



TECHNICAL REPORT

Gender Issues Influencing Zika Response in the Dominican Republic

JUNE 2019

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Acronyms

ANC	Antenatal care
ASSIST	USAID Applying Science to Strengthen and Improve Systems Project
CAIPI	<i>Centro de Atención Integral a la Primera Infancia</i> (Early Childhood Integrated Development Center)
CAZ	Community Action on Zika Project
CDC	U.S. Centers for Disease Control and Prevention
CEDAW	The Convention on the Elimination of all Forms of Discrimination Against Women
CSaZ	Congenital Syndrome associated with Zika
ENDESA	Encuesta Nacional Demográfica y de Salud (National Demographic and Health Survey)
FGD	Focus group discussion
GBS	Guillain Barré Syndrome
GBV	Gender-based violence
ICPD	International Conference on Population and Development
iDARE	Identify, Design, Apply/Assess, Record, Expand
IPV	Intimate partner violence
KII	Key Informant Interview
LAC	Latin America and the Caribbean
STI	Sexually transmitted infection
URC	University Research Co., LLC
USAID	United States Agency for International Development
WHO	World Health Organization

I. BACKGROUND

The USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project has worked globally since 2012 to improve the quality and outcomes of health care and other services by enabling host country providers and managers to apply the science of improvement. ASSIST seeks to build the capacity of host country service delivery organizations in USAID-assisted countries to improve the effectiveness, efficiency, client-centeredness, safety, accessibility, and equity of the health and family services they provide.

As part of USAID's emergency response to Zika, ASSIST has been implementing health systems strengthening efforts in Latin America and the Caribbean since 2016. ASSIST works to improve the capacity of Zika-related health services to deliver consistent, evidence-based, respectful, high-quality care with a focus on pregnant women, newborns, and women of reproductive age.

ASSIST achieves this by supporting Ministries of Health and Social Security Institutions in the Latin American and Caribbean (LAC) region and to:

- Increase health care personnel and client knowledge about Zika risks and prevention of vectoral and sexual transmission, including during pregnancy;
- Improve clinical screening for signs and symptoms of Zika infections during pregnancy and implementation of recommended care;
- Improve clinical screening for microcephaly and other manifestations of Congenital Syndrome associated with Zika (CSaZ) in newborns and increase the number and proportion of affected infants that are referred to and receive recommended care; and
- Strengthen the provision of high-quality psycho-emotional support services for women and families affected by Zika.

WI-HER, LLC, a women-owned small business and international development consulting firm, provides technical leadership on integrating gender into the Zika emergency response under the USAID ASSIST Project. To integrate gender, WI-HER developed an innovative, results-oriented approach that draws directly from the science of quality improvement, called iDARE, which stands for Identify, Design, Apply/Assess, Record, Expand.

The Identify and Design steps ensure that contextually appropriate interventions are implemented. These steps have a gender perspective that takes the different needs and behaviors of women, men, girls, boys and adolescents of both sexes into consideration. The final three steps ensure that this approach is constantly examined, evaluated, and adjusted to ensure continued effectiveness and improved development and humanitarian outcomes. This approach has been proven effective at multiple levels and across 35 countries in Africa, Asia, Eastern Europe, Latin America, and the Middle East.

WI-HER applied the iDARE approach to examine gender integration in Zika response in the Dominican Republic by conducting a rapid gender assessment, followed by a series of gender integration trainings for local ASSIST staff, regional managers of the Quality Improvement teams, and training of trainers sessions for Ministry of Health and National Health Service staff in April 2018 [1].

The gender assessment revealed issues that affect the quality and effectiveness of antenatal care, postnatal care, and family planning. Some of these issues included: limited decision-making power of women and girls over their sexual and reproductive health; resistance to condom use by couples in long-term relationships, including during pregnancy; low participation of males in antenatal care counseling; and biased attitudes of sexual and reproductive health service providers.

These critical issues need to be addressed as part of quality improvement of the Zika response at health facilities and through community-based activities to reach populations with limited access to health facilities.

II. INTRODUCTION

The U.S. Centers for Disease Control and Prevention (CDC) have identified multiple Zika transmission pathways [2]:

- Through the bite of an infected Aedes mosquito;
- If the woman is pregnant the virus can pass to her unborn child during pregnancy though the placenta or around the time of birth (Zika transmission during pregnancy can cause Congenital Syndrome associated with Zika, which can include microcephaly and a range of other fetal brain defects);
- Through consuming breast milk, though it is important to clarify that there have been no reports of health problems in babies resulting from breast milk from a woman with Zika virus infection;
- Through sex with a person who has Zika;
- Through blood transfusion;
- Through exposure to the virus in a laboratory or health care setting. Prior to the current outbreak, four reports of laboratory-acquired Zika virus infections were reported, however the route of transmission could not be clearly established in all cases.

International recommendations on Zika prevention and public health response efforts rarely take gender and social context into account. Governments recommendations that encourage women to avoid or delay pregnancy, practice safer sex consistently using effective contraceptives, or abstain from sex during pregnancy assume that women have high levels of reproductive control and autonomy [3]. However, these recommendations ignore the realities in the region, where there is often limited access to contraceptives and other sexual and reproductive health services, high rates of sexual and gender-based violence (GBV), and other reproductive health decision-making barriers that result in high rates of unintended pregnancies [4]. Understanding the needs and vulnerabilities of women, men, girls, boys and adolescents of both sexes helps us identify vulnerable populations, tailor responses, and dedicate resources where they are most needed.

In the Dominican Republic, while there is a study of the impact of the Zika virus on women, girls, boys, men and adolescents of both sexes [5], there is no existing analysis of how gender issues affect the ASSIST Zika quality improvement project. Therefore, this report aims to fill an important gap. This document offers an overview of these issues and how to identify and address critical gender concerns with contextually appropriate interventions. This document includes the WI-HER methodology developed under ASSIST, a desk review, and a commented analysis of data collected through qualitative gender assessment.

III. OBJECTIVES

The general objective of this analysis was to identify gender issues affecting the Zika response strategies. The specific objectives were to:

- Assess general knowledge about Zika and its transmission;
- Identify gender issues affecting condom use to prevent Zika transmission and Congenital Syndrome associated with Zika (CSaZ), particularly during pregnancy;
- Explore the possibility of engaging grandparents or other actors to support families that have children with CSaZ.

IV.METHODS

In responding to the objectives, the team used the following data collection methods: (1) in-depth desk review; (2) key informant interviews (KIIs) with four health providers and two representatives from organizations that work at the community level; (3) nine focus group discussions (FGDs) with 81

participants; and (4) additional findings from the health professionals' trainings. This assessment involved triangulation of research, methods, and data sources, all towards enhancing the validity of the results.

A. Desk Review

The team conducted an extensive desk review relevant statistics, studies, and documents relating to gender, sexual and reproductive health, and Zika in the Dominican Republic and the Latin American and Caribbean region.

B. Tool Development

FGD and KII guides were developed based on the objectives proposed by the ASSIST team and supplemented with findings from an extensive desk review.

The FGD guide was piloted in Santiago then immediately improved and applied in all subsequent FGDs (see the final version in **Annex 1**). However, as no substantive changes were made, the pilot FGDs were included in the final analysis.

C. Selection of Gender Assessment Fieldwork Sites

Dominican Republic ASSIST staff selected three sites in the three provinces with the highest number of CSaZ cases and where ASSIST was implementing quality improvement activities. These sites, shown in **Figure 1**, provided different perspectives from urban, peri-urban, and rural populations, in three parts of the country. The selected sites were:

- Cienfuegos, Santiago
- Villa Duarte, Santo Domingo
- Enriquillo and Independencia, Barahona

Figure 1. Sites where focus group discussions took place



Legend:

Region 0-Metropolitan Region

(Villa Duarte)

Region II- Santiago

(Cienfuegos)

Region IV-Enriquillo-Barahona

D. Selection of Assessment Participants

FGD participants were adult males, women of reproductive age, and grandparents. In total, there were 81 participants; 33 (41%) were men, and 48 (59%) were women (see **Figure 2**). We aimed for half of the participants in each group be from families of children with CSaZ. The dates that the FGDs were conducted are found in **Annex II**.

For FGDs, the local Quality Improvement team extended invitations to interested participants through convenience sampling according to the following selection criteria: women of reproductive age (18-49) focusing on members of families with children with CSaZ, men (ages 18-49), and grandparents, both males and females, focusing on members of families with children with cSaZ. For the FGDs with grandparents, we aimed to have half men and half women.



Figure 2. FGD participants distributed by community group and sex

E. Data Collection

In March and April 2018, the WI-HER/ASSIST team conducted nine focus groups with logistical support from partners working in communities, including personnel of Save the Children's Community Action on Zika (CAZ) Project, community workers from the Pastoral Materno Infantil and hospital staff. Data collection team members were experienced in qualitative methods, fluent in Spanish, and familiar with Zika. Participants gave informed consent before starting audio recording for each focus group and interview and expressed verbal consent to respect the confidentiality of others.

The team used a structured focus group and interview discussion guide, probing for general knowledge about Zika before asking questions about sexual transmission of Zika, condom use, and caring for children with CSaZ. To identify actors that could support families with children with CSaZ, each group participated in a brainstorming and prioritization activity.

