Maternal Health Among Venezuelan Women Migrants at the Border of Brazil.

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Abstract

Background: Meeting the Sexual and reproductive health and rights (SRHR) for populations living in fragile and humanitarian settings is critical, essential as well as a basic human right. Compounded with the inherent vulnerabilities of women in crises, there are substantial complications that directly associated with increasing the risks of poor SRHR outcomes for displaced populations. The current forced displacement of the Venezuelans migrants is one of the largest in the Latin America's history. Our research aimed to assess sexual and reproductive health and rights (SRHR) situation among Venezuelan women in Roraima State, Brazil.

Methods: A study with face-to-face interviews was conducted. Data collection covered various issues pertaining to SRHR services, access and use among Venezuelan migrant's women aged 18-49 years old. We used to data collection the Minimum Initial Service Package readiness assessment tools from the Inter-Agency Working Group on Reproductive Health.

Results: We present results of interviews with 405 women were conducted between 24 and 30 November 2019. The most common observed findings in our research as reported by women were unmet family planning needs. A significant proportion of women who needed family planning reported that they were unable to access family planning. This was attributed to either inability to access them and unavailability at the health care centres. Further, 25.0% of pregnant women or postpartum women did not receive antenatal or postnatal care.

Conclusion: Meeting the essential SRHR needs among Venezuelan's migrant women in Roraima, State, Brazil appears to be limited and challenging. Given the high and growing numbers of this migrant population in Brazil, the Brazilian health system must be adaptable to meet the needs of this population. Efforts among not only health governmental sectors, but also academic, non-governmental and international organisations need to be encouraged as well as coordinated for a comprehensive SRHR response. Given the current high risks associated with the Covid-19 pandemic. Meeting the SRH needs migrant populations has become more critical than ever given the current COVID-19 pandemic.

Background

Meeting the sexual and reproductive health and rights (SRHR) for populations living in fragile and humanitarian settings is essential as human rights[1]. It is estimated that over 70.8 million people are forcibly displaced worldwide[2], of which an estimated 34 million are adolescent girls and women of reproductive age[2,3], making up a significant proportion of the total displaced populations. Compounded with the inherent vulnerabilities of women in crises, there are substantial complications that directly associated with increasing the risks of poor SRHR outcomes for displaced populations. These are often associated with increased rates of exposure to gender-based violence[4], complications during pregnancy and childbirth, unsafe abortions and increased rates of reproductive tract infections among other[5–11].

Venezuela has been facing a complex economic and financial situation since 2014[12]. This has translated in worsening of SRHR indicators among Venezuelan women. Last available estimates showed, higher maternal mortality ratios, increased rates of adolescents' pregnancies, increased rates of HIV infection and limited availability of antiretrovirals[13,14], and effective prevention of on mother-to-child transmission of HIV and congenital syphilis[15,17]. The country has been also facing the resurgence of multiple vaccine-preventable (mumps, tetanus, diphtheria, measles and poliomyelitis) and vector-borne (dengue, chikungunya, Zika, malaria) infections, that pose health risks to the population at the borders[18,19], in particular for women, infants and children.

A significant number of Venezuelans are leaving the country, representing the largest displacement in the history of Latin America[20]. It is estimated that more than 289,000 Venezuelans move to Brazil between 2017 and December 2019 [20,21], particularly through the isolated northern state of Roraima where it is estimated up to 40,000 Venezuelans, are living in the main State cities Pacaraima and Boa Vista, and represent about 10% of the local population. Thirteen United Nations High Commissioner for Refugees (UNHCR) shelters were set up (including two only for indigenous people) in collaboration with the Brazilian Army. Mass vaccination campaign, as well as, support to strengthen local health care and services is ongoing by the Brazilian Ministry of Health with support from PAHO/WHO since early 2018[22].

To our knowledge limited comprehensive data exist around the SRHR needs of the Venezuelan migrant women at the borders as well as on the availability, response, and ability to access SRHR services. This data is essential to inform response, strengthen SRH service and quality delivery as well as to meet the prevailing needs. Previous reports from the region indicated that Venezuelan women face multiple barriers that limit their access to SRHR services in host countries like language difficulties, high number of people looking for attention, and cost of health services in Colombia, among others[23–24].

