

# “At Least I Didn’t Get Raped”: A Qualitative Exploration of IPV and Reproductive Coercion among Adolescent Girls Seeking Family Planning in Mexico

Journal of Interpersonal Violence

1–22

© The Author(s) 2020

Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/0886260520959571

journals.sagepub.com/home/jiv



Jasmine Uysal,<sup>1</sup> Jamila K. Stockman,<sup>1</sup>  
Elizabeth Miller,<sup>2,3</sup> Teresita Rocha-Jimenez,<sup>4</sup>  
Gudelia M. Rangel,<sup>5</sup> Alejandra Padilla Mercado,<sup>6</sup> and  
Argentina E. Servin<sup>1</sup> 

## Abstract

Adolescent girls who report intimate partner violence (IPV) are at an increased risk of experiencing reproductive coercion (RC); both these forms of gender-based violence (GBV) are associated with unintended pregnancy. Yet little is known about these experiences among adolescent girls in Mexico. Qualitative data were collected as part of formative research for the adaptation of an evidence-based intervention to address RC and IPV in community health centers in Tijuana, Mexico. From September, 2017 to January, 2018, adolescent girls aged 16 to 20 years old ( $n = 20$ )

<sup>1</sup>University of California, San Diego (UCSD), La Jolla, CA, USA

<sup>2</sup>Children’s Hospital of Pittsburgh of UPMC, Pittsburgh, PA, USA

<sup>3</sup>University of Pittsburgh School of Medicine, Pittsburgh, PA, USA

<sup>4</sup>Society and Health Research Center, CISS, Universidad Mayor, Santiago, Chile

<sup>5</sup>U.S.-Mexico Border Health Commission, Tijuana, Baja California, Mexico

<sup>6</sup>Mexican Ministry of Health (ISESALUD), Tijuana, Baja California, Mexico

## Corresponding Author:

Argentina E. Servin, Department of Medicine, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093, USA.

Email: [arservin@health.ucsd.edu](mailto:arservin@health.ucsd.edu)

seeking voluntary family planning (FP) services were identified and recruited from two publicly funded community health centers. We conducted semi-structured, in-depth interviews and analyzed the transcripts using inductive and deductive techniques. Participants in this sample commonly described experiencing IPV and RC (including pregnancy coercion and contraceptive sabotage), which many girls reported resulted in unintended pregnancy. Further, participants' narratives and general lack of knowledge on how to cope with IPV or RC illuminated the acceptability of offering GBV prevention intervention within FP clinics serving this population. Findings highlight an urgent need to prevent IPV and RC, and reduce risk for unintended pregnancy among adolescent girls in this region and the potential of FP clinics to serve as a safe space for intervention delivery. Findings contribute to the limited qualitative evidence from Mexico, describing adolescent girl's experiences of IPV and RC, strategies for preventing pregnancy in the context of RC, and opportunities for support from FP providers.

**Keywords**

adolescents, cultural contexts, dating violence, domestic violence, revictimization

According to the World Health Organization (WHO), 23–49% of women and adolescent girls aged 15 years and older are subjected to physical and/or sexual violence from a male partner in their lifetime (Pallitto et al., 2013). Although violence affects the lives of many women and girls, it does so unevenly—intimate partner violence (IPV) prevalence varies from < 4% in the past 12 months in high-income countries compared to > 40% in some low- and middle-income countries (LMIC), such as Mexico (Decker et al., 2015). Here, almost half (47%) of women and girls aged 15–49 years have experienced IPV (Instituto Nacional de Estadística y Geografía [INEGI], 2014). Mexico also has the highest adolescent birth rate out of all 37 member countries in the Organization for Economic Co-operation and Development (OECD), with 62 out of every 1,000 pregnancies occurring in adolescent girls (OECD Social Policy Division – Directorate of Employment, Labour and Social Affairs, 2019). Despite increased economic development and access to contraceptives, adolescent pregnancy rates have mysteriously risen by almost 15% over the past five years in Mexico, highlighting the need for further study of this prevalent issue. In 2017, two out of every ten mothers who gave birth in Mexico were under 20 years of age (INEGI, 2018a).

Research has documented that IPV is associated with poor reproductive health outcomes including unintended pregnancy among adult and adolescent women (Odonnell et al., 2009; Pallitto et al., 2005). Yet emerging evidence also supports another form of gender-based violence (GBV), distinct from, yet related to IPV, that is associated with unintended pregnancy and other poor reproductive health outcomes above the effects seen for IPV alone—reproductive coercion (RC; Basile et al., 2018; Kovar, 2018; Miller, Jordan et al., 2010; Miller et al., 2014; Moore et al., 2010). RC includes a range of controlling behaviors by a male partner or family member that limit the reproductive choices of women and girls including contraceptive sabotage (purposeful interference with a woman's attempts to use contraception; Miller, Decker et al., 2010; Moore et al., 2010), pregnancy coercion (male partner or family members forcing or pressuring a woman to become pregnant), and abortion coercion (interference with a woman's choice to continue or terminate a pregnancy; Miller, Jordan et al., 2010). Importantly, RC is especially prevalent among adolescent girls and women seeking family planning (FP) services (Hill et al., 2019; Miller & McCauley, 2013). Despite the implications that RC may have on the health of adolescent girls, few studies have investigated the prevalence or nature of RC among adolescent girls in Mexico (Grace & Fleming, 2016; Miller, Levenson et al., 2012; Silverman & Raj, 2014).

Developing the capacity to address RC and IPV within health care settings, not just primary but also emergency and urgent care, is critical in Mexico to improve the sexual and reproductive health (SRH) of adolescent girls. However, to date, no known models to effectively address RC and IPV to prevent unintended pregnancy have been developed within health care settings in this context. Thus, the goal of this study was to qualitatively describe adolescent girls' perceptions and experiences of RC and IPV, and their impact on girls' reproductive health and coping strategies of their health-seeking behavior, in Tijuana, Mexico to inform development of interventions to improve reproductive autonomy and health of this marginalized population of adolescent girls.

## **SRH and Violence Experiences in Mexico**

Although Mexico has witnessed a significant reduction in adult fertility rates since the mid-1970s (Consejo Nacional de Población [CONAPO], 2016), unmet need for contraception and unintended pregnancy remains problematic especially for adolescent girls and young women. A recent national study among sexually active women aged 15–49 years found that unmet need for contraception was 28.9% for women never married (Juarez et al., 2018).

