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# Barriers to Sexual and Reproductive Health Care Access in Central America With a Focus on Modern Contraception

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Barriers to Sexual and Reproductive Health Care Access in Central America

With a Focus on Modern Contraception

By

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## **Introduction**

Reproductive health is an important indicator of overall population health and is a priority of international organizations such as the United Nations (UN) and the World Health Organization (WHO). The UN includes the right to sexual and reproductive health (SRH) in their international covenant on rights stating, "...a woman's reproductive option is considered a basic human right".<sup>1</sup> This paper will evaluate whether SRH, specifically modern contraceptive access, is met throughout areas of Central America, with a focus on the country of Costa Rica.

The WHO defines SRH as "a state of complete physical, mental and social well-being related to the reproductive system, not merely the absence of disease but a positive and respectful approach to sexuality and sexual relationships...".<sup>1</sup> At the World Conference on Human Rights in 1968, choice in reproduction was explicitly recognized which further emphasized the importance of SRH on a global scale.<sup>2</sup> Women face many health challenges associated with their reproductive status and analyzing their reproductive care access is a critical component in evaluating the health status of Central America.

The WHO defines women of reproductive age as all women between 15-49 years old.<sup>3</sup> Dr. Dorothy Shaw in her editorial to *The Lancet* states "access to sexual and reproductive health is the gateway to health, because it is pivotal to our survival as a species."<sup>2</sup> In 1994, at the International Conference on Population and Development, reproductive health was identified as integral for improving quality of life.<sup>2</sup> SRH is critically important for women and echoed throughout global commitments to human rights, Shaw states "access to contraception represents

## Barriers to Sexual and Reproductive Health Care Access in Central America

the most important step towards gender equality.”<sup>2</sup> However, achieving this access is more difficult for some women in Central America and many face barriers in doing so.

Maternal mortality is an indicator of whether SRH health needs are being met and is also an indicator of a population’s health as a whole. The WHO defines maternal death as “the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.”<sup>3</sup> The maternal mortality ratio (MMR) is comprised of the numerator which is all maternal deaths occurring in a period of time, most often a year, and the denominator which is the total number of live births occurring in that same time period.<sup>3</sup> The importance of maternal mortality rates cannot be underestimated. The WHO states that “maternal mortality is widely acknowledged as a general indicator of the overall health of a population, the status of women in society and of the functioning of the health system.”<sup>3</sup> The UN collects and publishes population data for countries throughout the world and according to data from 2015, the MMR in Latin America which includes Mexico, all the countries of Central and South America, and the Caribbean was 68 deaths per 100,000 live births.<sup>4</sup> In comparison, the US MMR was 14 deaths per 100,000 live births, substantially lower.<sup>4</sup> Across Central America in 2015, the MMR in Guatemala was 88, El Salvador was 54, Honduras was 129, Nicaragua was 150, and Costa Rica was 25.<sup>3</sup> There are major differences across Central America when evaluating these numbers which starts with evaluating access to modern contraceptives.

According to the maternal health mapping study of Latin America and the Caribbean by Vargas-Riaño, Becerril-Montekio, Becerra-Posado, and Tristan, maternal mortality has “declined

## Barriers to Sexual and Reproductive Health Care Access in Central America

40% between 1990 and 2013.”<sup>5</sup> However, according to the authors, “profound inequalities in access to and use of reproductive health services still persist.”<sup>5</sup> This is evident in the MMR data published by the UN. Some of the consequences of limited access to modern contraceptives include unwanted pregnancies and unsafe abortions. The WHO in 2004 reported 20% of obstetric deaths could have been prevented with access to contraceptives.<sup>6</sup> Research done by Kestler, Barrios, Hernández, Valle, and Silva emphasizes providing women with effective contraception prior to hospital discharge following pregnancy and abortion complications is one of the most important strategies to prevent mortality.<sup>7</sup>

Access to SRH in Central America for women of reproductive age is an obstacle for many but not all women in the region. This paper will address whether barriers such as education level, immigration status, rural residence, discrimination, and financial burden impact contraceptive prevalence throughout Central America. The Central American countries included in this paper are Costa Rica, Guatemala, El Salvador, Nicaragua, and Honduras.