Focus group and interview data collection took place in a conference room in each health or community facility. All rooms were private with no other personnel present, so participants could speak freely. Focus group duration ranged from an hour and 15 minutes to two hours.

F. Sample Size

Sample size was calculated based on data saturation estimation, when repetition and redundancy is observed in the data. The team calculated that three focus groups of 8-12 participants each, per site, would be adequate to elicit all relevant variation in our themes of interest.

G. Data Analysis

The team in charge of collecting and analyzing the data was fluent in Spanish and familiar with Zika and the Dominican Republic context. The team conducted a thematic analysis on the textual transcript data and summarized the data by theme for each focus group discussion and interview recording.

V. DESK REVIEW

A. Dominican Republic sociodemographic overview

The Dominican Republic is a Caribbean country with a territory of 48,660.82 square kilometers. It represents two thirds of Hispaniola Island; the other third is the Republic of Haiti.

The 2010 National Census of Population and Housing reported a population of 9,445,281; 74.3% of the population is concentrated in urban areas and 50% is female [6]. The population is predominantly young, with a mean age of 25 years, but with a trend toward aging due to increased life expectancy and declining fertility rates [7].

Over the past 25 years, the Dominican Republic has experienced one of the strongest economic growths in the Latin American and Caribbean region, with an average annual rate of 7.15% in the period 2015-2016. While the economic growth rate slowed to 4.6% in 2017, the growth rate of the Gross Domestic Product is expected to increase to 5% in 2018 and maintain this rate in the future [8]. The World Bank reported a decrease in the poverty rate from 32% in 2015 to 30% in 2016. Nevertheless, one in every three Dominican lives in poverty [5], and the pace of poverty reduction is set to decline due to low social spending [8].

In terms of gender relations, the 2017 Global Gender Gap Report ranks the Dominican Republic 70th out of 144 countries (where the country with the smallest gender gap is ranked first) [9].¹ While women have higher educational attainment compared with men [10], this progress has not improved women's access to the labor market. Dominican women traditionally assume the burden of the caretaking roles, limiting their active economic participation and their economic autonomy. According to the ENHOGAR-2016, on average men spend 44.7 hours per week on paid work, while women spend 39.6 hours (5.1 hours less than men). On the other hand, 93% women report engaging in unpaid domestic work compared to 63.3% of men [12]. Women have high rates of unemployment and those who are employed are concentrated in areas with lower salaries and poor working conditions. Gender inequality significantly affects female-headed households, which, in 2014 represented 62.8% of poor households (quality of life index 2) [11].

B. The Zika outbreak in Dominican Republic and its consequences

The Dominican Republic reported one of the largest Zika outbreaks in the Americas. From January to December 2016, 5,226 cases of Zika infections were reported to the Ministry of Health. This likely significantly underestimates the actual burden of disease as approximately 80% of cases are asymptomatic, and it is unlikely they were ever tested. About half of the cases (51%) were diagnosed among people in between the ages of 20 to 39 years [12]. People living in areas that had difficulty accessing water, inadequate garbage disposal systems, or lived in proximity to landfills had a much higher risk of infection [13]. Most cases (58%) were from urban areas, compared to rural areas. Most infections (82%) were treated in an outpatient setting, while 17% were hospitalized [12].

The burden of diagnosed infections was primarily among women, as 74% of the reported cases were female, while the remaining 26% were males [12]. The feminization ² of Zika and Chikungunya in the country was apparent in both general data and in data disaggregated by age group, especially all among adolescents and adults [13]. This could be because pregnant women, and women of reproductive age who are likely to become pregnant, are more likely to be screened for Zika infection.³ Studies have associated the feminization of Zika with the gendered division of labor that assigns women caretaking

¹ The Global Gender Gap Report benchmarks 144 countries on their progress towards gender parity across four thematic dimensions: Economic Participation and Opportunity, Educational Attainment, Health and Survival, and Political Empowerment; the 2017 edition also analyzed the dynamics of gender gaps across industry talent pools and occupations.

² The term "feminization" describes a phenomenon in which the proportion of females relative to males is disproportionate.

³ To test whether these data had this type of bias, researchers in Puerto Rico analyzed data disaggregated by sex of people 20 years of age or older who were a confirmed case of Zika, excluding pregnant women. They found that women were still the majority of infections: 61% women and 39% men.

roles for their families and homes, increasing their risk of contact with mosquitoes carrying Zika while disposing garbage, fetching water, doing chores in the house, and caring for dependent people. Additionally, lack of access to contraception, repellant, and education about prevention of vector and sexual transmission of Zika [13]. ⁱHowever, without a cross-sectional survey of seroprevalence it is difficult to estimate the actual sex distribution of infection, particularly because the majority of cases do not have symptoms.

Of those with confirmed Zika infections, 95% had an uncomplicated disease presentation, three patients died, and 285 patients developed Guillain Barré Syndrome (GBS) [12]⁴.

In 2016, there were 1275 reported cases of Zika among pregnant women [12]. The Dominican Ministry of Health and National Health Service estimated that 11% of the babies born to women infected by Zika in the first trimester of pregnancy were born with anomalies (which is consistent with trends in Brazil) [14].

As of January 2018, 85 cases of microcephaly associated with the Zika have been confirmed [15]. The number of children Congenital Syndrome associated with Zika [16], which includes a large spectrum of neurological and developmental disabilities, not just microcephaly⁵, is considered to be much higher.

Similar to Brazil, where the profiles of families with CSaZ cases were studied [17], in the Dominican Republic mothers are the primary caretakers for children (both boys and girls) with CSaZ. They are more likely to be single mothers, young, with low educational levels, lacking insurance coverage, and without other forms of social protection [18]. Children with CSaZ need physical therapy, cognitive stimulation therapy, and extra assistance with everyday activities, like eating, which results in an increased financial and care burden. Their primary caretakers, usually their mother or another female family member, are often unable to work outside the home, or spend time on non-caregiving pursuits, like education, which increases the risk of perpetuating the intergeneration cycle of poverty [17,18]. These women and other family members often have insufficient support or limited access to services and need emotional support to cope with the demands of care of a child with severe disabilities [19].

C. Knowledge of effective practices to prevent Zika infection

Since the beginning of the Zika outbreak, interventions have been implemented to reduce the risk of Zika transmission in the Dominican Republic. One approach is educating the population about how to reduce transmission risk and promoting practices and attitudes to help reduce infection risk. Examples of protective behaviors include the use of insect repellent and mosquito nets, regular elimination of mosquito breeding sites, including water tanks, and condom use to prevent sexual transmission of Zika [20]. Community-based activities primarily focused on vector-borne transmission, thus public awareness that Zika is sexually transmitted remains low. Only 30% of people surveyed by Doctors of the World and Oxfam in the Dominican Republic knew that Zika was sexually transmitted [5], and knowledge was

⁴ The CDC defines GBS as "a rare, autoimmune disorder in which a person's own immune system damages the nerves, causing muscle weakness and sometimes paralysis. GBS can cause symptoms that last for a few weeks to several years. Most people recover fully, but some have permanent nerve damage. Some people have died of GBS."

⁵ The CDC defines the CSaZ as follows: "unique to unborn children and infants infected with Zika virus before birth, and is described by the following five features: (i) severe microcephaly in which the skull has partially collapsed; (ii) decreased brain tissue with a specific pattern of brain damage, including subcortical calcifications; (iii) damage to the back of the eye, including macular scarring and focal pigmentary retinal mottling; (iv) congenital contractures, such as clubfoot or arthrogryposis; (v) Hypertonia restricting body movement soon after birth. Congenital Zika virus infection has also been associated with other abnormalities, including but not limited to brain atrophy and asymmetry, abnormally formed or absent brain structures, hydrocephalus, and neuronal migration disorders."

estimated to be lower, between 5 to 15%, at the regional level [21]. Information about the link between Zika and microcephaly was also limited (15-40%) [21]. A meta-analysis of studies in the region revealed that community level knowledge about Zika is often intermixed knowledge about with other vector borne diseases, such as Chikungunya [21].

D. Female decision-making power and sexual transmission of Zika

After the association between Zika infection during pregnancy and microcephaly was discovered in January 2016, the Dominican Ministry of Health advised women to postpone pregnancy [22], while also promoting preventive behaviors to avoid mosquito bites among pregnant women. While it was discovered that Zika could be sexually transmitted in February 2016, many programs and policies were slow to incorporate and publicize this information [23]. The risk of sexually transmitted infections (STIs) and CSaZ make the promotion of attitudes and practices to prevent the sexual transmission of Zika crucial, particularly during pregnancy.

Recommendations that encourage women to avoid or delay pregnancy, use condoms during sex, or abstain from sex during pregnancy, assume that women have high levels of reproductive control and autonomy and access to contraceptives [3,24]. The reality is quite different, as Dominican women – like most women in Latin American and Caribbean countries – face a variety of obstacles that limit their decision-making power around contraceptive use and access to high-quality sexual and reproductive health services.

