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Examining the unique characteristics of a non-probability sample of undocumented female sex workers with dependent children: The case of Haitians in the Dominican Republic

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Introduction

Globally, foreign migration is common and is especially prevalent in the Americas – there are an estimated 60 million migrants in the Western Hemisphere alone (IOM 2012). Increasingly, migrants within the Americas are foregoing the United States and Canada as destinations in favor of movement between Latin American states (IOM 2012). About half of all migrants are women (Basok and Piper 2012), and depending on the geographic

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Ethical Approval
All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Conflict of Interest
The authors declare no conflict of interest.

context, many are undocumented (Keys et al. 2014). Formal economic opportunities for undocumented women in Latin America are limited and often pay little, such as domestic work. Undocumented women in Latin America may turn to sex work because the pay is often better and the work is less exploitative than other jobs available to them, such as housekeeping or child care (Rivers-Moore 2010). However, female sex workers (FSWs) face numerous challenges, including exposure to sexually transmitted infections, violence from clients and non-clients, economic hardship, and poor mental health (Parker and Aggleton 2003, Chudakov et al. 2002, Ulibarri et al. 2009). Currently, we know very little about undocumented FSWs, despite the likelihood that their presence is increasing throughout Latin America (Swing 2014). Understanding the unique experiences of these women is a critical first step in order for public health initiatives to meet the needs of this vulnerable population.

Key drivers of international migration in Latin America and the Caribbean include economic inequalities, limited opportunities for women, political upheaval, natural disasters or degradation of natural resources, urbanization, and translational relationships with friends or family who have previously migrated (Apostolopoulos and Sönmez 2007). Much of this movement is bi-national, characterized by migrants moving from their impoverished nations of origin to their more affluent next-door-neighbors. In the Central America/Caribbean region, most bi-national movement occurs along the Nicaragua-Costa Rica, Guatemala-Mexico, (Goldenberg et al. 2012), and Haiti-Dominican Republic borders (Alscher 2011).

Within Latin America, the Dominican Republic is an ideal place to study migrant FSW for several reasons. First, sex work is not illegal in the Dominican Republic, meaning that the law does not punish persons over the age of 18 for exchanging money, goods, or other services for sex (República 2014). Secondly, severe economic and human development disparities between Haiti and the Dominican Republic (WorldBank 2014a, b) have led to a substantial outmigration of Haitians to their Dominican neighbors (Riveros 2013). Estimates suggest that between 500,000 and 1.5 million Haitians live and work in the Dominican Republic (Canales, Becerra Vargas, and Montiel Armas 2009, Riveros 2013), 35% of whom are women (Tactuk, Ureña, and G.E. 2012). Moreover, estimates suggest that up to 90% of Haitian migrants are undocumented (CEFASA and CEFINOSA 2012) and often live in extremely impoverished areas that lack basic public services (e.g., *bateyes*[1]) (Kaiser et al. 2015). Haitian women are especially marginalized, since they earn exceptionally low wages. A recent survey found that 46% of Haitian migrant women in the Dominican Republic earned less than $5,000 Dominican pesos (US$109) per month (Tactuk, Ureña, and G.E. 2012), which likely creates increasing pressure to engage in sex work. Another study of Haitian migrant women in the Dominican Republic who live on *bateyes* found that 20% reported a history of engaging in some form of sex work (Brewer et al. 1998). This number has likely grown since the summer of 2014, when new legislation took effect that stripped generations of Haitian-Dominicans of their citizenship rights, reversed their eligibility to work in the formal sector, and increased Haitian migrants' vulnerability to deportation (Archibold 2013). Yet, the unique experiences of Haitian FSWs living in the Dominican

[1]Bateyes are impoverished sugar cane cutting villages in the Dominican Republic that are almost exclusively populated by Haitains.

Republic are highly under-researched, limiting our ability to create appropriate interventions.