In light of the above, our research aims to provide an assessment of the current SRHR situation among displaced Venezuelans women of reproductive age in Roraima State, Brazil. Data from this research will help provide an overview of the prevailing SRHR issues among this migrant women population in the Roraima State, and this is believed to be provide an important contribution given the limited availability of SRHR data on this humanitarian crisis.

Methods

Study Design and Participants

A method study design (that combined both quantitative and qualitative data collection approaches) was conducted. Data collection tools used in the quantitative arm of this study were adapted from the Minimum Initial Service Package (MISP) readiness assessment tools from the Inter-Agency Working Group (IAWG) on Reproductive Health[25]. In this paper, we focus on the findings from the quantitative data collected from both the non-indigenous and indigenous (from the *Warao* and *Ñ E Pa* tribes came from the

Orinoco Delta region, but fluently in Spanish) women. This research was approved by the Ethics Committee of the University of Campinas, Campinas, Brazil.

The target population perceived eligible for this study were Venezuelan women aged 18–49 years old, living in the towns of Boa Vista (Roraima State capital city) and Pacaraima, (the former located at the main land crossing points from Venezuela), in Roraima State, Brazil. Women were hosted at five UNHCR shelters based in Boa Vista and two shelters in Pacaraima and women who lived in informal non-UN settlements in Boa vista and who attended the *St Agostinho* church to receive free food and goods from a programme supported by UNICEF and Caritas International. In Boa Vista, a purposively selected sample of the three largest shelters was selected. These included the shelter with the highest proportion of women aged 18–59, a shelter designated for indigenous persons, and in Pacaraima, two additional shelters (including one only for indigenous persons) established by the UNHCR.

Similarly, a purposively selected sample of women was invited to participate and voluntary accepted to take part in the study after signing written informed consent. All face to face interviews were conducted in Spanish between 24 and 30 November 2019. Data collectors include a team of five (three women and two men) trained interviewers. We used a pre-tested, electronic, semi-structured-survey questionnaire that combined both open and close-ended questions, on socio-demographic characteristics (age, race, cohabitation status, education, employment, income, place of residence and migration information), pregnancy and childbirth (births and pregnancies, current pregnancy status, antenatal or postnatal care and complications), other SRH issues (family planning preferences, other gynaecological issues), and availability and access of SRH services, including user's satisfaction. Data was entered directly into tablets and saved in a secured online database in Campinas University. The data entry system included validation rules to minimize data entry errors during the survey. A unique pre-defined identification number was attributed to each woman.

Statistical Analysis

Sample size calculation was informed by data provided by UNHCR. According to this data, a total of 7,233 persons lived in the 11 shelters that were administered by UNHCR, including 1,917 women aged 18–59 years old in the two towns during the times of data collection. Based on this, it was estimated at least 358 women are needed for this assessment, using a 95% confidence interval (CI) (Z = 1.96), a marginal error of 5% (0.05) and an estimated response rate of 80%[24]. This number was rounded up to a total of 405 women among which 47 were women from the indigenous population. The results looked the same for the indigenous women so we pooled them together.

Data analysis revolved around simple frequency distribution (using means and standard deviations (SD)) as well as bivariate analyses using the χ^2 or the Fisher exact tests were used. In addition, we estimated the 95% Confidence Interval (CI) to analyse the data. For the data that showed no normal distribution, the Mann-Whitney test for two groups or when was used and documented accordingly the Spearman coefficient of correlation. Level of significance was set at $p < 0.05$.

Results

A total of 405 women were interviewed (representing 21.1% of the total women population in the 11 UNHCR shelters in in the two cities: Romaira and Boavista), 343 (84.7%) who were recruited from the UNHCR shelters (including 47 indigenous women) and 62 women (15.3%) who were recruited from the *St Agostinho* church. A summary of baseline characteristics of the study participants is presented in Table 1. The age (mean ± SD) was 30.1 ± 8.6 (range 18–49; 95% CI; 28.39; 31.87). Most of the women were identified as biracial (62.0%), with a partner at the time of the interview (66.2%) and with high school or some higher education (65.1%). Furthermore, 359/405 (88.6%) migrated from less than 1,000 km. Many interviewed women (75.6%) reported that they migrated with children.

Table 1
Sociodemographic characteristics of the interviewed Venezuelan migrant women at the Brazilian-Venezuelan border (n = 405), 2019.