When considering the serious consequences of contracting Zika during pregnancy, understanding the reasons behind the high rates of unwanted and unplanned pregnancy, lack of access to the full range of contraception options, GBV, and lack of power to negotiate condom use is critical. The Zika virus outbreak did not create these conditions, but rather demonstrated the ongoing consequences of lack of sexual and reproductive health and rights, particularly among the most vulnerable and marginalized.

Sexual and reproductive health rights, which includes access to sexual and reproductive health care and information, as well as autonomy in sexual and reproductive decision-making, are human rights laid out in the 1994 International Conference of Population and Development and are considered universal, indivisible, and undeniable. These rights include access to comprehensive sexual health information (including information about the sexual transmission of Zika), voluntary and informed family planning services (so that women may choose to delay pregnancy during a Zika outbreak), prenatal care and safe motherhood services (to properly screen for Zika), comprehensive infant care (to link children affected by CSaZ to proper services) and prevention and treatment of violence against women [58]. All of these are essential in the preventing and treating Zika, but in practice, many countries struggle to provide these rights.

In the Dominican Republic, nearly 53% of females are of reproductive age (15-49 years), and 26.18 years is the average age of first pregnancy. While the Total Fertility Rate for the Dominican Republic is 2.31 births per woman [10], the adolescent fertility rate is of 97 births per 1,000 girls aged 15-19, which is significantly higher than the regional average of 66.5 births per 1,000 girls aged 15-19 years [25].

The National Demographic and Health Survey (ENDESA for the acronym in Spanish) 2014 found that 63% of women and girls (age 15-49) without children and 73% of those with children reported their intention to use contraception, and 61% of married or cohabitating women did not want to have more children. In addition, 52% of women who had a child in the five years leading up the survey said their pregnancies were wanted, 35% reported they wanted the pregnancy but at a later time, and 13% reported that their pregnancies were not wanted [26].

The ENDESA survey reported that 55% of women between 15 to 49 use some form of contraceptive method and its even higher, 72%, among married women.⁶ The survey did not find any significant difference between urban and rural areas. Fifty-three percent of women obtained their contraceptive method from the public sector (mainly public hospitals and facilities), while the 43% bought the methods from the private sector (mainly clinics and pharmacies). Only recently, in 2017, have public pharmacies started distributing condoms at a low price [27].

Despite this, 11% of women in the Dominican Republic have an unmet need for family planning ⁷. This stems from a variety of barriers, including: stigma, biases of health providers, low negotiation power with partners, lack of sexual and reproductive health information and education⁸, and, as reported in 2015, contraceptive commodity stock outs, at either the service delivery or central level [3].

When analyzed by age group, unmet need for family planning is much higher among adolescents (27%) and women aged 20-24 (21%) than among other age groups, revealing that access to contraception is a major issue among young women and girls. This trend persists even though the Dominican Republic recognizes the right of all persons, including adolescents, to access preconception counseling and contraception, without any kind of discrimination, and according to human rights standards [28,29,30].

The 2013 ENDESA survey reported that 20.5% of adolescents (ages 15 to 19) have a child, are pregnant, or have been pregnant at least once [26].⁹ Adolescent pregnancies are much higher risk and between 16.2% and 20% of maternal deaths are adolescents. In addition, 36% of girls are married or in a union by 18, and 12% of girls are married before they are 15 [31], while only 3.8% of boys of the same age are married or in a union [26].

The Dominican Republic and Nicaragua have the highest percentage of girls under the age of 18 married or in a union among all the Latin American and Caribbean countries [32]. Even though Law 136-03 prohibits any sexual relation among a child or adolescent and adult more than five years older [28], 35% of the adolescent girls married or in a union have a partner from five to nine years older than them, and 23.4% have a partner that is ten years or older [33]. These unions negatively influence girls' development opportunities, affecting their physical, economic, and political autonomy, increasing the risk of poverty through lost educational and economic opportunities. Among the girls who left school, 20.4% reported it was because of a pregnancy, 7% to care for their children, and 4.8% because they got married or entered a union [26].

Pregnant adolescents face high rates of violence (21%) and high rates of abandonment by the fathers of their children [34]. Article 144 of the Dominican Civil Code considers 18 to be the minimum age of marriage for boys and 15 for girls [35]. Presently, the Dominican Congress is discussing a reform to

⁶ In "The State of World Population 2017" published by the United Nation Population Fund (2017), the updated rates of use of contraception methods among women in reproductive age are slightly different: 71% (any methods) and 69% (modern methods); while the proportions of met need for contraception were 87% (any methods) and 84% (modern methods).

⁷ The WHO defines "Women with unmet need are those who are fecund and sexually active but are not using any method of contraception, and report not wanting any more children or wanting to delay the next child. The concept of unmet need points to the gap between women's reproductive intentions and their contraceptive behavior" (http://www.who.int/reproductivehealth/topics/family_planning/unmet_need_fp/en/).

⁸ Even if, according to ENDESA 2013 survey, in Dominican Republic 100% of the women in the reproductive age surveyed knew or had listened about any contraception method.

⁹ This data doesn't consider pregnancies among girls younger than 14. The CLADEM analyzed official data that report a yearly average of 1,117 deliveries among girls aged from 10 to 14 years, in the period 2010-2014 (https://www.cladem.org/images/imgs-noticias/nin%CC%83as-madres-balance-regional.pdf).

increase the age to 18 for girls [36], preventing child marriage, in part, because the Committee on the Elimination of Discrimination against Women and the United Nations High Commissioner define marriage at an earlier age [37]. Young brides, especially if their spouses are much older, often have very limited power over their sexual and reproductive health because they tend to have unbalanced power relations.

In the Dominican Republic, like in other Latin America and Caribbean countries, many women have limited control over their sexual and reproductive health. Men are the primary decision-makers in the family, including whether contraception should be used [24,38]. Studies from several countries examined reasons why men might not permit their wives to use contraception, including the fear that it encourages infidelity, myths that some methods cause permanent sterility, and religious beliefs [39]. Threats of violence also limit the power of women to negotiate the use of methods [40]. In addition, the social pressure from immediate and extended family networks, local religious groups, and local political organizations, also plays a significant role in discouraging women from seeking contraception and using it consistently [41].

Another barrier is that family planning continues to be considered an exclusively female issue. An analysis of the Dominican government's expenditure on the Family Planning Program reveals that most funds are directed at contraception methods for women's use [42]. There is very low participation in malecentered methods, for example only 0.2% of men reported having a vasectomy and only 2.6% reported using condoms [26]. Although the Ministry of Health has a special component for men's health (*Componente Programático para la Salud del Hombre*), men are not considered a target for family planning services and sexual and reproductive health information [42]. Many of the health facilities where sexual and reproductive services are provided are not male friendly and do not promote the participation of men and boys as primary clients or as accompanying their partners. Moreover, health personnel sometimes have biased behaviors due to their cultural background influenced by the machismo¹⁰ culture or religion [42].

The ENDESA 2013 survey found that higher-risk sexual behavior is increasing with 5% of women and 29% of men reporting two or more sexual partners in the past twelve months compared to 3% and 24% from the previous ENDESA survey in 2007 [26]. Particularly among young men, it is increasingly normal to look for multiple temporary partners, called "*mangueos*" and "*agarres*", responding to patriarchal models of sexuality and masculinity [43]. The ENDESA 2013 survey showed that 38% of women and 46% of men with two or more sexual partners reported condom use in their last sexual encounter. Additionally, 22.5% of men of all ages had paid for sex at least once; 23% of men married or in a union paid for sex; and almost 21% of those who paid for sex did not use a condom the most recent time [26].

Examining attitudes about decision-making about sex, the 2013 ENDESA survey reported that 95% of women and 91% of men said that a woman is justified in denying sex to her husband or stable partner when she knows he is having sex with other women. In addition, 97% of women and 95% of men agreed that a woman should demand to use condom if her partner has a sexually transmitted infection, which, while showing a higher level of sexual autonomy, associates condom use with infidelity, which makes it more difficult to negotiate condom use during pregnancy to prevent Zika transmission [26].

Further reinforcing these findings, condom use within a married or stable couple is uncommon with 47.3% of men reporting they never use condoms with their committed partner [44], and only 10% of women and 16% of men married or in a stable relationship reporting condom use during their last sexual intercourse [26]. This may be because condom use is generally associated with non-marital and high-risk sexual

¹⁰ The concept of *machismo*, where men are taught to be strong and aggressive to achieve their goals, often manifests as male social domination over women in the LAC region. Men are expected to be dominant and sexually experienced, while women are expected to be submissive and faithful.

relations, meant to prevent STIs [42], while in a married couple it is associated with pregnancy prevention. Thirty-six percent of men said they would be worried if their partner asked them to use condom [42,44]. Requesting condom use with a stable partner can be perceived as a threat to male authority common in patriarchal culture where "machismo" is deeply rooted. It can be perceived as an offense, lack of trust, an accusation of infidelity, and can lead to violent reactions, usually on the part of the male partner, including obliging women to have unprotected sex [21,25,46,47,48].