Some existing initiatives, such as *Movimiento de Mujeres Unidas* (MODEMU) and *El Centro de Promoción y Solidaridad Humana* (CEPROSH) aim to address the needs of sex workers in the Dominican Republic. MODEMU and CEPROSH work collaboratively and separately to promote programs to defend sex workers' civil and human rights, improve access to healthcare, and expand the reach of HIV/STI prevention and treatment services. Still, few interventions are tailored to the unique needs of Haitian FSWs. This study builds our understanding of how Haitian sex workers, most of whom are undocumented, differ from their documented Dominican counterparts. In this article, we construct a profile of characteristics unique to Haitian FSWs that differentiates them from Dominican FSWs. Due to the new anti-Haitian legislation in the Dominican Republic, it is likely that the number of Haitian women engaging in sex work will grow. Thus, understanding how Haitian FSWs differ from Dominicans will help public health initiatives target outreach and services to meet the needs of this expanding population.

The research team hypothesized that several factors may differ between Haitian and Dominican FSWs. For instance, depression is prevalent among sex workers across multiple sociocultural contexts (Rekart 2005). However, anti-Haitian discrimination and the omnipresent threat of deportation may worsen depression among Haitian migrant FSWs in the Dominican Republic. Similarly, sex work is highly stigmatized in general (Rekart 2005), but discrimination against Haitians may lead to greater internalized sex work-related stigma for this group compared to Dominican FSWs. Additionally, it is widely recognized that engaging in sex work in a formal setting (e.g., brothel, cabaret) is safer than working independently (e.g., street sex work) (Harcourt and Donovan 2005). However, discriminatory hiring practices may contribute to a lower likelihood of Haitian FSWs working in this context. Lastly, the rate of secondary school enrollment is much higher among Dominicans than Haitians (Werner 2014). Therefore, it is likely that health consciousness will be significantly lower among Haitians, since the relationship between education and engaging positive health behaviors is well documented (Iverson and Kraft 2006).

Methods

Participants

This is a secondary examination of a cross-sectional study about motherhood, child health, and stigma (e.g., sex work or HIV-related stigma) among the following three groups of women: sex workers, women living with HIV, and a control group of HIV-negative women who were not sex workers. This article presents data from a non-probability sample of Haitian (N=94) and Dominican (N=255) FSWs in San Felipe de Puerto Plata, Dominican Republic. Participants fell into two categories of sex workers: 1) formally employed and 2) independent. In order to obtain a diverse sample, sex workers were recruited from several rural and urban sex work sites including, carwashes[2], escort resorts[3], and casas de citas/ cabarets[4]. Independent sex workers[5] were recruited from these same locations (but reported no formal employment arrangement with them) and the street. All potential participants

were approached by a trained study staff member who briefed them on the purpose of this research and confidentiality procedures; interested women were screened for eligibility.

To be eligible for the study, participants had to be Spanish-speakers, older than 17 years of age, and could not be pregnant at the time data were collected. Since the goal of the parent study was to examine child health among stigmatized mothers, participants had to have at least one biological or adopted[6] child age 15 years or younger. Recruitment took place from April to December 2014 and all participants received an incentive of RD$150 (US$3.35).

Procedures

Trained interviewers verbally administered tablet-based questionnaires in Spanish. Interviews were conducted in private rooms or in quiet, secluded areas of participants' work to ensure privacy and confidentiality. The Colorado Multiple Institutional Review Board (COMIRB) and Consejo Nacional de Bioética en Salud (CONABIOS) granted ethical approval for this study. Participation in the study was voluntary and written informed consent was obtained from each of the participants.