### **Background**

SRH begins with access to modern contraceptives options prior to becoming sexually active. The WHO separates contraceptives into two categories, clinic and supply (modern) and non-supply (traditional).<sup>3</sup> Modern contraceptives include estrogen and progesterone contraceptives in the form of pills, implants, rings, patches, progestogen injectables, intrauterine devices (IUDs), condoms, vaginal barrier methods, sterilization both female and male, and emergency contraception pills.<sup>3</sup> Traditional contraception includes cycle monitoring, ejaculation withdrawal, lactational amenorrhea, and abstinence.<sup>3</sup>

## Barriers to Sexual and Reproductive Health Care Access in Central America

Beginning in the 1970s, women in El Salvador, Guatemala, and Honduras, have been surveyed through the Reproductive Health Survey program.<sup>8</sup> Information obtained in the surveys includes contraceptive use, fertility, and maternal and child health services and is mostly obtained from women who are married or in stable relationships.<sup>3</sup> The WHO recognizes that basing the prevalence of modern contraceptive use on women in married and stable relationships does not include a considerable proportion of women using modern contraceptives.<sup>3</sup> Contraceptive use in Central America has been increasing but discrepancies in usage percentages between the five countries are noticeable.<sup>3</sup> The following percentages account for women who are married or in a union as of the year 2019.<sup>3</sup> Nicaragua and Costa Rica are tied with a modern contraceptive prevalence of 77%.<sup>4</sup> The modern contraceptive prevalence in El Salvador was 72%.<sup>4</sup> Honduras had a modern contraceptive prevalence of 65% and Guatemala had a modern contraceptive prevalence rate of 52%.<sup>4</sup> In comparison, the US had a contraceptive prevalence rate of 67%.<sup>4</sup> These percentages reflect that more than half of women in married or union relationships are using modern contraception however, there are major differences in these percentages particularly for the women in Guatemala.

The reproductive health data above reflects women who are married or in a union. Female adolescences aged 15 to 19 are a vulnerable population of reproductive age and their statistics on birth rate and contraception are tracked through the United Nations Fund for Population Activities (UNFPA). According to data from 1998-2011, Latin America and the Caribbean had an adolescent birth rate of 84 which is defined as the number of live births per 1,000 adolescents aged 15-19.<sup>10</sup> In comparison, Eastern Europe and Central Asia had an

## Barriers to Sexual and Reproductive Health Care Access in Central America

adolescent birth rate of 31, considerably lower than Latin America and the Caribbean, see appendix Table 6.1.<sup>10</sup>

The UNFPA also breaks the data into countries where 20% or more of women aged 20-24 had a live birth before age 18, see appendix Figure 4.2. Four of the five Central American countries were included with Nicaragua having the highest rate at 28%, followed by Honduras at 26%, and Guatemala and El Salvador tied at 24%.<sup>10</sup> This population of women reported a contraception need of 26% defined by the UNFPA as an expression or “a desire to control their fertility but were not using contraception.”<sup>10</sup> These figures depict 1 in 4 adolescent women in Central America have had a child before the age of 19 partly explained as a result of poor access to modern contraception.

Another method for analyzing SRH for a country or region is total fertility rate (TFR). The WHO describes TFR as “closely associated with contraceptive prevalence and other indicators of reproductive health such as the maternal mortality ratio.”<sup>3</sup> According to the UN, Guatemala had the highest TFR of the Central American countries at 2.6 lifetime births per woman as of 2015.<sup>9</sup> Guatemala’s higher TFR aligns with their lower prevalence of modern contraceptive use. Costa Rica and El Salvador had the lowest fertility rate at 1.7 followed by Nicaragua at 1.9 and Honduras at 2.0.<sup>9</sup> In comparison, the US fertility rate is 1.9.<sup>9</sup> There have been considerable drops in fertility rate since the 1990s when Guatemala had a rate of 5.2, Honduras was 4.9, Nicaragua was 4.2, El Salvador was 3.7, and Costa Rica was 3.0.<sup>9</sup> According to the WHO, drops in TFR is a statistic used to measure the success of family planning initiatives.<sup>3</sup> These drops indicate modern contraceptive services are gaining momentum however,

## Barriers to Sexual and Reproductive Health Care Access in Central America

differences between the countries indicate there may be more barriers to access faced by women in Guatemala compared to those in Costa Rica.

Overall, the statistics on contraceptives portray Central American countries as having a contraceptive prevalence higher than at least 50% but there is a lack of data on women who are not married or in stable relationships. The increase in contraceptive use is reflected by the decrease in TFR since the 1990s however, adolescent pregnancy is still prevalent throughout the region.