Research demonstrates that even if people have information about condoms and other methods, gender norms tend to prevail during attempts at condom negotiation and people proceed to have sex even if they do not have condoms. Moreover, it is not socially acceptable for women to carry condoms, or they are considered promiscuous. On the other hand, men are expected to demonstrate their masculinity and take advantage of any occasion to have sex, even if they do not have a condom and even if the partner disagrees [43]. Men who equate masculinity with risk-taking and sexual dominance have been found to be more likely to have multiple partners, to have an STI and have negative attitudes towards condom use [49]. Gender norms associate male virility with their number of partners and their number of children. Contraception is therefore sometimes associated with reduced sexual virility and is associated limited male acceptability of many methods.

E. Gender-based violence (GBV), Zika, and other STIs

In the Dominican Republic, as in the rest of the region, sexual and gender-based violence (GBV) is deeply rooted in gender and social norms characterized by unequal power relations between men and women [46].

The Dominican Republic has high rates of GBV, especially intimate partner violence (IPV). The 2013 ENDESA survey reported that 26% of women suffered physical violence at some point in their lives since age 15. Moreover, one out of every ten women have suffered sexual violence at least once in their lives, with the present or previous partner as the perpetrator in the 80% of cases. A high percentage of women reported suffering violence during their pregnancy, and the rate is much higher among adolescents (11%) compared to older women aged among 40 and 49 (6.3%) [26].

An average of 200 women are killed per year in the Dominican Republic; more than half of these murders were by their previous or current partner [50]. GBV constitutes an obstacle for women who would like to prevent or postpone pregnancy or have safer sex, since they may be victims of sexual violence and forced or obliged to have unprotected sex [51]. Dominican women reported that their partners often display controlling behaviors, the most common forms being jealousy or anger if they talk to other men (40%), insistence on knowing where she was all the time (34%); prohibiting her from meeting with friends (27%), and distrust in her money management (27%) [26].

Several studies demonstrate that the male control over women applies limits their ability to negotiate a method to prevent pregnancies and STIs. Fear of violence when requesting condom use can lead to inconsistent condom use. For some women, the fear of being abused is greater than the fear of an STI or the desire to practice safe sex [52]. Since the Zika outbreak is quite recent, there are not yet studies estimating the association between IPV and Zika infections, however a similar comparison have been drawn between HIV and Zika because both are sexually transmitted. A 2013 WHO systematic global review across different settings with HIV epidemics found that intimate partner violence increases the risk for HIV infection among women and girls by more than 50%, and in some instances up to four-fold [53]. There is a two-way link between GBV and STIs: victims of GBV are more likely to acquire STIs and having an STI makes them more vulnerable to violence [54]. In the Dominican Republic, 22.4% of women with HIV have been victims of sexual violence; and victims of violence have 2.6 times the risk of acquiring HIV compared to other women [55]. The WHO also reported that forced sex has a direct link with HIV and highlighted that the younger a woman is at the time of her first sexual intercourse, the higher the probability of being forced into sex [56].

In the LAC region, studies associate IPV during pregnancy with a decreased prenatal care visits. For example, in one of the major maternal perinatal hospitals of Peru, patients that were victims of IPV are eight times more likely to attend less than six prenatal care visits compared to patients that do not experience violence [57]. In the context of Zika, it is possible to infer that dynamics would be similar, where women experiencing IPV might be less likely to attend prenatal sessions, therefore less likely to receive education about Zika prevention, to have the tools to prevent transmission, and to receive early screenings to detect possible fetal abnormalities.

VI.PRESENTATION AND DISCUSSION OF RAPID GENDER ANALYSIS FINDINGS

The main objective of the assessment, which included FGDs and KIIs, was to identify gender issues affecting Zika response in the Dominican Republic. The results are presented in three parts: (i) Knowledge about Zika and its transmission; (ii) Gender issues affecting condom use, especially during pregnancy to prevent Zika transmission and CSaZ, and other sexual health behaviors; (iii) Local actors that could support families with children with CSaZ such as grandparents.

A. Knowledge about Zika

To reduce the risk of Zika infection, it is critical to share information with those most at risk in a way that empowers community members with the knowledge to protect themselves from Zika transmission and encourages attitude and behavior change, both at an individual and at a community level. This information can be given in both health facilities and in the community through active participation of community health workers and community outreach by the Primary Health Units.

When FGD participants were asked to speak about Zika transmission, the answers largely focused on mosquitoes and different ways to prevent vector borne diseases. Information about the sexual transmission of Zika and the risks of contracting it during pregnancy was rarely mentioned, and even then, the responses were limited and imprecise. These findings suggest that general knowledge about sexual transmission of Zika has not significantly improved since the analyses conducted by Doctors of the World and Oxfam [5] and by Bardosh [21] in 2017.

In <u>Santiago</u>, six people, three males and three females, out of the 30 consulted, were aware of sexual transmission of Zika, and all of them were engaged in the community as health promoters. They did not immediately volunteer this information, but only discussed this mode of transmission when asked specifically about it.

In <u>Villa Duarte</u> (Santo Domingo), FGD participants were not aware of cases of Zika, GBS, or CSaZ in their community. Nevertheless, participants in the three groups and of both sexes knew about Zika, the different modes of transmission, including sexual transmission, and prevention methods. In some cases, the information was intermixed with information about other vector borne diseases, especially with Chikungunya, which is present in the region [21].

The focus groups in <u>Barahona</u> were unique in that most of the women were mothers of children with CSaZ; all grandparents worked for the health system, including some health promoters; most of the men were staff of the hospital, and two were relatives (one father and one grandfather) of children with CSaZ.

Among the group of women, only some of the mothers of the children with CSaZ knew about sexually transmitted Zika. They said that they had been informed only recently and did not know about it during their pregnancies:

"I knew it was transmitted by a mosquito, when I got pregnant, women had to protect themselves from mosquitoes." (Woman, mother of a child with CSaZ, Barahona)

"Only in the last few months we have been informed that Zika can be transmitted through sexual relations. Women are the most vulnerable because of pregnancies." (Woman, mother of a child with CSaZ, Barahona)

Almost all the participants in the men's group knew that Zika was sexually transmitted, since as hospital staff, most of them had had participated in sensitization activities about Zika. On the other hand, the relatives of children with CSaZ had only recently been informed about this Zika transmission pathway.¹¹

Some men stressed that the information was widely spread through television and radio programs, but that in the poor communities few people have access to these sources of information. They said that community-based campaigns sometimes do not offer enough information or resources to prevent transmission, limiting people's ability to comply with recommended prevention practices.

"It has been widely announced on TV and radio. But there are communities without televisions, when promoters go there they just spread chlorine, but do not give proper information." (Man, Barahona)

None of the grandparents in Barahona knew that Zika could be transmitted sexually, even though all of them worked within the health system. One of the health promoters finally said:

"With the confirmation you just gave us [about sexually transmission of Zika], to prevent Zika you also have to use condoms." (Grandfather, health promoter, Barahona)

Even people informed about the risk of acquiring Zika and other STIs through sex often have incomplete and incorrect information. For example, when discussing strategies to avoid STIs, one of the women interviewed in Santo Domingo said that when her husband arrives home late and drunk and she suspects he had sex with other women, she avoids having sex with him that night. She believed that the risk of being infected was only possible in a certain period and that putting off sex for one night would be enough to protect her.

"When he arrives at home at one o'clock at night and drunk, I do not give it to him. I stick to the wall and put the child in the middle of the bed so he doesn't approach me." (Woman, Santo Domingo)

Similarly, no one in the focus groups knew the duration that Zika persists in semen or that 80% of Zika cases are asymptomatic. This has important implications since transmission is possible over months, although the symptoms may disappear or may never appear in the first place.

This section highlights that there are important information gaps to be addressed. There appears to be large segments of the population, particularly in resource-poor communities, with incomplete information about how to prevent Zika. It is fundamental to promote Zika prevention in all settings (health facilities, community centers, schools, mass media methods etc.), to emphasize prevention of sexually transmitted Zika, especially among pregnant women, and to give women and adolescents the education and contraceptives necessary to postpone unplanned pregnancies.

¹¹ It is also worth mentioning that the men's group took place more than one month later than the women' and grandparents' groups.

B. Gender issues affecting condom use

1. Gender stereotypes associated with sexuality

Deeply rooted traditional gender stereotypes related to sexuality were common in all communities where FGDs took place.

Masculinity is equated with sexual dominance and risk taking. Both men and women considered extramarital relations normal for men. Many of the men in the FGDs admitted voluntarily to multiple extramarital relations and in some cases, having paid for sex. In Barahona, they referred to stable extramarital partners as "*second base*."¹²

On the other hand, women were classified in a dichotomous way:

"The man is of the street; the woman is of her house."*

This expression in Dominican popular culture reaffirms gender norms that the man's sphere of influence is outside of the home (the street) while the woman's is in the home, assuming reproductive roles, domestic work, raising children, etc.

A woman that goes out to the street – into the men's space - is socially unacceptable and referred to as "easy" or "whore."

* Proverb cited by participants in the WI-HER trainings (Santo Domingo, April 2018)

• Women who remain in the home to care for the family, are religious, preserve the family's honor, and do not raise doubts about their fidelity, comply with the traditional gender roles. For example, a man described his wife as the following:

"My wife would never ask me to use a condom, she is all 'church-house-work." (Grandfather, Barahona)

• Women who defy these gender norms and leave the house (or "go out in the street") are considered promiscuous. Most participants of both sexes, but mainly men, defined them as '*fácil*' ('easy') and '*mujeres de la calle*' ('*women of the street*'), in some cases '*cueros*'¹³ ('sluts'). Men considered them unsuitable for marriage.

