

**HIV Care Provider Perceptions of the Needs of Haitian Migrants Living with HIV in the
Dominican Republic**

by

Inngide Elizabeth Osirus

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This thesis was presented

by

Inngide Elizabeth Osirus

It was defended on

May 8, 2020

and approved by

Committee Members:

Sarah Krier, PhD, MPH, Assistant Professor, Department of Infectious Diseases and Microbiology, Graduate School of Public Health, University of Pittsburgh

Robert W.S. Coulter, PhD, MPH, Assistant Professor, Department of Behavioral and Community Health Sciences, Graduate School of Public Health, University of Pittsburgh

Jasmine Abrams, PhD, Assistant Professor, Department of Community Health Sciences, School of Public Health, University of Boston

Thesis Advisor:

Mackey Friedman, PhD, MPH, Assistant Professor, Department of Infectious Diseases and Microbiology, Graduate School of Public Health, University of Pittsburgh

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Abstract

Introduction

Human Immunodeficiency Virus (HIV) is one of the greatest global health challenges, but HIV is preventable and can be managed with treatment. Important aspects of HIV prevention include raising awareness, ensuring individuals know their status, and assisting HIV positive individuals with starting and remaining in HIV treatment and care. These primary and secondary prevention strategies are imperative to decreasing the overall burden of HIV in a community and globally. Using the HIV treatment cascade, a framework that outlines stages of HIV care, to drive prevention efforts is integral to achieving the 90-90-90 global HIV targets: 90% of all persons living with HIV (PLWH) are aware of their HIV status, 90% of all PLHIV who know their status are receiving antiretroviral therapy (ART), and 90% of those on ART are virally suppressed. This represents one of the key monitoring strategies and public health significance for supporting expansion and linkage of HIV care, treatment, and prevention services. Additionally, using the cascade can highlight gaps and progress along the continuum of care that can help scientists and practitioners determine the best opportunities for intervention. In 2017, the Centers for Disease Control and Prevention in the Dominican Republic named migrants of Haiti and Dominicans of Haitian descent as their priority population, as this demographic group is diagnosed with HIV at

higher rates in comparison to the general population and there are no official HIV prevention programs targeting Haitian migrants.

Methods

This qualitative needs assessment explored barriers that exist in HIV testing and gaps in the treatment cascade for Haitian migrants in the Dominican Republic from the perspectives of medical doctors and community health workers. Participants of the key informant interviews were recruited through convenience and snowball sampling. The key informant interviews were thematically analyzed using Braun and Clark's 6-phase framework.

Results

Participants of the key informant interviews identified barriers to HIV testing and treatment such as, discrimination, HIV-related stigma, income, and politics. Collectively, participants stated recommendations that a targeted program for Haitian migrants living with HIV would need to address these barriers: 1) human rights to decrease discrimination and increase access to services, 2) cultural humility and stigma reduction training for Dominican medical providers, 3) international care coordination (between Haiti and the Dominican Republic) for persons living with HIV/AIDS, and 4) sexual health education.

Discussion

The results demonstrate that Haitian migrants in the Dominican Republic have many unmet needs and that effectively addressing HIV among this demographic group will require an intersectional approach between human rights policy, systems level trainings, social support, and increased educational and employment opportunities.

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Preface

Cap-Haïtien, Haiti is my beginning. As it is the beginning of who I am, it constantly inspired me to somehow positively impact the place that molded me. When I received the Stanley Prostrednik Health Science Award from the Nationality Room Scholarship at University of Pittsburgh, it was my first opportunity to conduct global health research in the realm of public health. I worked hard to make connections to global health researchers to conduct research abroad, to somehow positively affect individuals of Haitian-descent. Through personal connections, I was referred to Dr. Jasmine Abrams, who allowed me to accompany her as she conducted a needs assessment from the perspective of HIV care providers. I am especially thankful to Dr. Abrams, the care providers of the Dominican Republic and the friends I made while there. Their support of the research was critical for my success and I cannot thank enough the many people who took the time to talk to us. As my first global health research experience, it was a novel and enriching experience and it will forever be engrained. I owe an immeasurable debt of gratitude to the Nationality Room Scholarship, especially the Stanley Prostrednik Health Sciences Scholarship, my professors, advisors, family and friends who all have supported me furthering my global research experience.

List of Abbreviations

ART	Antiretroval Therapy
CONAVISIDA	Consejo Nacional para el VIH y el Sida
DR	Dominican Republic
FSW	Female sex workers
HIV	Human Immunodeficiency Virus
MSM	Men who have sex with men
PLWH	People Living with HIV
SAI	Servico de Atencion Integral
STI	Sexually transmitted infection

1.0 Introduction

Human Immunodeficiency Virus (HIV) is one of the greatest global health challenges, but HIV is preventable and can be managed with treatment. Regardless of the myriad of biomedical advances, especially in medication and increased life expectancy, there are still HIV-related disparities among different populations. HIV stigma still persists and it is seen as the final frontier to address some of the HIV-related disparities.

According to UNAIDS, the Caribbean is the second most HIV-affected region in the world after Africa, with an HIV prevalence in the general population of 1.6% [1]. By mostly tailoring to the areas and populations with the greatest needs, over the years, there has been progress in both prevention and treatment of HIV infections in the Caribbean. At the end of 2017, it was estimated that an average of 310,000 (260,000 - 420,000) people were living with HIV in the Caribbean. Of that average, 73% were aware of their HIV status – a 7% increase from the previous year. The treatment cascade portrays the gaps to achieve the 90-90-90 targets. In 2017, UNAIDS reported that about 181,000 people, 57% of all people living with HIV, were accessing antiretroviral therapy in the region [2]. The estimated percentage of people living with HIV who achieved viral suppression increased by 3% in 2016 to 40% in 2017 [2].

Four countries in the Caribbean – Cuba, Jamaica, Haiti and Dominican Republic accounted for approximately 90% of new HIV infections in the Caribbean in 2017. Whereas, 87% of AIDS-related deaths in the Caribbean occurred in Jamaica, Dominican Republic and Haiti [2]. Haiti and Dominican Republic shares the island of Hispaniola. In the Caribbean alone, Haiti accounts for approximately “half of new HIV infections and deaths due to AIDS-related illness” [2]. These infections are correlated Haiti not providing comprehensive sexual health education in primary

and secondary schools [2]. It is one of the few countries in the Caribbean that does not offer this educational service to its young population [2]. Studies show that comprehensive sexual health education plays a crucial role in preparing young adults to make safe sexual decisions to prevent STIs, such as HIV, in this population [8]. Historically, there have been decades of Haitian migration into the Dominican Republic, due to seasonal employment and economic opportunities [3]. The current political events and increased racial tensions in the Dominican Republic, contribute to the disparities that Haitian face, especially HIV+ Haitian migrants [4]. The Centers for Disease Control and Prevention in the Dominican Republic identified as their priority population as Haitian migrants and Dominicans of Haitian descent in 2017 [12]. This demographic group is diagnosed with HIV at higher rates in comparison to the general population and there are no official HIV prevention programs targeting Haitian migrants [12].

2.0 Background

Haiti and Dominican Republic share the island of Hispaniola, but citizens of each country rarely interact due to centuries of political tensions and fears exacerbated by a history of racism, wars and massacres [3]. The contrast between the economic growth of the two countries is staggering. Over decades, Haiti has experienced constant political instability, economic struggle and natural disasters, while the Dominican Republic has flourished economically with continuous economic growth supported mainly by tourism and the sugarcane industry [3]. In the early 1900s, in promise for work, the Dominican Republic contracted Haitians for low-waged labor in the sugarcane industry in the Dominican Republic. As Haitians worked on the sugarcane fields, they lived in the *Bateyes*, a settlement camp for sugarcane workers and their families [3]. Over the following decades, a wave of fear incited over the “Haitian invasion” in the Dominican Republic as seasonal immigrants from Haiti arrived to work the sugar harvest [4]. Over time, the exploitation of Haitian migrants working on the *Bateyes* living in poverty gained attention of human rights organizations. The Dominican government has historically provided few public services, such as education and health services to the Haitian families and children living in the *Bateyes*. To this day, many *Bateyes* still have no running water, electricity, sanitation facilities or schools [4]. To curb migration, in 2010, Dominicans created a new legal clause to no longer extend birthright citizenship to migrants, as well as, revoking citizenship to Haitian migrants as far back as 1929 [10]. Currently, the Constitution of the Dominican Republic does not offer citizenship to children, of Haitian parents that are not naturalized even if born in the Dominican Republic [10]. Without documentation, Haitian migrants are denied access to additional social services provided to the general population. A shift in the sugarcane industry occurred that led Haitian migrants to seek

other forms of employment, which caused additional social tensions and racial prejudice for years [3].

Similar to many years before in search for work in the *Bateyes*, a second wave of Haitians (approximately 329,000 people), migrated to the Dominican Republic in 2010 [3] after a 7.0-magnitude earthquake struck Haiti on January 12th, 2010, one of the most devastating natural disasters to ever be experienced in Haiti. According to CNN.com (2010), it was estimated that 250,000 individuals died and 300,000 were injured. Approximately 3 million people were affected, and “about 1.5 million individuals were forced to live in makeshift internally displaced persons (IDP) camps” [5]. The 2010 earthquake in Haiti displaced millions. This displacement was exacerbated not only because of the earthquake, but also because of factors such as, the size of the population, the state of the physical and political environment, an unbalanced division of economic status, a lack of adequate building standards, and disorganized use of land [6].