Likewise, use of modern contraceptives or long-acting reversible contraceptives (LARCs) is low among adolescents (15–19 years); less than 10% reported using a form of modern contraception (CONAPO, 2016; Juarez et al., 2018). As previously mentioned, Mexico has the highest adolescent birth rate of all the member countries of the OECD, and specifically, Tijuana has the second highest rate of teen pregnancy in the country (OECD Social Policy Division – Directorate of Employment, Labour and Social Affairs, 2019; Gobierno Del Estado de Baja California, 2018). Furthermore, there are no data available on RC, and the limited data available on IPV indicates that almost half (47%) of Mexican women and girls aged 15–49 have experienced IPV by a male partner (INEGI, 2014). Likewise, in the past five years, there has been an increase in violence against women, including GBV and IPV in Mexico (INEGI, 2016; Instituto Nacional de las Mujeres, 2020). While no studies have explicitly reported on the quantitative association between IPV or RC and modern contraceptive use or unintended pregnancy in Mexico, qualitative studies have found that women are afraid to oppose their husbands or partners' wishes regarding their FP use out of fear for their physical safety, contextualizing the clear barrier IPV and RC can pose to continued and successful FP use in this setting (Dansereau et al., 2017). Sociological research has further classified men as a risk factor to women's reproductive health in Mexico due to highly patriarchal, hegemonic, and commonly accepted social norms (De Keijzer, 1997). In Mexico, it is common for girls under age 18 to be married (formal, 23%) or have informal unions with older male partners; of these girls, 92% are not in school (Rivero, 2017).

## **Methods**

### ***Study Design***

Qualitative data were collected as part of formative research for the adaptation of a clinic-based intervention known as Addressing Reproductive Coercion in Health Settings (ARCHES) that demonstrated via two US-based randomized controlled trials to prevent RC and improve reproductive autonomy (Miller et al., 2011; Miller et al., 2016). The study design and theoretical framework for this study is modeled after previous studies in the United States and Kenya to assess women's and girls' experiences with RC and IPV to adapt the ARCHES model (Boyce et al., 2019; Miller et al., 2017; Tancredi et al., 2015; Zachor et al., 2018). Semi-structured, in-depth interviews (IDIs) were conducted among adolescent girls seeking FP services to assess and describe their experiences with RC, IPV, care seeking, and linkages with unintended pregnancy. This study was approved by the Institutional Review

Boards at the University of California, San Diego and Universidad Xochicalco in Tijuana, Mexico.

### **Study Setting**

The United States–Mexico border, with a total length of 1,969 miles, is one of the most transited international border crossings in the world and home to one of the largest binational conurbations, the sister cities of San Diego, California–Tijuana, Baja California (United States Department of Transportation, Bureau of Transportation Statistics, 2019). Due to its geographic location, constant human mobility, and strong social and economic ties, Tijuana has become the ideal setting not only for international commerce, manufacturing, and cultural exchange but also for other activities such as drug trafficking, human trafficking, sex work, and a migration hub (Calderón et al., 2019; Gobierno del Estado de Baja California, 2018; U.S. Department of Justice Drug Enforcement Administration, 2018). It is estimated that half of the almost 2 million people that live in Tijuana are either migrants from the center and south of the country, or from Central America and the Caribbean that failed to cross north to the United States. (INEGI, 2012, 2018b). Majority of these migrants have settled in the outskirts of the city where there is limited infrastructure (e.g., water, sanitation, drainage, etc.). It is here in the highly marginalized areas of the city where most of the community health centers run by the Mexican Ministry of Health are located (Biblioteca Mexicana del Conocimiento, 2015). Because Mexico currently offers universal health coverage, these centers are the primary source of health care for individuals living in these communities (Nigenda et al., 2016; Perez-Palacios, 1994). It is estimated that 80% of adolescent girls (14–19 years of age) that receive services related to SRH are seen at these clinics (CONAPO, 2010). This study was implemented in these community health centers in Tijuana, taking advantage of the existing health care infrastructure working with the most vulnerable and marginalized communities.

### **Recruitment**

From September, 2017 to January, 2018, adolescent girls seeking confidential FP services were identified and recruited from two community health centers in Tijuana, Mexico run by the Mexican Ministry of Health (ISESALUD). Local female research assistants, trained in the WHO recommendations on intervention research for violence against women (WHO, 2016), approached adolescent girls in the waiting rooms of the two participating community health centers to ask if they were interested in hearing more

about participating in a “girls health study.” If interested in speaking, participants were taken to a private setting within the clinic by the research assistant where they were explained the purpose of the study and if interested, they were screened for inclusion (being biologically female, aged 16–20 years old, speaking Spanish or English, seeking FP services at the participating community health center, residing in Tijuana, Mexico, having no plans to move in the next 12 months). As part of informed consent, research assistants explained that participation in the study was completely voluntary and would in no way affect the care that girls received at the clinic. Those who were eligible and interested provided voluntary written informed consent before participation in IDIs.

### *Data Collection*

Female research assistants conducted a total of 20 IDIs in Spanish in private rooms at the participating centers. The interviews were audiotaped (identified using only a study-unique identification number) and lasted 60–90 minutes. The interview protocol was informed by the WHO safety and ethical guidelines for conducting research with adolescent girls (WHO, 2007), and followed an open-ended guide, which was iteratively revised as data collection and analysis progressed. Questions elicited women’s narratives regarding RC experiences, their knowledge and experiences of IPV and RC, knowledge of FP, HIV, and sexually transmitted infections (STIs), current utilization of IPV services, as well as access and barriers to health and legal services and were adapted from formative research guides utilized in the United States and Kenya (Boyce et al., 2019; Miller et al., 2011; Miller et al., 2017). Participants received US\$15 for their time and travel costs associated with their participation, HIV/STI information, and a small referral card with contact information of verified, free or low-cost local IPV service agencies.

### *Participant Characteristics*

Among the 20 adolescent girls, the median age was 17.5 years, the average level of education was 7 years (middle school), and the country of origin was Mexico (from Baja California and other southern states). Importantly, all participants reported experiencing IPV (verbal, physical, and/or sexual) at least once in their lifetime with half in the past year and 60% reported ever experiencing RC. Further, only one participant reported currently using a modern contraceptive method (Depo-Provera) other than male condoms. All of the participants had at least one child under the age of five or were pregnant at the time of their interview (Table 1).

**Table 1.** Characteristics of Adolescent Girls (N = 20) in Tijuana, Mexico Seeking Family Planning Services in Publicly Funded Community Health Centers.

<b>Variable</b>	<b>N = 20 (100%)</b>
Age (median, IQR)	17.5 (16–19)
Education	
Seven years of education (middle school)	14 (70.0)
Birthplace (birth state in Mexico)	
Baja California	9 (45.0)
Other Mexican state	11 (55.0)
Experienced IPV	
Lifetime	20 (100.0)
Recent	10 (50.0)
Ever experienced RC	19 (95.0)
Male partner age (Median, IQR)	19 (17–21)
Currently using modern contraception <sup>a</sup>	1 (5.0)
Ever been pregnant	20 (100.0)
Age of first pregnancy (Median, IQR)	16.5 (13–18)

Note. <sup>a</sup>Other than condoms includes intrauterine device (IUD), Depo-Provera, implant, and/or contraceptive pills.