"I would never marry a woman that had sex with other men." (Young man, Barahona)

Another theme that arose in all the communities was that many poor adolescent girls and young women were turning to transactional sex to meet their basic needs. This information is consistent with the literature and statistics in the first section of the report.

"In the suburbs teenage girls (aged from 9 to 15) have rates: RD\$100, RD\$500, they give it for a cheap lunch." (Adult man, Santiago)

Gender stereotypes that reduce women to virgins, mothers, and whores reduce condom and contraception negotiation power, increase the risk of increase risk of STI transmission and unwanted pregnancy, all of which are associated with greater risks of Zika transmission and having a child with CSaZ.

¹² A term from baseball that is used in the Dominican Republic to refer to other stable romantic and sexual relationships that are considered outside but parallel to their official partners.

¹³ The term "cuero" is used disparagingly to qualify women as prostitutes.

2. Barriers to condom access

The majority of FGD participants agreed that it is possible to access condoms for Zika prevention. They are distributed by health providers for free during antenatal care and family planning counseling, and are available for purchase at pharmacies, supermarkets and motels.

"It is easy to get condoms; you can get them for free in the hospital, clinic, etc. or buy them in pharmacies and supermarkets." (Young woman, Santiago)

However, many FGD participants cited barriers to accessing condoms. One major barrier discussed was health provider bias toward women, girls, and young boys looking for condoms. Many participants discussed feeling judged and scrutinized.

"I can get condoms from the clinic, but they do not give them easily. You are in hurry and they ask questions like "what will you use them for?" [...] For girls and women it is even more difficult, they give them talks, and ask a lot of questions." (Man, Santo Domingo)

"When I go to the clinic I have to ask for condoms, they do not offer them to me. And when I ask for them the health provider asks me: 'Are you a whore?' or 'Do you have multiple partners?' Sometimes I say yes just to get them more quickly, but this makes me feel uncomfortable." (Woman, Santo Domingo)

A community promoter in an FGD who was very knowledgeable about Zika expressed a similar hesitation in promoting condom use among married couples:

"Condoms are mainly for the street, otherwise the family is not encouraged, the population does not grow, and the country is paralyzed." (Male health promoter, Santo Domingo)

These kinds of biases among health promoters, based on personal beliefs and gender norms, could limit the quality and effectiveness of sensitization activities at the community level.

Other factors limiting access to condoms are related to the lack of confidentiality and privacy in the health care system. Many participants recounted that other people entered the patient consultation room without asking permission and that health facilities were distributing condoms in public areas where confidentiality was not guaranteed. In one case, a person could be identified as HIV-positive by going to one of the main condom distribution points in Barahona.

Only young men in Santo Domingo expressed ease asking for condoms from the local community health promoters:

"CAZ¹⁴ always gives me condoms; If I go out with a girl, I tell the promoter: 'I need a cap." (Young man, Santo Domingo)

On the other hand, adolescent girls and young women of the same community said that even if they were interested in receiving condoms, the same promoter would not provide them with condoms and they would not feel comfortable asking him. This illustrates that at the community level, gender norms influence the community workers and inhibit the girls and young women from requesting or receiving condoms from male promoters.

3. Barriers to condom use

Access to condoms does not guarantee their use, especially among married or committed couples and among youth. One grandmother explained the following:

¹⁴ The USAID-funded Community Action on Zika (CAZ) Project led by Save the Children.

"They have their backpack full of condoms, but they do not use them." (Grandmother, Santiago)

As explained in the following paragraphs, there are different gender issues limiting condom use, particularly among married and stable couples.

4. Condoms used by men in extramarital or occasional relations

Among FGD participants, it was widely accepted that condom use is associated with sex outside of marriage, such as at the beginning of a relationship, when partners do not know each other very well, or with occasional partners.

*"My friends use condoms when they are going to cheat. I put it on when I go to "kill a bad woman."*¹⁵ (Young man, Santo Domingo)

"I use condoms when I am 'outside,' with my wife I don't." (Young man, Barahona)

"A couple can use condoms when they are in love (dating), but when they are married: No!" (Mother of a child with CSaZ, Barahona)

Men do not always use condoms with occasional partners but are more likely to than with their long-term partners or wives. As stated in the desk review, there is a high percentage of men with multiple partners that do not use condoms, even when for paid sex.

"The man uses the condom if the woman demands it, but not with the wife." (Woman, Barahona)

This inconsistent use of condoms puts the committed partner and casual partners at risk for contracting STIs.

"There are men who go with a woman without a condom, then they arrive at home and when the wife starts with their needs, they do not put on the condom either. Most of the time they do not know the situation with the other woman." (Grandfather, Barahona)

Extramarital affairs are normalized for men. Participants recounted instances of health providers giving women extra condoms for their husband's extramarital relations, so she can put them in his wallet as an indirect way of preventing unplanned pregnancies and protecting herself.

"In the hospital they give me condoms, the provider tells me "I give you some extra condoms, because men do not have control when they are outside the home", I put condoms in his wallet." (Woman, Santo Domingo)

The normalization of extramarital affairs by physicians, the idea that women should be responsible for their husbands practicing safer sex with secondary partners, and men not being held accountable for their sexual activity are all symptoms of pervasive gender inequality. This impacts women and girls' ability to control their sexual and reproductive health.

5. Condom negotiation within a married couple and risk of violence

Discussions within the FGDs and supporting statistics revealed that requesting condom use within a married or committed couple challenges the expectation of female fidelity and threatens male authority and control. Since condom use is associated with cheating and sex work, a woman's request to use

¹⁵ This quote contains a popular expression used in the Dominican Republic. Analyzed from a gender perspective, it clearly expresses the unbalanced gender stereotypes associated with male and female sexuality. It emphasizes the power and strength of the man who is having several relationships. To have sex for him is to "kill" or punish the woman who does not fit the gender stereotypes of passivity and purity, and that for this reason is called "the bad one."

condoms can be perceived as an offense, lack of trust, an accusation of infidelity, or it can rouse suspicion about the woman's fidelity and integrity.

"To ask the husband to use condoms can be considered a lack of respect. It is as if you do not trust him." (Grandmother, Barahona)

"Once I had enough of family planning and told my husband: 'if you don't want me to get pregnant, let's use condoms'; he told me: 'You are crazy! I prefer we break up, tell me if you are cheating on me with another man'. He got jealous; I was his wife, in his home." (Grandmother, Santo Domingo)

Participants of both sexes said they would fear their partner's reaction when proposing condom use, and that it could escalate to threats of separation or violence.

"When men propose to use the condom, women think they have been betrayed and prefer to separate rather than using the method." (Grandfather, Santiago)

"I'd never dare to ask my wife to use condoms; she would throw at me all the cauldrons in the kitchen." (Man, Santo Domingo)

However, the fear of violence is more common among females. This could be associated with the high levels of GBV, IPV, and femicide that Dominican women experience.

"The normal reaction is to tell her: 'No! You are my wife."" (Man, Santiago)

"Men's first reaction is being suspicious about the wife's infidelity and to get violent. Men are blind; they do not immediately understand these kinds of things." (Young man, Santo Domingo)

"Not everyone reacts in the same way. I am aggressive. We do not know how we behave at home." (Young man, Barahona)

General violence and GBV were discussed in all the FGDs in each of the three communities. Data from 2017 revealed that there were at least two femicides, or murder of women, in each of the communities investigated: Villa Duarte (Santo Domingo), Cienfuegos (Santiago) and Barahona [52]. In Barahona, in January 2018 the mother of a baby girl born with Zika associated microcephaly with was killed by her partner, leaving the child affected by Zika and her older brother as orphans.

Some women said that because of the possibility of a violent reaction, sometimes women prefer not to propose condom use.

Only one woman, a mother of a CSaZ child, discussed a way to negotiate condom use with her husband:

"There is the way to explain it: we use condoms, or we don't do it." (Mother of a CSaZ child, Barahona)

Fear of stigma and violence associated with condom negotiation reduce women's reproductive autonomy, as they are less able to prevent unwanted pregnancies and to take measures to prevent STI transmission, including Zika. Therefore, without the power to prevent unwanted pregnancy or Zika transmission, women are unable to fully exercise their sexual and reproductive rights. Thus, increasing the possibility of babies with CSaZ being born.

6. Condom use during pregnancy

Most of the female participants in FGDs believed that women are responsible for protecting the unborn child from Zika during pregnancy. Only a few young men said that it is a shared responsibility. When discussing condom use during pregnancy, participants of both genders mentioned that it is difficult to propose condom use with their partners, but that it is even more difficult during pregnancy. This could be because condom use with committed partners is generally used as a method of contraception, which is

not an issue if the woman is already pregnant. A young man whose wife was pregnant at the time of the consultation expressed the following:

"After marriage I don't use condoms; we did it only at the beginning to prevent pregnancy." (Young man, Barahona)

When prompted whether he would use a condom while his partner was pregnant, one young man said:

"I would say yes, but I would ask her to explain to me the reasons." (Young man, Barahona)

This response suggests that men are not entirely opposed to condom use during pregnancy but need to better understand the reasons. Therefore, education efforts could be a key intervention component.