### Limiting Factors to SRH

While there are many barriers to obtaining SRH access, this paper will focus on how levels of education, immigration status, residence (rural vs urban), discrimination, and financial burden impact women's ability to obtain modern contraceptives. These specific barriers were common throughout the literature reviewed on this topic and selected based their frequent mentioning.

Education is vital to all people and for women specifically is the means to “equip them for a better life... help prevent early marriages, and high-risk child bearing and to reduce the associated mortality and morbidity,” as stated by the UNFPA.<sup>10</sup> According to the comparative report on the Reproductive Health Survey data in Central America, the use of maternal health services “increases steadily with increasing levels of education in all countries.”<sup>6</sup> The report found more women in Honduras, Guatemala, El Salvador, and Nicaragua are achieving higher levels of education and in turn, the use of health services has increased.<sup>6</sup> As of the year 2001, almost half of women in Nicaragua and El Salvador completed at least 7 years of school.<sup>6</sup>



## Barriers to Sexual and Reproductive Health Care Access in Central America

Whereas, in Guatemala and Honduras, approximately 30 percent had at least 7 years of education.<sup>6</sup> The report also found women in urban settings had more years of education in comparison to women in rural settings.<sup>6</sup> According to the UNFPA, “girls most likely to have a live birth before age 18 reside in rural and remote areas, have little or no education, and live in the poorest households.”<sup>10</sup> Yet, Nicaragua had the highest percentage of adolescent birth rate and the highest education. Birth rate statistics were not broken down further into specific areas, rural vs urban, or poverty level of the mothers. This may explain why many women, while educated, still don’t have access to modern contraception due to rural location and cost.

Layering contraceptive prevalence onto education, women in Nicaragua and El Salvador had higher levels of education and greater prevalence of modern contraceptive usage at 77% and 72% respectively.<sup>4,6</sup> Whereas, in Honduras and Guatemala education is typically less than 7 years, and their modern contraceptive prevalence was lower at 65% and 52% respectfully.<sup>4,6</sup> Education is not the sole reason why the prevalence of modern contraceptive usage varies throughout Central America.

A study conducted by researchers Rocha-Jiménez, Morales-Miranda, Fernández-Casanueva, Brouwer, and Goldenberg using in-depth interviews of international migrant sex workers in Guatemala and Mexico found participants access to SRH varied depending on their migration status and affordability of such services.<sup>11</sup> “Many circular migrants shared narratives of having avoided or delayed much needed SRH care in their destination countries owing to unaffordable costs, impolite or inconsistent treatment by providers, and concerns regarding their immigration status.”<sup>11</sup> Sex workers are a vulnerable population and as a result of limited SRH access experience health inequalities particularly related to HIV and sexually transmitted

## Barriers to Sexual and Reproductive Health Care Access in Central America

infections which are two health conditions with considerably high prevalence in this population.<sup>11</sup> The quote by Rocha-Jiménez and colleagues, include concerns of cost, discrimination, and immigration status as barriers to SRH.

Expanding on immigration status, in a study conducted by medical anthropologist, Kathryn Goldade, Nicaraguan migrants in Costa Rica identified “lack of access to health care was the primary disadvantage to being undocumented.”<sup>12</sup> This is due to the health care system in Costa Rica requiring residency documents or a formal work permit in order to qualify for the state provided health care.<sup>12</sup> Migrant women typically find work in the informal labor sector and are therefore unable to obtain health insurance in Costa Rica.<sup>12</sup> Whereas, their husbands can obtain health insurance through formal work employment and their children are covered under Costa Rican health care, leaving the woman as the only family member not covered by insurance. Without health care, migrant women have to pay fee-for service and can rarely pay due to financial burden.<sup>12</sup> The exceptions to fee for service included access to emergency care, with childbirth falling into that category.<sup>12</sup> One of the migrant women interviewed by Goldade stated she had been turned away when trying to get birth control pills and later a tubal ligation. These denials led to a pregnancy which to receive care when pregnant required bureaucratic steps she felt ashamed to take and resulted in missed prenatal appointments.<sup>12</sup> This migrant woman’s experience highlights the cost barrier to SRH migrant women face by not having insurance due to their immigration status.