### Data Analysis

IDIs were transcribed verbatim and then translated from Spanish to English by a trained bilingual, binational research team, preserving key terms in Spanish. Spanish and English transcripts were subsequently reviewed by the bilingual and binational Principal Investigator (PI), and any discrepancies were back translated to ensure meaning and terms were appropriately preserved. Qualitative analysis was led by the PI in conjunction with two members of the same binational research team (i.e., one from the US-based team and one from the Mexico-based team). The research team systematically read through transcripts, engaged in open, line-by-line coding and constructed a coding scheme based on the content of the transcripts which was iteratively revised until the research team reached consensus. Transcripts were coded in ATLAS.ti version 6.2 to group, label, and describe intersections between emergent themes related to IPV, RC, unintended pregnancies, FP and HIV/STIs, and utilization of IPV services available (Crabtree & Miller, 1999; Strauss, 1987). Thematic saturation as directly

and broadly related to the aforementioned research questions, was reached with the fifth interview; additional interviews were conducted to ensure no new themes emerged and were utilized to develop sub-themes and coding structures. Using the final coding scheme, inter-coder reliability was assessed and achieved greater than 80% consistency between the coders. This analysis adopted deductive and inductive perspectives in which participants' language and experiences were used to interpret our research questions (i.e., to identify and understand factors influencing RC, IPV, unintended pregnancy, knowledge of SRH, and knowledge of IPV services available; Creswell, 2014). For ethical and confidentiality purposes, names of participants reported in the results have been changed.

## **Results**

Results are presented by our research questions to first describe women's and girls' experiences with two common forms of GBV in Mexico—IPV and RC and how these forms of abuse impact girls' SRH and care seeking.

### *IPV Experiences*

IPV was pervasive in this sample. Most adolescent girls reported recent experience of IPV (inclusive of physical, sexual, or emotional abuse) and many reported experiencing more than one form of violence in their lifetime. All participants knew at least one woman or girl who had experienced IPV. Most participants stated that IPV (physical and emotional) was something that happened frequently to themselves and to other women and girls in their community, in both public and private spaces.

Q: Do you think intimate partner violence is common here?

A: Yes. You see a lot of things even on the streets. (Romantic) couples, who are fighting, yelling at each other and all that, their partners are disrespecting women on the street, telling them things, hitting them. (Ana, 18 years old)

While emotional abuse was acknowledged as a common public occurrence, many participants minimized the severity of this psychological violence in their own relationships, especially as most participants knew women and girls with similar or more severe experiences of IPV (inclusive of physical violence and forced sex). Importantly, many adolescent girls also described how the use of alcohol and drugs by their male partners exacerbated their violence experiences.

When he (partner) was drunk he would shout and threaten me with hitting me, but he didn't... during those five years he never hit me. I was lucky... My dad would hit my mother all the time, ever since I can remember, since I was a child, he would always hit her. (Laura 19, years old)

Similarly, girls who had experienced episodic physical violence prior to the time of interview minimized the severity of their male partners' perpetration of physical violence and especially their current perpetration of emotionally abusive behaviors. These same participants often refused to seek medical help or attention because they perceived the violence as normal and/or not severe enough to seek help.

I am married now, and he is a bit jealous... like he doesn't let me do what I want to do, but it's okay... When we first started living together, he used to hit me a lot, once when I was pregnant... I didn't go to the doctor because it wasn't that bad, he just punched me... but we are okay now, he doesn't hit me anymore. (Victoria, 16 years old)

This pattern of discounting violence experiences also extended to adolescent girls' accounts of sexual assault. In the quote below, Claudia, describes how she was "lucky" compared to her peers as she experienced sexual violence by a man who she knew and was dating at the time, and did not result in an unintended pregnancy.

Honestly, I got lucky... I mean we had gone out a couple of times, he wasn't like a stranger and well I didn't get pregnant or anything... at least I didn't get gang raped like my friend from school, that was bad... she was in the hospital for a month. (Claudia, 17 years old)

This quote also highlights other consequences of sexual violence including social stigma, and social and physiological consequences of unintended pregnancy, expressed by many participants in this sample.

## *RC Experiences*

The majority of adolescent girls reported experiencing RC inclusive of both contraceptive sabotage, pregnancy, and abortion coercion. However, hardly any participants recognized this behavior as a form of abuse. Many girls described wanting to use some form of contraception, often male condoms, but their male romantic partners opposed and ultimately made the final decision in the matter. Lack of ability to negotiate this condom use, and awareness of and willingness to use other female-controlled modern contraceptive methods resulted in unintended pregnancy for several girls in this sample.

I wanted to use condoms but my former partner, he didn't, he didn't let me. He mistreated me, and forced me to have sex without protection, and then I got pregnant and he hit me when I told him. (Valeria, 15 years old)

Many adolescents also mentioned that their partner pressured them to have a child even though they (the adolescent girls) did not feel ready; some participants reported that their partners did not respect her fertility desires and would sabotage their use of condoms, resulting in unintended pregnancy. Many girls described continuing sexual relations with male partners (both same age and older) who refused or tampered with condoms, despite their awareness that they were at risk for unintended pregnancy, and, in many cases, ultimately became pregnant. Girls who were aware of the condom tampering and desired not to get pregnant, often said they used emergency contraception (EC) regularly to ensure they did not become pregnant but had not switched to using a regular method. While some of these girls successfully avoided unintended pregnancy via EC use, many ultimately did not.

I wanted him to use condoms, but he didn't want to because we were together now (living together).... He always would tell me how happy it would make him if I got pregnant, but I really wanted to go to school, I told him I wasn't ready.... So he tricked me once and didn't use a condom, so I took the pill (EC). He got very upset when he found out.... the second time, he broke the condom and well, I got pregnant. (Erika, 17 years old)

He tricked me and didn't actually put on a condom and when I found out I took the (EC) pill.... He just didn't put it (condom) on. (Rosa, 17 years old)

Other participants described how in different phases of their relationships or with different partners they had very little control over use of male condoms during sexual intercourse. This was particularly common in younger girls' experiences as they described that they did not know about or had access to other modern contraceptive methods. Importantly, girls described that their male partner made the decision to purchase condoms or not, but no participants reported purchasing condoms themselves and asking their partner to use them.

I started using condoms (when I was 15 years old) and I told my partner that I didn't want to get pregnant but after a while we weren't using them anymore... he said that it was just going to be one time, but then I got pregnant. I wasn't using them because he hadn't bought them (condoms) and he said that we didn't need them. (Gabriela, 16 years old)

Highlighting the intersection of IPV and RC, girls who had experienced extreme violence (e.g., sexual violence or rape) experienced family members

or partners pressuring them to continue the pregnancy against their wishes (i.e., abortion coercion) and lacked medically accurate information on FP and abortion-related services. These social norms were also reinforced by larger messages in society (i.e., TV, radio, observation) that abortions are dangerous and unacceptable, no matter the circumstances or age of the girl.