Following the 2010 earthquake, migration of Haitians propelled to many different countries, with the United States became home to the largest Haitian migrant population, and significant numbers also living in the Dominican Republic [6]. In recent years, thousands of people of Haitian ancestry have been pressured to leave voluntarily or have been forcibly deported, including documented cases of people of Haitian descent who were actually born in the Dominican Republic [6].

Many factors that impact the way Haitian migrants in the Dominican Republic seek care. Culture profoundly impacts health and health outcomes [9]. Their cultural beliefs may serve as a barrier to seeking health care services as migrants living in the Dominican Republic. Additional barriers, such as stigma and discrimination (racial and HIV-related) play a major role in this population seeking care [2]. The fear of deportation causes Haitian migrants to delay medical care

– this can be extremely detrimental to Haitian migrants who are HIV positive or living with AIDS and other individuals living in the Dominican Republic. Untreated HIV infection, in almost all cases, leads to damage to the immune system and increases potential for opportunistic infections, which in part marks the transition from HIV infection to an AIDS diagnosis [11].

This qualitative study was designed to explore barriers to HIV testing and care in Haitian migrant communities living in the Dominican Republic. Of literature that addresses barriers to HIV treatment and care, few studies have been published specific to Haitian migrants and the multi-level factors that are associated with HIV care in the Dominican Republic [14].

2.1 Literature Review

2.1.1 Prevalence of HIV/AIDS in the Dominican Republic and Haiti

HIV prevalence is defined as the percentage of people living with HIV. Together, Haiti and the Dominican Republic account for approximately 75% of people living with HIV in the Caribbean. In the Dominican Republic, a little under 1% (approximately 0.8%) of people between 15-49 years old who were tested were HIV positive, with a slightly higher proportion in men (0.9 percent) than in women (0.7 percent) [17]. Among youth ages 15-24, 0.4 percent of women and 0.2 percent of men were HIV positive [17]. The prevalence of HIV is above 5% among gay, other men who have sex with men (MSM), and transgender women; among female sex workers, HIV prevalence is 4.5% [27].

Haiti's prevalence of HIV in the 1990s was high across the country, "at one point reaching 8% in Port-au-Prince and 4% in the rural areas" [22]. According to UNAIDS, Haiti's gender prevalence among the adult population (15-49 years old), portrays that "women [are at a higher prevalence of] 2.5% when compared to men at 1.7%" [24]. In Haiti, women are disproportionately affected by HIV, as they are 58% of PLWH [7]. An estimated HIV prevalence in 2018 was 2% among persons 15-49 years old, with an overall HIV/AIDS prevalence of 2.7% [7,24,26]. The prevalence of HIV varies by gender and characteristics such as educational level, area of residence, economic status and lifetime sexual partners [23]. MSM and female sex workers (FSW) are disproportionately impacted by HIV than in comparison to the general population, with HIV prevalence rates of 12.9% and 8.7% respectively

2.1.2 Prevalence of HIV/AIDS in Haitian Migrants Living in the Dominican Republic

In the Dominican Republic, the HIV prevalence estimates for Haitian migrants, particularly the construction workers were 4.6%, Haitian migrants sex workers 5.4%, and vulnerable women residing in the *Bateyes* 2.4% [17]. In 2016, there were 2,394 new infections among adults older than 15 years old and the population with the highest HIV infection were Haitian migrants accounting for 47.83% of new infections in the Dominican Republic [17]. This highlights the needs for preventative efforts for HIV/AIDS in the *Bateyes* and the Dominican Republic [35].

2.1.3 Health Outcomes of Internally Displaced Individuals/Migrants

In 2017, approximately 68.5 million individuals were displaced globally, which increased by 2.9 million [19]. Globally, migrant farmworkers and their families have unique health challenges and face inequalities in their health outcomes compared to the general population [18]. Delivery of care to this population has always been a challenging feat, especially in low-income countries. They often face significant barriers to social and health services locally due to politics. Continuity of care in the host country is imperative for migrants, which can be done by increasing information and education about the health care system in their host country [18]. Difficulties with communication, and language barriers impact health outcomes of internally displaced persons. With vulnerable individuals in this population and, limited language proficiency migrants are at jeopardy for rapid decline in health [20]. Interpretation services can offer an advantage in medical consultations to enhance provider-patient communication and ultimately, their relationship [18].

2.1.4 HIV Testing in the Dominican Republic and Haiti

Governmental health institutions and partners are increasing efforts to identify positive HIV cases by targeting testing strategies [23]. HIV testing rates in certain vulnerable populations are low, highlighting the need for tailored test and treat strategies, such as index testing [22]. Index testing identifies current and former partners and family members (children) of PLWH [23]. This method can offer advantages to improve disclosure, linkage to care and treatment [23].

By law, HIV testing is mandated for pregnant girls and women in the Dominican Republic [25]. Currently, there is no minimum legal age or gender restriction to access voluntary HIV testing and it does not require parental consent [25]. Analyses indicates a gap in HIV testing and treatment with Haitian men, as they are less likely than women to seek healthcare, HIV testing and start ART treatment [26].

2.1.5 HIV-related Stigma in the Caribbean

Around the world, HIV-related stigma poses a significant threat to HIV prevention and treatment [30]. “HIV stigma is a social, context-driven process that interferes with the psychological and physical wellbeing of PLWH [44]. Stigma impacts sexual history disclosure, HIV testing, HIV treatment, support and social interactions [31]. On account of stigma, individuals who live with “concealable stigmatized identities face complex decisions regarding disclosure” [33]. Stigma remains a stressor for people living with HIV, which can impact medication adherence, serostatus and sexual risk, which can possibly increase the rates of HIV [34]. The “Caribbean cocktail” is referred to as the combined factors that contributes to HIV/AIDS-related stigma in the Caribbean, which can ultimately threaten the well-being of the Caribbean [30]. This

“cocktail” includes “fear of contamination, homophobia, religious beliefs and ignorance” [30]. Due to stigma, the “Caribbean cocktail” can greatly impact an accurate percentage of individuals living with HIV in the Caribbean and if they migrate, across different countries as well. According to the LIVITY Research Project (2008), respondents of the in-depth semi-structured interviews distinguished between two types of HIV-related stigma [31]. “Felt stigma” is described as “their feelings about an HIV positive diagnosis and the reactions they fear from others,” such as, depression, ostracism, violence, disclosure [31]. “Enacted stigma” is defined as “the actual experiences” of those experiencing HIV-related stigma, such as, employment discrimination and verbal abuse [31]. “HIV acquisition was associated with sexual behaviors and identities that were regarded as immoral” – a punishment for one’s sin [31]. Behaviors and identities, such as promiscuity, prostitution, and homosexuality [31]. Ignorance is attributed to the “influence of religion, lack of health promotion, refusal of parents to discuss sexual issues with their children” [31]. HIV-related stigma is a constant issue affecting the lives of Caribbean people living with HIV/AIDS and creating interventions are imperative to address the stigma, as education alone may not be sufficient [31].

2.1.6 HIV-related Stigma in Healthcare Setting

Stigma does occur towards people living with HIV in healthcare settings. Stigma in healthcare settings can manifest as “refusal of treatment to PLWH and failure to protect the confidentiality of patients’ HIV status” [44]. The HIV-related stigma in that setting can impact the HIV care continuum as it can contribute as a barrier to optimal treatment for individuals living with HIV [32]. When patients experience stigma in the healthcare setting it may negatively impact their adherence to medication, self-esteem and their patient-provider relationship by reducing trust

[44]. Literature emphasizes the importance of respectful interactions with PLWH are critical to their HIV-related health [44].

2.1.7 Summary

The prevalence of HIV among Haitian migrants portrays the disproportionate need that Haitian migrants living with HIV encounter which highlights the way they seek HIV-centered care in the Dominican Republic. As a vulnerable population, migrants have a risk of increased negative health outcomes. Due to HIV-related stigma, racism, barriers to HIV testing and the historical and current political climate, there are a myriad of factors affecting their needs as Haitian migrants living with HIV in the Dominican Republic. The fear of deportation of Haitian migrants may discourage them to seek health care. More needs to be known about the context in which they seek and receive HIV-centered care and strategies care providers use to target this population. Therefore, this needs assessment was conducted to explore the gaps that Haitian migrants living with HIV face in the Dominican Republic. The recommendations of the care providers will shape intervention strategies to reach Haitian migrants living with HIV in the Dominican Republic.

3.0 Methods

This thesis will serve as a starting point to explore HIV care providers' perceptions of the barriers that HIV positive Haitian migrants face to seek HIV testing and care in the Dominican Republic. The research was conducted in Santo Domingo and Dajabon, Dominican Republic. Key informant interviews facilitate discussion from the unique perspective of the care providers with diverse backgrounds and opinions for exploratory research and were the primary method of data collection. The key informant interviews were conducted with well-informed professionals with first-hand knowledge about the community. These professionals provided insight to investigate and further understand this population. For that purpose, key informant interviews were conducted with directors/staff/medical providers of community-based, governmental, and academic organizations ($N = 13$) to better understand:

1. systemic, social, and individual level barriers to HIV testing and retention in care,
2. factors associated with linkage to and retention in care,
3. factors associated with treatment interruption, and
4. recommendations for future directions/interventions inform intervention development to decrease disease burden in this population.