Rural location of residence is a common concern throughout the literature on modern contraceptive access in Central America. The most recent Reproductive Health Survey data from 2001-2003, indicated women in urban areas had higher rates of contraceptive use compared to

## Barriers to Sexual and Reproductive Health Care Access in Central America

those in rural areas.<sup>8</sup> The Social Security Institute in El Salvador, Guatemala, and Honduras provides health services which are “primarily urban based, and provides the bulk of its services in the capital city.”<sup>8</sup> For example, women in Guatemala’s urban areas had a 56.7% modern contraceptive prevalence whereas Guatemala’s rural women had a 34.7% modern contraceptive prevalence rate.<sup>8</sup> The location of these services and prevalence differences shed light on the discrepancy in contraceptive prevalence between the Indigenous and Nonindigenous women in Guatemala. Kestler and colleagues dug into the contraceptive prevalence rates by ethnic group and found Guatemalan Indigenous rural women only had a 23.8% prevalence of contraceptive use in the year 2002.<sup>7</sup> One of the consequences to limited access of contraceptives are abortions and according to Kestler and colleagues, “often performed in unsafe or unsanitary conditions, ...leading to serious morbidity, even death.”<sup>7</sup> Implementing a nationwide family planning policy at the community level, at health care centers, and the hospital systems is advocated for by Kestler and colleagues. These initiatives would increase access for women in rural areas and limit the use of unsafe abortions therefore lowering MMR.

Discrimination experienced by Indigenous and Afrodescent women is a major barrier preventing these populations from seeking SRH, specifically modern contraception. A literature review done by Castro, Savage, and Kaufman in the time frame between 2000 to 2015 focused on understanding ethnic minority barriers to equitable SRH in Latin America.<sup>13</sup> They found that discrimination and racism toward Indigenous and Afrodescendant women in Latin America serves as a deterrent to seeking health care and “may fuel inequitable health outcomes between women of dominant and those of minority ethnicity.”<sup>13</sup> The discrimination was not only societal but also demonstrated through providers in the forms of disrespect, verbal abuse, using coercion,

## Barriers to Sexual and Reproductive Health Care Access in Central America

and other forms of discrimination.”<sup>13</sup> It is therefore not surprising when these populations avoid seeking SRH. This is confirmed with their literature review stating, “provider discrimination, coupled with financial barriers, affect health care utilization rates among women of ethnic minorities.”<sup>13</sup> Differences in contraceptive prevalence among Indigenous women which was 23.8% compared to 52% for married or women in a union throughout Guatemala are very noticeable.<sup>4,7</sup> Discrimination is an integral part of why that difference exists.

### Contraceptive Acceptance, Accessibility, and Coverage

Options for accessing contraceptives in Central America are offered through Social Security, pharmacies, and private clinics.<sup>8</sup> The Ministry of Health is the principal source of contraception for all Central American countries.<sup>8</sup> The cost of contraceptives provided by the Ministry of Health is subsidized and therefore increases access to rural, poor, and less educated women.<sup>8</sup> The report analyzing Reproductive Health Survey data found the use of contraceptives has been steadily increasing since the early 1990s across El Salvador, Guatemala, Honduras, and Nicaragua.<sup>8</sup> Injectable birth control had the highest increase in usage from the early 1990s to early 2000s in all four countries and was the greatest preferred contraceptive method.<sup>8</sup> There are a few reasons mentioned by Kestler and colleagues as to why injectable Depo-Provera is the preferred option among Guatemalan women. “Anecdotal evidence suggests that women prefer this method because of its discretion.”<sup>7</sup> Other than discretion, for women living far from health clinics only needing one shot every 3 months is more practical.<sup>7</sup>

Research obtained by Rocha-Jiménez and colleagues on sex workers in Guatemala and Mexico, found women in this trade are required by public health guidelines to undergo regular

## Barriers to Sexual and Reproductive Health Care Access in Central America

HIV/STI screening at local clinics in order to uphold their health cards to engage in sex work.<sup>11</sup>

The primary concern by public health officials for this demographic was HIV/STI prevention.

Whereas, the primary unmet concern voiced from the women was contraception, sexual education, and absence of care and treatment services.<sup>11</sup> Most women in the study reported a lack of access to contraception information with non-barrier methods being the most limited.<sup>11</sup> The lack of education on contraception led to unintended pregnancies and women using barrier methods only with paying clients.<sup>11</sup> While some public health concerns such as HIV and STI prevention are being addressed in this population, their contraceptive needs are not.

