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***Servicios Amigables*: Provider perspectives on youth-friendly sexual and reproductive health services in México**

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***Servicios Amigables*: Provider perspectives on youth-friendly sexual and reproductive health services in México**

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An abstract submitted to the Faculty of the

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Abstract

Servicios Amigables: Provider perspectives on youth-friendly sexual and reproductive health services in México

By Lilian Bravo

Background: Mexico has a high adolescent pregnancy rate of 69.5 births per 1,000 adolescent women. Adolescent pregnancy has negative consequences for both the mother and the child. Given that Mexico's adolescent population makes up 20.2% of the population, new programs have been implemented at the national level to address the growing adolescent pregnancy issue.

Objective: To understand to what extent providers adhere to youth friendly services (YFS) and identify barriers to the provision of youth friendly services. This analysis also aimed to provide recommendations for future sexual and reproductive health (SRH) programming for adolescents in Mexico.

Methods: Qualitative interview data from a cross-sectional study conducted in 2012 through a partnership between the National Institute of Public Health (INSP) and the National Institute for Women (INMUJERES) was analyzed for this project. Fifteen interviews with health providers who worked in public health institutions with experience providing services to adolescents were analyzed using MaxQDA V.11 software. Thematic analysis was conducted to identify and describe prominent themes within the interviews.

Results: The majority of providers were familiar with the tenets of YFS. Four fifths of providers interviewed expressed a desire for more training regarding adolescent health. At the same time, several providers had not internalized the national goal of providing information and tools to adolescents equally between genders and age. Providers also frequently mentioned negative parental attitudes that impede the provision of SRH services.

Discussion: While it is desirable to implement youth friendly services in clinical settings, there is little evidence that this approach alone changes adolescent risk behavior. Adopting evidence-based programming will be a better solution to reducing adolescent pregnancy rates, particularly interventions that target parents as well as adolescents. Introducing continuous training for health providers will be beneficial to promote confidence, patient retention and satisfaction, as well as reducing the impact of conservative views on practice.

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Table of Contents

Chapter 1: Introduction 1
Problem Statement 2
Purpose Statement 2
Research Questions 2
Significance Statement 3
Chapter 2: Literature Review 4
Servicios Amigables - Youth Friendly Services 4
Youth Friendly Services in Latin America 6
Current State of Adolescent Health in Mexico 9
Efforts to Improve Adolescent Health in Mexico 12
Critiques of YFS and Gap in the Literature 16
Chapter 3: Methods 18
Setting 18
Research Design and Procedures 19
Data Analysis 19
Ethical Considerations 20
Chapter 4: Results 21
Education in the Clinical Setting 25
Public Health Impact of Adolescent Health 27
Education Through School Partnerships 28
Barriers to Youth Friendly Services 28
Conservative Views 28
Institutional Barriers 31
Chapter 5: Discussion 35
Recommendations 37
Training 37
Parental involvement 39
Evidence Based Interventions 40
Strengths and Limitations 42
Public Health Implications 43
Appendix 44
Appendix 1: Spanish Interview Guide 44
Appendix 2: Qualitative Interview Guide for Health Care Providers [English Version] 48

Appendix 3: Finalized Adolescent Sexual and Reproductive Health Codebook 52
References 53

Chapter 1: Introduction

The sexual and reproductive health (SRH) of adolescents is a global priority due to their unequal burden of health issues. In 2012, adolescents (age 10 to age 19) represented one-sixth of the global population (WHO, 2014c) Disproportionate rates of unintended pregnancy, maternal mortality, and sexually transmitted infections (STIs) are observed in this demographic, who is generally assumed to be healthy (UNICEF, 2013). Adolescents are especially vulnerable to these health concerns because they can alter the adolescent's life-course by interrupting their education and/or introducing financial commitments they may not be able to sustain (United Nations, 1994; WHO, 2014c) Adolescence is an age when health behaviors, both positive and negative, are adopted which may last through their life course (WHO, 2014c). For this reason, in 2002, the World Health Organization (WHO) proposed a youth friendly services (YFS) framework to reach this unique demographic. This framework was created for public health practitioners to follow in order to provide targeted health services and education to adolescents (WHO, 2014c).

Youth Friendly Services (YFS) can be recognized by their emphasis on equity, acceptability, and appropriateness of care. YFS are hypothesized to increase the preventative and primary services by helping adolescents feel more comfortable and feel a higher sense of autonomy when making their health care decisions (WHO, 2002). To provide this higher level of comfort emphasizes privacy and mutual respect between the provider and the patient. YFS are especially important when discussing sexual and reproductive health (SRH). Adolescent SRH is a topic that has been well-documented to be difficult for adolescents to engage in. In Latin America specifically, adolescent SRH is difficult to address due to the topic's status as a taboo subject (Cuenca, 2013; Gobierno de la Republica de Mexico, 2015). In Latin America, YFS have

been introduced in a variety of countries throughout Latin America such as Chile, Colombia, Ecuador, and Mexico but has seen limited success.

Problem Statement

YFS are of particular importance in Mexico, where adolescents represent a fifth of the population (CONAPO, 2008). In 1998, the first adolescent-specific health program was introduced through the Mexican Institute of Social Security IMSS- Oportunidades. This was followed by the establishment of a *Servicios Amigables* program by the Secretary of Health (SSA) in 2002. Between 2008 and 2012, however, the teen pregnancy rate decreased at the same rate as it had from 2000-2008. In addition, Mexico's mortality rate of adolescent mothers has increased from 35 births per 1,000 mothers in 2005 to 37 births per 1,000 mothers in 2011 (UNICEF, 2013). Despite the fact that in 2012, 90% of teens indicated that they had heard of at least one form of birth control method (Gutiérrez JP, 2012), Mexico's birth rates remain above average in comparison to other developed countries in Latin America.

Purpose Statement

This qualitative analysis aims to explore perspectives of providers regarding adolescent SRH to understand how they perceive the provision of YFS. Specifically, this analysis examines the accounts of several health care providers that interact with adolescents in public health institutions. It focuses on how providers follow the tenets of YFS, what barriers are present in the provision of youth friendly SRH services in public health institutions.

Research Questions

This analysis explores provider perspectives on the following research questions:

1. To what extent are the health care providers familiar with tenets of YFS?

2. To what extent are health care providers following the YFS tenets, specifically in relation to SRH services?
3. What barriers are present in following YFS guidelines in SRH services in the public health institutions of Mexico?

Significance Statement

YFS have been shown to improve the adolescent experience in health facilities (Coker T et. al, 2010). In addition, YFS have been reported to be effective in increasing knowledge (Mmari & Magnani, 2003). However, the effectiveness of YFS is dependent on the actual provision of services (Zuurmond, Geary, & Ross, 2012). This is why it is imperative to understand the provider's perspectives on YFS as they are the individuals directly in contact with adolescents. Primary care physicians can incorporate several strategies throughout their clinical visits to help give guidance to the adolescent (Ambresin, Bennett, Patton, Sanci, & Sawyer, 2013)

Given that Mexico has had two adolescent health programs in place for over a decade, it is necessary to determine to what extent the approach is being utilized, specifically by providers. If YFS programs are carried out as intended there is increased potential to reduce the unintended pregnancy and STI rates among the adolescents who are reached. Improvements in these two health areas can have life-long consequences (WHO, 2014c) and as such may help improve the health of the overall Mexican population, not just the 20% who are currently in their adolescent years.