3.1 Recruitment and Participation

The research team consisted of Dr. Jasmine Abrams (a Healthy Psychologist), an undergraduate pre-med student, and myself (a Masters in Public Health Candidate). Before arriving to the Dominican Republic, initial connections were made with HIV care providers and organizations via emails and phone calls through convenience sampling. Once potential

participants consented, additional correspondences were made to finalize a date, time, and location to conduct the key informant interviews. At the end of every interview, the participant was asked to recommend another individual or organization in the Dominican Republic that worked with Haitian migrants living with HIV. Some participants directly connected us to other HIV care providers/organizations working with Haitian migrants and HIV care – or the connections were made individually through our initial connections. This snowball sampling method of recruitment ensured that the appropriate HIV care providers and organizations were contacted and likely increased the odds of the care providers to follow-up to schedule an interview [36].

3.2 Data Collection

Eighteen organizations were contacted to conduct key informant interviews during our time in the Dominican Republic. Thirteen individuals from nine organizations participated in the key informant interviews. All nine interviews were conducted face-to-face. Of the thirteen participants in the nine organizations: four participants worked at governmental organizations and one participant worked as a director of a medical school. Five participants that worked at social organizations – two participants were directors, and three participants are medical doctors in hospital settings with HIV positive patients. *Note: *Some of positions overlapped (i.e. medical doctor as director of social organization)*. The key informant interviews ranged from 1-3 hours – the time varied by the discipline, position of the participant, the level of direct engagement with the Haitian migrant population and whether or not a tour of the facility occurred. The participants chose the location of the interviews; therefore, the location were the key informant interviews

occurred varied, but most interviews ($N = 8$) occurred on-site of the organization. There were two interviewers that conducted the key informant interviews.

At the beginning of each interview, participants introduced themselves and their work. All participants were asked three questions regardless of their position, additional questions were asked depending on their position. Seven of the thirteen interviews were conducted entirely in Spanish. Of the nine key informant interviews, two interviews had translators present. After a question was asked, the translator translated the answer to the interviewers. Though a translator was not always needed, they helped clarify any words or phrases that were not well understood. If translators were not present, a pause occurred between questions to ensure the understanding of the answer. For interviews conducted in Spanish, questions were initially translated by Google translate and later verified by an academic professor fluent in Spanish as well as a Dominican Spanish professor. The interviews were not recorded and the transcripts of the interviews were hand-written notes taken by the interviewers. The notes were directly translated to English during the key informant interviews.

Afterwards, the interview anecdotes, notes and main points of discussion were typed into a word processing document then uploaded to NVivo 12. To maintain confidentiality among participants, names and places were not added to the transcripts. No new data, no new codes, no new themes, occurred after the 12th key informant interview, therefore, thematic saturation occurred [37].

3.3 Topic of Discussion

The key informant interviews sought to gather information from the perspective of care providers about the needs of Haitian migrants living with HIV in the Dominican Republic and their barriers to care. The key questions were designed to elicit more in-depth information about this community. Sample questions were: “Do risk perceptions in Haitian migrants living with HIV influence HIV testing?” “What are some primary reasons individuals say they come in for testing?” “What are some factors associated with treatment interruption?” “What are factors associated with retention in care?” “What are factors associated with better linkage to care?”

3.4 Thematic Analysis

Qualitative data from the key informant interview notes were thematically analyzed and coded by one person. According to Braun and Clark’s 6-phase framework; “thematic analysis is a method for identifying, analyzing and reporting patterns (themes) within data” [16]. Unlike many other analytics methods, thematic analysis is not grounded in any pre-existing theoretical framework, instead, only seeks to identify patterns (themes) within qualitative data. A theme is characterized by significance. Significance is not always considered by the amount of times the theme appeared; instead, it may appear less relatively, it may capture an important element in analysis. This analysis is more than a summary; it interprets and makes sense of the data. There are two primary ways in thematic analysis to identify themes or patterns within data: inductive or theoretical approach. To analyze the data from these key informant interview notes, an inductive approach was used. “An inductive approach means the themes identified are strongly linked to the

data themselves” [16]. In this approach, the themes would not reflect the theoretical interest of the researcher [16]. This approach is data-driven, meaning it is a process of coding that allows the data to speak for itself, without preconceptions or attempting to fit it “into a pre-existing frame” [16].

In thematic analysis, there are two levels of themes: semantic and latent. “A thematic analysis typically focuses exclusively or primarily on one level” [16]. A latent approach was used to identify the “underlying ideas, assumptions and conceptualizations – and ideologies - that are theorized as shaping or informing the semantic content of the data” [16]. Below outlines the process of thematic analysis following the Braun’s and Clarke’s 6-phase framework. It is imperative to note that qualitative analysis is not a linear process, but recursive, therefore, some phases were revisited, as needed:

- Phase 1: Become familiar with data through immersion of the data by reading and rereading the key informant interview notes
- Phase 2: Begin to organize the data in a systematic and meaningful way. Use a qualitative analysis software (NVivo 12) to generate initial codes from interview notes
- Phase 3: From the codes, search for overarching themes
- Phase 4: Review and refine themes
- Phase 5: Define themes
- Phase 6: After identifying the themes, a final analysis occurs to produce a write-up [16].

4.0 Results

4.1 Overview of Findings

Discussions were prefaced to understand the experiences of Haitian migrants, especially Haitian migrants living with HIV in the Dominican Republic. Results of thematic analysis conducted with data generated from the key informant interviews ($N = 13$), revealed the need for intervention with Haitian migrants at the national level. Collectively, interviewees stated recommendations to address the barriers that Haitian migrants living with HIV:

- 1) addressing barriers to HIV testing, treatment and care
- 2) human rights to decrease discrimination and increase access to services,
- 3) cultural humility and stigma reduction training for Dominican medical providers,
- 4) international care coordination between Haiti and the Dominican Republic for persons living with HIV/AIDS, and
- 5) education in schools and for medical professionals.

Through the key informant interviews, codes such as income, politics, discrimination, HIV-related stigma were categorized into five key themes. The themes identified were the needs of HIV prevention and care programming recommendations for Haitian migrants living with HIV from the perspective of care providers. These key themes included: barriers to HIV care, human rights, stigma reduction, international care coordination, and education.

4.2 Addressing Barriers to HIV Testing, Treatment and Care for Haitian Migrants Living with HIV

4.2.1 Income

Level of income plays a role for HIV patients seeking medical care. Though HIV medication is free to some degree in the Dominican Republic, there are additional costs that are incurred when seeking care. This includes the cost of transportation depending on distance to seek care. A participant explained, *“Most HIV positive migrants don’t have money to seek care, they have to eat first and take care of their familial obligations.”*

One participant mentioned that there are many Haitians who travel to the Dominican Republic to their HIV care institution every 3 months to refill their medication. He indicated that *“Haitian migrants and Dominicans of Haitian descent fall into the first category of needs; therefore, they usually receive their medications from little to no charge. It depends on their income but if there is a cost, it would be \$300 Dominican Pesos (DP) or ~\$6 USD per visit. And if they can’t afford it, they work with them to exonerate the price.”* He continued to explain that of the Haitians who can afford it, they are able travel to the Dominican Republic to receive HIV care. Traveling to the Dominican Republic offers patients discretion and privacy unlike when HIV medications are delivered in Haiti. During their medical visit, they receive medication as well as monitoring of CD4 levels. Highlighting the level of income in this population is important to address the disparities in seeking HIV-centered care.

4.2.2 Discrimination

Discrimination is a consequence of stigma. Therefore, discrimination serves as an additional factor that affects the treatment cascade among PLWH. Discriminatory acts can be subtle, or overt. One participant who is a program manager spoke about one of his experiences as a practicing medical doctor about 9 years ago. The participant explained, *“At that time, I saw a lack of resources in maternal health hospitals, where sometimes there are literally 3 women in labor sharing 1 bed. In terms of discrimination in those settings, there has been some resentment from working class Dominicans about having to share services with migrants. Some staff lacks sensitivity towards their care and mannerism to migrants.”* Discrimination does occur in medical setting, not only by other patients, but also medical staff and doctors. Though it is rare, there have been reported cases where medical doctors deny giving care to patients who are HIV positive in the Dominican Republic. Sometimes *“doctors use religion as an excuse for discrimination,”* to not care for individuals living with HIV. For instance, some potential outcomes are linked to denial of services, negative provider-patient relationships, and misconceptions of “patients’ illnesses as consequences of individual behaviors that violate moral codes in the context of Christian beliefs” [39].

4.2.3 HIV Testing

Knowing one’s HIV status, through HIV testing is a crucial method of prevention and control of HIV. Over time, there has become an increased fear and hesitancy of “knowing your status.” In the Dominican Republic, similar to the United States, *“it is criminalized if you know your HIV [positive] status and partake in sexual activities with seronegative individuals. Though*

criminalization is important, [it] increases the individuals not wanting to get tested in the community.” Another participant continued to mention how, “Nationally, there isn’t a drive to routine testing and individuals seeking HIV care. Only individuals in the key populations who understands their risk and [are] concerned for their health would go in every 6 months.”

The resources to conduct HIV testing are often limited and vary across regions in the Dominican Republic. A participant explained the process, *“[Testing is] mostly a blood test, and it can take up to a few weeks, depending on whether the results are positive or negative. If the results are positive the standard test is then repeated. Additionally, there is on-site counseling before and after the patient gets the result, irrespective of HIV status. The cost depends on whether the public or private sector is used. The test is covered by private insurance and in the public sector, it is fully subsidized, in both cases as long as there is a request from a doctor.”* This was the first participant that mentioned the need of a request, or a prescription from a doctor to obtain an HIV test. This can be a barrier to the process of individuals undergoing HIV testing.