Measures

Haitian nationality, the primary outcome variable, was obtained by participant self-reports. Several sex work-related covariates were included in the analysis. For instance, depression among FSWs, was measured by the 10-item Center for Epidemiological Studies Short Depression Scale (CES-D 10; Cronbach's alpha=0.83)(Zhang et al. 2012). The CES-D 10 asks participants to report the number of times they experienced depression symptoms in the last week using a 4-point scale (e.g., "I was bothered by things that usually don't bother me"; rarely or none of the time, some or a little of the time, occasionally or a moderate amount of the time, all of the time). Mean scores (range: 0–3) were calculated for the CES-D 10, where a mean score of 10 was the clinical cutoff for indicated depression. Participants with a CES-D 10 score of ≥ 10 were categorized as "depressed", while participants with a CES-D 10 score of ≤ 9 were categorized as "not depressed" (Anderson 1994).

Internalized sex work-related stigma (ISW-RSS) was measured using an adapted version of the 6-item Internalized AIDS-Related Stigma Scale ("I feel guilty that I am a sex worker") (Kalichman et al. 2009). In order to increase scale sensitivity, response choices were converted from dichotomous options (disagree/agree) to a 4-point scale (e.g., no, rarely, sometimes, yes") for the ISW-RSS (Cronbach's alpha=0.83). Sex work-related stigma was determined by calculating mean scores on this scale (range: 1–4). Higher means indicated more internalized sex work-related stigma.

[2]Women who engage in car wash-based sex work, work in carwashes with on-site bars staffed by sex workers available for hire.
[3]Escort resorts are adults-only resorts staffed by sex workers available for hire
[4]Cabarets/casas de citas are bars and brothels that employ women to sell alcoholic drinks, dance with customers, and provide sexual services. Female employees may or may not live on the premises.
[5]Independent sex workers are sex workers who are not formally employed by any particular business. Typically, these women work on a freelance basis on the street, from their homes, or in local bars.
[6]In this context, "adoption" refers to formal and informal arrangements where an individual acts as a child's primary caretaker for an indefinite period of time.

Health consciousness was measured using the Re-Conceptualized Health Consciousness Scale (Cronbach's alpha=0.83)(Hong 2009). This scale asks participants to report how strongly they agree with 11 different health-related declarations using a 5-point scale (e.g., "Good health takes active participation on my part"; strongly disagree, disagree, neutral, agree, strongly agree). Mean scores (range: 1–5) were calculated where a higher score meant increased health consciousness.

Data were also collected on the type of sex work venue (e.g., cabaret/casa de cita, carwash, escort resort) and whether women engaged in full-time sex work. Women who reported formal employment by one of these venues were categorized as "formal sex workers;" FSW who reported no formal employment were categorized as "independent sex workers." Engaging in sex work full time was ascertained by the WHO World Health Survey (WHS) Individual Questionnaire, using two questions ("How many hours per day, excluding unpaid mealtimes and on-call hours do you work at your job?" "How many days per week do you work at your job?"). Number of hours per week was multiplied by number of days per week, yielding the total number of hours per week spent engaged in sex work. Then, the variable was dichotomized by differentiating participants who engaged in sex work full time (40 hours or more per week) from those who did not.

Permanent income, which measures household wealth, was assessed using the WHS Permanent Income Index, which is a list of household assets (e.g., "does anyone in your household have a refrigerator"; yes/no) (WHO 2002). Permanent income is thought to be a better financial indicator than participant self-reports of income because it eliminates biases based on respondents' different interpretations of income and expenditures (Zhang et al. 2012). To calculate permanent income, principal components analysis (PCA) was conducted on items in the WHS Permanent Income Indicators questionnaire. Specifically, PCA reduces the items contained in the index, based on participant reports, to those that imply measurable differences in household wealth. Then, this process assigns a value score to those items retained in the index to capture the amount of wealth they contribute relative to the other items. Items with rotated factor loadings (promax) <0.4 were excluded from final calculations of permanent income. Remaining items were weighted by their rotated (promax) factor loadings and retained for analysis. Mean scores (range: 0–1) for permanent income were then calculated using weighted questionnaire items, where higher scores meant more permanent income (Zhang et al. 2012).

Finally, models controlled for years of education (last grade completed), age (years), partnership ("which of the following best describes your relationship type?"; partnered/unpartnered), number of biological or adopted children (number of children), and whether all children lived with respondents (WHO WHS Household questionnaire) (WHO 2002).