Chapter 2: Literature Review

Servicios Amigables - Youth Friendly Services

The age range in which adolescents takes place (10-19 years old) is a period of time in which a variety of physical, psychological and social changes take place, and potentially influence health behaviors (Viner, 2012). These unique issues require that adolescents receive healthcare in a manner that is distinct from services provided to children and adults (INSP, 2012).

To address the unique needs of adolescents, in the World Health Organization (WHO) released a framework for "Youth-Friendly Services" (YFS) in 2002 (WHO, 2002). YFS are defined as "Services that meet the needs of young people and are accessible to all and offer sensitivity and confidentiality" (WHO, 2002). In the WHO framework, there are descriptions regarding the need to train providers to better serve their adolescent patients. This includes increasing equity, effectiveness, accessibility, acceptability, and appropriateness of care (WHO, 2002). YFS are thought to increase the efficacy of interventions and preventative care by helping adolescents feel more at ease with their physician and more autonomous in their health related decisions.

In a systematic review of YFS health care conducted in 2013, Ambresin et al utilized research that focused on adolescent perspectives. They found that adolescents most often wish to receive the same type of services that are outlined in the WHO YFS framework. The review showed that adolescents associated positive experience of care under eight main domains: accessibility of health care, staff attitude, communication, medical competency, guideline-driven care, age appropriate environments, youth involvement in health care, and health outcomes (Ambresin et al., 2013).

For adolescents, receiving services from a provider who respects their autonomy is important; this relationship sets the stage for all other components of YFS (Ambresin et al., 2013; Chaisson & Shore, 2014). Receiving services from providers who "lecture" them has been reported to cause adolescents to view the providers as condescending, and in general these services are viewed poorly (McKee MD et al., 2011). In addition, it is important for providers to gain the trust of their adolescent patient, particularly related to SRH, so that the adolescent can trust that the information they share with the provider will be kept in confidence (Chaisson & Shore, 2014; Coker T et. al, 2010). In 2010, a study examining the perspectives of both parents and adolescents regarding adolescent health care was published in the *Journal of Adolescent Health* by Coker et al. This study found that adolescents reported confidentiality as one of their biggest concerns in seeking health services. The adolescents in this study also reported that confidentiality was determined through the personal interactions they experienced with their providers. The adolescents also went on to report that their experience seeking health care would be improved if providers attempted to establish a personal connection with them (Coker T et. al, 2010).

YFS are reliant on having a private space, ensuring confidentiality at *all l*evels, training on YFS and having a streamlined appointment or walk-in process at the institutional level (Chaisson & Shore, 2014). Creating this environment is of special concern to the provision of SRH services. One method to achieve the creation of this environment is to create youth-specific centers. These centers incorporate the YFS tenets by having specially trained staff and an environment that is appealing to adolescents. These centers are ideal for adolescents as they are able to obtain all of their services in the same location (Zuurmond et al., 2012). These centers also provide adolescents with the privacy needed to maintain confidentiality.

In a descriptive review of YFS by Tylee et. al, several factors related to access were identified as important to adolescents (Tylee, Haller, Graham, Churchill, & Sanci). YFS should be located in locations that are visible and convenient for target adolescents, a finding corroborated by other reviews of YFS (Ambresin et al., 2013). Another important strategy identified was the tailoring of the operating hours of health facilities with YFS. This was necessary to coordinate schedules with adolescents who are unavailable during regular school and work hours. In addition, YFS should be publicized in a manner that will attract adolescents, so that adolescents understand that these services exist and are available and accessible to them (Tylee et al.). Finally, YFS need to be affordable for adolescents. Incorporating subsidized health care, or adequate incentives for obtaining services, has been identified as a possible strategy to ensure that adolescents can afford the health services that they need(Tylee et al.).

Other programmatic strategies that have been attempted are utilizing existing health centers and integrating YFS components into programming that occurs at the health clinic. YFS in primary care settings have the capacity to create an environment to provide care for teens in a confidential and supportive manner (Chaisson & Shore, 2014).

Youth Friendly Services in Latin America

Research has determined that the WHO framework, while originally developed for low-income countries, is applicable to a broader audience (Ambresin et al., 2013; Coker T et. al, 2010; WHO, 2015). In Latin America YFS were adopted by several countries as early as 1999 (Williams de T, Poblete A, & Baldrich A, 2012), most prominently in Chile, Ecuador, Bolivia and Colombia. For sexual and reproductive health specifically, Ecuador and Colombia have implemented national programs.

There have been few evaluations of the YFS programs in Latin American countries. In 2013, a qualitative evaluation of Chile's national YFS program was conducted by Poffald et al. This study focused on pregnant adolescent mothers, and a majority of participants interviewed expressed that they were hesitant to seek services because of the embarrassment they would experience. This embarrassment was assumed to come after the criticism they would receive from their providers for being a pregnant adolescent (Poffald L. et al, 2013). Adolescents in this study also reported fearing a breach in confidentiality. In a separate review, this breach of confidentiality was most often a fear that the adolescents parents or guardians would find out about the adolescents sexual experience (Tylee et al.).

In Chile, a mixed-methods study was conducted by Williams et al evaluating the YFS provided at a primary health care clinic from the viewpoint of both providers and adolescents (Williams de T et al., 2012). This study found that providers expressed frustration with a lack of training and a lack of institutional support for YFS. Providers stated that this lack of training made them feel unprepared to provide adequate services to their adolescent patients (Williams de T et al., 2012). Adolescent satisfaction surveys found that the majority of adolescents who attended YFS were satisfied with the care they were receiving; in some cases a satisfaction level of over 90% was reported. This was surprising to the authors as there was no dedicated space for adolescents to receive health related services, a prominent recommendation in most youth friendly service related literature. While, adolescents reported high satisfaction with the services they received, the lowest satisfaction was observed with the accessibility of services related to long wait times.

Similar results were found in 2013 through in a national evaluation of SRH specific YFS program in Colombia by Murgeitio et al. (Murgeitio C et al, 2013). Adolescents perceived the

services they received positively; the services were provided in a clinic that had an adolescent-specific space with extended hours that made the services accessible to adolescents. In addition to the physical space with convenient hours, providers were advised to provide services to adolescents in a manner that emphasized respect and confidentiality. As part of the YFS programming, educational presentations were conducted in the community. This evaluation revealed that even with these highly recommended YFS measurers in place, issues remained. Community members viewed the educational presentations as ineffective and unwanted. Health providers expressed frustration with the lack of institutional support in the form of mandatory YFS and complained that this lack of continuity in the provision of YFS resulted in disproportionate commitment to the provision of YFS among health providers. A positive finding of this study was that YFS increased the prevalence of accurate SRH knowledge, however the prevalence of this knowledge was still very low (22%) (Murgeitio C et al, 2013).