The majority of the participants from the twelve FGDs agreed on the important role health providers play in encouraging men to actively participate in family planning and Zika transmission prevention by giving them comprehensive and detailed information on condom use during pregnancy.

"Doctors should invite men to go to counseling and explain it to them. If men receive these kinds of calls, they quit whatever they do and go." (Young man, Barahona)

7. Other reasons for not using condoms

Participants mentioned several other reasons for not using condoms including: condoms feeling different or reducing sensation, having allergic reactions, and fear of method failure. These ideas are so deeply rooted that several participants used them as justification even though they had never tried a condom or never had sex.

Men's primary reservations about condom use focused on the change in sensation when using a condom or that it reduces their virility and ability to perform sexually.

"I use condoms. I cannot use other methods and the doctor asked me to go to a visit with my husband and suggested us to use condoms. My husband is not happy, he says that it is not the same, that he doesn't feel it in the same way and that since I am his wife he doesn't have to use this. He was using it when he was having sex with street women." (Woman, Santiago)

"When I used condoms, they didn't work. When I wear it, I start thinking I am using a glove and never ejaculated" (man 1, Barahona). "The same thing happened to me, I had to drink alcohol and wash my face to make it work; I tell myself "I won't leave without finishing this!" (Man, Barahona)

Women's complaints about condom use revolved around method failure and concerns about complications. Even a woman who had Zika and a child with CSaZ expressed her absolute refusal to use condoms.

"I don't like them, I don't like them! I would not use it even as a joke." (Mother of a child with CSaZ, Barahona)

"They are not a sure thing: they easily break." (Woman, Santo Domingo)

"Sometimes they remain inside." (Woman, Barahona)

"I do not want to ruin (heat up) my parts." (Grandmother, Santiago)

Only one woman spoke positively about using condoms with her partner, referring to how she overcame her husband's resistance by making wearing a condom part of the foreplay, which encouraged its use.

"Most people don't like it because they do not use properly: Some men put it on and start... you know... they want it and take it. Men do not wait for women to lubricate. [...] I had no problems in having my husband use it... I used to help him to put it on." (Grandmother, Santiago)

Despite a few examples of willingness to use condoms, men's concerns remain on their pleasure, their ability to perform, and their partners' fidelity, while women are more concerned about their effectiveness and negative physical consequences of condom use. While the concerns of both groups must be addressed to improve correct and consistent condom use, the gendered nature of condom negotiation and use must also be examined and addressed.

C. Zika prevention education in antenatal care counseling

Most FGD participants of both sexes said that doctors play a crucial role in explaining the importance of using condoms during the first trimester of pregnancy. They referenced both general doctors from Primary Health Units, gynecologists, and other providers involved in antenatal care (ANC) services. Male participants agreed that men should be involved in ANC counseling visits.

"During pregnancy, it is necessary that the men go with their pregnant partner to the doctor to understand the process, to see what it is necessary to do, etc." (Mother, Barahona)

One of the obstetricians in a FGD emphasized the importance of male participation and suggested that pregnant women should bring their husbands if they uncomfortable proposing condom use or if their partners had a negative reaction or resistance.

"Women do not react well when they are told to use condoms, they think their partner is unfaithful, or they fear that he will react violently, but then they accept to leave with condoms, but you cannot tell if they use them, sometimes they return as couples, so we can explain them." (Health provider, Barahona)

Only one male FGD participant had accompanied his wife to ANC visits. As supported by the desk review,⁴² he confirmed that ANC health facilities and services are not male friendly. He felt judged by the health provider.

Limitations to Male Involvement in ANC

Health professionals participating in the WI-HER/ASSIST training confirmed the limited effort of health providers to involve men in ANC. These health professionals mentioned additional limits to men's participation in ANC counseling including a lack of time, inability to take time off from their job, lack of interest, and insufficient information to motivate them. "My wife is pregnant; she is seen by a gynecologist in Santo Domingo. I always accompany her when she goes to antenatal visits. I am the only man in the middle of many pregnant women and even the gynecologist asked me what I'm doing there." (Young man, Barahona)

Given men's decision-making power around contraceptive use, it is critical to engage them in education around condom use for Zika transmission prevention with their partners. Leveraging the power of doctors to communicate with and influence the behavior of men, could be important in encouraging partner's attendance at antenatal care visits and finding other ways to reach men in the community.

D. Assertive communication skills

Both males and females stressed the importance of assertive communication between couples and the importance of creating an environment of trust when discussing these issues. Young men in Santo Domingo emphasized that providers should counsel women on how to propose condom use to their partners:

"Explain how and when to say it. Do not wait for the moment of intimacy to avoid brutal and aggressive reactions." (Young man, Santo Domingo)

While empowering women with condom negotiation skills is an essential part of increasing condom use, this young man's comment also demonstrates how socially acceptable GBV is, where women must be taught how to avoid it, rather than men and boys taught not to abuse women and girls. Men and boys

must also be taught how to engage in equitable conversations and relationships with women and girls, including learning to respect and value their rights and opinions, and not resorting to violence when upset.

E. Adolescents: vulnerable and underserved

A report about Zika in the Dominican Republic published by Doctors of the World and Oxfam highlighted that feminization of Zika was apparent among adolescents [13]. Moreover, the information collected for FGDs and through the literature review [18] revealed that some of the mothers of children born with CSaZ were under 18 when they gave birth.

A concern raised by all groups was the high number of unplanned pregnancies among adolescent girls. Social workers at the community level were particularly concerned about the high rates of adolescent pregnancy in their communities.

"Where I live there are a lot of girls who are pregnant or mothers, a lot are 12 or 13-year-old. They stop studying for this and all their future is affected." (Woman, community promoter, Santo Domingo)

"There are a lot of children giving birth to children." (Man, Santo Domingo)

These statements agree with data collected during the 2013 ENDESA survey which showed that one out of every five adolescent girls has a child, is pregnant, or has been pregnant at least once [26]. Many participants across the FGDs and KIIs related this issue with the lack of sexual education, limited power in condom negotiations due to abusive and unbalanced power relations, and stigma about contraceptive use.

"Adolescents lack of proper information and orientation, it is important to introduce sexual education in the schools." (Female health provider, Barahona).

"In the suburbs, teenagers don't use condoms. Girls don't ask for it and men take advantage of them. [..] Both: teenagers and adult men." (Young man, Santiago).

"I give condoms to sexually active girls and tell them not to have sex without them. Most of them have adult partners who look for sex but not responsibilities and they use condoms, they finish the condoms quickly. I tell them "you go fast!" [...] Some others say their partners don't want to use condoms because they say they don't feel the same" (Female community health promoter, Santo Domingo)

"Teenagers don't use condoms because they are afraid of parents. Especially girls, they don't run the risk to carry condoms in their bags." (Adult man, Santiago)

The prevalence of adults engaging in sexual activity with adolescents plays an important role in early, unplanned pregnancies. However, as is evident in the quotations above, the girls are given the responsibility to carry condoms, insist on their use, and to prevent pregnancy. This social norm of older men being sexually involved with adolescent girls leads to extremely unequal power dynamic, further reducing the likelihood of reproductive control through condom negotiation.

While adolescents face a variety of barriers in accessing condoms, one of the most widely discussed barrier was bias from health providers.

"When the main provider was out, I was in charge. Once a boy aged 13 or 14 came looking for condoms, I told him: 'Don't do this, you are just 14. He went away and while leaving told me: 'If I get sick it's your fault!' Can you imagine?" (Grandmother and health worker, Barahona)

"Previously I was distributing condoms for the Provincial Health Direction, girls aged 16, from the secondary school, were going to get condoms. I was shocked. I told them 'don't do it, it is before age!" (Grandmother, Barahona)

During the service providers training conducted by WI-HER/ASSIST in Santo Domingo in April 2018, adolescent pregnancy was discussed in depth. Most training participants were unaware that Dominican law guarantees adolescents the right to access preconception counseling and contraceptive methods [28,29, 30]. Furthermore, they believed parents could take legal action against doctors or health workers who give condoms to minors. Most of the health professionals who participated in the training believed that both the educational and health systems were not providing insufficient sexual education and sexual and reproductive health services because of the Catholic Church's influence.

In all three women's focus groups, women said that many mothers take their daughters to the gynecologist when they suspect she is sexually active. However, they did this almost exclusively for pregnancy prevention and not STI prevention.

"There are a lot of mothers preparing their teen daughters when they are 12 or 13; as soon as they know they are having contact they prepare them. Yes, it is like that, otherwise at 13 they are having abortions." (Mother of a child with CSaZ, Barahona)

Mothers believe that by ensuring that their daughters do not have unplanned pregnancies, they can reduce their risk. However, once again, we see the burden of pregnancy avoidance placed on adolescent girls, rather than shared equally between girls and their partners.

Another important finding from key informant interviews was that the adolescent girls might not access ANC as early in their pregnancies as other women. Participants cited possible reasons such as stigma, biased behaviors of the health providers, fear of the parents' reaction, and lack of knowledge about the reproductive process.