Analyses

All statistical procedures were conducted in Stata 13.1. Descriptive statistics summarized participant characteristics. Means and medians were used for continuous variables (e.g., age) and percentage frequencies were used for categorical variables (e.g., partnered). Then, t-tests (continuous variables) and chi-squared tests (categorical variables) were used to determine if differences existed for specific independent variables.

Separate unadjusted logistic regressions were performed to identify significant relationships between independent variables and Haitian nationality. Then, adjusted logistic regression models that included all independent variables simultaneously (e.g., all of the independent variables were controlled for at once) were computed. Since the largest percent of missing data for any variable was <6%, listwise deletion was used in the final analysis.

Results

Participants

Table 1 summarizes the sample characteristics, stratified by nationality (Haitian or Dominican). On average, Haitian FSW had fewer years of education (7.2 vs. 8.8 years), more biological or adopted children (2.7 vs. 2.1 children), and lower permanent income (0.3 vs. 0.4), health consciousness (4.2 vs. 4.4), and internalized sex work-related stigma (2.3 vs. 3.0) scores. Haitian FSW were less likely to engage in formal sex work (26.6% vs. 85.1%), sex work at least full time (41.3% vs. 72.1%), and were less likely to be depressed than their Dominican counterparts (64.5% vs. 72.6%). However, Haitian FSW were more likely to be partnered (36.6% vs. 30.6%), and have all of their children living with them (60.2% vs. 47.2%).

Table 2 displays the unadjusted and adjusted logistic regression results for the odds of Haitian nationality by covariates.

Several covariates were significantly associated with Haitian nationality in the adjusted analysis. For instance, Haitian FSWs were younger (aOR=0.93; 95% CI=0.87–0.99), less educated (aOR=0.88; 95% CI=0.78–0.99), and had more children (aOR=1.19; 95% CI=0.57–2.50) than their Dominican peers. Haitian FSWs also had different working conditions and experiences with stigma than Dominican FSWs. First, Haitian FSWs were less likely than Dominican FSWs to engage in formal sex work (aOR=0.06; 95% CI=0.03–0.12), as we hypothesized. Haitian FSWs were also less likely to work full-time (aOR=0.42; 95% CI=0.20–0.88), and were generally poorer than their Dominican counterparts (aOR=0.01; 95% CI=0.00–0.19). Finally, Haitian FSWs reported *less* internalized stigma than Dominican FSWs (aOR=0.48; 95% CI=0.30–0.76). Depression and health consciousness were not associated with Haitian nationality.

Discussion

This study presents important characteristics associated with a non-probability sample of migrant Haitian FSWs compared to local Dominican FSWs; per the enrollment criteria, all women in both groups reported having at least one biological or adopted child age 0–15. Several notable differences emerged between these two groups of women, which can aid public health efforts in the Dominican Republic aimed at sex work harm reduction. Haitian FSWs are, on average, less educated and poorer than their Dominican counterparts. Haitian FSWs are also less likely to work full-time. Thus, Haitian FSWs may especially benefit from educational outreach, including peer educators to decrease the health risks associated with FSW, as well as training in other income-generating activities. Peer education and establishing support networks among Haitian FSWs is also important because they are less

likely to be affiliated with a formal sex work establishment. Generally, sex work that takes place in informal settings, such as on the street, is more dangerous because the client has more control and there is a higher risk of physical and sexual violence (Harcourt and Donovan 2005). Physical and sexual violence against sex workers increases the odds of sexually transmitted infections, including HIV, by drastically reducing FSW's capacity to negotiate safer sex practices or by subjecting FSW to coercive or forced unprotected sex (Shannon et al. 2009).