A study conducted in 2008 by Meave et al. among adolescents in Mexico City found that accessibility, acceptability and clear communication are of highest importance for the adolescents in seeking SRH services (Meave Loza & Gómez-Maqueo, 2008). Having a specific space for Mexican adolescents to receive services with YFS components was recommended in order to improve the SRH of this demographic (Meave Loza & Gómez-Maqueo, 2008) An added benefit to having YFS centers was the ability to attract adolescents who are not enrolled in school (Zuurmond et al., 2012). In the past, many SRH YFS programs have been implemented in schools, although they have reportedly been hindered by administrators who are uncomfortable with the topic (Meave Loza & Gómez-Maqueo, 2008).

Current State of Adolescent Health in Mexico

SRH is multi-faceted, but in policy, the focus in Mexico has mostly been on education regarding condoms and contraceptives to prevent pregnancy and the spread of sexually transmitted infections (STIs). This focus has had mixed outcomes. The 2012 National Survey of Health and Nutrition (ENSANUT) showed that 90% of adolescents ages 12-19 years old indicated that they had heard of at least one form of birth control, most frequently condoms, a large increase from 69% in 2000 (INSP, 2012). When it came to more in-depth SRH related knowledge however, overall education was low. For example, when asked "What should you do after you miss a birth control pill?", only 18.7% of women ages 15-19 were able to correctly answer the question. The ENSANUT survey also found that more adolescents were using contraceptives during their first sexual experience than before.

In 2006, 30% of male adolescents and 57% of females reported not having used any type of contraception during their first sexual experience, in 2012 this reduced to 14.7% of males and 33.4% of females (Cuenca, 2013). From 1997-2006, there were no significant changes in the percentage of adolescents ages 15-19 years old who currently used at least one form of birth control. This percentage has remained at 44.7 percent (INEGI, 2010). However, this percentage did show variation by state. In eight different states the percent of adolescents who currently used at least one form of birth control was under 40 percent, one of those states was the state of Oaxaca (INEGI, 2010).

In 1997 the percentage of births to women under 20 years old was at its lowest point of 16.3%, however, in 1998 the percentage began to rise, and in 2013, this percentage was at its highest at 19.4% (INEGI, 2013). This is likely because fertility has declined more strongly among women in older age groups in Mexico. Data from the National Survey of Health and

Nutrition (ENSANUT) estimates that the fertility rate for 12-19 year olds has risen between 2006 and 2012 from 30 to 37 live births per 1,000 women (Gutiérrez JP, 2012). The rates for adolescents ages 15-19 specifically are higher, likely because there is a larger proportion of sexually active women in this population, but they have declined from between 81 births per 1,000 women in 1990 to 63 births per 1,000 women in 2012 (The World Bank, 2015).

Not only do teen pregnancy statistics vary by age, they also vary by education and region. The highest adolescent fertility rate of 180 births per 1,000 women was observed in the adolescents with the least amount of schooling, and the lowest rate was among teens with secondary schooling or more (60 per 1,000 women) (INEGI, 2013). In urban settings, 23.3% of teens under 18 had given birth to at least one child, while 31.1% of teens living in rural areas and 50.8% of teens of indigenous descent had given birth (SSA, 2008b).

Adolescent pregnancy is of concern for both the mothers and the babies. Pregnancy during the adolescent years increases the risk of mortality for both the mother and the child. Complications during the pregnancy and childbirth are the second leading cause of death among 15 to 19 year old females worldwide (WHO, 2014b). Further, infants born to mothers under 20 years old face a 50% higher risk of being still born or dying in the first few weeks compared to infants born to mothers between the ages of 20-29 (WHO, 2014b). In addition, infants born to adolescent mothers are more likely to be low birth weight, which leads to long-term negative health effects. In general, the younger the mother, the greater the risk of having a low birth weight child (WHO, 2014a). Among adolescents ages 15 to 19 years, the maternal mortality rate is 37.3 deaths per 100,000 live births, higher than any other age group in Mexico (Gobierno de la Republica de Mexico, 2015). In adolescent women of indigenous Mexican descent, maternal mortality is the leading cause of death (CONAPO, 2008).

In addition to the health risks, adolescent childbearing may also have a significant economic effect on women of low socioeconomic status. Having a child during adolescence can lead to a lower quality of life for both the mother and the child (Gobierno de la Republica de Mexico, 2015). Among adolescents under the age of 15, 30.7% stopped attending school and did not return post-pregnancy. Among adolescents 15-18 years old, 17.7% stopped attending school and did not return post-pregnancy (Gobierno de la Republica de Mexico, 2015). Looking at the demographic as a whole, 90% of women age 12-19 years old who reported having a child, did not attend school compared to just 24% of those who are age 12-19 years old who did not report having a child (INEGI, 2010). It is for these reasons, among many others, that teen pregnancy is seen as contributing to the cycle of poverty and ill health in Mexico (Cuenca, 2013) and why adolescent SRH is of such importance to Mexico's young population.

Forty percent of adolescent mothers reported that their pregnancy was unintentional (Cuenca, 2013). In the case of unintentional pregnancies, emergency contraception and abortion are not easily accessible in Mexico. Abortion is prohibited by law in most areas of Mexico, except in cases of rape. Mexico City is the exception, as elective abortion was legalized by the federal government in 2007, only within the city limits (Gobierno de la Republica de Mexico, 2007). Despite these limitations, adolescents accounted for 17.1% of all abortion services in 2010, the second largest age group which utilized the abortion services in that year. Twelve percent were between the ages of 18-19 and 5.1% were in the age range of 11-17 (Mondragón Kalb M, 2011). Emergency contraception is more widely available, though in short supply in public health institutions. In 2014, a law was put into place which required all emergency contraception obtained at the public health institutions to be free of cost (Juarez F et. al, 2013).

In addition to unwanted pregnancy, failure to use condoms may lead to the spread of STIs. Nationally, STIs are among the leading causes of general morbidity among those aged 15-44 (Cuenca, 2013). The lack of education regarding STIs among adolescents is cause for concern. The 2012 ENSANUT found that almost half of all students surveyed erroneously believed that they were safe from STIs if birth control pills were being used (Menkes C, 2006). Of all sexually transmitted infections, HIV has been given the highest importance. HIV represents a growing problem in Mexico, especially among its youth. As of 2012, it was estimated that 0.1% of adolescents were living with HIV, and that the majority was contracted through sexual transmission (SSA, 2011). Adolescents and young adults (ages 15-24) make up 50% of all new cases of HIV (Gobierno de la Republica de Mexico, 2015) .

Efforts to Improve Adolescent Health in Mexico

Mexico has prioritized public health, as is evident through a variety of federal policies and programs. In fact, the right to health care is stated in the Mexican Constitution (Octavio Gomez Dantes et al. , 2010), and the *Seguro Popular* established Mexico's universal health care system in 2003 (Knaul et al., 2012).