### **Methods**

This is a broad but not all-encompassing paper conducted using the online database PubMed, Augsburg University's Lindell Library, and the United Nations website to obtain research information. Key phrases searched included the following; maternal outcomes in Central America, women's health Latin America, sexual and reproductive health in Central America, and maternal mortality ratio in Latin America. References of articles selected were scanned and used for additional research material. An interview was conducted with Ashleigh Cutt PA-C on June 7<sup>th</sup>, 2019 after she returned from traveling to Honduras on a medical mission trip earlier in May of 2019.

Interviews were conducted with local Costa Rican health care professionals during the month of July in 2019. On July 1<sup>st</sup>, 2019, an interview was conducted with Dr. Jose Alejandro Madrigal Loba from the Costa Rican Doctors' Association at the Colegio De Medicos Y Cirujanos. Dr. Madrigal Loba was asked questions regarding access to health insurance for all

## Barriers to Sexual and Reproductive Health Care Access in Central America

Costa Ricans but also specific access for pregnant women. Additionally, discussed with him was access to contraceptives. An interview was conducted on July 3<sup>rd</sup>, 2019 in La Carpio with Susie Aguirre, a Nicaraguan registered nurse currently working at Hospital Calderón Guardia. The neighborhood of La Carpio is a poor neighborhood outside of San Jose located next to a landfill and is home to many Nicaraguan refugees. Topics discussed with Susie included treatment of women delivering babies at the hospital, the dislike of the hospital settings by pregnant women, and the use of midwifery. A third interview was conducted on July 5, 2019 with Randall Fernández at the EBAIS (Equipos Básicos de Atención Integral en Salud), a local health center, in the Indigenous, rural community of Boruca. Topics discussed with Randall included teen pregnancy prevention, access to contraceptives, and family planning.

### **Discussion**

After analyzing research, survey data, and conducting interviews with local health officials in Costa Rica, SRH is a prominent health topic of concern in Central America. Access to modern contraception as early as age 15 prevents unwanted pregnancies, unsafe abortions, allows for the spacing of pregnancies, and conception when desired. Factors such as rural location, immigration status, discrimination, and financial burden were issues identified in the literature and expanded upon through personal interviews.

Location is a known barrier to accessing modern contraception. The Reproductive Health Survey data states the Social Security Institute in El Salvador, Guatemala, and Honduras provides the majority of its services in the capital city of those countries.<sup>8</sup> An interview was conducted with Ashleigh Cutt PA-C on June 7<sup>th</sup>, 2019 regarding her medical mission trip to the

## Barriers to Sexual and Reproductive Health Care Access in Central America

Jungle Hospital in the Congrejal River Cove of Honduras, located approximately 415 km from the capital city of Tegucigalpa. A service of need Ashleigh identified for women in the area is access to birth control due to many women reporting running out of their birth control pills. Inconsistent access for women in rural areas contributes to the lower prevalence of modern contraceptive use in Honduras and the statistic that 26% of women age 20-24 in Honduras have had a child by age 18.<sup>10</sup> Honduras has a TFR of 2.0 and a modern contraceptive prevalence rate of 65% for women who are married and in a union.<sup>4,9</sup> Ashleigh's interview highlights the need for better access to modern contraception in a consistent manner. It is unclear how women in this area of Honduras obtain access to modern contraceptives when the hospital is not staffed.

Another barrier to accessing modern contraception, is a woman's immigration status. This is becoming an area of concern in Costa Rica as many people from all over Central America, and most recently Nicaraguans are fleeing to the country. According to Dr. Madrigal Loba, Costa Rica provides insurance to all pregnant women. While having insurance removes the financial burden of seeking prenatal care, there is a gap in contraceptive access for migrant women. According to Dr. Madrigal, 95% of the Costa Rican population of five million people are covered by La Caja, a social security program, funded by the Costa Rican workforce. La Caja is not accessible to those who are not citizens. In an interview conducted by Goldade of a physician in Costa Rica, the physician expressed concern for not providing preventative services such as birth control to those who were uninsured.<sup>12</sup> Ultimately, the physician decided to go against La Caja policy and provide contraceptive access for free.<sup>12</sup> Not all migrant women were allotted this care for free as mentioned in other interviews conducted by Goldade. Thus, these women have the financial barrier of fee for service in order to obtain modern contraception.