I was raped when I was 13 years old by a neighbor.... I felt ashamed when it happened, so I didn't tell anyone...but a couple of months later I found out I was pregnant.... I wanted to have an abortion, but my mother didn't want me to... then I saw on La Rosa de Guadalupe (telenovela) that abortions are dangerous, the girl (in the telenovela) tried to get one and almost died. (Clara, 16 years old)

### *Accessing IPV Services*

The majority of participants reported being unaware of IPV services available to them or having only overheard about services in passing from their peers. Girls that did have tangential awareness of IPV services identified both real and perceived barriers to accessing safe and supportive care at these institutions (e.g., cost of transportation, fear of stigma from service providers and loss of confidentiality).

I've only heard of DIF, but that place is very far.... I am not sure if there is anything else.... If they offered support services for IPV here (at the health center), I would come.... I think a lot of the women that live here would come because its normal to go to the clinic. (Irma, 18 years old)

Girls experiencing IPV and other forms of GBV had more serious fears about retribution from violent male partners, family members, and even members of their communities. In these instances, girls expressed hesitation to seek help or speak up about their experiences to avoid experiencing stigma from community members or other social ramifications. In interviews, girls described clear power imbalances between boys and girls' reproductive and child decision-making within their own relationships and their social networks. Of particular importance in the quote below, one girl expresses that her male partner had the ability to "take her baby away," and thus she felt she was unable to seek help and completely powerless to seek help for abuse.

I was afraid of him and I didn't want him to take my baby girl away from me... also I didn't want to tell anyone, it's a small town and everyone knows each other, and they communicated a lot. They tell each other everything... you can't say anything too personal. (Alma, 16 years old)

Several participants suggested ways to improve services or screening for IPV. As mentioned by Irma several quotes earlier, some girls felt that accessing services for IPV at the community health center would allow for confidentiality and, ultimately, would be less stigmatizing than seeking care from other institutions or community members.

Well I think that being in a place that is private and that you are alone (only with the doctor), without anyone else, like your partner or family member, is important.... Also for them to ask about violence (experiences) in a sensitive and confidential matter. (Monica, 17 years old)

## **Discussion**

The results of this study identified that experiences of IPV and RC were common among this sample of adolescent girls seeking FP services in community health centers in Tijuana, Mexico, and, ultimately, posed a serious impediment to their reproductive health. Adolescent girls perceived perpetration of possessive and controlling behaviors by male partners as normal and minimized violence, even severe acts of violence such as physical and sexual abuse, within the context of their own relationships. Previous research has found that certain violent behaviors can be perceived as non-abusive, where the victim and the aggressor can share a perception of the relationship in which possession, jealousy, and exclusivity are considered necessary elements within the relationship (Borrego et al., 2015; Gómez et al., 2012), especially in age-disparate relationships which were common among this sample. Girls in this study also seemed to subscribe to a belief in hierarchy of acceptable violent behaviors with intermittent or emotional abuse being the least serious and most tolerable, and persistent physical abuse or “gang rape” to be the most severe, shameful, and least tolerable. Studies have found that early exposure to violence and trauma, such as in childhood and adolescence, may interfere with emotional and cognitive processes to interpret abusive behavior as abusive, and thus lead to normalization of violent behaviors (Ayala et al., 2016; Rodríguez et al., 2012). It is likely that the pervasive, severe, and public perpetration of violence in this context has distorted participants’ understandings of and agency to be in a safe and healthy relationship which may predispose them to more readily accept violent and abusive actions from their partners.

Additionally, these results highlight the specific forms of RC that girls report experiencing, and the consequences and severity of RC and IPV in promoting unintended pregnancy. As noted, the majority of adolescent girls reported experiencing condom refusal/ tampering (a form of contraceptive

sabotage) or pregnancy coercion (i.e., her male partner engaged in emotional, verbal or physical abuse in an effort to force her to become pregnant against her wishes). However, hardly any participants acknowledged these behaviors as abusive or violent, with most girls who reported RC insisting it was normal for their male partner to make the final decision about contraception, condom use, and pregnancy. Most of these stories ended in participants having an unintended pregnancy directly as a consequence of their experiences of RC, a finding which has been substantiated via other quantitative and qualitative studies in global contexts, and among both adult women and adolescent girls (Miller & McCauley, 2013; Miller, Decker et al., 2010; Miller, Jordan et al., 2010). Likewise, approximately half of the adolescent girls in this sample were currently in a relationship with an older partner, which increases vulnerability to early and coerced sexual initiation, IPV, and RC (Miller et al., 1997). Interestingly though, girls in relationships with similar age partners also reported experiencing RC, IPV, and unintended pregnancy. Previous studies have found that women and girls in relationships with men who hold unequal gender norms experience increased IPV victimization and unintended pregnancy even in the absence of an age differential (Nydegger et al., 2017), a factor that was clearly at play in this context as girls described common and prescriptive social norms accepting of violence against women in their own and their families and peers relationships.

Girls in this sample reported extremely low use of modern forms of contraception (e.g., LARCs). This is also consistent with previous studies conducted in Mexico, where contraceptive use remains as low as 40% in rural communities and among adolescents (Chandra-Mouli et al., 2014). Further, the reliance on male-controlled condoms and limited power to negotiate condom use greatly inhibits girls' access, self-efficacy, and agency to use any contraception in this context resulting in constrained ability to control their pregnancy outcomes generally, and especially in the face of abuse.

Importantly, participants' narratives support the utility and importance of FP clinics as settings for addressing RC and IPV, and FP providers as critical allies in supporting women's reproductive empowerment as seen in previous contexts (Miller et al., 2017). Research in other settings has documented that women have various tactics to maintain control of their reproductive decisions and hide their FP use from unsupportive partners or family members. These women report switching to a less detectable contraceptive methods (i.e., Depo-Provera, IUD, implant) or implementing various harm reduction strategies to hide their contraceptive use (e.g., hiding pills around the house), which may be applicable for adaptation to this population and context (Boyce et al., 2019; Miller et al., 2011; Miller et al., 2016). Despite using questions adapted from the aforementioned studies, in this sample, none of the

adolescent girls reported using or knowing any strategies to cope with experiences of RC. It is likely that due to the younger age of this sample, lower overall contraceptive use and use of modern, female-controlled methods, and the self-described normalcy of male control over reproductive decisions, girls are less able, aware, and entitled to implement these coping strategies in this context, highlighting the need for health interventions to increase girls' capacity, entitlement, and self-efficacy to cope with RC and maintain autonomy over their contraceptive and pregnancy decisions. It is also particularly important to have interventions that integrate IPV identification, support, and referral to services into friendly and confidential adolescent FP care, given the finding that girls in this sample had limited awareness and acceptability of and agency to use local IPV services. Reaching girls through FP services, and stressing the importance of privacy and confidentiality, may allow for a more acceptable and routine entry point to address these forms of violence and, simultaneously, connections to unintended pregnancy.