Mexico's health care system has both public and private sectors however, the majority of health services are considered public. The public sector is subsidized by the government and is overseen by the Secretary of Health (SSA). The public sector is made up of the Institute of Social Security (IMSS), the Institution of Health and Social Services of State Workers (ISSSTE), State Health Services (SESA), the and Secretary of Health services (SSA). The use of different public health institutions depends on employment status. Those who work for the government receive health services at ISSSTE. This includes all federal, state, and local government employees as well as their families. All other employed or retired individuals and their families may obtain

services at IMSS. Individuals who are not employed in the formal sector, or are unemployed, are able to receive services at the SSA institution as well as at the IMSS sponsored cash-transfer program, *Oportunidades* (M.E. Bonilla-Chacin, 2013; Octavio Gomez Dantes et al. , 2010). Within the private sector there are private hospitals, clinics, and alternative health providers. These private health services are not subsidized by the government (Octavio Gomez Dantes et al. , 2010).

The public health institutions are comprised of health facilities that provide preventative as well as primary care services. Preventative health programs have been established in recent years through all of the public health institutions. Programming in these preventative health programs has focused on the prevention of chronic diseases and reducing unhealthy behaviors. In 2002, IMSS established their program PrevinIMSS. This was followed in 2010, by ISSSTE establishing their preventative health program called PrevinISSSTE. These programs are designed to meet the needs of the general population. SSA has a department specifically dedicated to prevention and has demonstrated its support of preventative health programs by the establishment of several federal policies (M.E. Bonilla-Chacin, 2013).

In addition to the establishment of its public health institutions, the Mexican government has demonstrated its political commitment to improve the health of its population through several policies. Not only is the right to health care stated in the constitution and guaranteed through universal health coverage, several Official Mexican Standards (NOM)[1] ensure equal

[1] NOM are national standards in Mexico that must be followed. These were established in 1961 and are revised every five years. These NOM's are set for various industries, including health care (Instituto de Investigaciones Jurídicas de la UNAM, 2011))

health services. In 1993, sexual and reproductive health guidelines were established in the Family Planning Services NOM (NOM 005) (SSA, 1994).

In the NOM, the position of SSA is that family planning is of the highest concern due to its extensive reach in society and its impact on the Mexican population. The NOM 005 details the rights of all Mexican citizens of reproductive age to obtain information regarding family planning methods. The NOM also specifies that each individual has the right to make their own choices regarding family planning methods (SSA, 1994). In regards to family planning counseling, the NOM details that adolescents are one of four priority audiences. Counseling is described as a service which should be provided in a manner which will make the patient comfortable, will not reinforce the concept of sexuality as taboo, and in a manner that will directly address any misconceptions. In addition, the NOM explicitly states that through the counseling process, individuals should receive all possible information in order to make an informed decision regarding what type of contraceptive method will be best for the individual (SSA, 1994).

Regarding sexual and reproductive health of adolescents, no policy is in place that goes beyond identifying adolescents as a priority audience. There are, however, several adolescent health programs in place. In 1998, the IMSS Oportunidades program established an adolescent health program, the Model of Integrated Health for Rural Adolescents (MAISAR) (IMSS, 2013) . MAISAR operates within a designated space called the Center for Attention for Rural Adolescents (CARA). CARA are spaces dedicated to adolescent health located within IMSS health facilities. Areas of focus include family planning, STI prevention, drug and alcohol abuse prevention, and the development of a healthy self-esteem (IMSS, 2013). In 2011, IMSS also developed the program JuvenIMSS for the rest of its health facilities. JuvenIMSS focuses on

similar topics and operates within the IMSS health institution. Notably, JuvenIMSS has a peer education program dedicated specifically to sexual and reproductive health.

In 2002, SSA also established their youth friendly service program, *Servicios Amigables* (SSA, 2002). This program operates in the SSA health facilities within the Prevention Department. Given its location, *Servicios Amigables* is able to provide both preventative and primary health services. The *Servicios Amigables* program places special attention on sexual and reproductive health, but also includes programming regarding vaccinations, obesity, physical activity, and sexuality. SSA's mission for their *Servicios Amigables* program is to "Provide quality information and services in sexual and reproduction health to the Mexican adolescent population, and to support assertive decisions that allow their skills to develop in order to become productive adults". In 2008, SSA published a document titled "Specific Action Plan: Adolescent and Reproductive Health 2007-2012" (SSA, 2008a). In this action plan, SSA stated that teens had a right to obtain SRH without discrimination by age or gender, to obtain condoms and contraceptives, and to obtain counseling to prevent unwanted pregnancies (SSA, 2008a). All of these rights were guaranteed with an overall goal to reduce maternal mortality among women under the age of 20, to reduce the teen pregnancy rate, and to lower the incidence of STI's (SSA, 2008a). This has been the focus of SSA to improve the health profile of Mexican adolescents.

SSA's YFS program is currently being implemented nation-wide and consists of a variety of activities. As part of this programming, partnerships with local schools were also established to conduct outreach and educational presentations to adolescents. In addition, partnerships have been created with national school entities and other federal adolescent health entities to disseminate mass-media campaigns to promote the *Servicios Amigables* program (SSA, 2008a). In addition, partnerships with the Secretary of Public Education (SEP) was

developed in order to incorporate adolescent health topics into the educational curriculum. Finally, a goal for SSA was to develop a set of indicators to accurately monitor and evaluate the progress of their *Servicios Amigables* program to reduce pregnancies, increase health care utilization, reduce STIs, and increase use of condoms and contraception.

Critiques of YFS and Gap in the Literature

Critiques of the YFS model have focused on the fact that it is not based in strong evidence (Speizer, 2003). Several reviews have been conducted to evaluate the effectiveness of YFS programs, and have found that existing programs are rarely set up for rigorous monitoring and evaluation (Senderowitz J, 1997). For this reason, the majority of reviews evaluating YFS have been inconclusive. Existing evaluations have been criticized because of a lack of generalizability, lack of rigorous indicators, and lack of rigorous data. Tylee et al found in 2012 that many of the YFS evaluations to date were purely observational, and had limited generalizability due to low validity (Tylee et al.). In addition, without a standard set of validated indicators regarding YFS, rigorous comparisons across programs are not possible. For this reason, additional research is needed.

A systematic review of YFS evaluations conducted in 2012 by Zuurmond et al found that the majority of studies evaluating YFS measured knowledge as an outcome, but failed to include measures for behavioral outcomes. This review also found that adolescents were not attending YFS centers, so they were not cost-effective given the low attendance (Zuurmond et al., 2012). This has been a consistent finding in other evaluations of YFS in health clinic settings and youth centers (Murgeitio C et al, 2013; Speizer, 2003; Zuurmond et al., 2012).

Though youth friendly services have received wide-spread support in that they have been shown to provide higher quality care to adolescents, there is not enough evidence to demonstrate

a significant impact of YFS on behavioral change specific to SRH. Qualitative studies looking at YFS have typically focused on adolescent perspectives and behaviors to determine the efficacy of these programs. However evaluation research with providers has not been conducted in Mexico. This research seeks to shed light on how federal policy translates into primary care settings. (Murgeitio C et al, 2013)

Chapter 3: Methods

The data used for this qualitative analysis was collected for an evaluation conducted by the National Institute of Public Health (INSP) and the National Institute for Women (INMUJERES) in 2012. The aim of the evaluation was to describe and analyze the operations and processes in place at public health institutions that provide sexual and reproductive health services to adolescents, with an overall focus on health services provided to women. The public health institutions that were evaluated included the Mexican Social Security Institute (IMSS) and its unit IMSS-Oportunidades, as well as the Institute for Social Security and Services for State Workers (ISSSTE) and the Secretary of Health (SSA) institutions.