Characteristics of women	**N (%)**
Age (years) (n = 405)	
18–19	36 (8.9)
20–29	186 (45.9)
30–39	114 (28.2)
40–49	69 (17.0)
Ethnicity (n = 405)	
White	83 (20.5)
Indigenous	45 (11.1)
Biracial	251 (62.0)
Black or Asian	26 (6.4)
Cohabitation status (n = 403)	
With a partner	268 (66.2)
Without a partner	135 (33.3)
Educational level (n = 405)	
Illiterate	9 (2.2)
Primary school	132 (32.6)
Secondary school	180 (44.4)
Post-secondary school	84 (20.7)
Parity (n = 405)	
0	67 (16.5)
1–2	154 (38.0)
3–5	154 (38.0)
6 or more	30 (7.4)
Place of residence (n = 405)	
UN shelter	343 (84.7)
Outside the official shelters	62 (15.3)

Characteristics of women	N (%)
Main reasons for migrating (n = 405)	
Lack of work opportunities	326 (80.5)
Health problems	40 (9.9)
Violence	9 (2.2)
Other	30 (7.4)
Employment status before migrating (n = 405)	
Formal job	200 (49.5)
Informal job	97 (23.9)
Housewife or other	108 (26.6)
Current employment status (n = 405)	
Unemployed	378 (93.3)
Formal or informal employment	27 (6.7)

Table 2 describes the main SRHR issues and concerns as reported by women. Two thirds of the women in our sample do not met family planning needs and were unable to receive care when needed. Access to antenatal care was also another commonly cited concern, among 63 women (15.5%) who reported a childbirth after arrival in Roraima, 15 did not receive antenatal care. Main reasons were attributed to lack of access (10/15) or because they considered that they did not need care (5/14). 10 women (15.9%) reported having Caesarean delivery; 10 (15.9%) reported complications after childbirth (mainly fever, bleeding, and hypertension). 43 did not receive women postnatal care, mainly reasons were attribute to lack of access (18/43) and lack of information about the importance of this care (20/43). Additionally, 31 (49.2%) women reported that healthcare professionals did not offer contraception after childbirth.

Table 2
Sexual and reproductive health issues and care-seeking among Venezuelan migrant women at the Brazilian-Venezuelan border (n = 405), 2019.

Sexual and reproductive health issues and care-seeking	**n (%)**
Main self-reported sexual and reproductive health concerns	*N = 405*
Access to contraception	134 (33.1)
Gynaecological condition [e.g. menstrual disturbances, pelvic pain, vaginal discharge]	107 (26.4)
Sexually Transmitted Infection related symptoms	67 (16.5)
Antenatal or postnatal care	29 (7.2)
Gender-based violence	19 (4.7)
None	49 (12.1)
Woman consulted for SRH issue (n = 405)	
Yes	255 (63.0)
No	150 (37.0)
Reasons for consultation (n = 255)	
Contraception	79 (30.9)
Gynaecology problem	68 (26.7)
Antenatal care	45 (17.6)
Other	63 (24.7)

Among women who received antenatal care, the majority indicated that they were satisfied with the consultations and that the consultations were adequate and covered measurement of weight, blood pressure, measurement of the abdomen, urine and blood tests, and in some cases it included ultrasound scan and they received advice on alert signs. Albeit the main concern of women and the main reason for consultation to the health system was contraception; among the 79 women who looked for provision of contraceptives, 50 (63.3%) reported that they did not have access to the preferred contraceptive method of choice and 40 (50.6%) women reported that they did not have access to any form of contraception. Further, the most commonly preferred methods of contraception included injectables, subdermal implants and intrauterine devices (IUD).

The Table 3 summarises the main issues pertaining to access to SRH services and use. Almost, 25% of the women indicated that they were not satisfied with the attention provided at the different health units. This was primarily attributed to overcrowding of these health units. On the other hand, many women (75.4%) reported adequate access to personal hygiene kits and 94% (n = 308/328) of the women indicated that these kits were distributed predominantly by multilaterals international organisations;

however, 203 out of 323 (62.8%) of the women indicated that the distributed hygiene kits were not sufficient to meet their daily needs.

Table 3
Access and Use of sexual and reproductive health (SRH) services among Venezuelan migrant women at the Brazilian-Venezuelan border (405), 2019.