Servicio Atención Integral (SAI), is a comprehensive HIV care facility in Dominican Republic. The research team met with two SAIs to further understand their purpose and the roles that they play for individuals living with HIV in the Dominican Republic. *“[SAI’s] help with medication delivery and HIV testing. If someone is positive, they are referred to a SAI and at the site they go through the process of diagnostic testing, analysis, then they get the medication and they benefit at the site.”* In an interview at a SAI, we asked a medical doctor, *“What are the HIV testing services available here?”* The doctor responded, *“We have rapid testing here, so that’s 30 minutes for test results. But those resources differ across regions. To confirm the viral loads, we send the sample to Santo Domingo.”*

We asked a participant whether routine testing across populations exists. He replied, *“HIV test, can be an opt-out in practice, but it [should be] done in all pregnant women. The way the test is presented to some women who are giving birth, they may deny it. Women have a higher risk, and may have been infected for some time especially how there are still some issues with MPCT.”*

Additionally, a participant explained the differences of HIV testing among genders. “More women come in for testing – especially women of childbearing age, compared to men. When a woman is of childbearing age, a doctor would request HIV testing routinely in practice. But for men, there isn’t that same pool of testing for HIV and men usually don’t seek HIV care services.” We asked about the influence of the perception of risk and its correlation to HIV testing. A participant replied, “In terms of men, only really men in the LGBTQ community really know their risk.” In the Dominican Republic, there are targeted awareness campaigns and interventions for individuals in the LGBTQ community [14]. This allows them to understand their risks and increase testing and possibly, increase appropriate prevention methods.

During pregnancy, labor and delivery, and breastfeeding HIV can be passed from mother-to-child. It is imperative that mothers who are HIV positive begin antiretroviral treatment as soon as possible to decrease the risk of perinatal transmission. Maternal-to-child transmission occurs in Dominican Republic, this is mainly due to a delay in prenatal care. We spoke to a director of a hospital in a low resource setting in Dominican Republic. As a medical provider, she would often see a lot of women, including Haitian migrants who come to Dominican Republic to seek prenatal care, sometimes, at their time of delivery. We prompted her by asking *“What does it look like for a woman coming to seek prenatal services here?”* She responded, *“During their first prenatal check-up, they are tested for HIV and syphilis. But depending on the stage of their pregnancy, it*

depends how they receive care. The later they come, the less likely they receive appropriate care to decrease chances of perinatal transmission.”

The “*machismo culture*” is a sociocultural term that defines the social role of men and women in Hispanic cultures. It often highlights ideas entrenched in masculinity, which plays a role sexism, misogyny, emotional and sexual violence in the culture [41]. Four participants mentioned “*because of the ‘machismo’ culture,*” there is an increased need to create programs and spaces for women’s empowerment in sexual decision making through the use of condoms and HIV testing.

There are many barriers that exists on the individual, community and institutional levels for HIV testing. Interventions have been created to decrease barriers specific to HIV testing. An organization in Dominican Republic, “*started an intervention to increase HIV rates in vulnerable communities where they would go to where they frequent at night to deliver services such as HIV education, pass out condoms and offer HIV testing.*” The program manager of this organization highlighted the importance of an increased need to perform “*pre- and post-test counseling with each test, decrease stigma from the hospitals in particular, confidentiality in regards to treating HIV.*” A participant also mentioned that “*pre and post testing affects the way individuals handle results and linkage to care.*” After HIV testing to know one’s status, linkage to care is significant as it is the next step in the global 90-90-90 HIV target goals. HIV continuum of care is critical in achieving HIV target goals, as if individuals who are aware of their positive status are not connected to care, it contributes to loss to follow up [40].

4.2.4 Loss to Follow Up

The loss of patients occurs at every stage in the HIV diagnostic and treatment cascade, especially among newly diagnosed HIV positive patients. A participant explained, once

individuals are “*tested and linked to care – loss to follow up and that’s where the issue lies. Any reason why you think someone can be lost to care, it happens here.*” A participant explained that “*language, culture, domestic violence, and beliefs play a role as barriers to seeking care*” and contributes to the loss to follow up in Haitian migrants living with HIV in the Dominican Republic. With the transient nature of migrants, a participant stated, “*testing in the community is harder than in clinics, as the biggest issues with migrant populations is that they are moving. There’s seasonality and relocation in a lot of the jobs (farms or construction) offered to migrants. There’s constant fears of immigration police, gender-based violence, lack of resources and trust*” and a hierarchy of competing needs. For instance, food, shelter and clothes are more important than seeking HIV care.

A participant we interviewed is conducting a migrant study in the Dominican Republic to characterize the migrant population and ART medication. Through the research study, a participant identified caveats in Haitian migrants regarding difficulties of migrants adhering to treatment. “*One of the major findings is that survival is more important than anything, we blame them for not adhering to treatment. We blame them but they are trying to survive, need to buy food, and food is recommended for medication. Hierarchy of needs.*”

Pregnancy complicated with a new HIV diagnostic test can additionally contribute to the loss to follow-up of patients. “There are several issues with women in terms of childbearing, sometimes Haitian migrants come at the time of delivery. So, to give them HIV care, if they are HIV positive becomes difficult especially after delivery [because] they just return back to Haiti.”

4.2.5 Low-resource Setting

To effectively prevent new infections and control the current cases of HIV infections, laboratory monitoring and biomedical equipment for faster results are imperative. One participant mentioned, *“I would like a molecular bio lab with more up-to-date medical equipment, such as, PCRs to improve the quickness of the results in the lab.”*

Delays in receiving HIV testing results can lead to new infections and increase loss to follow up of HIV positive individuals. In low-resource settings where resources are not well distributed and varies across regions of the Dominican Republic, can additionally affect medical care and HIV care among different populations. Over the past few years, many Haitian pregnant women travel from Haiti to Dominican Republic, near or at the time of delivery. We asked a participant if that is commonly seen around the shared border of the Dominican Republic and Haiti, and he replied, *“Santo Domingo [the capitol], and once you cross the border it is not too difficult to travel on to Santo Domingo.”* During the interviews, several participants ($N = 7$) mentioned the need to increase and equal distribution of resources in the Dominican Republic.

4.2.6 Politics

A number of policies and political factors often play a role in addressing the number of HIV infections and individuals seeking HIV-centered care in a community. As previously introduced in the background, *“[Haitian migrants] were contracted to work as sugarcane workers and living in the Bateyes. During that time, there was a lot of political issues with migrants working as they had little education.”* Over the years, the historical and political issues complied and

created “*a vendetta with Haitians vs. Dominicans.*” A participant stated, “*A year ago, the barrios attacked the political system because a lot of Haitians came to work.*”

A participant explained the impacts of the upcoming presidential election in 2020 and the current climate with the migrant populations – “*increased nationalism similar to that of the United States at the moment.*” Additionally, this participant mentioned, “*For instance, some of the work we are doing, we can’t say we are transitioning our attention to migrant populations - as people in the DR would be upset. And we can’t say it fully for Haitians, but for everyone [in the Dominican Republic].*”

A participant explained how a global public health organization that “works in stigma, discrimination with community organizations” in the Dominican Republic, and they “cannot work with the government directly, but [they] empower organizations financially to work within their own countries, not only help with jobs but also education. In the report they released, “[they] talked about human rights and community empowerment.” The Dominican Republic governmental program, “gives support to other organizations to do more of the work on the political side of things.”

Due to the increase of political tension between Dominicans and Haitian migrants or Dominicans of Haitian descent, there has been a recent wave of nationalism which exacerbates the fears of deportation, and may lead some Haitian migrants to not seek care. To not be deported, Haitian migrants need to present a form of documentation, the director of a social organization explained, “*documents can be something as simple as formal ID, or birth certificate.*” He further explained, one issue that migrants (and even some Dominicans) have faced in regards to health insurance is documentation. Immigration status does not play a huge role to receive care and

medications. He stated that though *“you do not have to show legal documentation in clinics, there may be some individuals who are still hesitant to still seek care.”*

When Haitian migrants do not have citizenship documentations, they are fearful to travel long distances to seek HIV care and would rather delay care. One organization highlighted the work they conduct to try to eliminate the barrier of distance. *“We work with regulation and deportations of undocumented immigrants and facilitates the mobile clinics that goes out to the communities to provide HIV-centered care via testing and education.”*

4.2.7 PrEP, a Newly Introduced Method of HIV Prevention in the Dominican Republic

Pre-exposure prophylaxis (or PrEP) is an effective preventative method for individuals who are at high risk of contracting HIV to reduce their risk through a daily pill. The introduction of PrEP in the Dominican Republic is relatively new, as many organizations may not have access to PrEP. A participant explained, *“We are currently piloting a prevention program of HIV with PrEP for MSM. A lot of people don’t know there are many options for prevention of HIV other than male and female condoms. Culture plays a role in other preventative methods, with women not feeling empowered to ask for the use of condoms and many individuals here are not used to taking medication every day.”* The participant used himself as an example, stating he knows he should take a particular medication daily for an ailment, but he does not. Though PrEP is available, he reported being unsure if individuals will adhere to it daily.