Setting

The qualitative component of this study conducted in-depth interviews with providers who worked with adolescents to provide SRH services, including physicians, social workers, health promoters, nurses and one health facility director. In total, fifteen interviews were conducted with providers at all three institutions in two states, Mexico and Oaxaca. The geographic location of these interviews was intentional to capture any regional differences that may exist due to differences in access to education, availability of adequate housing, and poverty levels.

Mexico is comprised of thirty-two states and in 2014, the country was home to 120 million residents. Mexico State is the most populous state in the country, with 16.6 million residents, or 14% of the country's population. The Federal District (D.F.) is located in the state of Mexico, and is home to 8.7 million residents. In contrast, the state of Oaxaca has a state-wide population of 3.9 million residents, and is home to the largest indigenous population in the

country. The vast majority of this state is rural with the exception of its popular tourist destinations along the coast.

Research Design and Procedures

Interviews were conducted using a semi-structured interview guide created by the INMUJERES/INSP researchers (See **Appendix 1**). These interview guides were developed by reviewing information obtained from national and international scientific literature on previous studies related to SRH. A pilot was conducted in August of 2012 with health care providers working in SRH services with adolescents; the data generated in the pilot were not included in this analysis.

The interviews were conducted by two professionals who had training in qualitative methodology and experience in conducting key-informant interviews. These interviews were conducted in-person at their place of work, and were recorded with participants' permission. The recordings were transcribed verbatim and de-identified in order to protect the confidentiality of the providers.

Data Analysis

The analysis was initiated by researchers at INSP who created a standard codebook which was finalized after conducting an inter-coder agreement process between two INSP researchers. The codebook for this project consisted of nine codes covering various topics of interest including the provision of SRH services, the providers' work environment, institutional processes, youth friendly services, and the socio-contextual environment in which providers worked (**Appendix 3**). The thematic analysis presented here used the data coded by INSP and INMUJERES researchers.

Qualitative analysis began with a close reading of the transcripts. After the initial reading, the interviews were analyzed by specific themes. A detailed summary was developed for each theme, including a discussion of patterns in the data, properties and dimensions of each theme, and similarities and differences across institutions. Few differences were identified across institutions except where noted in the text, therefore results are presented thematically.

Ethical Considerations

INSP obtained approval for data collection by INSP's Research Ethics Committee. For the secondary data analysis no further IRB approval was necessary because only de-identified was used.

Chapter 4: Results

All of the public health institutions in this study had prevention programs in place, however only the programs at SSA and at IMSS-Oportunidades had programming specific to adolescent health. Sexual and reproductive health was mentioned by the providers as a component of the prevention programs, but SRH was not an area of focus. Throughout the interviews, it was apparent that all providers were familiar with some of the core tenets of youth-friendly services.

Providers identified two primary sources of guidelines for their practices: the Mexican National Standards (NOM), specifically NOM 005 on Family Planning, and the World Health Organization's (WHO) youth friendly services (YFS) framework. All fifteen providers recognized that providing SRH education and services to adolescent's required a different approach in comparison to adults. Most provider perspectives on adolescent SRH centered on education and counseling surrounding condoms and contraceptives.

The providers had a variety of experiences related to adolescents, perhaps related to their different roles as clinicians, social workers and health promoters. Nevertheless, the majority of their perspectives were very similar. For this reason, there is little distinction between clinical and health education providers in these results. Prominent components of YFS that providers consistently mentioned included the importance of creating a relationship between the patient and themselves, focusing on communication with adolescents, creating a private and inviting space, as well as making services accessible to adolescents.

> *Provider: Well, I think that we need to give [adolescents] the opportunity that they desire, in other words, give them the opportunity that if they need to learn or know*

something, give them the way in which to ask us. Give them confidence and I believe we can't approach all of the adolescents from the same angle. All adolescents have different needs, because of their environment, because of their habitat, their relationships, and their family members and because of their culture, no? So, we can't approach them all with the same method, but even so, they all need it, no? **(ISSSTE 2, Mexico: 25)**

The most frequently mentioned aspect of youth friendly services was open communication between the provider and the adolescent patient, noted by two thirds of the providers interviewed. For good communication to occur, a relationship needed to be established. Nearly a third of providers said that the process of building this relationship began by recognizing the individual needs of their patients and respecting their rights to make decisions. To establish good communication, providers mentioned a variety of mechanisms that they utilized throughout their interactions with adolescents. About half of providers specifically stated that using clear and non-technical language was necessary; some believed that it was best to use "their language" which could include slang.

Provider: To get along with them I try to use a focus at their level. In other words, how they view the world, from their age, because coming to them with words, or questions that are too, too technical, well maybe they'll be even less likely to pay attention to me, no? So, I always try to stay at their level. Many times even using their vocabulary, being careful to always work with the respect that needs to exist between us and them. **(SSA 2, Oaxaca: 25)**

Interviewer: Think that you are training me, and that I will be working with adolescents. What would you tell me? How should I address myself around them?

Provider: Well the idea is to, above all, introduce yourself with a lot of confidence, give

them confidence and talk to them in a form that is not technical, but more so, how they talk [laughter]. (**IMSS 2, Mexico: 94**)

By addressing the individual needs of their patients, providers believed that adolescents were more likely to remain interested in the topics discussed and to retain the information.

The relationship between provider and patient was described by three providers as a process that took place over an extended period of time.

Interviewer: And let's say you're going to train me, no? To distribute condoms. What would you tell me? What do I need to do with adolescents?

Provider: I would tell you that we need to read a lot about adolescents, train ourselves. Why? Because the way we address them is not the same as a conversation we have with an adult. In other words, they need, one needs to find the proper manner for them to become interested in what one is telling them, or what the conversation will be about. Addressing an adolescent needs to be very special, it needs to be, you need to find the way. Sometimes even talking in the same manner that the adolescent speaks. But, for this there needs to be various conversations; it can't be only one conversation, and then the adolescent trusts you. **(ISSSTE 2, Oaxaca: 122)**

Participants said that this relationship is easier to build within a youth-friendly space. Clinical providers in particular noted that physical space was a necessary Part of building a relationship with their patients. Two thirds of all providers also stated that the space available to them was not adequate. The only institutions with an adolescent-specific space were those with specific adolescent health programs, SSA and IMSS Oportunidades. This space was usually within another general department such as Family Planning or the Health Promotion, and providers

voiced concern that the space they had was too small, lacked privacy and the location of their office was inappropriate.

The ideal space described by the providers included features that would help their adolescent patients feel more comfortable. It was important to have some sort of physical barrier to provide privacy, such as a wall, or a room divider. Other characteristics included having a designated space for adolescents with comfortable furniture and sufficient room for several people. The privacy would create a comfortable environment for the patients, and make them more likely to share information or asking questions regarding their sexual and reproductive health. Without this private space, the providers recognized that adolescents might feel uncomfortable speaking openly in fear of being overheard, or simply being seen visiting their specific department in the health facilities.