Given the young age of this sample, early sexual initiation, and their common experiences of violence and unintended pregnancy at extremely early ages upstream, community-based interventions must also be considered to prevent unintended pregnancy and violence before it begins and to increase care seeking of adolescent girls to health clinics to increase successful utilization of acceptable forms of FP methods to delay or prevent pregnancy. Studies in high-income contexts have supported school-based interventions for violence prevention (Hahn et al., 2007; Miller, Tancredi, 2012; Park-Higginson et al., 2008) and contraceptive use (Lopez et al., 2016), although none have yet targeted RC specifically and few have been tested in LMIC settings (Lundgren & Amin, 2015). Development and implementation of a model to promote rights-based understanding of safe and healthy relationships are needed for boys and girls in schools in Mexico, and within health settings to offer a safe and secure opportunity for adolescent girls to disclose violent experiences and seek support from a qualified professional. This is particularly relevant in this context where many girls reported experiencing or witnessing violence at home from an early age. Engagement of boys and men in violence prevention via evidence-based community and school social norm approaches is also needed to combat the high levels of acceptability of IPV and RC present in this patriarchal society and to shift social norms among men and women to be unaccepting of IPV and RC. Some interventions targeting boys via school-based approaches have proven successful in high-income contexts to reducing IPV and sexual violence, while community and couples-based approaches targeting adult men have proven effective in reducing IPV and unintended pregnancy (Abramsky et al., 2016; Raj et al., 2016), and shifting attitudes regarding violence.

Currently, no evidence-based model exists to address both RC and IPV for adolescents in Mexico whether in clinic, school or community-based settings. ARCHES is one such intervention demonstrated to increase successful, female-controlled contraceptive use by integrating information within contraceptive counseling to educate girls about types and ways that modern contraceptive methods can be used more easily without interference from their male partners (Tancredi et al., 2015). ARCHES providers are also trained to talk to women and girls about their IPV and RC experiences and offer a supportive response without pressure to disclose, offering reinforcing messages on girls' right to be in a safe and healthy relationship and to make their own FP and pregnancy decisions demonstrated to shift women's' perceptions to be less accepting of violence. In this intervention, all women and girls are offered referral information in the form of a mini booklet that they can read and share with friends, and those disclosing IPV are referred over the phone to a local IPV service. ARCHES is the only clinic-based model that has shown feasibly, acceptability, and efficacy to prevent RC and IPV, and improve reproductive autonomy among women and girls in United States and, recently, in Nairobi, Kenya (Boyce et al., 2019; Miller et al., 2011; Miller et al., 2017; Tancredi et al., 2015), and shows promise for adaptation to this context in FP clinics to address the needs expressed by girls in this study. New adaptations of the model are being proposed in Kenya to include community-based applications to reach girls that are unable to visit the clinic.

This study is not without limitations. As a small qualitative study among adolescent girls, findings from this study are not generalizable to a wider population of girls in Tijuana and findings are limited to what was reported by this relatively small sample. Quantitative research with representative samples of adolescent girls from such contexts is needed to understand the prevalence of RC, and the factors associated with this understudied form of GBV. Further, it is likely that this sample did not include the most vulnerable girls as participants were recruited from community health centers. However, given the dearth of research on adolescents' experiences of RC and IPV in Mexico, this study provides an important glimpse into these issues of violence and coercion, consequences for unintended pregnancy, and areas for adaptation and future study. This is an important and necessary first step to development of evidence-based, youth-centered clinical models to address and prevent these GBV experiences among adolescents seeking SRH services.

### **Acknowledgments**

The authors would like to extend a special gratitude to the adolescent girls in Tijuana, Mexico who participated in this study. The authors also gratefully acknowledge the entire multidisciplinary binational research team involved in this project, the United

States–Mexico Border Health Commission (Mexico Section) for their assistance with data collection, the Mexican Ministry of Health (ISESALUD), Dr Jay Silverman and Ms. Annabella Narvarte at the University of California, San Diego for their continuous support to the project.

### Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

### Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the National Institutes of Health (NIH)/ National Institute on Child Health and Human Development (NICHD) [K23HD08475601A1, PI: Servin] and the UC Berkeley Research Program on Migration and Health (*Programa de Investigación en Migración y Salud - PiMSA*).

### ORCID iD

Argentina E. Servin  <https://orcid.org/0000-0001-5523-7767>

### References

- Abramsky, T., Devries, K. M., Michau, L., Nakuti, J., Musuya, T., Kyegombe, N., & Watts, C. (2016). The impact of SASA! A community mobilization intervention, on women's experiences of intimate partner violence: secondary findings from a cluster randomized trial in Kampala, Uganda. *Journal of Epidemiology & Community Health, 70*(8), 818–825. <http://dx.doi.org/10.1136/jech-2015-206665>
- Ayala, L. C., Mollada, C. B., Pineda, C. E., Bellerín, M. A. A., Franco, L. R., & Rodríguez-Díaz, F. J. (2016). Tolerance of abuse within Mexican adolescent relationships. *Psicología: Reflexão e Crítica, 29*(46). <https://doi.org/10.1186/s41155-016-0050-8>
- Basile, K. C., Smith, S. G., Liu, Y., Kresnow, M. J., Fasula, A. M., Gilbert, L., & Chen, J. (2018). Rape-related pregnancy and association with reproductive coercion in the U.S. *American Journal of Preventive Medicine, 55*(6), 770–776. <https://doi.org/10.1016/j.amepre.2018.07.028>
- Biblioteca Mexicana del Conocimiento. (2015). *La calidad de la atención a la salud en México a través de sus instituciones, segunda edición* [Mexican Library of Knowledge: The quality of health care in Mexico through its institutions] (2nd ed.) Secretaría de Salud Subsecretaría de Integración y Desarrollo del Sector Salud. [http://www.calidad.salud.gob.mx/site/editorial/docs/dgr-editorial\\_01A.pdf](http://www.calidad.salud.gob.mx/site/editorial/docs/dgr-editorial_01A.pdf)
- Borrego, J. L. C., Rodríguez-Franco, L., Rodríguez-Díaz, F. J., Bringas, C., & Paíno, S. (2015). *Percepción de la victimización en el noviazgo de adolescentes y jóvenes españoles* [Perception of victimization in dating in Spanish teen and