4.2.8 Using Mobile Units as a Method to Eliminate Barriers of Distance with HIV Positive Individuals

In relation to future directions, two organizations mentioned their efforts to address the HIV positive community needs would be beneficial through the use of mobile units. One participant stated, *“There is also a need for specific, tailored and targeted interventions for different communities, as well as the use of mobile units.”* Using mobile units as a care delivery model can significantly reduce some of the barriers, such as healthcare access, specifically for Haitian migrants living with HIV. *“We facilitate the mobile clinics that goes out to the [migrant] communities to decrease/try to eliminate the barrier of distance.”* Additional barriers are fears due to legal status, HIV-related stigma and financial costs. But through mobile units, HIV care can be delivered to the communities in need.

Through the key informant interviews, codes such as income, politics, discrimination, HIV-related stigma were categorized into five key themes. The themes identified were the needs of HIV prevention and care programming recommendations for Haitian migrants living with HIV from the perspective of care providers. These key themes included: barriers to HIV care, human rights, stigma reduction, international care coordination, and education.

4.2.9 Increase Human Rights Advocacy for Haitian Migrants Living with HIV in the Dominican Republic

4.2.9.1 Human Rights

Many participants mentioned the need to increase human rights advocacy and policy for Haitian migrants living in the Dominican Republic. They called for engagement of stakeholders through country-specific work, community empowerment and human rights. As important as it is to abide by the governmental HIV agenda, *“we want to address the gaps that exist in the 90-90-90 cascade, stigma and human rights.”* One particular organization worked closely with Haitian migrants and human rights since their inception in 1985, *“as it was a group of migrant workers who felt as though their human rights were violated.”* Over the decades, their services shifted with the needs of this population, now their main focus are addressing the HIV related disparities in this population.

One participant experienced Haitian migrants’ living conditions personally when he lived in the *Bateyes* to conduct his doctoral research. He described his experience, *“A lot of Haitians live in the area of tourism and informal economy. I experienced life in the Bateyes, and I experienced first-hand how Haitians are treated in the DR. As a researcher and human being, I saw health inequalities, political issues and a part of the population left with no identity.”* He mentioned that over the past decade since defending his dissertation, the conditions of the *Bateyes* did not change very much. He stated the needs that still exists in these communities, *“They need: human rights advocate, education, source of funding such as, work, to contribute to society and pay taxes - they need opportunities.”*

Through the key informant interviews, codes such as income, politics, discrimination, HIV-related stigma were categorized into five key themes. The themes identified were the needs of HIV prevention and care programming recommendations for Haitian migrants living with HIV from the perspective of care providers. These key themes included: barriers to HIV care, human rights, stigma reduction, international care coordination, and education.

4.2.10 Reduce Stigma as it is Prevalent in Healthcare Settings and Among Community Members to Increase Uptake of HIV Care

4.2.10.1 HIV-related Stigma

To some degree, all of the key informant interviewees reported how stigma plays a role in how HIV positive individuals seek care in the Dominican Republic. According to a participant, governmental institutions were initially “*very hesitant to admit the roles of those factors in the healthcare system,*” but the influences of stigma were hard to deny. Stigma was said to affect the rates of HIV testing, returning to obtain results, disclosing status to sexual partners, linkage to care and treatment interruption. A participant explained, “*In reality, there are several individuals in the community who don’t participate in HIV testing and don’t accept the role of testing in the community when they go into the communities. Some reasons are because lower education, religious (healing), and stigma.*”

Governmental institutions, such as Consejo Nacional para el VIH y el Sida (CONAVIHSIDA), created a national program and campaign to decrease stigma among the general population towards HIV positive individuals and PLWH. Dominican Republic’s National Council for HIV and AIDS, is a governmental organization established in 1987 “that administers programs to fight HIV/AIDS” [38]. Stigma transcends communities and seeps into the medical

settings where care is provided to PLWH. Two participants mentioned the impact of “*turnover in staff and medical doctors which makes it a constant battle of destigmatizing individuals*” that work with HIV positive patients. At the end of the interview, organizations were prompted with questions about the future directions for their organizations, several participants responded that one of the primary objectives they want to address is reducing stigma towards individuals living with HIV. The stigma manifests in many ways, mainly it deters individual living with HIV seeking care. For example, individuals travel to other areas in the Dominican Republic to receive central HIV care. The shared responses are from the care providers’ perspective of Haitian migrants living with HIV of the forms of stigma they face in navigating the health services in the Dominican Republic.

4.2.10.2 Servicio Atención Integral (SAIs)

During the key informant interviews, Servicio Atención Integral, SAIs, were mentioned frequently. SAIs works closely with the government, whether they are public or private. They also vary in sizes; they can also stand alone as a community clinic or can be within hospitals. SAIs offer comprehensive care services that aim to support individuals who experience or are at risk of discrimination or violence based on sexual orientation or, gender identity. Therefore, they support people living with HIV/AIDS, through services such as, antiretroviral medication and counseling services. In regards to HIV services, “[SAIs] help with medication delivery and HIV testing. If someone is positive, they are referred to a SAI and at the site they go through the process of diagnostic testing, analysis, then they get the medication and they benefit at the site.”

We asked a participant, “What services are available at your SAI?” The participant stated, “Most patients come by appointment. Diagnostic and counseling services are available to singles, couples (serodiscordant), and support groups, as well as, medical services.”

Though these services are available to PLWH, there are factors that delays individuals, especially HIV positive individuals to seek care at these sites. One participant further explained, *“There are several different SAIs in different regions, but the resources, staff and quality of care varies throughout the country. Some individuals want to use SAIs but because of geographical region it may be difficult to get there. Others don’t feel comfortable using the SAI’s in their neighborhood because of stigma, discrimination and lack of confidentiality. Some locations are more difficult to get medication, and some SAI’s are small and can’t handle the demand of their respective locations.”* During the interview, one participant at an SAI mentioned that *“[other] SAIs are not pulling their weight.”*

One organization mentioned how they work to meet the gaps due to Haitian migrants, particularly women not seeking those services available. *“SAI’s exists, but because of stigma and confidentiality some of the women are afraid to go there. If positive [for HIV], they are connected to [a SAI], but may not go because of distance, fears to be deported and life issues, as they may not have money to seek care such as transportation fees and possible copay. We work closely with the women to decrease stigma, to increase education, uptake of health services, HIV testing and prevention.”*

When we spoke to participants, they mentioned how individuals living with HIV are hesitant to seek care due to confidentiality and stigma. To avoid stigma, some individuals will travel to a SAI outside of their location to receive their HIV care. We prompted a participant with the question, *“What training are available to SAI staff to increase trust and confidentiality among the patients?”* The participant replied, *“The SAIs are trained in stigma, violence, privacy/confidentiality, discrimination. It’s not only the doctor, but also healthcare workers.”* Additionally, they were asked, *“What is the frequency of training? What happens if its violated?”*

The participant replied, *“If violated, there’s a notation in the system and they can’t work in the public sector and it’ll be nearly impossible, or at least more difficult to get a job but it is possible to possibly work in the private sector. The SAI’s size may play a role in termination if privacy is violated, if the SAI is small, they may not have the capacity to handle a termination, and may be given a second chance.”*

It was a consensus across many participants that SAI’s play an important role in HIV testing and treatment in the Dominican. But many disparities exist in SAIs location to deliver care to individuals and patients living with HIV to seek care at these sites to do confidentiality, stigma and discrimination. Those barriers should be addressed to increase uptake in those services.

Through the key informant interviews, codes such as income, politics, discrimination, HIV-related stigma were categorized into five key themes. The themes identified were the needs of HIV prevention and care programming recommendations for Haitian migrants living with HIV from the perspective of care providers. These key themes included: barriers to HIV care, human rights, stigma reduction, international care coordination, and education.

4.2.11 Call for International Care Coordination Between the Dominican Republic and Haiti

4.2.11.1 National HIV Plan in the Dominican Republic

The National Strategic HIV Plan was referenced by all participants. According to a participant, the current goals for HIV plans in the Dominican Republic are: (1) the health of millennials and (2) the 90-90-90 treatment cascade. *“It is a law, that all the provinces that offer HIV services should work in conjunction with the national project.”* Of the organizations

interviewed, they work closely with the national program to reach their fundamental goal to “conduct their HIV services with the 90-90-90 goal as the foundation.”

The National Program coordinates and works on prevention of HIV and testing in MSM, pregnant women, and sex workers and gives support through funding to organizations that works with these [populations]. A participant stated the fact that there is currently a “national [HIV] program targeted to men, even though the rates of HIV are higher in women” with a ratio of 2:1. A participant mentioned their future direction to work with more women (not only pregnant women) to empower them and offer preventative services.

Over the past few years, monitoring systems for patients receiving treatment for HIV have been strengthened. As “HIV medication is covered by the government, once you have the secondary confirmative diagnostic testing it is entered into the national system [to receive care].” Additionally, one participant mentioned that, “There are currently some national programs to create monitoring systems with civil societies for PLWH that have been reported to the network.”

4.2.11.2 National Funding in the Dominican Republic

Proper funding sources for national HIV targeted programs are crucial to address the current HIV/AIDS cases, and potentially decrease future HIV infections. A participant explained the current funding structure of Dominican Republic National Strategic Plan, “*The national AIDS program is fully subsidized, partly by the local government and international aid, about 50/50, being international aid a bit more predominant. Most of the international aid goes towards prevention strategies and government funding is mostly consumed by treatment.*”

A participant further explained, “If the patient is registered in the national AIDS program, testing and treatment are free. The positive patients are automatically registered in the national AIDS program and receive more education and counseling options from different institutions,

public and private.” One participant expressed concerns for future funding. “There may be some rising issues with prescriptions and medication. [A global organization] funding for medication is almost over and it used to fund most or all of medications. At the moment, it’s on the governments’ shoulder and individuals aren’t sure how long because it may lead to an economic strain on the country.”