Some community health organizations in the Dominican Republic, such as CEPROSH, have attempted to address some of the issues facing Haitian FSWs through peer-based campaigns. Community leaders of Haitian descent, all of whom have current or past experience with sex work, are specially trained as peer-outreach workers by CEPROSH to conduct HIV/STI prevention classes in *bateyes* and other Haitian neighborhoods. Outreach workers also role-play with participants to improve condom negotiation skills, demonstrate how to properly apply a condom, encourage women to get tested for HIV, and educate FSW about HIV/STI transmission. Still, to the knowledge of the research team, there are no formal programmatic efforts to address workplace safety and client-perpetrated violence against Haitian FSW in the Dominican Republic. Such programs are needed, given the context of FSW among women of Haitian descent living in the Dominican Republic.

In addition, Haitian FSWs report having a greater number of biological or adopted children than Dominican FSWs. This is likely reflective of general differences in fertility between Haitians and Dominicans, where large-scale demographic data show similar trends (Haitians: 3.2 children born/woman; Dominicans: 2.5 children born/woman) (Unicef 2012b, a). Moreover, our finding regarding stigma runs contrary to our original hypothesis because Haitian FSWs reported lower levels of internalized sex work-related stigma than Dominican FSWs. Though we can only speculate, this may be due to the effect of foreign migration for sex work. Prior research has shown that some women leave their home countries to engage in sex work with greater anonymity (Cabezas 1999), which lessens stigma, and may be the case for some Haitian FSW in this study. Alternatively, it is possible that there are differences in how sex work is perceived by Haitian and Dominican FSWs. For instance, job scarcity, social marginalization, and economic instability is far worse for Haitian women, who are overwhelmingly prohibited from working in the formal sector, than for Dominican women. Ethnographic research about gay and gender non-conforming individuals in Mexico suggests that in severely resource constrained settings, such as that experienced by Haitian women in the Dominican Republic, stigma is not simply associated with engaging in sex work; it is more complex. Rather, for this group, stigma is tied to how sex workers spend the money they earn, not how they earn it (Prieur 1998). This finding is corroborated by ethnographic work about Haitian and Dominican FSWs in the Dominican Republic that showed that sex workers stigmatized other FSWs who had children and did not send them money. Conversely, these women admired FSWs who provided their children with financial support (Brennan 2004). Because of the disparity in social and economic opportunities between Haitians and Dominicans, it is possible that Haitian women do not consider sex work a choice, while Dominican women are more flexible, which may affect internalized stigma. Therefore, interventions to address sex work-related stigma would benefit Haitian

FSWs far less than efforts to reduce anti-Haitian discrimination, the creation of alternative economic opportunities, and reversing the 2014 amendment to the Dominican constitution.

Finally, health consciousness and depression were not significantly associated with Haitian nationality in the adjusted multivariate models as we hypothesized. This study is the first, to our knowledge, to examine depression or health consciousness among Haitian FSWs living in the Dominican Republic. This finding may help public health officials prioritize their efforts to improve the health and lives of these women. Fortunately, this study showed that Haitian FSWs, in particular, do not suffer from greater levels of depression compared to Dominican FSWs. However, the proportion of participants in each group who had a positive depression screen was substantial (e.g., Haitian FSWs=64%; Dominican FSWs=73%). Few empirical studies have estimated the prevalence of depression in FSWs, though one meta-analysis found it to be quite high (50%) as well (Ross, Farley, and Schwartz 2004). Thus, widespread efforts for the general FSW population in the Dominican Republic should be promoted, such as access to free mental health clinics or mobile clinics offering counseling and support services.

This study had limitations. First, surveys were conducted in Spanish, which may have biased our sample of Haitian women. Specifically, the parent study did not intend to focus on the experiences of Haitian FSWs. Because of this, we did not sample from Haitian communities (e.g., *Bateyes*), where inhabitants are more likely to be monolingual Haitian Kreyol speakers. Therefore, Haitian FSWs in our sample may be different from the larger demographic of these women. Moreover, since no part of this research took an ethnographic approach, we are unable to provide data about the day-to-day lives of these women, which could have provided additional context. Additionally, we did not measure some variables that could have been important for Haitian FSWs such as how long they had lived in the Dominican Republic or their experiences with anti-Haitian discrimination. Lastly, due to the objectives of the parent study, only women with children were enrolled in this research. FSW who are parents may be different than other FSW, which also could have introduced bias. Despite these limitations, our findings are of considerable importance, given the dearth of existing literature on this timely and important topic. Given that the humanitarian crisis among Haitians in the Dominican Republic is ongoing and could even worsen, this work provides a foundation for future research.