> *Interviewer: If you had all the money in the world without limitation, for a program for adolescent sexual and reproductive health, what would you buy?*
> *Provider: Just like there is a clinic for mothers, a clinic for dysplasia, a clinic for cancer, for cardiology, etc. I think it would be very good to create a specific clinic for adolescent health. Reproductive health and such, to prevent pregnancies, and stay aware of their menstruation dates…* **(ISSSTE 4, Mexico: 70)**

About one third of providers thought that a specialized team should include a physician, a nurse, and a social worker. Two of these providers also said that having a gynecologist and psychologist specifically for adolescents would be ideal. Having this specific space, along with a specific set of providers, would make the adolescent's experience at the clinic more streamlined, more accessible, and closer to WHO YFS framework.

Education was seen as a key component of adolescent SRH among all providers across all institutions. Providers viewed education as a mechanism to prevent adolescent pregnancies and STIs by providing the knowledge they needed to make informed decisions. Three quarters of providers stated that all adolescents ages 10-19 should receive sexual and reproductive health education, agreeing with the WHO Adolescent Health guidelines. Providers in these institutions provide education in two different contexts: individual counseling at clinical visits and presentations at schools.

Education in the Clinical Setting

Providers stated that they took every opportunity they could to provide adolescents with SRH information, and noted that there were not many adolescents who came to the health facilities. Information was given to adolescents who accompanied family members for appointments, or when adolescents had appointments for services unrelated to SRH. Adolescents were rarely seen at the health facilities alone, and were even less likely to come in specifically for SRH information. The only instance in which adolescents were said to go to the health facilities specifically to receive condoms or contraceptives was at the ISSSTE location in Ciudad Neza in Mexico, the most urbanized location in which the interviews were conducted. The information provided at health facilities included information on different contraceptive methods, their benefits and potential side effects, STIs, and the health and socio-economic consequences of adolescent pregnancy. Provision of condoms and contraceptives was described as consisting of two elements: the actual distribution of the method and the counseling. When describing a typical conversation with an adolescent about contraceptive use, three providers stated that it was necessary to start the session by figuring out what the person already knew in order to tailor the information to the individual and address any questions they might have.

The contraceptives available were relatively consistent across all institutions; three different nurses stated that the patch was the most popular method for females, and condoms were for males. Other available methods included birth control pills, implants, and IUDs. Emergency contraception was only mentioned on three occasions, twice in the context of a need for the institutional to invest in emergency contraception. After receiving contraceptive counseling, the provider and patient discussed what the best options were for that individual. Five providers stated that the best method was determined by using information in the Family Planning NOM or the WHO guidelines.

In all locations, it was necessary to see a physician in order to receive contraceptives. Only one of the providers interviewed, and ISSSTE nurse in Oaxaca, said she could provide all types of birth control except IUDs. Another nurse, at IMSS, noted that physicians were not providing effective contraceptive counseling to their adolescent patients.

> *Interviewer: Okay, do the medical doctors provide family planning, sexual and reproductive health services?*
> *Provider: They should, and they do, but they also have goals set for them. So one comes in, and then another, and what they do is refer, refer, refer…. Refer this one to EMI, this one to social work, and this one…. The work gets referred to others. I say this, because my own patients come to me with many doubts. "Didn't the doctor tell you?" "No." OK, I understand, they only have half as much time. Ok, your doctor didn't' explain it to you so I will explain it to them because I have twice as much time as he does. So there. But yes, many times the doctors just refer them to someone else.* **(IMSS 1, Mexico: 84)**

Once a method of contraception was agreed upon, the patient had to get authorization from their respective institutions. Adolescents who obtained services at IMSS and ISSSTE had

health coverage through their parents' employment, so there were potential confidentiality risks that might deter adolescents from obtaining services[2]. At the ISSSTE however, one nurse reported that this issue was being addressed with respect to IUDs; this method could now be requested anonymously.

Public Health Impact of Adolescent Health

Adolescents (10-19 years old) are a demographic with unique vulnerabilities, and as such represent a primary target population for health initiatives (D., 1996). It has been well documented that behaviors taken on in adolescence can have lasting effects into adulthood (WHO, 2014c). While adolescents are generally thought to be in good health, this age consistently faces disproportionate rates of suicide, STI's, unplanned pregnancies, interpersonal violence, maternal mortality, accident related injuries and other preventable illnesses (WHO, 2014c). This age group is vulnerable to external factors such as the opinions or will of others, access to health services, and institutional processes such as the type of services available as well as the price and location of health services. These factors can easily influence adolescents' decision to seek health services (Kirby, 2007). Due to environmental, social, and political factors, adolescents are the demographic most likely to participate in high risk taking behaviors (Elkind D., 1998). Of particular concern are the adolescent health risk behaviors that are observed in sexual and reproductive health (SRH). For this reason, it is important to provide adolescents with high quality health services in order to facilitate the best possible decisions and behavior.

[2] The primary insured individual receives billing statements which might detail procedures, medications, or visits to the doctor. In addition, authorization for certain procedures might be asked of the primary insured individual.

Education Through School Partnerships

Education outreach that was conducted at schools took place through partnerships with school districts. From the providers' accounts, this outreach was conducted most often through large presentations at auditoriums, usually led by social workers and health promoters, although doctors and nurses participated occasionally as well. The presentations covered a wide range of topics such as self-esteem, obesity, communicable diseases, and SRH. The SRH presentations covered methods of contraception, STIs, and sexuality. In the state of Oaxaca, gender equality was a topic that was emphasized during these presentations more so than in the state of Mexico. Some providers noted that school presentations were a useful way to reach a large number of adolescents. One nurse thought that these assemblies were critical in creating a relationship with the adolescents as they allowed students to meet providers in an informal setting, and that initial meeting might encourage the adolescents to visit to health facilities.

Barriers to Youth Friendly Services

Barriers identified by providers centered on conservative views and institutional barriers. The frequency varied by institution, but these barriers were present across all locations. Conservative views were observed among school administrators and parents; they were seen as a general societal issue. Institutional barriers affected all levels of service provision and included funding, training, and institutional processes.

Conservative Views

Providers said that conservative views on sexuality were a limitation to their SRH work with adolescents. This was most often seen in Oaxaca, but was also mentioned in the state of Mexico. SRH was referred to as a taboo and forbidden topic in four separate interviews. In Oaxaca, SRH outreach education at schools was not well received by school administrators, who

attempted to limit the conversation to topics that were not potentially offensive. One nurse stated that school administrators clearly disapproved when she addressed SRH, and said it made her uncomfortable and influenced her work. Other nurses paid careful attention to their presentation to make sure that none of the materials were overly suggestive or sexual in nature.

Parents also expressed conservative views about condom and contraceptive distribution. Four nurses were able to recall specific cases where parents of adolescents were unhappy that the provider gave their children condoms. One explained that parents got upset when their daughters were offered condoms, because this suggested that they had already or would soon initiate sexual activity.