4.2.11.3 National Health System in the Dominican Republic

An overview of the current structure of the Dominican Republic health system was imperative to understand how their HIV care services are integrated into that system. As well as, the ways individuals, including Haitian migrants seek care in the Dominican Republic. A participant gave us a brief history of the health system. There was a Health Code founded in 1956 that socialized medicine in the Dominican Republic. Other Latin countries commenced socializing medicine since 1993, but the Dominican Republic didn’t start reforms until 2001. That reform led to the formation of two laws:

- General Health Law (03/2001): #42-01, which is in charge of all general health programs, such as vaccinations, HIV and medication. With this law, it doesn’t matter where you’re from, the public hospitals are free for all.
- DR Social Security System (05/2001)
 - Covers retirement and also established the structure of the system, where there were three major governmental structure roles:
 - Superintendence for Health: observe relationship between doctors, patients and have health insurance for everyone
 - Ministry of Health: regulates the healthcare system
 - There are *three healthcare options:
 - Employment: similar to the US, but companies/employers are required (mandated by law) to guarantee health insurance and through a portion of their paycheck covers for health insurance and retirement. Employers and employees contribute to their healthcare

- Subsidized: individuals have no job, government pays (like Medicare); 100% coverage with no copay at public hospitals
- Contributory Subsidized: 63% of Dominican Republic workforce are independent professionals and the jobs are a little informal. [The government] can't control income where it's become a bit more difficult to figure out how much they should pay towards health insurance. *This option poses issues and there has been debates to remove this healthcare option and offer only the first two.

These two laws lead to a lot of changes since 2001, currently 75% of the population is insured. The hospitals receive money from the government for medication. The public hospitals receive 100% coverage, and private hospitals about 20% coverage.

The participant was also asked, "If healthcare is free, why don't people access care more?" He replied, "The issue lies more in the quality of care the patients receive. Before, 911 wasn't available in many cities, but they are working to make emergency vehicles available to offer health emergencies [to ultimately] decrease deaths. Also, there has been an increase of preference towards private hospitals as the treatment is preferred and the wait time is shorter, convenience plays a huge role. But if you have the governmental insurance, you have to go to the public hospital, or will have to pay very high out of pocket costs to the private hospitals."

When a participant was prompted with the question, "What factors are associated with retention in care/linkage to care?" He replied, "Transnational communication as there's issues with their HIV care in both countries [due to] different health systems."

Through the key informant interviews, codes such as income, politics, discrimination, HIV-related stigma were categorized into five key themes. The themes identified were the needs of HIV prevention and care programming recommendations for Haitian migrants living with HIV from the perspective of care providers. These key themes included: barriers to HIV care, human rights, stigma reduction, international care coordination, and education.

4.2.12 Increasing Educational Opportunities for Care Providers and Sexual Health

Education in Schools

4.2.12.1 HIV Education Among Care Providers

In an effort to decrease HIV-related stigma, education plays a crucial role in debunking HIV-related myths especially among medical care providers. Due to HIV-related stigma in the medical field, participants mentioned the need to increase the need to increase medical providers and staff competency in HIV diagnosis, methods of transmission, and treatment across the lifespan through education. To address the gaps in knowledge a participant created educational weekly meetings with staff members. A participant explained how as an opportunity to further educate her staff, *“weekly staff comes in early to watch podcasts from UMass. Depending on the topic of the podcast, it opens up opportunities for discussion.”* She described an enlightening discussion of HIV and immigration policies and immigration in general between her staff. She emphasized how all of these “social” discussions are important in medical spaces as well. Through her personal experience, the participant recommended the need to create HIV educational opportunities for medical students and professionals. The participant continued to explain how, *“Medical students [and] professionals who wanted to work in our institution were quizzed on basic HIV knowledge and scored an average of 25%. It inspired me to begin create opportunities for HIV education for medical professionals, as I feel as though there’s a lack of knowledge between professionals. Topics such as HIV101 to understand the disease/pathology, mechanisms and to understand how the medication works. [Additional topics were] aging (geriatrics), pediatrics, and meds.”*

4.2.12.2 Sexual Health Education in the Dominican Republic Schools

Sexual health education plays a crucial role in allowing adolescents to make informed sexual health decisions at their sexual debut, as well as, decrease HIV-related stigma. A director of a social organization shared format of sexual health education. She explained how personal beliefs and religion acts as a barrier to students in school to be taught sexual health education in the Dominican Republic. *“It is written that all schools should offer it. But some teachers do not [teach] because of religious or personal beliefs. The Roman Catholic Church has great influence and does not approve, as they feel as if it is condoning the behaviors.”* And as an organization, she suggested that *“maybe in the future, we will collaborate with more schools.”* To have a better understanding of any current or future plans to address the need for sexual health education in schools, we promoted, *“Since the school does not really offer sexual health education, is there something else?”* She replied, *“We have seen the importance of specific interventions for different groups. A creative or playful and cultural intervention [with a] focus on youth prevention and not only for older adults.”* Creating this comprehensive sexual health education and intervention can be imperative to HIV prevention, control and treatment in the next generation.

5.0 Discussion

These key informant interviews sought to elicit perceptions of healthcare providers of the needs of Haitian migrants living with HIV, the gaps that exist, the services available to them, and how this context impacts their health outcomes. When we asked care providers the needs of Haitian migrants living with HIV, there was no shortage of answers to their immediate needs as well as recommendations to meet the gaps that this population experience. Though enacted in a variety of ways, HIV-related stigma and racial discrimination underlie the experience of many Haitian migrants living with HIV in the Dominican Republic. Some of the HIV-related health inequities that are seen in Haitian migrants living with HIV are likely a result of discrimination and stigma. The stigma related to being HIV positive is a burden for many individuals as there are fears of disclosure of status in the community [31, 44]. The stigma and discrimination in medical settings should be strongly discouraged as it can contribute to PLWH to not return for follow up appointments, or to adhere to treatment [32, 44]. Such effects can impact the country's control of new infections and overall disease burden [44]. Dominican Republic has created policies against stigma and discrimination and systems to anonymously report any negative experiences in healthcare settings [27]. But it is unknown if this reporting method is used widely by Haitian migrants, or individuals that experience stigma or discrimination.

Comprehensive HIV preventative services in the Dominican Republic should be made aware to Haitian migrants, especially in regions with high density of Haitian migrants. This will allow individuals at greater risk to be reached, increase testing in the community and linkage to care. Receiving an initial positive diagnosis of HIV can be a life-changing moment. Therefore, it is imperative to receive counseling before and after the test can increase linkage to care. Especially

since rapid tests are not rapidly available in the Dominican Republic, it would be a few weeks before an individual receive their tests results. During the interviews, it was mentioned that though it is written that counseling should occur with every HIV test – it has been said at times, that counseling is not always offered.

The provider-patient relationship dynamics plays an important role in patient care which can increase trust and disclosure. There are several cultural differences between Haitians and Dominicans. These cultural differences can impact patient-provider interactions. For example, one participant mentioned how as a sign of respect, Haitians do not often engage in direct eye contact with “higher authority.” But in the medical settings, Dominican medical providers translate that as a disrespect when their Haitian patient(s) is avoiding eye contact. Increasing cultural humility in medical settings can improve provider-patient relationships with this new understanding. Additionally, increasing HIV education competency in medical schools and current medical providers and staff can increase the quality of care provided to HIV positive individuals, especially HIV positive Haitian migrants. Increasing general knowledge of HIV correlates to stigma reduction in medical settings. Moreover, participants recommended Haitian Creole translators at treatment centers, female empowerment and gender-based violence interventions.

One participant expressed concerns for future HIV-related funding, especially since the source of funding is near its end. Currently, the cost is shared between the Dominican Republic and a global partner, but he is unsure if the cost of HIV preventative services, which includes free medication, can be sustained by the government alone. With the progress made to address HIV-related gaps, he hoped that the efforts are not scaled back and future health outcomes impacted due to funding.

International strategies are a bold call to action to not only accelerate action, but to reach out to people who are falling behind. Migrants are known to be transient in nature, mainly attributed to the seasonality of employment. The shared border between the Dominican Republic and Haiti allows migrants in a sense, to frequently go back and forth between the countries as well. Increasing international care coordination between Haiti and the Dominican Republic for persons living with HIV/AIDS can be crucial in linkage to care [27]. It is often seen when a pregnant woman comes to the DR to deliver, learns that they are HIV positive but are unsure in how to navigate the HIV care system in Haiti [14]. At times, care providers in the Dominican Republic do not know where they should refer these patients. Creating capacity to collaborate and increase communication across borders is crucial to address the prevalence of HIV in both nations [26, 27].

Haitian migrants living with HIV navigate a space filled with centuries of racial discrimination which impacts politics, HIV-related stigma, low socioeconomic status due to employment opportunities readily available for Haitian migrants living in the Dominican Republic [3, 4]. Therefore, creating human rights policies can contribute to decreasing discrimination and increasing access to services [10]. One participant suggested using the Human Security Model framework for Haitian migrants living in the Dominican Republic. “Human security means protecting fundamental freedoms—freedoms that are the essence of life” [28]. This includes, but is not limited to, creating or tailoring social, economic, political systems to ensure that this population have the basic needs to live fulfilling lives in their host country [28]. Moreover, this can begin to be achieved by creating a task force with representatives from both countries and human rights advocates to advocate for adoption of policies to ensure basic, human rights of Haitian migrants living in the Dominican Republic. According to several participants of the key

informant interviews, Haitian migrants have a hierarchy of needs. Economically, they are more concerned with addressing their basic needs and necessities (i.e., shelter, food), than seeking medical care.