Conclusions

Overall, Haitian FSWs in the Dominican Republic are more vulnerable than their Dominican peers, since they are less educated, poorer, and have more dependent children. However, this study shows that Haitian FSW are less likely to internalize sex work-related stigma than Dominican FSWs, suggesting that stigma reduction campaigns would not be particularly beneficial for this population. Instead, efforts to increase economic stability, reduce anti-Haitian discrimination, and overturn anti-Haitian legislation could yield greater gains for Haitian FSWs living in the Dominican Republic. Depression was high among Haitians and Dominicans alike in this study, demonstrating the need for widespread initiatives to address mental health in FSWs. More research is needed to understand the plight of Haitian women in the Dominican Republic, especially in light of the changes to the Dominican constitution.

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References

Alscher S. Environmental degradation and migration on Hispanola island. International Migration. 2011; 49(S1):e164–e188.

Anderson EM. Screening for depression in well older adults: Evaluation of a short form of the CES-D. American Journal of Preventive Medicine. 1994; 10(22):77–84. [PubMed: 8037935]

Apostolopoulos, Y., Sönmez, S. Tracing the diffusion of infectious diseases in the transport sector. In: Apostolopoulos, Y., Sönmez, S., editors. Population mobility and infectious disease. US: Springer; 2007. p. 131-156.

Archibold RC. Dominicans of Haitian descent cast into legal limbo by court. New York Times. 2013 Oct 24.:A1, A6.

Basok T, Piper N. Management Versus Rights: Women's Migration and Global Governance in Latin America and the Caribbean. Feminist Economics. 2012; 18(2):35–61. DOI: 10.1080/13545701.2012.690525.

Brennan, D. What's love got to do with it? Transnational desire and sex tourism in the Dominican Republic. Durham: Duke University Press;

Brewer TH, Hasbun J, Ryan CA, Hawes SE, Martinez S, Sanchez J, Butler de Lister M, Constanzo J, Lopez J, Holmes KK. Migration, ethnicity and environment: HIV risk factors for women on the sugar can plantations of the Dominican Republic. AIDS. 1998; 12(14):1879–1887. [PubMed: 9792389]

Cabezas, A. Women's work is never done. In: Kempadoo, K., editor. Sun, Sex, and Gold: Tourism and Sex Work in the Caribbean. Maryland: Roman and Littlefield Publishers Inc; 1999. p. 93-124.

Canales, AI., Becerra Vargas, PN., Montiel Armas, I. Salud en zonas fronterizas: Haití y la República Dominicana. Santiago de Chile; 2009.

CEFASA, and CEFINOSA. Mano de obra de origen Haitiano a la economía Dominicana. Santiago, República Dominicana: Centro de Formacion y Agraría (CEFASA) y Consultores Económicos Financieros y Organizacionales (CEFINOSA); 2012.

Chudakov B, Ilan K, Belmaker RH, Cwikel J. The motivation and mental health of sex workers. J Sex Marital Ther. 2002; 28(4):305–15. [PubMed: 12082669]

Goldenberg SM, Strathdee SA, Perez-Rosales MD, Sued O. Mobility and HIV in Central America and Mexico: a critical review. J Immigr Minor Health. 2012; 14(1):48–64. DOI: 10.1007/s10903-011-9505-2. [PubMed: 21789558]

Harcourt C, Donovan B. The many faces of sex work. Sex Transm Infect. 2005; 81(3):201–6. DOI: 10.1136/sti.2004.012468. [PubMed: 15923285]

Hong, H. Scale development for measuring health consciousness: Re-conceptualization. 12th Annual International Public Relations Research Conference, Holiday Inn University of Miami Coral Gables; Florida. 2009.

