strong point, this study highlighted the need to put on the agenda the discussion about disordered migratory movements and their impact on the health system, as well as pointing out the importance of the inter-federal project for Rapid Response to Syphilis in Care Networks as a promoter of public policies that bring resilience to the health system, providing the necessary conditions to strengthen primary health actions, epidemiological surveillance actions, education and integration between health care and surveillance actions and to act as a facilitating factor for social inclusion through the articulation between the various governmental spheres, communities and social sectors⁽²³⁾. The project also allows for a broad representation of all instances and a quick response in facing the storms resulting from disorderly displacements, more specifically in the case presented, as well as in the minimization and management of risks in possible new cases.

As limitations of this study, it was detected that these data are probably underestimated, considering the underreporting of syphilis cases in the SINAN, especially with regard to foreigners, which makes it difficult to analyze the reported epidemiological data more accurately. We also highlight the need to carry out more research on this topic at the national level, in view of the lack of information and studies related to the incidence, prevalence and monitoring of cases of STIs in foreign citizens in a refugee situation in Brazil, as well as the need to improve the SINAN compulsory notification forms, to provide a specific field to enter the nationality.

CONCLUSION

In conclusion, it is observed that the illness situation of the immigrant population, in this context of forced displacement, exemplified by the influx of Venezuelans into Brazil and the consequent state of public calamity in some cities in northern Brazil, constitutes a serious public health problem. This fact leads to the observation that it is necessary to seek a consensus, through an international discussion, to define and establish criteria or guidelines for coping in the health area, focusing on the establishment of a specific contingency plan that can handle adverse situations that pose a risk to the health of the local and global population and immigrants who are in waiting areas or in places suitable for their reception.

Given the above, it can be inferred that this study emerged from a challenging, conflicting theme, perceived as transversal, with micro-territorial, macro-regional, national and international implications, with the possibility of accentuating inequalities, relational barriers and intolerance between the various people involved, requiring deeper and more cohesive studies to investigate, prospect and provide possible answers from the point of view of social history, international law, movement geography, migration sociology and urban anthropology, engineering and other sciences, also involving those at the government level, civil society and global health scholars.

PARTICIPATION OF EACH AUTHOR

Jane Francinete Dantas participated in the writing of the article, in the critical review of the article and in the final approval of the version to be published.

Rosângela Maria Morais da Costa participated in the writing of the article, in the critical review of the article and in the final approval of the version to be published.

Aliete Cunha-Oliveira participated in the critical review of the article and in the final approval of the version to be published.

Joaquim Luís Alcoforado participated in the critical review of the article and in the final approval of the version to be published.

FUNDING

The project Rapid Response to Syphilis in Care Networks – Ministry of Health.

CONFLICT OF INTEREST

The authors have no conflict of interest to declare.