## Barriers to Sexual and Reproductive Health Care Access in Central America

Denying access of modern contraception to migrants in Costa Rica is not reflected in the country's contraceptive prevalence statistic of 77% and therefore it is unknown how many migrant women in Costa Rica are in need of the preventative service. Costa Rica's MMR of 25 can be attributed to much of the women citizens being insured under La Caja but the number may not encompass all women in the country.

Discrimination is a barrier faced by Indigenous, Afrodescent, and migrant women in Central American countries. The interviews with Costa Rica health care workers conducted by Goldade, identify discrimination towards Nicaraguan migrants by health professionals. "Physicians and nurses viewed Nicaraguans as needing more health services than nationals because of cultural reasons that included sexual promiscuity, violent tendencies, and a lack of education regarding health care seeking."<sup>12</sup> Discrimination was mentioned by Susie Aguirre, a registered nurse at Hospital Calderón Guardia in San Jose, as a reason why women avoid going to the hospitals. Susie Aguirre estimated that 11 out of 20 women in the neighborhood of La Carpio give birth at home due to the mistreatment and discrimination received at the hospital. Both Susie and Goldade highlight discrimination and bring to light the magnitude of the problem. Castro and colleagues include the 2010 UN Economic Commission for Latin America and the Caribbean's statement that "the high maternal mortality ratio in Latin America and the Caribbean (is due) to health system discrimination against Indigenous and Afrodescendant women."<sup>13</sup> Castro and colleagues also found literature expressing Nicaraguans in Costa Rica experiencing "providers' purposeful neglect."<sup>13</sup> These findings confirm Susie's experience of women in La Carpio, many of whom are Nicaraguan refugees, avoiding medical care for reasons such as discrimination.



**Conclusion**

Access to SRH, specifically modern contraceptives, is multifaceted and includes barriers of education level, immigration status, rural residence, discrimination, and financial burden. After traveling to Costa Rica, I was able to gain deeper knowledge on their health care system and accessibility of services. Many of the women in Costa Rica have access to health insurance through the social security system, likely contributing to the lowest MMR in Central America and high prevalence of modern contraception. However, the population of migrant women in the country cannot access preventative services such as contraception and therefore the maternal health statistics don't perfectly represent the reality of all women in the country. Refugee and migrant access to modern contraceptives is a concerning health problem and one that will continue as more Nicaraguans seek refuge from the current political climate in their home country.

The UN's emphasis on the basic human right for women to have reproductive options is not completely met throughout Central America.<sup>1</sup> Using MMR data as an indicator on the population health of the countries leads to the conclusion that improvement is needed in SRH throughout the region beginning with access to modern contraception. Eliminating barriers to accessing modern contraception is the first step to ensure this right is met for all women in Central America.

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## Barriers to Sexual and Reproductive Health Care Access in Central America