The current socio-economic situation fosters high migration – internally and externally – impacting the movement of the migrants [4, 5, 9]. The transiency of Haitian migrants creating a challenge to link them to care and adhere to treatment to ultimately reach viral suppression [40]. Mobile clinics were mentioned in the key informant interviews as methods to decrease barriers to seeking and receiving HIV-centered care. Using mobile clinics can offer a Haitian migrants targeted care, especially if migrants are hesitant to seek care in healthcare facilities due to fears of deportation and stigma/discrimination.

The healthcare systems in Haiti and the Dominican Republic are structurally different. Most of the citizens of the Dominican Republic are covered under universal healthcare, but, Haitians in Haiti do not share similar healthcare system structures [27, 42]. System-level changes in Haiti's health structure are still necessary to build capacity for service delivery to their citizens [26, 42]. For Haitian migrants lived in Haiti, and are familiar with the system may not know how to navigate care in the Dominican Republic or was used to delaying care unless it was a medical emergency [26].

There is an additional recommendation to create and teach a comprehensive sexual health education curriculum in schools. The Dominican Republic has one of the highest rates of adolescent pregnancy and sexually transmitted diseases in the Caribbean [21]. Adolescents' sexual health behaviors are mainly impacted by the lack of comprehensive sexual health education [29]. Effective sexual health education is imperative for school-aged children to make safe, well-informed sexual health decisions at their sexual debut [25]. As mentioned previously there is an

increased percentage of HIV in the younger population [22]. Comprehensive sexual health education can increase STI related knowledge, including HIV/AIDS to shape safe sexual to prevent infections among this population [8, 25]. This will allow all students, regardless of racial backgrounds in the schools to receive sexual health education. Increased knowledge and policy change can simultaneously decrease the HIV-related stigma and discrimination in the Dominican Republic [27, 32].

6.0 Limitations

This thesis served as a starting point to explore care providers perceptions of the barriers that Haitian migrants living with HIV face to seek HIV care in the Dominican Republic. Participants recruited are known to work with Haitian migrants and Haitian migrants living with HIV. Though most of these care providers currently work directly with the population, these interviews are based from the perspective of the care providers, not directly from the population of Haitian migrants living with HIV. The research was conducted in Santo Domingo, the capital of Dominican Republic and Dajabon, a border town of Dominican Republic and Haiti. The demographics captured in these two regions, may not reflect the complete needs of Haitian migrants living in other regions.

However, these limitations are balanced by the strengths of the study. Key informant interviews from the perspective of the care providers are for exploratory research and were the primary method of data collection. These in-depth interviews were an affordable method to gain of big picture of this population's needs. In addition, the interviews were conducted with community experts – leaders and professionals – with first-hand knowledge, giving us a range of perspectives from different sectors. The participants provided insights on attitudes and motivations, as well as, recommendations about the nature of Haitian migrants living with HIV needs. The anonymous nature of these key informant interviews likely increased care providers willingness to openly share information about the current needs of Haitian migrants living with HIV. Additionally, the nature of the interviews likely reduced reporting bias.

7.0 Conclusion

The results of the key informant interviews suggest that Haitian migrants in the Dominican Republic have many unmet needs and that effectively addressing HIV among this demographic group will require an intersectional approach. In order to make a profound impact to address the needs of Haitian migrants living with HIV in the Dominican Republic, an intervention approach will need to include human rights policy, systems level trainings, social support, increased educational and employment opportunities. An intervention aimed to address these outcomes would be imperative to improving the health, social, and educational outcomes of Haitian migrants living with HIV [26]. It will also address the needs to increase medical competency among medical providers of HIV positive Haitian migrants to eliminate the underlying stigma [14, 26]. Continuing to enforce the stigma and discrimination reporting systems can increase uptake of medical services among HIV positive individuals, especially Haitian migrants [22]. Creating policies to protect Haitian migrant's rights living in the Dominican Republic, though it may not be received well from Dominicans with nationalistic views [3]. This systematic change can contribute to the seeking healthcare without fear of deportation.

Currently, the Dominican government lumps Haitian migrants into the migrant category of HIV programs, but this population faces disproportionate inequities compared to other migrant populations living the Dominican Republic [14]. Any programs developed for Haitian migrants living with HIV should be developed and implemented collaboratively with appropriate stakeholders – allowing this population a space to share and include their concerns and recommendations. Targeted HIV programs for Haitian migrants in the Dominican Republic can bridge the disparities that exists among this population.

Feasible steps to create a targeted intervention for Haitian migrants are as follow: First, a qualitative research and/or household surveys should be conducted with the Haitian migrant population to capture their personal experiences and needs. Additionally, an expansion of focus groups and/or in-depth interviews with Haitian migrants living with HIV to gauge the specific challenges they face with confirmation of their diagnosis. Furthermore, the qualitative results should be analyzed to compile a report to share with appropriate stakeholders working directly or indirectly with this population. The findings of such research could be used to develop targeted interventions for Haitian migrants living with HIV to bridge the gaps of disparities they face.

Appendix A Codebook

INDUCTIVE CODE	DESCRIPTION
1. Barriers to Care	
1a. Income	Refers to the level of income of Haitian migrants due to the type of work mainly/readily available to them. This includes the mention of how life takes precedence over health.
1b. Stigma	Includes the mention of stigma that HIV+ individuals face. This includes negative attitudes, prejudice and beliefs about people living with HIV, especially among Haitian migrants in the Dominican Republic. This includes the reporting systems available to HIV+ individuals. This includes the lack thereof.
1c. Discrimination	Includes the mention of discrimination, mainly racial among Dominicans and Haitians. But is also due to the unfair and unjust treatment of someone based on their real or perceived HIV status – that occurs in settings, such as work or medical (hospitals, clinics). This includes the lack thereof.
1d. HIV Testing	Includes the mention of HIV testing, testing services and procedures available. This also includes the mention medical prescription being necessary to perform HIV testing. This also includes the lack thereof.
1e. Loss to Follow-up	Includes the mention of individuals who are HIV+ confirmed via diagnostic testing, but not connected to HIV care due to a loss of follow up. Includes the mention of the seasonal transient work and economic opportunities to Haitian migrants, especially among HIV+ individuals Some examples are due to cost of care, life priorities, returning to Haiti and trust. This includes the lack thereof.
2. Governmental	

2a. Politics	Includes the mention of how politics play a role in HIV supportive care for the general population and targeted populations. Includes the mentions of documents, official paperwork that will allow migrants to be in Dominican Republic without the fear of being deported. Examples of this includes a birth certificate or an identification card with a picture, name and birthdate. This includes the lack thereof.
2b. National HIV Plan	Includes the mention of the National HIV Plan for Dominican Republic to address the HIV rates, especially among certain populations.
2c. Funding	Includes the mention of national and international funding for HIV prevention and control
2d. Health System	Includes of the mention of Dominican Republic health system structure. This includes the mention of Haiti's health system.
2e. Human Rights	Includes the mention to increase human right efforts for Haitian migrants. This includes the lack thereof.
3. Medical Setting	
3a. SAIs	Includes the mention of a governmental initiative, SAI's (Servico de Atencion Integral), a comprehensive HIV care center located around different areas in the Dominican Republic
3b. Low-resource setting	Includes the mention of resources, either biomedical or physical resources available in medical care settings. Examples of this includes lack of HIV rapid testing, hospital beds, availability of doctors. This includes the lack thereof.
3c. HIV Education Among Care Providers	Refers to the need to increase medical providers and staff competency in HIV diagnosis, methods of transmission, and treatment across the lifespan through education. Includes the recommendations to create more educational opportunities for

	medical providers and current medical students. This includes the lack thereof.
4. Future Directions	
4a. PrEP	Includes the mention of PrEP as a method of preventative measure that is beginning to be introduced to HIV+ populations.
4b. Mobile Units	Includes the mention of using mobile units to bring HIV centered care to hard to reach populations, including Haitian migrant populations. This includes the lack thereof.