> *Provider: Yes it would be good [to provide condoms] to young men and women alike, but then they say "What?" That's where the prejudice comes in, "How are you going to give this to my daughter, she is a young girl!" No, no. Its also that I have a daughter who is 16 and I wouldn't like my daughter to carry a condom, in, in…I mean yes it would be good, but I wouldn't like my daughter to have a condom, it would be like, "what a Young girl!" […] but just as well, the time will come to give out the condoms to the women at 19 years of age, why? Because then they are of legal age and understand the consequences of their actions. It's been explained to them in the school, and by their parents.* **(IMSS 1, Oaxaca: 135)**

Parental involvement was noted in most of the interviews as adolescents usually came to the health facilities with their parents for reasons unrelated to SRH. One third of the providers interviewed said that SRH education was conducted only when parents were present in order to avoid potential misunderstandings. A similar proportion stated that in order to provide adequate

education to adolescents the parents had to be reached as well so they could reinforce the information.

At a more societal level, providers recognized that conservative views were difficult to address. Three stated that encouraging parents to maintain open communication with their children about sexuality could help normalize the subject, and suggested using medical terminology when referring to anything in the reproductive system. Two recommended beginning SRH education at an earlier age in order to normalize discussions of sexuality and using mannequins and life-like props when teaching sexual education.

> *Provider: I think that from the moment they are born, I tell the mothers that they should explain to the children and say penis, vagina. Clearly, when society and the family allow it. But don't tell them 'pajarito' [birdy], 'nidito' [little nest] ... because later, that creates problems, tell them what they are called.* **(SSA 1, Mexico: 75)**

At the same time, a number of providers exhibited similarly conservative views during the interviews. These views were more common among participants in Oaxaca. This is evident in behaviors discussed above, such as giving condoms to males more frequently than females, and providing them to males at an earlier age than females. Other examples include one participant stating that since so many contraceptives are available, anybody who was pregnant, was pregnant by choice. Another noted that she took girls' appearances into consideration when deciding whether to provide condom counseling. Physical traits such as the fit of her clothing and the amount of makeup used were mentioned as a method to determine whether SRH information needed to be provided or not.

> *Provider: Well I think that the physical appearance tells us a lot about the kids. ... the*

adolescent comes and presents himself, and from there we see the type of, the kids that are more tranquil or the ones who are more restless, by the type of dress and the way they behave themselves, no? From there we see the young girls of about maybe 12 years old who come very tranquil, but there are some young girls that are twelve years old who already have clothes that are very tight and come with a lot of makeup; and so I think that there it is important to detect, for this girl I need more, I need to give more emphasis on sexuality rather than this one, no? Maybe to this one I'll only give her [information] on preventing accidents. But this other girl, maybe she is about to initiate her sexual life or is already involved in that, no? **(ISSSTE 2, Mexico: 26)**

About a third of providers stated that before beginning any counseling, or providing condoms or contraceptives, it was necessary to emphasize that they were not encouraging adolescents to become sexually active; reinforcing abstinence was necessary throughout SRH education and counseling. One specifically said that a "mini-sermon" must be given to adolescents on the importance of abstinence.

Institutional Barriers

Interviewees emphasized a need for training, additional funding, educational materials, and space. Four fifths of the providers interviewed said they wanted more training specific to adolescents. Training on adolescent SRH was said to be non-existent by three providers, and was mentioned by nine providers as something that required more emphasis. It was clear that administrators at all facilities disseminated manuals and guidelines, including the Mexican National Standards and the World Health Organization YFS manuals, however, there was no training or discussion on the information. Participants noted that it was up to them to review the

materials, but there was not enough time during their work hours. At the same time, nine providers did report reading and conducting research on adolescent health on their own time.

Provider: Here we have the Mexican National Standards in family planning, they do provide us, we do have lots of information.
Interviewer: So you base your presentations on them.
Provider: Yes, and also, things that I download from the internet, articles that I download from the internet. Information from the World Health Organization, all of that, no? I try to read a little bit of everything to be well supported in that aspect. **(IMSS Oportunidades, Oaxaca: 267)**

The most frequently mentioned training topics were effective communication with adolescents, understanding the state of adolescent health worldwide and in the communities where they work, and evidence-based approaches.

Interviewer: You mentioned something important regarding time, no? Time because we have, we need training, how would you like the training?
Provider: To give us training that is really, how to reach adolescents. Because this is what we do, we work with them, with adolescents, but sometimes I don't know if we're doing the correct thing. Maybe if we speak empirically, then we need courses that are very specific to adolescents. What's going on in the world on this, and this, and that? So, I think that the statistics say this and this and this. And the kids, that way we are able to talk to the adolescents. Look the statistics say that the diseases are increasing. And that we, if that's what the statistics say, then we need to start working with them. But yes, I think that yes, we need to be educated more. **(ISSSTE 1, Mexico: 120)**

One location stood out as being different from the others in terms of on-going training. The Director of IMSS in the State of Mexico organized weekly meetings in its Family Planning Department; all available staff members were present at these meetings to review and discuss guidelines and answer questions. The SSA institutions in Oaxaca also reported frequent radio programs that provided continuous education to their providers.

Another barrier reported was a lack of presentation materials, such as pamphlets, mannequins, screens and projectors. Four providers simply stated that they needed "absolutely everything." Three noted that the materials were important so adolescents could take flyers and pamphlets home to look over and share with others. Providers in Oaxaca said that pamphlets and flyers were extremely rare; one said that she had been holding on to flyers distributed by the institution in 1996. She had not received materials regarding pregnancy in almost twenty years.

> *Interviewer: There is a lot, and when something arrives, we are at the tail of Oaxaca, and so nothing arrives. And so, we don't have anything, we don't have any leaflets, no brochures, no posters, no banners, before they used to send posters. This, thank God, is a flipchart is from '95, '96 yeah? They sent it to us, I grabbed, I laminated it, I saved it, because if not… I am working with these now, but they're outdated. […] we feel a little bit removed because truthfully, I feel that we are forgotten, in other words, we do our job with what little we have […] with this structure it is difficult to work, yes.* **(ISSSTE 1, Oaxaca: 48)**

Institutional barriers were mentioned most frequently, and most passionately, at the ISSSTE in Oaxaca. Lack of space, time, and confidence in the system where they worked were apparent in interviews at this institution. For example, while lack of space was something that all institutions mentioned, only in Oaxaca was there a distinct lack of space as well as institutional

support to provide more space. For example, at the ISSSTE in Mexico, providers described their facility as spacious, but said that it lacked organization to adequately use the space available for health promotion. In contrast, providers at the ISSSTE in Oaxaca described the space available to them as cramped and inadequate to provide services to their patients. One said that she felt like the facility was the forgotten corner of Mexico, and another stated that the facility wouldn't approve funds to place a curtain in her area of work to provide privacy for women receiving Pap smears. They also noted more "modern" methods of contraception such as implants, IUDs, and emergency contraceptives had not made it to their area yet.

Chapter 5: Discussion

This analysis aimed to understand to what extent the public health institutions in Mexico provided youth friendly services, from the perspective of providers. While most institutions had adolescent health programs in place, only SSA and IMSS Oportunidades had programs based on the youth friendly services (YFS) model. There was little evidence in the data to suggest that the YFS program resulted in the providers having a different understanding of their adolescent patient needs. Across all institutions, it was evident that providers understood the tenets of YFS, and the guidelines listed in the NOM 005, yet they were not consistently followed.