IOM. Americas and the Caribbean: Regional Overview. International Organization for Migration (IOM); 2012. https://www.iom.int/americas-and-caribbean [accessed February 19]

Iverson AC, Kraft P. Does socio-economic status and health consciousness influence how women respond to health related messages in media? Health Education Research. 2006; 21(5):601–610. [PubMed: 16702193]

Kaiser BN, Keys HM, Foster J, Kohrt BA. Social stressors, social support, and mental health among Haitian migrants in the Dominican Republic. Revista Panamericana De Salud Publica-Pan American Journal of Public Health. 2015; 38(2):157–162. [PubMed: 26581057]

Kalichman SC, Simbayi LC, Cloete A, Mthembu PP, Mkhonta RN, Ginindza T. Measuring AIDS stigmas in people living with HIV/AIDS: the Internalized AIDS-Related Stigma Scale. AIDS Care. 2009; 21(1):87–93. DOI: 10.1080/09540120802032627 [PubMed: 19085224]

Keys HM, Kaiser BN, Foster JW, Burgos Minaya RY, Kohrt BA. Perceived discrimination, humiliation, and mental health: A mixed-methods study among Haitian migrants in the Dominican Republic. Ethn Health. 2014; 20(3):1–22.

Parker R, Aggleton P. HIV and AIDS-related stigma and discrimination: a conceptual framework and implications for action. Soc Sci Med. 2003; 57(1):13–24. [PubMed: 12753813]

Prieur, A. Mema's house: On transvestites, queens, and machos. Chicago: The University of Chicago Press; 1998.

Rekart ML. Sex-work harm reduction. Lancet. 2005; 366(9503):2123–34. DOI: 10.1016/S0140-6736(05)67732-X. [PubMed: 16360791]

República, Dominicana. Codigo Penal de la República Dominicana. Santo Domingo: República Dominicana; 2014.

Riveros, N. Estado del arte de las migraciones que atañen a la República Dominicana. República Dominicana; OBMICA: 2013.

Rivers-Moore M. But the kids are okay: motherhood, consumption and sex work in neo-liberal Latin America. Br J Sociol. 2010; 61(4):716–36. DOI: 10.1111/j.1468-4446.2010.01338.x. [PubMed: 21138429]

Ross CA, Farley M, Schwartz HL. Dissociation among women in prostitution. J Trauma Practice. 2004; 2(3–4):199–212.

Shannon K, Kerr T, Strathdee SA, Shoveller J, Montaner JS, Tyndall MW. Prevalence and structural correlates of gender based violence among a prospective cohort of female sex workers. British Medical Journal. 2009; 339(b2939) ARTN b2939. doi: 10.1136/bmj.b2939.

Swing, WL. Desperate women's dangerous moves. International Organization for Migration; 2014. [accessed February 29]

Tactuk, P., Ureña, C., Then, GE. Primera encuesta nacional de inmigrantes en la República Dominicana: Informe general. Santo Domingo, RD: Oficina Nacional de Estadística ONE; 2012.

Ulibarri M, Semple S, Rao S, Strathdee SA, Fraga-Vallejo MA, Bucardo J, De la Torre A, Salazar-Reyna J, Orozovich P, Staines-Orozco HS, Amaro H, Magis-Rodriguez C, Patterson TL. History of abuse and psychological distress symptoms among female sex workers in two Mexico-US border citie. Violence Vict. 2009; 24(3):399–413. [PubMed: 19634364]

Unicef. [accessed May 6th] At a glance: Haiti. 2012a. http://www.unicef.org/infobycountry/haiti_statistics.html

Unicef. [accessed May 6] At at glance: Dominican Republic. 2012b. http://www.unicef.org/infobycountry/domrepublic_statistics.html

Werner K. Differences in poverty in the Dominican Republic and Haiti: Factors that affect growth. Global Majority E-Journal. 2014; 5(1):57–71.