Appendix B Map of Hispaniola: Haiti and the Dominican Republic



Retrieved from <https://www.britannica.com/place/Hispaniola> [43]

Bibliography

1. UNAIDS (2006). Fact Sheet: Caribbean. Retrieved from https://www.who.int/hiv/mediacentre/200605-FS_Caribbean_en.pdf
2. UNAIDS (2018). Data 2008. Retrieved from https://www.unaids.org/sites/default/files/media_asset/unaid-data-2018_en.pdf
3. Alami, Aida (2018). The New York Review of Books: NYR Daily. Between Hate, Hope, and Help: Haitians in the Dominican Republic. Retrieved from <https://www.nybooks.com/daily/2018/08/13/between-hope-hate-help-haitians-in-the-dominican-republic/>
4. Wright, Pam (2007). The Origin of the Dominican Batey. Children of the Nations: Raising Children Who Transforms Nations. Retrieved from <https://cotni.org/news/dominican-republic/2007/11/14/origin-dominican-batey>
5. CNN.com (2020). Haiti Earthquake Fast Facts. CNN Editorial Research. Retrieved from <https://www.cnn.com/2013/12/12/world/haiti-earthquake-fast-facts/index.html>
6. Batalova, J. and Schulz, J. (2017). Haitian Immigrants in the United States. Migration Policy Institute: Migration Information Source. Retrieved from <https://www.migrationpolicy.org/article/haitian-immigrants-united-states>
7. UNAIDS (2018). Country: Haiti. Retrieved from <https://www.unaids.org/en/regionscountries/countries/haiti>
8. Fonner, V., Armstrong, K., Kennedy, C., O'Reilly, K. and Sweat, M (2014). School Based Sex Education and HIV Prevention in Low- and Middle- Income Countries: A Systematic Review of Meta-Analysis. *PLoS One*. 9(3): e89692. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3942389/>
9. Viruell-Fuentes, E., Miranda, P., and Abdulrahim, S. (2012). More than culture: Structural racism, intersectionality theory, and immigrant health. *Social Science & Medicine*. Retrieved from <https://sph.umd.edu/sites/default/files/files/Viruell%20Fuentes%20et%20al%202012%20SSM%20More%20than%20Culture%20Structural%20Racism.pdf>
10. World Politics Review (2018). How a Broken Migration Policy Has Divided Haiti and the Dominican Republic. Retrieved from <https://www.worldpoliticsreview.com/insights/24431/how-a-broken-migration-policy-has-divided-haiti-and-the-dominican-republic>
11. Centers for Disease Control and Prevention (2019). About HIV/AIDS. Retrieved from <https://www.cdc.gov/hiv/basics/whatishiv.html>
12. Global Health – Dominican Republic (2017, June 30). Centers for Disease Control and Prevention. Retrieved from <https://www.cdc.gov/globalhealth/countries/dr/default.htm>

13. Centers for Disease Control and Prevention (2019, September 27). Facts about HIV Stigma. Retrieved from <https://www.cdc.gov/hiv/basics/hiv-stigma/index.html>
14. Rojas, P., Malow, R., Ruffin, B., Rothe, E. and Rosenberg, R. (2011). The HIV/AIDS Epidemic in the Dominican Republic: Key Contributing Factors. *J Int Assoc Physicians AIDS Care (Chic)*. 206-315. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5637397/>
15. UNAIDS (2020). 90-90-90: Treatment for All. Retrieved from <https://www.unaids.org/en/resources/909090>
16. Virginia Braun & Victoria Clarke (2006). Using thematic analysis in psychology, *Qualitative Research in Psychology*, 3:2, 77-101, DOI: 10.1191/1478088706qp063oa. Retrieved from <https://core.ac.uk/download/pdf/1347976.pdf>
17. Cardenas, R., Quezada, H., Terrero, V. (2018, September). Plan Estrategico Nacional (PEN) Para La Prevencion y El Control de Las ITS, VIH, y El SIDA 2019-2023.
18. Brandenberger, J., Tylleskar, T., Sontag, K., et al. (2019). A systematic literature review of reported challenges in health care delivery to migrants and refugees in high-income countries - the 3C model. *BMC Public Health*. Retrieved from <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-019-7049-x>
19. UNHCR: The UN Refugee Agency. Global Trends: Forced Displacement in 2017 (2018, June 25). Retrieved from <https://www.unhcr.org/5b27be547.pdf>
20. Cochrane Methods Equity. Migrant Health. Retrieved from <https://methods.cochrane.org/equity/migrant-health>
21. Richards, S.D., Mendelson, E., Flynn, G., Messina, L., et. al. (2019, June 13). Evaluation of a comprehensive sexuality education program in La Romana, Dominican Republic. *International Journal of Adolescence*. Retrieved from https://www.researchgate.net/publication/333777681_Evaluation_of_a_comprehensive_sexuality_education_program_in_La_Romana_Dominican_Republic
22. Koenig, S., et al (2010). Successes and challenges of HIV treatment programs in Haiti: aftermath of the earthquake. *HIV Ther*. 4(2): 145–160. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3011860/>
23. CDC Division of Global HIV & TB Country Profile: Haiti (2019). Retrieved from <https://www.cdc.gov/globalhivtb/where-we-work/Haiti.pdf>
24. American Health Foundation Haiti (2019). Retrieved from <https://www.aidshealth.org/global/haiti/>
25. Research Dossier: Prevention for Girls and Young Women Dominican Republic. Retrieved from https://www.ippf.org/sites/default/files/hiv_prevention_girls_and_young_women_dominican_republic.pdf

26. Haiti Country Operational Plan: Strategic Direction Summary (2019). PEPFAR. Retrieved from https://www.state.gov/wp-content/uploads/2019/09/Haiti_COP19-Strategic-Directional-Summary_public.pdf
27. Advancing Partners and Communities (2019). Reaching Key Populations and Improving HIV Services: Country Program in Review Dominican Republic. Retrieved from https://www.advancingpartners.org/sites/default/files/sites/default/files/resources/tagged_apc_dr_report_doc.pdf
28. Vietti, F., and Scribner, T. (2013). Human Insecurity: Understanding International Migration from a Human Security Perspective. *Journal on Migration and Human Security*. Retrieved from <https://journals.sagepub.com/doi/pdf/10.1177/233150241300100102>
29. Pan American Health Organization (2017). Country Report: Dominican Republic. Retrieved from https://www.paho.org/salud-en-las-americas-2017/?page_id=115
30. Archibald, C. (2010). HIV/AIDS-Associated Stigma among Afro-Caribbean People Living in United States. *Arch Psychiatric Nursing*. 24(5): 362-364. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2943852/>
31. Anderson, et al (2008). HIV/AIDS-related stigma and discrimination: Accounts of HIV-positive Caribbean people in the United Kingdom. *Social Science & Medicine*. 67(5). Pages 790-798. Retrieved from https://www.sciencedirect.com/science/article/pii/S0277953608002372?casa_token=FMM5H3AIr2UAAAAA:J1wMowZYL1W9c00iByWJ-JV91dJZey7tWEr0w29ku99jhJSvp1BGVdiKMG50wcZiQjZW-HhltA
32. Stringer, K.L., Turan, B., McCormick, L. et al. (2015, December 09). HIV-Related Stigma Among Healthcare Providers in the Deep South. *AIDS and Behavior*. Pages 115-125. Retrieved from <https://link.springer.com/article/10.1007/s10461-015-1256-y>
33. Chaudoir, S.R. and Quinn, D.M. (2020). Revealing concealable stigmatized identities: The impact of disclosure motivations and positive first disclosure experiences on fear of disclosure and well-being. 66(3): 570–584. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4494783/>
34. Vanable, P.A., Carey, M.P., Blair, D.C. and Littlewood, R.A. (2006). Impact of HIV-Related Stigma on Health Behaviors and Psychological Adjustment Among HIV-Positive Men and Women. *AIDS and Behavior*. 10(5). Pages 473–482. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2566551/>
35. Lopez-Severino, I. and de Moya, A. (2007). Migratory Routes from Haiti to the Dominican Republic: Implications for the Epidemic and the Human Rights of People Living with HIV/AIDS. *Revista Interamericana de Psicología/Interamerican Journal of Psychology*. 41(1). Pages 7-16. Retrieved from <http://pepsic.bvsalud.org/pdf/rip/v41n1/v41n1a02.pdf>
36. Stephanie Glen (2014, December 9). Snowball Sampling: Definition, Advantages and Disadvantages. Statistics How To. Retrieved from <https://www.statisticshowto.com/snowball->

[sampling/#:~:text=Snowball%20sampling%20is%20where%20research,and%20becomes%20larger%20and%20larger.](#)

37. Lowe, A., Norris, A., Farris, A. J., and Babbage, D.R. (2018). Quantifying Thematic Saturation in Qualitative Data. *Field Methods*. *SAGE journals*. 30(3). 191-207. Retrieved from <https://journals.sagepub.com/doi/abs/10.1177/1525822X17749386?journalCode=fmxd>
38. Consejo Nacional Para el VIH y el SIDA (2020). Retrieved from <http://www.conavihsida.gob.do/>
39. Reyes-Estrada, M., Varas-Diaz, N., and Martinez-Sarson, M. (2015). Religion and HIV/AIDS Stigma: Considerations for the Nursing Profession. *New School Psychol Bull*. 12(1): 48-55. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4744372/>
40. Keane, J., Pharr, J.R., Buttner, M.P., and Ezeanolue, E.E. (2017). Interventions to Reduce Loss to Follow-up During All Stages of HIV Care Continuum in Sub-Saharan Africa: A Systematic Review. *AIDS Behavior* 21(6). 1745-1754. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/27578001/>
41. Villegas, P. (2017, April 23). Memo from Mexico: Where Machismo Is Entrenched, Focus Moves to the Trenches. *The New York Times*. Retrieved from <https://www.nytimes.com/2017/04/23/world/americas/where-machismo-is-entrenched-focus-moves-to-the-trenches.html>
42. Jean-Patrick Alfred (2012). *Sante Publique*. 24(5). Pages 453-458. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/23472986/>
43. The Editors of Encyclopedia Britannica. Hispaniola: Island, West Indies. Britannica. Retrieved from <https://www.britannica.com/place/Hispaniola>
44. Kay, E.S. (2018, March 1). Experienced HIV-related stigma in healthcare and community settings: Mediated associations with psychosocial and health outcomes. *J Acquir Immune Defic Syndr*. 77(3). Pages 257-263. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5807196/>