Variables	
Are you satisfied with the attention received in the health facility? (n = 247)*	
Satisfied	93 (37.7)
Partially satisfied	92 (37.2)
Not satisfied	62 (25.1)
Among those who respond "no" or "partially satisfied", what is the reason? (n = 147)*	
Many people to attend in the facility	83 (56.5)
Woman don't like the attention	25 (17.0)
Long waiting time	18 (12.2)
Others	21 (14.3)
What are the organisations that you know that provide services of SRH? (n = 405)	
Primary Health Post	293 (72.3)
Maternity hospital	44 (10.9)
Clinic at the UN shelter	9 (2.2)
Don't know	59 (14.6)
Travel time from the place of residence of the respondent to the health facility providing SRH services (n = 333)*	
15 minutes	268 (80.5)
60 minutes	38 (11.4)
90 minutes	27 (8.1)
After the arrival to the place of residence; which goods of hygiene or childbirth were received? (n = 405)	
Disposable sanitary menstrual pads	269 (66.5)
Sanitary reusable cloth menstrual pads	3 (0.7)
Obstetric delivery kit	33 (8.1)
Personal hygiene items	27 (6.7)
None	73 (18.0)
*No all women answer these questions	

Discussion

In this paper, we focus on providing an overview of the main SRH issues impacting Venezuelan migrant women in Roraima State, Brazil. Access to good quality SRH services is basic human rights and has the potential to save lives. Our findings show that the provision of adequate SRH services to the Venezuelan migrant women population is limited. This was particularly true as it pertains to meet family planning needs (in terms of both use and access to), ability to use the needed SRH services as well as access to antenatal and postnatal care. Most of these migrant women were young, migrated with a partner and children and had more than nine years of education. Although, almost 50% reported to have had a formal job before migration; almost all these interviewed women reported that they are currently in Brazil are unemployed. This is in spite of the fact that the interviewed women reported their main reasons for migration to Brazil was because of the lack of opportunities and the prevailing health problems in Venezuela.

Also, their ability to access to health care to help resolve these issues was very limited, keeping in mind that the majority of the interviewed women in this study were actually residing in the UN shelters. This finding suggested that such needs are expected to be more severely exacerbated among the migrant women living in informal settlements.

Access to long acting reversible contraception (LARCs) was particularly lacking and this was of a major concern to many women in this research. Women indicated that their inability to access LARCs prevents them from meeting their family planning needs and increases their chances of unplanned pregnancies, which continues to pose an important challenge for them given their daily life realities.

In line with these findings, it equally essential to highlight that these prevailing SRH issues among the Venezuelan migrant women are better than the situation of Venezuelan migrant women in Colombia, country in which they have to pay to receive medical attention[26]. However, the SRH situation for migrant women is similar to those clustered in Brazil among the national population. For example, in Brazil the prevalence of LARC use is only 1.9% among women of reproductive age[27]. This is has been directly and often associated with the high prevalence of unplanned pregnancy in the country[27]. Although, copper-IUD is commonly available at all Brazilian public healthcare facilities, the prevalence of it use is low, while, implants and the hormonal IUD are only available in few institutions in the public health care facilities.

According to the Brazilian Constitution, all citizens have the right of free access to health at the National Health Service (SUS, *Sistema Unificado de Saúde*). Venezuelan migrants in Brazil enjoy these similar health rights and full access for free to the public health system[28]. Yet, it is important to highlight that the Roraima state, where these women migrants concentrate, the migrant population are using the same publicly funded programmes and these programs are facing severe shortages of healthcare providers, materials, medicines, contraceptives, tests and equipment. These shortages are directly attributed to the fact that both the municipal and the state health systems did not adequately prepare for the large numbers of received migrants, and thus health system resources at the level of health facilities are

crippled because of the inadequate distribution of health care providers and health system to resources to meet these increased numbers. Only as an example the number of deliveries from Venezuelan migrants at the public Maternity hospital at Boa Vista were 288, 572, 1629 and 2875 for the years 2016, 2017, 2018 and 2019, respectively representing 3.4%; 6.6%; 16.4% and 26.1% of the total deliveries in the city[29,30]. This limited capacity of the health system poses important risks for all women including the migrants.

When we assessing the overall satisfaction of women with the SRH services provided, migrant women; however, reported that they were either satisfied or partially satisfied with the attention they received at the health facilities only when it comes to antenatal care. This finding is not surprising, as it is a long standing tradition in the country to provide adequate attention to pregnant women and children. The close proximity from the UN shelters to the basic health posts could also be attributed these observed satisfaction rates with antenatal care.