- young]. *Revista Iberoamericana de Psicología y Salud*, 6(2), 64–71. <https://doi.org/10.1016/j.rips.2015.04.001>
- Boyce, S. C., Uysal, J., DeLong, S. M., Carter, N., Undie, C. C., Liambila, W., Wendoh, S., & Silverman, J. G. (2019). Women's and girls' experiences of reproductive coercion and opportunities for intervention in family planning clinics in Nairobi, Kenya: A qualitative study. *BMC Reproductive Health*. Advance online publication. <https://doi.org/10.1186/s12978-020-00942-7>
- Calderón, L. Y., Heinle, K., Ferreira, O. R., & Shirk, D. A. (2019). *Analysis through 2018: organized crime and violence in Mexico*. Justice in Mexico Department of Political Science & International Relations University of San Diego. <https://justiceinmexico.org/wp-content/uploads/2019/04/Organized-Crime-and-Violence-in-Mexico-2019.pdf>
- Chandra-Mouli, V., McCarraher, D. R., Phillips, S. J., Williamson, N. E., & Hainsworth, G. (2014). Contraception for adolescents in low- and middle-income countries: Needs, barriers, and access. *Reproductive Health*, 11(1), 1. <https://doi.org/10.1186/1742-4755-11-1>
- Consejo Nacional de Población (CONAPO). (2010). *Consejo Nacional de Población, Salud sexual y reproductiva de los jóvenes: La situación actual de los jóvenes en México* [National population council. Sexual and reproductive health of youth: The current situation of youth in Mexico]. Author. [https://www.gob.mx/cms/uploads/attachment/file/237216/Cuadernillo\\_SSR\\_RM.pdf](https://www.gob.mx/cms/uploads/attachment/file/237216/Cuadernillo_SSR_RM.pdf)
- CONAPO. (2016). *Salud Sexual y Reproductiva* [National Population Council, Mexico. Sexual and Reproductive Health]. Author. [https://www.gob.mx/cms/uploads/attachment/file/237216/Cuadernillo\\_SSR\\_RM.pdf](https://www.gob.mx/cms/uploads/attachment/file/237216/Cuadernillo_SSR_RM.pdf)
- Crabtree, B. F., & Miller, W. L. (1999). *Doing qualitative research*. SAGE Publications.
- Creswell, W. J. (2014). *Research design: qualitative, quantitative, and mixed methods approaches*. SAGE Publications.
- Dansereau, E., Schaefer, A., Hernández, B., Nelson, J., Palmisano, E., Ríos-Zertuche, D., Woldeab, A., Zúñiga, M. P., Iriarte, E. M., Mokdad, A. H., & El Bcheraoui, C. (2017). Perceptions of and barriers to family planning services in the poorest regions of Chiapas, Mexico: A qualitative study of men, women, and adolescents. *Reproductive Health*, 14(1), 129. <https://doi.org/10.1186/s12978-017-0392-4>
- Decker, M. R., Latimore, A. D., Yasutake, S., Haviland, M., Ahmed, S., Blum, R. W., Sonenstein, F., & Astone, N. M. (2015). Gender-based violence against adolescent and young adult women in low- and middle-income countries. *Journal of Adolescent Health*, 56(2), 188–196. <https://doi.org/10.1016/j.jadohealth.2014.09.003>
- De Keijzer, B. (1997). *El varón como factor de riesgo: Masculinidad, salud mental y salud reproductiva*. ESOCUR UJAD [The male gender as a risk factor: Masculinity, mental health and reproductive health]. [http://www.codajic.org/sites/www.codajic.org/files/El%20varon%20como%20factor%20de%20riesgo\\_0.pdf](http://www.codajic.org/sites/www.codajic.org/files/El%20varon%20como%20factor%20de%20riesgo_0.pdf)
- Gobierno Del Estado de Baja California. (Government of the state of Baja California). (2018). *Programa especial para la prevención del embarazo en adolescentes*. [Special program for the prevention of teenage pregnancy]. Author. <http://>

- www.copladebc.gob.mx/publicaciones/2019/planesyprogramas/Programa%20Especial%20Prevencion.pdf
- Gómez, A. H., Rojas, A. D. G., & Coronado, M. V. C. M. (2012). Exploración de actitudes y conductas de jóvenes universitarios ante la violencia en las relaciones de pareja [Exploration of the attitudes and behaviors of young university students in the face of violence in intimate relationships]. *Revista Computense de Educación*, 23(2), 427–441. [https://doi.org/10.5209/rev\\_RCED.2012.v23.n2.40036](https://doi.org/10.5209/rev_RCED.2012.v23.n2.40036)
- Grace, K. T., & Fleming, C. (2016). A systematic review of reproductive coercion in international settings. *World Medical & Health Policy*, 8(4), 382–408. <https://doi.org/10.1002/wmh3.209>
- Hahn, R., Fuqua-Whitley, D., Wethington, H., Lowy, J., Crosby, A., Fullilove, M., Johnson, R., Liberman, A., Moscicki, E., Price, L., Snyder, S., Tuma, F., Cory, S., Stone, G., Mukhopadhaya, K., Chattopadhyay, S., Dahlberg, L., Fullilove, M., & Task Force on Community Preventive Service (2007). Effectiveness of universal school-based programs to prevent violent and aggressive behavior a systematic review. *American Journal of Preventive Medicine*, 33(2), S114–S129. <https://doi.org/10.1016/j.amepre.2007.04.012>
- Hill, A. L., Jones, K. A., McCauley, H. L., Tancredi, D. J., Silverman, J. G., & Miller, E. (2019). Reproductive coercion and relationship abuse among adolescents and young women seeking care at school health centers. *Obstetrics and Gynecology*, 134(2), 351–359. <https://doi.org/10.1097/AOG.0000000000003374>
- Instituto Nacional de Estadística y Geografía. (INEGI). (2012). *Migración internacional captada a través de la Encuesta Nacional de Ocupación y Empleo 2006-2010 ENOE. Metodología y caracterización demográfica*. [International migration captured through the National Survey of Occupation and Employment 2006-2010 ENOE. Demographic methodology and characterization]. Author. <https://www.inegi.org.mx/app/biblioteca/ficha.html?upc=702825003987>
- INEGI. (2014). *Encuesta Nacional de la Dinámica Demográfica (ENADID) 2014*. [National Survey on Demographic Dynamics 2014]. <http://www3.inegi.org.mx/rnm/index.php/catalog/270/sampling>
- INEGI. (2016). *Measuring violence against women in Mexico*. Author. <https://unstats.un.org/unsd/gender/Events/20%20Oct%202015/Mexico.pdf>
- INEGI. (2018a). *Natalidad y Fecundidad (1994–2018)*. [Birth and Fertility rate 1994–2018]. Author. Retrieved from <https://www.inegi.org.mx/temas/natalidad/>
- INEGI. (2018b). *México en Cifras: Baja California* [Mexico by numbers: Baja California]. Author. <https://www.inegi.org.mx/app/areasgeograficas/?ag=02>
- Instituto Nacional de las Mujeres. (National Women's Institute). (2020). *Alerta de violencia de género contra las mujeres* [Gender based violence]. Author. <https://www.gob.mx/inmujeres/acciones-y-programas/alerta-de-violencia-de-genero-contra-las-mujeres-80739>
- Juarez, F., Gayet, C., & Mejía-Pailles, G. (2018). Factors associated with unmet need for contraception in Mexico: Evidence from the National Survey of Demographic Dynamics 2014. *BMC Public Health*, 18 (1), 546. <https://doi.org/10.1186/s12889-018-5439-0>