When accessed in a timely manner, ANC increases the likelihood of preventing maternal death and disability among adolescents, and to provide the opportunity to educate pregnant girls about how to protect themselves from Zika and other STIs during pregnancy.

Based on these interviews, the intersection of gender, socioeconomic status, and age limit an adolescent's ability and power to prevent unplanned pregnancies. With the prevalence of Zika, one of the potential outcomes is an unwanted pregnancy where the unborn child contracts Zika, which can impact the child, mother, and family for the rest of their lives. It is clear that adolescents of both sexes must be prioritized when strategizing risk communication, community engagement, comprehensive sexuality education, and open access to contraceptives on demand.

F. Support systems for families of children with Congenital Syndrome associated with Zika

Relatives of children with SCaZ were only available to participate in FGD in Barahona. Among the eleven participants in the FGD of women of reproductive age, nine were mothers of children with SCaZ and among the eleven men, one was a father and one a grandfather.

According to participants in the FGDs and KIIs, three out of the 16 children with CSaZ identified in the provinces of Barahona, Independencia, and Enriquillo, still have their father's support; the remaining 13 are cared for by single mothers. This is consistent with the literature analyzed at national level [18] and in Brazil [17], revealing that most children with CSaZ and their mothers are abandoned by the father. This leaves the burden of childcare and income generation on the mothers, further increasing the risk of low educational attainment and perpetuating the intergenerational cycle of poverty.

In the community of Cienfuegos (Santiago), one infant girl was reported to have born with microcephaly associated with Zika to adolescent parents. According to key informants, the father initially said the infant was his daughter and they were living together. However, due to the stigma of having a child with disabilities and the pressure of the family, the father refused to claim his child, claiming that she could not be his daughter since in the family had no previous cases of disability. Therefore, the mother and her daughter were forced to leave their community to live with her maternal grandparents.

Some FGD participants revealed that one of the main reasons fathers abandon their families is they feel frustrated because they are not able to support their families economically, since most of them are poor and unemployed and it is expensive to care for a child with CSaZ. Other participants, male, and female, believed the reason for fathers not taking responsibility for their children with CSaZ was cultural.

"Most mothers are single. Dominican men are "machos", they do not care about children." (Man, Santiago)

However, it is clear that fathers' lack of participation in caregiving and discomfort with having a child with disabilities plays an important role in these decisions.

"The father never felt good with this situation." (Woman, mother of a child with CSaZ, Barahona).

"Fathers are more vulnerable to critics because they do not participate in talks, they do not share in the waiting room of the therapy center. Mothers, thanks to the talks, overcome many things, many worries, for example, worries like 'what are other people saying about this?'" (Woman, mother of a child with CSaZ, Barahona)

FGD participants agreed that mothers of children with CSaZ bear the primary burden of care and are sometimes the main providers for the family.

"I am a single mother, I have a double responsibility: to work (I take care of a house during weekends), to care about his health, I have to care for everything." (Woman, mother of child with CSaZ, Barahona)

"We had to go to Santo Domingo to do studies that cost a lot, we still have to do some studies, but now I'm not working. My baby girl already has two months in therapy; we come here twice a week to do therapies. Sometimes my mother-in-law helps us carrying the child." (Man, father of a child with CSaZ, Barahona)

Apart from a few exceptions, the fathers that did not abandon their families gave limited support at home:

"His [the child's] dad is going to work. Sometimes, when he is at home, he carries him for a while and gives him back to me: 'take your son."" (Woman, mother of a child with CSaZ, Barahona)

These attitudes about women's role as primary or sole caregivers are deeply rooted in patriarchal gender norms. In addition to viewing caregiving as solely women's purview, men that help in housework are criticized for weakening their authority in the home and their control over their partners.

"I cook sometimes. My mother says that my wife governs me." (Man, Barahona)

"If we help at home they call us mommy." (Man, Barahona)

Most mothers of children with CSaZ had to leave their studies or jobs because caring for a child with CSaZ is so demanding.

"It's not easy, sometimes I feel that everything is falling down." (Woman, mother of a child with CSaZ, Barahona)

Given this situation it is important to identify additional people that can give practical, useful support to these families. The main actors cited by FGD participants were grandparents of both sexes.

"Fathers are usually busy; grandparents can be of a big help in care." (Woman, mother of child with CSaZ, Barahona)

Other actors considered as possible resources to support mothers include:

- Unemployed young people (Men, Santo Domingo)
- Women who offer paid care in their house (Women, Santiago)

Some recommendations that participants gave when referring to grandparents, but that could be valid for other supporters include:

- Giving them a proper training, since sometimes they are afraid they will hurt the children, and this limits their ability to care for them. (Woman, mother of child with CSaZ, Barahona)
- While involving grandparents or other actors, it is important to make sure that this doesn't reduce the responsibilities of the father (Grandmother, Barahona);
- Carefully considering caregivers, to avoid situations of abuse (Grandfather, Santiago).

As we examine sources of support for women, primarily mothers, who act as primary caregivers of children with Zika, respondents mentioned ensuring that fathers participate and choosing caregivers carefully to ensure that these children are not abused, physically or sexually. While considering ways to support children with CSaZ, who need and will continue to need a tremendous amount of care and support, the role the gender plays in magnifying the consequences of this disease is undeniable. Helping create stronger support systems for the primary caregivers of children with CSaZ is an important step, but it must not overshadow the need to look more deeply at the reasons why young, often poor, women are more likely to give birth to children with CSaZ, to bear the brunt of caregiving, and how that affects their lives and those of their children.

VII. CONCLUSIONS

The intersection of gender, age, and socioeconomic status limits many girls and women's ability to prevent unplanned pregnancy, Zika, CSaZ, and other STIs. The interviews and FGDs conducted during this assessment showed that few people have complete information about Zika, modes of transmission, and how to prevent infection. It is critical to address this education gap, because knowledge and awareness are prerequisites to generate changes in attitudes and behaviors.

This assessment also highlights how rigid gender norms that perpetuate inequality impact the sexual and reproductive health and rights of women, men, girls, boys and adolescents of both sexes.

It is essential to empower both women and men with the knowledge and tools to understand Zika, how it is transmitted, how it can be prevented, the impact it can have on their unborn children, and to prevent unplanned pregnancy. Without access to a full range of contraceptive options, including emergency contraceptives, governments are putting the burden of preventing pregnancies on women, in a context where most women and girls have never been able to fully exercise their sexual and reproductive rights. This is evident in the continued barriers in accessing condoms, negotiating their use, and using them correctly and consistently.

A key barrier to condom access emphasized by assessment participants was lack of privacy within the healthcare system, including condom distribution centers in public areas and interruption of consultations by strangers, which can discourage people from accessing sexual and reproductive health services. Women and adolescents face additional barriers while accessing condoms due to health personnel bias about the age at which sexual initiation should occur, and stigma faced by girls and women about being perceived as sexually promiscuous or thought to be sex workers if found carrying condoms. All of these barriers make it more difficult to seek out condoms, to receive them, and to have them with you when you need them.

Corroborating the 2013 ENDESA survey findings, there are several barriers to condom use deeply rooted in gender issues. Condom use remains uncommon within married and committed couples because condoms are associated with extramarital relations, which is generally normalized among men. This association is linked with gender stereotypes that consider the ideal woman as faithful to her partner and dedicated to the home. Women who defy the gender norms and have a social life outside the home, entering men's socialization spaces – "the street" – are considered promiscuous and called '*mujeres de la calle*' ('women of the street').

Condom use by married or committed couples was generally considered unacceptable both by men, who perceived it was their right to have condom free sex with their wives, and by women, who considered the request to use a condom as an offense to their partner. Respondents also expressed fear of violent retaliation or threats of separation when condom use was proposed. When asked about ways to improve condom use as a Zika prevention method, participants agreed on the important role health providers could play by inviting fathers to ANC counseling and explaining them in a comprehensive way why they should use condoms during the pregnancy. Young married men also suggested that health providers dedicate time to counsel women on safe negotiation skills around condom use, to reduce the risks of violent reactions.

The assessment highlighted that girls have limited access to sexual and reproductive health services at the facility level, although they are particularly vulnerable to unwanted pregnancy, sexual and genderbased violence, Zika, and its consequences. Given the high rates of unplanned adolescent pregnancies and unions at an early age, adolescent girls need to be empowered with accurate information about Zika as well as comprehensive sex education, so they have the skills and knowledge needed to control their sexual and reproductive health. Girls face unique barriers in accessing contraception, specifically condoms, because of biased behavior from health providers and stigma about sexual initiation outside of marriage.

Most of the FGD participants, mainly women, believed that women are responsible for protecting the unborn child from Zika during pregnancy, however, without access to accurate information and contraceptives they do not have the tools to do so. Key informants in maternal hospitals reported that due to stigma, fear of the parent's reactions, lack of proper information, and biases among health providers, adolescent girls may delay accessing ANC, thus reducing the possibility to prevent Zika during pregnancy. The lack of engagement of men and boys at health centers when their partners are pregnant was identified as a key intervention point, as they tend to hold the decision-making power about contraceptive use, particularly condoms, and therefore need to be knowledgeable about Zika and how to prevent the disease during pregnancy.