We also to date will not be able to estimate the impacts of the Covid-19 pandemic on the most vulnerable populations, like the migrants from Venezuela. These migrants are living in severe crowded conditions, in which maintaining physical distancing is almost impossible due to the characteristics of the shelters which included tends with almost 10 persons each one and one common area to offer meals with tables and chairs without the recommended physical distance. Official report on June 9, 2020 from the Brazilian Army indicated that 96 of their members who were based at the UN shelters tested positive for coronavirus, as well as 82 Venezuelan migrants including 7 deaths[31–33].

At this time, access to SRH services and use of these services is expected to also become compromised among this migrant population[34]. These issues are already impacting the Venezuelan migrant population in the Roraima state, as per our study results. With that being said, it is crucial to emphasize that the maintenance of the essential SRH services among these women migrant population in these difficult times of Covid-19 is pivotal to respond to the pressing SRH needs of these migrant women[35].

Our study presents strengths like to be the first to provide an overview of the status of SRHR issues and concerns among Venezuelan migrant women (aged 18–49 years) in Brazil, including availability and delivery of services, barriers to service uptake and related challenges in Brazil. The sampling size and sample selection allowed for adequate generalisability of these findings to the larger Venezuelan migrant women in Brazil. On the other hand, one limitation is the unwillingness to disclose sensitive information related to SRH practices, service utilisation and health facility records by women.

The phenomenon of the migrant population from Venezuela to other Latin American countries poses important SRH challenges and the burden of communicable diseases[36]. Ensuring access to the MISP and more so the essential SRH services with in the MISP indicated above, during Covid-19 response, could present a unique opportunity among this women migrant population, as it will allow for testing of symptomatic migrant women and simultaneously effective contract tracing. Thus, the provision of these

needed services could also assist in controlling the spread of this epidemic in this migrant population[37,38].

In summary and congruent with the results here in, to be able to respond more responsibly to the identified SRH challenges here in, we need to identify essential health priorities for these migrant's women and address the potential associated barriers. This should be paralleled with adequate sensitisation and mobilisation of all multilateral organisations, policy makers and stakeholders to save time and resources and to avoid the risks of stigmatisation that could further prevent migrants from timely access and coverage to the needed health care including that of SRH. There are still important gaps to the realisation of girls' and women's rights, and migrant women are particularly among the most vulnerable group.

Conclusions

The COVID 19 epidemic can further exacerbate the SRH challenges identified in this assessment[38]. The empathetic inclusion of migrants during COVID-19 response by national authorities is a must[41]. The national health systems must follow needs driven agenda responsive to the needs of not only general population but as well this Venezuelan migrant population. Adequately coordinated and concerted joint forces efforts that jointly include both the health governmental sectors, academia as well as non-governmental and international organisations are critical to be able to respond timely and appropriately and limit the deterioration of the SRH quality and service provision to this migrant population as a result of the severe impacts of the COVID-19 on the Brazilian national health system.

List Of Abbreviations

CI: Confidence Interval

HIV: Human Immunodeficient Virus

IAWG: Inter-Agency Working Group

IUD: Intrauterine device

LARC: Long-acting reversible contraception

MISP: Minimum Initial Service Package

PAHO: Pan American Health Organisation

SRHR: Sexual and reproductive health and rights

SRH Department of Sexual and Reproductive Health and Research

SUS: *Sistema Unificado de Saúde*

UNHCR: United Nations High Commissioner for Refugees

UNICEF: United Nations Funds for Child

WHO: World Health Organisation

Declarations

Ethics approval and consent to participate

This research was approved by the Ethics Committee of the University of Campinas, Campinas, Brazil. All women invited to participate were voluntary accepted to take part in the study after signing written informed consent.

Studies with any animal or human data or tissue

Not applicable

Consent for publication

Not applicable

Availability of data and materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests

The authors have declared that no competing interests exist. The authors alone are responsible for the views expressed in this article and they do not necessarily represent the views, decisions or policies of the funding bodies or institutions with which they are affiliated.

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Authors' contributions

LB, ML and CMC designed the study. LB performed the first visit to established all the contacts before to start the data collection. ML, CMC, DM, AB, MMH performed the data collection. LB performed the analysis and wrote the first draft. All the authors interpreted the data and co-wrote the manuscript/substantive editing and review and approved the final manuscript.

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