- Kovar, C. L. (2018). Reproductive coercion: Baby, if you love me.... *MCN, American Journal of Maternal/Child Nursing*, 43(4), 213–217. <https://doi.org/10.1097/NMC.0000000000000435>
- Lopez, L. M., Bernholc, A., Chen, M., & Tolley, E. E. (2016). School-based interventions for improving contraceptive use in adolescents. *Cochrane Database of Systematic Reviews*, 6. <https://doi.org/10.1002/14651858.CD012249>
- Lundgren, R., & Amin, A. (2015). Addressing intimate partner violence and sexual violence among adolescents: emerging evidence of effectiveness. *The Journal of Adolescent Health*, 56(1), S42–50. <https://doi.org/10.1016/j.jadohealth.2014.08.012>
- Miller, E., & McCauley, H. (2013). Adolescent relationship abuse and reproductive and sexual coercion among teens. *Current Opinion in Obstetrics and Gynecology*, 25(5), 364–369. <https://doi.org/10.1097/GCO.0b013e328364ecab>
- Miller, E., Decker, M. R., McCauley, H. L., Tancredi, D. J., Levenson, R. R., Waldman, J., Schoenwald, P., & Silverman, J. G. (2010). Pregnancy coercion, intimate partner violence and unintended pregnancy. *Contraception*, 81(4), 316–322. <https://doi.org/10.1016/j.contraception.2009.12.004>
- Miller, E., Decker, M. R., McCauley, H. L., Tancredi, D. J., Levenson, R. R., Waldman, J., Schoenwald, P., & Silverman, J. G. (2011). A family planning clinic partner violence intervention to reduce risk associated with reproductive coercion. *Contraception*, 83(3), 274–280. <https://doi.org/10.1016/j.contraception.2010.07.013>
- Miller, E., Jordan, B., Levenson, R., & Silverman, J. G. (2010). Reproductive coercion: Connecting the dots between partner violence and unintended pregnancy. *Contraception*, 81(6), 457–459. <https://doi.org/10.1016/j.contraception.2010.02.023>
- Miller, E., Levenson, R., Herrera, L., Kurek, L., Stofflet, M., & Marin, L. (2012). Exposure to partner, family, and community violence: Gang-affiliated Latina women and risk of unintended pregnancy. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 89(1), 74–86. <https://doi.org/10.1007/s11524-011-9631-0>
- Miller, E., McCauley, H. L., Decker, M. R., Levenson, R., Zelazny, S., Jones, K. A., Anderson, H., & Silverman, J. G. (2017). Implementation of a family planning clinic-based partner violence and reproductive coercion intervention: Provider and patient perspectives. *Perspectives on Sexual and Reproductive Health*, 49(2), 85–93. <https://doi.org/10.1363/psrh.12021>
- Miller, E., McCauley, H. L., Tancredi, D. J., Decker, M. R., Anderson, H., & Silverman, J. G. (2014). Recent reproductive coercion and unintended pregnancy among female family planning clients. *Contraception*, 89(2), 122–128. <https://doi.org/10.1016/j.contraception.2013.10.011>
- Miller, E., Tancredi, D. J., Decker, M. R., McCauley, H. L., Jones, K. A., Anderson, H., James, L., & Silverman, J. G. (2016). A family planning clinic-based intervention to address reproductive coercion: A cluster randomized controlled trial. *Contraception*, 94(1), 58–67. <https://doi.org/10.1016/j.contraception.2016.02.009>

- Miller, E., Tancredi, D. J., McCauley, H. L., Decker, M. R., Virata, M. C., Anderson, H. A., Stetkevich, N., Brown, E. W., Moideen, F., & Silverman, J. G. (2012). "Coaching boys into men": A cluster-randomized controlled trial of a dating violence prevention program. *Journal of Adolescent Health, 51*(5), 431–438. <https://doi.org/10.1016/j.jadohealth.2012.01.018>
- Miller, K., Clark, L., & Moore, J. (1997). Sexual initiation with older partners and subsequent HIV risk behavior among female adolescents. *Family Planning Perspectives, 29*(5), 212–214. <https://doi.org/10.2307/2953397>
- Moore, A., Frohwirth, L., & Miller, E. (2010). Male reproductive control of women who have experienced intimate partner violence in the United States. *Social Science & Medicine, 70*(11), 1737–1744. <https://doi.org/10.1016/j.socscimed.2010.02.009>
- Nazar-Beutelspacher, A., Salvatierra-Izaba, B., Morales Dominguez, M. Del, C., Hartman, A., & Rodriguez Mazariegos, M. (2011). *Estudio cualitativo de barreras de demanda y oferta con enfoque a nivel local y comunitario y cambio de comportamiento en municipios prioritarios de Chiapas* [A qualitative study of barriers to accessing services, availability, and demand with a local and community focus and changes in the municipalities of Chiapas]. Informe de las regiones Altos Tseltal-Tsotsil y Tuliija Tseltal-Chol.
- Nigenda, G., González-Robledo, L.M., Juárez-Ramírez, C. & Adam, T. (2016). Understanding the dynamics of the Seguro Popular de Salud policy implementation in Mexico from a complex adaptive systems perspective. *Implementation Science, 11*, 68. <https://doi.org/10.1186/s13012-016-0439-x>
- Nydegger, L. A., DiFranceisco, W., Quinn, K., & Dickson-Gomez, J. (2017). Gender norms and age-disparate sexual relationships as predictors of intimate partner violence, sexual violence, and risky sex among adolescent gang members. *Journal of Urban Health, 94*(2), 266–275. <https://doi.org/10.1007/s11524-016-0068-3>
- Odonnell, L., Agronick, G., Duran, R., Myint-U, A., & Stueve, A. (2009). Intimate partner violence among economically disadvantaged young adult women: Associations with adolescent risk-taking and pregnancy experiences. *Perspectives on Sexual and Reproductive Health, 41*(2), 84–91. <https://doi.org/10.1363/4108409>
- Pallitto, C. C., Campbell, J. C., & O'Campo, P. (2005). Is intimate partner violence associated with unintended pregnancy? A review of the literature. *Trauma, Violence, & Abuse, 6*(3), 217–235. <https://doi.org/10.1177/1524838005277441>
- Pallitto, C. C., García-Moreno, C., Jansen, H.A., Heise, L., Ellsberg, M., & Watts, C. (2013). Intimate partner violence, abortion, and unintended pregnancy: Results from the WHO multi-country study on women's health and domestic violence. *International Journal of Gynecology & Obstetrics, 120*, 3–9. <https://doi.org/10.1016/j.ijgo.2012.07.003>
- Park-Higgerson, H. K., Perumean-Chaney, S. E., Bartolucci, A. A., Grimley, D. M., & Singh, K. P. (2008). The evaluation of school-based violence prevention programs: A meta-analysis. *Journal of School Health, 78*(9), 465–479. <https://doi.org/10.1111/j.1746-1561.2008.00332.x>