WHO. World Health Organization. World health survey A - Household questionnaire. 2002.

WorldBank. [accessed November 18] Country Profile: Dominican Republic. 2014a. http://www.worldbank.org/en/country/dominicanrepublic

WorldBank. [accessed November 18] Country Profile: Haiti. 2014b. http://www.worldbank.org/en/country/haiti

Zhang W, O'Brien N, Forrest JI, Salters KA, Patterson TL, Montaner JSG, Hogg RS, Lima VD. Validating a shortened depression scale (10 item CES-D) among HIV-positive people in British Columbia, Canada. PLoS One. 2012; 7(7):1–5.

Table 1

Demographic Characteristics of Haitian and Dominican Female Sex Workers Living in the Dominican Republic (2014)

Independent Variables	Haitian FSW (N=94)	Dominican FSW (N=255)	Total (N=349)	
	Mean ± SD	Mean ± SD	*p* [a]	Mean ± SD
Age	27.9±7.0	27.3±6.6	0.58	27.5±6.7
Years of education	7.2±3.0	8.8±2.9	≤0.001	8.4±3.0
Number of biological or adopted children	2.7±1.4	2.1±1.2	≤0.001	2.2±1.3
Permanent income score	0.3±0.1	0.4±0.1	≤0.001	0.4±0.1
Health consciousness	4.2±0.6	4.4±0.5	≤0.001	4.4±0.5
Internalized sex work-related stigma	2.3±0.9	3.0±0.8	≤0.001	2.8±0.8
	N (%)	N (%)	*p* [b]	N (%)
Formal sex work (yes)	25 (26.6%)	217 (85.1%)	≤0.001	242
Engages in sex work at least full time (40 hours per week or more) (yes)	38 (41.3%)	181 (72.1%)	≤0.001	219 (63.7%)
Partnered (yes)	34 (36.6%)	77 (30.6%)	0.21	112 (32.4%)
All children live with respondent (yes)	56 (60.2%)	120 (47.2%)	0.04	176 (50.6%)
Depression (yes)	60 (64.5%)	185 (72.6%)	0.12	245 (70.2%)

[a] Denotes statistical significance of t-tests for independent means between Haitian and Dominican women

[b] Denotes statistical significance of chi-squared tests between Haitian and Dominican women

Table 2

Unadjusted and Adjusted Logistic Regressions for the Odds of Haitian Nationality Among Female Sex Workers Living in the Dominican Republic

Independent Variables	Unadjusted OR [95%CI]	Adjusted OR [95% CI]
Age	1.01 [0.98, 1.05]	0.93 * [0.87, 0.99]
Years of education	0.84 *** [0.77, 0.91]	0.88 * [0.78, 0.99]
Partnered	1.37 [0.83, 2.25]	1.19 [0.57, 2.50]
Number of biological or adopted children	1.39 *** [1.16, 1.67]	1.66 *** [1.23, 2.24]
All children live with respondent	1.63 * [1.01, 2.64]	2.11 * [1.02, 4.35]
Formal sex work	0.06 *** [0.04, 0.11]	0.06 *** [0.03, 0.12]
Engages in sex work at least full time (40 hours per week or more)	0.27 *** [0.16, 0.44]	0.42 * [0.20, 0.88]
Permanent income score	0.01 *** [0.00, 0.06]	0.01 ** [0.00, 0.19]
Elevated depression symptoms	0.67 [0.41, 1.11]	1.02 [0.47, 2.22]
Health consciousness	0.41 *** [0.26, 0.66]	0.66 [0.37, 1.16]
Internalized sex work-related stigma	0.40 *** [0.30, 0.55]	0.48 ** [0.30, 0.76]

* $p<0.05$;

** $p<0.01$;

*** $p\leq0.001$