**Appendix**

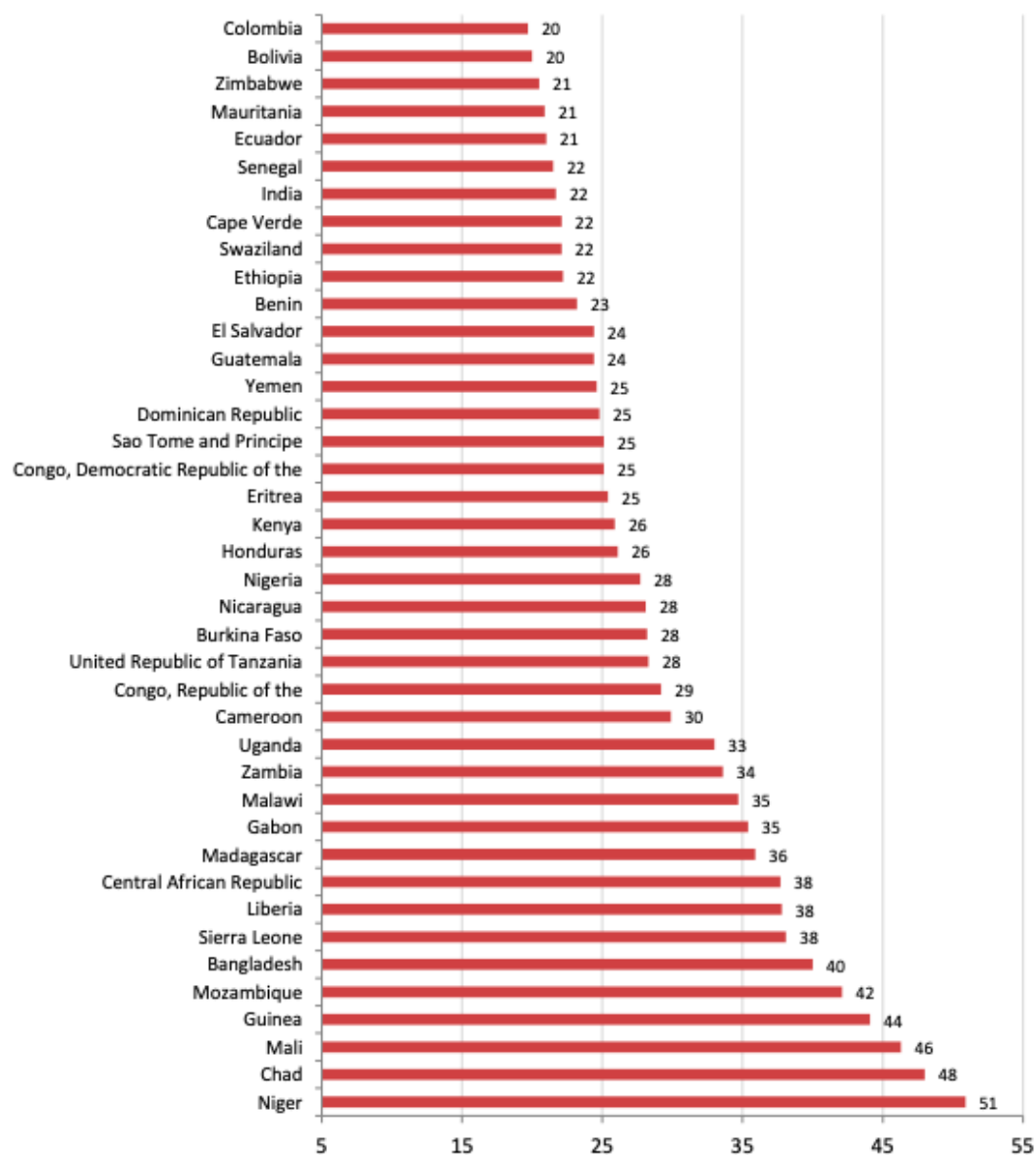
Table 6.1: Distribution of female adolescents aged 15-19 by marital status, adolescent birth rate, total demand for family planning, contraceptive prevalence and unmet need for contraception by region, 1998-2011

UNFPA regions	Girls age 15-19			Total demand for family planning (%)	Contraceptive prevalence (%)	Unmet need for contraception (%)
	Currently married (%)	Single/other (%)	Adolescent Birth Rate			
Eastern Europe and Central Asia	8.7	91.3	31	46	31	15
Latin America and the Caribbean	12.0	88.0	84	77	51	26
Arab States	12.5	87.5	50	34	21	13
Asia and the Pacific	15.2	84.8	80	46	23	23
East Asia and the Pacific	5.0	95.0	50	53	38	15
South Asia	24.9	75.1	88	45	21	25
Sub-Saharan Africa	23.6	76.4	120	37	13	24
Eastern and Southern Africa	19.2	80.8	112	48	22	26
West and Central Africa	28.0	72.0	129	30	7	23
Developing countries	15.8	84.2	85	45	22	23

Source: UNFPA MDG5b+Info database with data from DHS and MICS studies ([www.devinfo.org/mdg5b](http://www.devinfo.org/mdg5b)). Estimates for distribution of girls aged 15 to 19 by marital status are based on United Nations Population Division, 2010 and 2012.

## Barriers to Sexual and Reproductive Health Care Access in Central America

Figure 4.2: Countries with 20 per cent or more of women aged 20-24 having a live birth before age 18



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Depositor's Name (Please Print): Maria L McCoshen

Author's Signature: Maria L McCoshen Date: 08/10/2019

If the Deposit Agreement is executed by the Author's Representative, the Representative shall separately execute the following representation.

I represent that I am authorized by the Author to execute this Deposit Agreement on the behalf of the Author.

Author's Representative Signature: \_\_\_\_\_ Date: \_\_\_\_\_