- Perez-Palacios, G. (1994). *Norma Oficial Mexicana, NOM-005-SSA2-1993, de los servicios de planificación familiar*. [Mexican Official Law, NOM-005-SSA2-1993 of family planning services]. <http://www.salud.gob.mx/unidades/cdi/nom/005ssa23.html>
- Raj, A., Ghule, M., Ritter, J., Madhusudana, B., Gajanan, V., Nair, S., Dasgupta, A., Silverman, J. G., Balaiah, D., & Saggurti, N. (2016). Cluster randomized controlled trial evaluation of a gender equity and family planning intervention for married men and couples in rural India. *PLoS ONE*, *11*(5). <https://doi.org/10.1371/journal.pone.0153190>
- Rivero, E. (2017). Informal child marriages in Mexico: Findings from new INSAD report. Girls Not Brides. <https://www.girlsnotbrides.org/informal-child-marriages-mexico-insad/>
- Rodríguez, F. L., Bellerín, M. Á., Borrego, J. L. C., Rodríguez-Díaz, F. J., & Molleda, C. B. (2012). Tolerance towards dating violence in Spanish adolescents. *Psicothema*, *24*(2), 236–242.
- Silverman, J. G., & Raj, A. (2014). Intimate partner violence and reproductive coercion: Global barriers to women's reproductive control. *PLoS Medicine*, *11*(9), e1001723. <https://doi.org/10.1371/journal.pmed.1001723>.
- Strauss, A. (1987). *Qualitative analysis for social scientists*. Cambridge University Press.
- Tancredi, D. J., Silverman, J. G., Decker, M. R., McCauley, H. L., Anderson, H. A., Jones, K. A., Ciaravino, S., Hicks, A., Raible, C., Zelazny, S., James, L., & Miller, E. (2015). Cluster randomized controlled trial protocol: addressing reproductive coercion in health settings (ARCHES). *BMC Women's Health*, *15*(57). <https://doi.org/10.1186/s12905-015-0216-z>
- The Organisation for Economic Co-operation and Development (OECD) Social Policy Division – Directorate of Employment, Labour and Social Affairs. (2019, May). *SF2.3: Age of mothers at childbirth and age-specific fertility*. Author. [https://www.oecd.org/els/soc/SF\\_2\\_3\\_Age\\_mothers\\_childbirth.pdf](https://www.oecd.org/els/soc/SF_2_3_Age_mothers_childbirth.pdf)
- United States Department of Transportation, Bureau of Transportation Statistics (BTS). (2019). *Border crossing data, annual data*. Author. <https://explore.dot.gov/views/BorderCrossingData/Annual?:isGuestRedirectFromVizportal=y&embed=y>
- U.S. Department of Justice Drug Enforcement Administration. (2018). *2018 National drug threat assessment*. Author. <https://www.dea.gov/sites/default/files/2018-11/DIR-032-18%202018%20NDTA%20final%20low%20resolution.pdf>
- World Health Organization (WHO). (2007). *WHO ethical and safety recommendations for researching, documenting and monitoring sexual violence in emergencies*. Author. [https://www.who.int/gender/documents/OMS\\_Ethics&Safety10Aug07.pdf](https://www.who.int/gender/documents/OMS_Ethics&Safety10Aug07.pdf)
- WHO. (2016). *Ethical and safety recommendations for intervention research on violence against women*. Author. <https://www.who.int/reproductivehealth/publications/violence/intervention-research-vaw/en/>
- Zachor, H., Chang, J. C., Zelazny, S., Jones, K. A., & Miller, E. (2018). Training reproductive health providers to talk about intimate partner violence and reproductive coercion: An exploratory study. *Health Education Research*, *33*(2), 175–185. <https://doi.org/10.1093/her/cyy007>

## **Author Biographies**

**Jasmine Uysal**, MPH is a research project coordinator at the Center on Gender Equity and Health (GEH) at the University of California, San Diego (UCSD). She is a survey researcher who works to implement, evaluate, and scale interventions to prevent gender-based violence (GBV) and improve women's and girls' reproductive autonomy and health equity.

**Jamila K. Stockman**, PhD, MPH, is a vice chief and an associate professor in the Division of Infectious Diseases and Global Public Health, Department of Medicine at the University of California, San Diego. Dr. Stockman has dedicated her research career towards improving the lives of women with experiences of intimate partner and sexual violence.

**Elizabeth Miller**, MD, PhD, is chief of Adolescent Medicine at Children's Hospital of Pittsburgh of UPMC, and professor of Pediatrics at the University of Pittsburgh School of Medicine. Dr. Miller's research focuses on the impact of gender-based violence on young women's reproductive health. She conducts research on brief clinical interventions to reduce partner violence and unintended pregnancy.

**Teresita Rocha-Jimenez**, PhD, is an assistant professor at the Society and Health Research Center, Universidad Mayor in Chile. Her research centers on how the different stages of migration (e.g., origin, transit, destination, and interception) and mobility experiences impact the mental and sexual health of vulnerable populations in border regions across the United States, Mexico, and Central America.

**Gudelia M. Rangel**, PhD, is the Executive Director of the U.S.–Mexico Border Health Commission. For the past two decades her research has centered on improving the health of underserved and vulnerable populations, including immigrants, Latinos, women, and children. She has published on health services issues including access to health insurance coverage, utilization of health, and mental health services, and the financing of health care.

**Alejandra Padilla Mercado**, MD, MPH, is the Director of the Florida–Morita Community Health Center in Tijuana, Mexico and has been working with the Mexican Ministry of Health for the past decade. Aside for overseeing the operations of the community health center, she also works on implementing programs to increase access to intimate partner violence and sexual and reproductive health services for adolescents in Tijuana.

**Argentina E. Servin**, MD, MPH, is an assistant professor in the Division of Infectious Diseases and Global Public Health at the University of California, San Diego. Her research focuses on the intersecting epidemics of intimate partner violence and sexual violence, HIV acquisition and transmission, and substance abuse among marginalized populations in both domestic and international settings.