Women tend to be the primary caregivers of children with CSaZ, are at greater risk of raising their children without a partner and received limited caretaking support provided from men when they do remain with their family. Identifying other sources of support is critical for their and their children's wellbeing. Among potential sources of caregiving and psychosocial support, participants identified grandparents and young people looking for employment as potential support in caring for a child with CSaZ at the community level.

Zika did not create the lack of access to sexual and reproductive health in the Dominican Republic. Rather, the arrival of the Zika virus laid bare the consequences of the ongoing lack of access to contraceptives, sexual education, pervasive sexual and gender-based violence, and deeply ingrained machismo cultural ideals. Providing women and girls with the education and contraceptives necessary to make free and informed choices about their sexual and reproductive health is necessary to reduce the incidence of Zika infections and cases of CSaZ, and it is something that all women and girls have the right to regardless of the Zika outbreak.

VIII. RECOMMENDATIONS

To reduce rates of Zika infection and the cases of children born with CSaZ, it is essential to address key barriers identified throughout this assessment at the health facility and community levels.

Ensure access to contraceptives, quality of care, privacy, and confidentiality

- Guarantee availability of and access to a full range of high-quality, modern, voluntary, and userfriendly contraceptive methods, including emergency contraception, for women, girls, men, boys, and adolescents of both sexes.
- Ensure privacy and confidentiality whenever and wherever contraceptives are distributed, or sexual and reproductive health consultations are given, including the confidentiality of medical records and patient provider interactions.
- Sensitize health providers working in sexual and reproductive health about the Dominican laws, norms, and protocols that guarantee the right to access to preconception counseling and modern contraception methods, including to adolescents
- Sensitize health providers working in sexual and reproductive health on how to provide gender sensitive, stigma-free, confidential, and human right-based health services.

Strengthen Zika education in health facilities and communities

- Strengthen Zika education in health facilities and target community-based education to at-risk populations that usually do not attend family planning and antenatal care counseling, including adolescents and men.
- Sensitize and train and all health staff, not only those involved in sexual and reproductive health, on Zika to improve patient education. Emphasize accurate information related to the sexual transmission of Zika, prevention methods, and general sexual and reproductive health knowledge, including of the full range of contraceptive methods.
- Provide patient education to reach men and boys where they can be found, including at their jobs and where they socialize, explaining risks for Zika, and how Zika could affect their health and the health of their partners and children.
- Support Primary Care Units to continue, expand, and strengthen health facility and community level education and outreach activities, including provision of contraceptives outside of health facilities.
- Conduct innovative educational activities tailored to address different vulnerable groups and carry it out where the members gather. Possible locations include: schools, workplaces, community centers, sports facilities, town squares, religious gathering spaces, etc.

Provide equitable and comprehensive contraceptive access and counseling

- Educate all women and men, and girls and boys, receiving contraceptive counseling about how Zika is contracted, the risks while pregnant, and discuss potential choices including using contraception to avoid becoming pregnant/impregnating someone or using condoms during pregnancy to prevent Zika transmission.
- Guarantee men and women have access to the full range of short and long-term contraception, including both female and male condoms.
- Counsel women and girls on condom negotiation and assertive communication or link them with services that can provide skilled-based training. Counsel men and boys on condom negotiation and equitable sexual decision-making based in affirmative consent.
- If a girl or woman's partner refuses to use a condom, or she would like support discussing the subject with him, providers should offer to support this conversation both in health facility and community settings.
- Screen all girls and women for GBV at every visit, especially if the girl or woman has symptoms of an STI, provide supportive counseling, STI testing and treatment, access to a range of contraceptive methods, and emergency contraception, if necessary, and refer her to appropriate services (emotional support, social, and legal services).

Ensure comprehensive ANC that includes Zika education

- Emphasize the importance of using condoms to prevent sexual transmission of Zika during pregnancy. Stress that using a condom to prevent Zika is a way to care for your family, and that anyone can pass the virus sexually if they have been bitten by an infected mosquito.
- When possible, ensure promoters and/or providers of both sexes are available for education and counseling.
- Link the families where an unborn child has been diagnosed with CSaZ with psycho-emotional health support services and for appointments with healthcare providers who can give them information about the spectrum of disabilities their child may have.
- Promote male participation in ANC: ask the pregnant women to bring their partner to the next visit, conduct outreach about the importance of male participation in health facilities during men's medical visits and at the community-level in male-focused environments.
- Ensure the waiting area is welcoming to both women and girls and men and boys, including bathrooms and reading material for both genders.

Provide holistic support for families of children diagnosed with CSaZ

- Link families with children with CSaZ with individual and group psychosocial support services. This is particularly important for the primary caregiver.
- Provide health facility environments that are supportive people with disabilities and emphasize their inclusion and participation. Ensure all health facility and community-level staff is educated about how to work with people with disabilities and help reduce stigma for them and their families.
- Link family of children born with CSaZ to longer-term support and care such as rehabilitative services, early stimulation, social assistances and protection, psychosocial support, medication access, education, and help accessing these services if the family cannot afford them.

When considering reducing Zika transmission and the incidence of CSaZ, it is clear that we must move beyond discussions only about mosquitoes and start talking about, and with, women and girls. Women and girls are at the center of the epidemic, and what is now an endemic disease, the consequences of which will continue to be revealed in coming years. We must talk about the sexual and reproductive health and rights of women and girls, to whom the government recommended delaying pregnancy without providing them the skills, education, or contraceptives to do so. We must talk about how we can build a stronger, higher-quality health system that support families and women and girls in particular. We must strategize how to engage men in Zika prevention, protecting and caring for their children, developing more-equitable relationships with women, and how to examine and confront the pervasive macho culture. Zika and CSaZ have brought to light the consequences of the lack of access to comprehensive sexuality education, full range of contraceptives, and reproductive decision-making power. This report provides evidence of the wide-ranging impact of Zika on the lives of girls and women and boys and men in the Dominican Republic and the role that gender plays in its perpetuation. Measures to address these challenges must be implemented at the community, health facility, institutional, and cultural levels to create lasting, positive change.

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ANNEXES

Annex I: FGD Guide

ASSESS KNOWLEDGE ABOUT ZIKA AND ITS TRANSMISSION

- 1. What do you know about Zika? (sources of information)
- 2. Which are the main problems related to Zika (its possible consequences)
- 3. Which are the ways it is transmitted?
- 4. Which are the ways to prevent Zika?
- 5. How many months do you think a Zika virus can survive in semen? (up to 6 months)

IDENTIFY GENDER ISSUES AFFECTING CONDOM USE DURING PREGNANCY TO PREVENT ZIKA TRANSMISSION

- How do you think sexually transmitted Zika can be prevented?
 a. Please explain
- 7. In which occasion do men use condoms?
 - a. Do they use it with wives?
 - b. Do they use it with other partners?
 - c. Explain
- 8. How do men/ women react when their partners ask them to use condom?
- 9. Do couples use condoms during pregnancy? Why? Explain
- 10. Why do men and women have resistance using a condom? Explain
- 11. If they decide to use a condom, do they have to face any obstacle? Explain (women/men)
- 12. Which actors could influence the decision to use a method of pregnancy and STI prevention?
 - a. To whom would you listen?
 - b. Do extended families have a say or influence in these decisions?

Distribute among participants a white piece of paper with an M written on the back; ask them to write anonymously on it which of the main actors cited previously they consider the best influencer for men. Distribute a piece of paper with F on the back and ask them to write on it which one they think to be the best influencer for women.

13. With whom do you feel comfortable to speak about these issues?

CARE OF CHILDREN WITH CSAZ

- 14. Who do you think is responsible to protect the baby (before the baby is born) from being affected by Zika?
- 15. Who takes care of persons with disabilities in this community?
- 16. In your opinion, whose help can care givers count on?
- 17. What do you think about males getting involved in care activities?
- 18. What role can grandfathers and/or grandmothers play to support families affected by CSaZ?
- 19. Who you think can encourage men to care for children affected by Zika?
- 20. Do you feel that fathers of babies with microcephaly due to Zika are supporting the family? Why?
- 21. Does having a child with CSaZ affect the man's status in the community? Explain
- 22. Do you think that having a child with microcephaly can lead to some form of domestic genderbased violence? (explain)
- 23. Do fathers of the children with microcephaly take care about their kids and family? Do you think abandonment is a form of violence?
- 24. Do you have any questions?

Annex II: Dates of FGDs

Santiago - Community of Cienfuegos - 1st and 2nd of March

- 1. 1st of March from 9 am to 11 am: grandparents' FGD
- 2. 1st of March from 2 pm to 4 pm: men's FGD
- 3. 2nd of March from 9 am to 11 am: women's FGD

Barahona - Coming from different communities of Barahona e Independencia 7th and 8th of March and 18th April

- 1. 7th of March from 2 pm to 4 pm: grandparents' FGD
- 2. 7th of March from 10 am to 12 pm: women's FGD
- 3. 18th of April from 10 am to 12 pm: men's FGD

Santo Domingo - Community of Villa Duarte - 9th and 10th of April

- 1. 9th of April from 10 am to 12 pm: men's FGD
- 2. 9th of April from 10 am to 12 pm: grandparents' FGD
- 3. 10th of April from 2 pm to 4 pm: women's FGD

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