REFERENCES

1. Vidal L, Musset A, Vidal D. Sociedades, mobilidades, deslocamentos: os territórios da espera. O caso dos mundos americanos (de ontem a hoje). *Confinns*. 2011;(13). <https://doi.org/10.4000/confinns.7274>
2. Gil AC. Métodos e técnicas de pesquisa social. 6ª ed. São Paulo Atlas; 2008.
3. Flick U. Desenho da pesquisa qualitativa. Porto Alegre: Artmed; 2009.
4. Gil AC. Como elaborar projetos de pesquisa. 6ª ed. São Paulo: Atlas; 2017.
5. Trends G. Forced displacement in 2018 [Internet]. Geneva: UNHCR [cited on Sep 20, 2019]. Available at: <https://www.unhcr.org/globaltrends2018/>
6. Trends G. Forced displacement in 2019 [Internet]. Geneva: UNHCR [cited on Sep 20, 2019]. Available at: <https://www.unhcr.org/globaltrends2019/>
7. Brasil. Lei nº 13.445, de 24 de maio de 2017. Institui a Lei de Migração [Internet]. 2017 [cited on Sep 20, 2019]. Available at: http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2017/lei/113445.htm
8. Organização Internacional para as Migrações. Monitoramento de Fluxo da População venezuelana no Brasil. DTM rodada 4 [Internet]. Organização Internacional para as Migrações; 2019 [cited on Sep 14, 2019]. Available at: <https://www.globaldtm.info>
9. Prefeitura de Boa Vista. Secretaria Municipal de Saúde. Departamento de Vigilância Epidemiológica. Boletim Epidemiológico - Sífilis. Roraima: Secretaria Municipal de Saúde; 2019.
10. Sasaki EM, Assis GO. Teorias das migrações internacionais. *Anais do XII Encontro Nacional de Estudos Populacionais*. 2016;1-19.
11. Organização das Nações Unidas. Alto Comissariado das Nações Unidas. Convenção relativa ao estatuto dos refugiados [Internet]. Organização das Nações Unidas; 2018 [cited on Sep 18, 2019]. Available at: https://www.acnur.org/fileadmin/Documentos/portugues/BDL/Convencao_relativa_ao_Estatuto_dos_Refugiados.pdf
12. Gostin LO, Friedman EA. The Sustainable Development Goals: One-Health in the world's development agenda. *JAMA*. 2015;314(24):2621-2. <https://doi.org/10.1001/jama.2015.16281>
13. Lee BX, Kjaerulf F, Turner S, Cohen L, Donnelly PD, Muggah R, et al. Transforming our world: implementing the 2030 agenda through sustainable development goal indicators. *J Public Health Policy*. 2016;37(Suppl. 1):13-31. <https://doi.org/10.1057/s41271-016-0002-7>
14. Ventura D. Mobilidade humana e saúde global. *Rev USP*. 2015;(107):55-64. <https://doi.org/10.11606/issn.2316-9036.v0i107p55-64>
15. Oliveira RFRD. Direito à saúde dos refugiados: perspectivas do direito português. *e-Pública*. 2016;3(1):207-29.
16. World Health Organization. Report on global sexually transmitted infection surveillance [Internet]. Geneva: World Health Organization; 2018 [cited on Sep 20, 2019]. Available at: <https://apps.who.int/iris/bitstream/handle/10665/277258/9789241565691-eng.pdf>
17. Rowley J, Vander Hoorn S, Korenromp E, Low N, Unemo M, Abu-Raddad LJ, et al. Chlamydia, gonorrhoea, trichomoniasis and syphilis: global prevalence and incidence estimates, 2016. *Bull World Health Organ*. 2019 [cited on Oct 1st, 2019];97(8):548-62. Available at: <https://doi.org/10.2471/blt.18.228486>
18. Freire MS. Venezuela: Análise de um país em crise e a entrada de imigrantes refugiados para o Brasil [Internet]. 2019. [cited on Sep 20, 2019]. Available at: <https://openrit.grupotiradentes.com/xmlui/handle/set/2448>
19. Partido Socialista dos Trabalhadores Unificado. Imigração venezuelana em Roraima: Uma crise humanitária [Internet]. Partido Socialista dos Trabalhadores Unificado [cited on 21 oct 2020]. Available at: <https://www.pstu.org.br/imigracao-venezuelana-em-roraima-uma-crise-humanitaria>
20. Portal G1 Roraima. Cidade de RR na fronteira com a Venezuela tem tumulto após assalto a comerciante [Internet]. Portal G1 Roraima [cited on Oct. 21, 2020]. Available at: <https://g1.globo.com/rr/roraima/noticia/2018/08/18/cidade-de-rr-na-fronteira-com-a-venezuela-tem-tumulto-apos-assalto-a-comerciante.ghtml>
21. Calixto GP. Crise humanitária na Venezuela: como o Brasil tem lidado com o fluxo migratório de venezuelanos [Internet]; 2018 [cited on Sep 20, 2019]. Available at: <https://repositorio.uninter.com/handle/1/319>
22. Souza EMD. A hundred years ago, the discovery of *Treponema pallidum*. *An Bras Dermatol*. 2005;80(5):547-8. <https://doi.org/10.1590/S0365-05962005000600017>
23. Stamm LV. Syphilis: antibiotic treatment and resistance. *Epidemiol Infect*. 2015;143(8):1567-74. <https://doi.org/10.1017/S0950268814002830>
24. Peeling RW, Mabey D, Kamb ML, Chen X-S, Radolf JD, Benzaken AS. Syphilis. *Nat Rev Dis Primers*. 2017;3:17073. <https://doi.org/10.1038/nrdp.2017.73>
25. World Health Organization. Global guidance on criteria and processes for validation: elimination of mother-to-child transmission of HIV and syphilis. Geneva: WHO; 2014.
26. Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Vigilância, Prevenção e Controle das Infecções Sexualmente Transmissíveis, do HIV/Aids e das Hepatites Virais. Projeto interfederativo resposta rápida à sífilis nas redes de atenção. Brasília: Ministério da Saúde; 2017.

Address for correspondence:**JANE FRANCINETE DANTAS**

Laboratory of Technological Innovation in Health, Universidade Federal do Rio Grande do Norte
 Avenida Nilo Peçanha, 620 – Petrópolis
 Natal (RN), Brazil.
 CEP: 59012-300
 E-mail: jane.dantas@lais.huol.ufrn.br

Received on: 06/12/2021

Approved on: 09/09/2021