Our findings regarding condom and contraceptive distribution and counseling were consistent with an adolescent SRH evaluation in Mexico conducted by the National Institute of Public Health (INSP) that looked at quantitative and qualitative data from 926 health facilities across all five regions of Mexico. The evaluation found that all providers stated that they provided condom counseling to men, however, only 62%-77% of providers reported provided condom counseling to women (INMUJERES, 2013). Given that the HIV epidemic in Mexico is increasing faster among women than men, and the dominant mode of transmission for women is heterosexual sex, it is crucial that this disparity in the provision of condom counseling be addressed (CENSIDA, 2013).

The lack of formal policy on YFS has been identified by providers as a barrier, as was seen in the evaluations of YFS in several Latin American countries (Lina Jaruseviciene, 2013; Murgeitio C et al, 2013). Incorporating YFS into policy is a strategy that has been supported by other evaluations of YFS, yet it should be noted that existing policy is not always followed. The existing family planning policy outlined in the NOM explicitly states that "the provision of family planning services should be systematically offered to every person of reproductive age"

(SSA, 1994). According to a very recent government publication, a NOM is being developed that will address YFS; it is anticipated that this NOM will be introduced in 2018 (Gobierno de la Republica de Mexico, 2015).

Youth-friendly services have been shown to be effective in increasing patient retention, satisfaction (Mmari & Magnani, 2003) and knowledge, but there is little evidence that implementing YFS leads to behavioral change on the part of adolescents (Kirby, 2007) (Brindis, Loo, Adler, Bolan, & Wasserheit, 2005). YFS evaluations have typically used adolescent perceptions of services as the primary outcome of interest, while measurable SRH behaviors have not been examined (Tylee et al.). YFS programs have generally not been submitted to rigorous evaluation of behavioral change post-implementation (Speizer, 2003) (Senderowitz J, 1997). While it is desirable to have YFS available in clinical settings, implementing YFS alone is not likely to result in an important reduction in sexual risk behavior among adolescents.

Evidence-based interventions (EBIs) represent the "gold standard" of what research has shown to be effective (UCSF, 2014). In the United States, the field of adolescent sexual and reproductive health has moved toward evidence-based programming for the past decade or so (Schalet et al., 2014). EBIs are interventions that have been rigorously evaluated and shown to result in behavior change among those who received the intervention as compared to a control group, Behaviors typically targeted include delaying sexual initiation, consistently using condoms and/or contraception, and having fewer sexual partners; effective programs typically show sustained behavior change at 6-12 months post-intervention (Banco Interamericano de Deserrollo, 2012; Cuenca, 2013; Kirby, 2007; Meave Loza & Gómez-Maqueo, 2008). The following recommendations are based on the findings of this qualitative analysis and take evidence-based approaches into account.

Recommendations

Training

In this study, four fifths of providers interviewed stated that they desired more training on adolescent health. The providers in this study specifically mentioned wanting training regarding communication with adolescents, and training on evidence-based practices to provide SRH to adolescents. These findings are not consistent with the 2012 INSP evaluation of SRH services, which indicated that the majority of providers were satisfied with the amount of training on adolescent health they had received. In the study, the providers who reported the most training, had received approximately 20 hours of training (INMUJERES, 2013). It may be that providers were more willing to discuss their desire for training in qualitative interviews than a quantitative survey. In any case, it is apparent that a training system is already in place, but it is either not reaching all providers or was not considered sufficient. For this reason, an assessment of providers' desire for training would be beneficial. This assessment should ask providers to elaborate on what knowledge they feel is missing, and what would be the most useful formats for this continuing education.

Identifying the method most useful for providers will be key in making sure the training is effective. Training is consistently cited as a key component to the successful introduction of YFS in health care settings (Gottschalk, 2014; Meave Loza & Gómez-Maqueo, 2008; WHO, 2003, 2012, 2014c). Training has also been reported to be fundamental to improve provider performance related to YFS (Gottschalk, 2014; Tylee et al.). The desire for more training among health providers who work with adolescents is not unique to this project; studies conducted

across the globe have reported that providers repeatedly express a need for more training specific to YFS and adolescents (Tylee et al.).

The World Health Organization (WHO) recommends conducting continuous learning assessments of providers working with adolescents (WHO, 2015) in order to achieve increased patient satisfaction (Fletcher, 2008). The results of this analysis suggest that a continuous education approach would be welcomed by providers. In addition, the providers at the SSA institution in Mexico reported having continuous training in the form of weekly meetings in their department and were quick to comment that they felt supported at the institutional level through these meetings. . Following the example of this SSA facility could be useful, particularly if some weekly meetings incorporate more formal continuous education. For example, weekly meetings might include the Adolescent Health training module from Pathfinder International's *Comprehensive Family Planning and Reproductive Health Training Curriculum*. This module is composed of thirteen units covering adolescent health topics, with a focus on communication integrated throughout the units. This training module was designed for use with physicians, nurses, counselors and midwives (Judith Senderowitz, 2004).

In Mexico, continuing education is mandatory for physicians. Utilizing this existing mandate to establish a specific continuous education curriculum for physicians working with adolescents may be beneficial. This has already been done for a different national strategy, the National Integral Strategy of the Attention to Nutrition (ESIAN). In 2014, INSP hosted a multi-day continuing education seminar to familiarize over a thousand health providers with the new national strategy (INSP, 2015). A seminar such as this for providers who work with adolescents might be scheduled in tandem with the release of SSA's strategic plan for adolescent sexual and reproductive health, which is revised every five years, much like the NOMs.

In addition, adolescent health should be integrated into the theoretical and practical curriculum at medical schools, where there is no current focus on adolescent health. Integration of adolescent SRH into medical curricula can be accomplished through elective classes, or more ambitiously, as part of the mandatory general curriculum (Haslegrave & Olatunbosun, 2003). Topics should include the current health status of adolescents in Mexico including regional variations, communicating with adolescents, and the socio-contextual environment in which adolescents make decisions. These continuing education courses, and curriculum integration, will serve to help providers feel more confident in their work, and in turn increase patient satisfaction (Forsetlund L, 2009).

At the level of individual providers, health training sessions have been shown to be effective in improving knowledge in multiple formats. In a systematic review conducted by Forsetlund et al for the Cochrane Collaboration, educational meetings alone (such as conferences, lectures, workshops, and seminars) were found to improve professional practice (Forsetlund L, 2009). To increase the effectiveness of these training sessions, they should be continuous, as best practices and evidence is constantly emerging. Rural health facilities could benefit from distance learning in the form of web casts, online lectures, and seminars. Currently, there are several organizations with continuing education workshops that focus on adolescent health which could be adapted for use in Mexico. It should be noted also that the Mexican National Institute of Health (INSP) also has considerable capacity to develop and implement such training as distance learning modules.

Parental involvement

Our study findings also suggest a need to shift the focus toward SRH interventions that seek to involve parents. Parental reluctance regarding adolescent SRH education has been

reported to be an issue in other evaluations of SRH programs in Mexico (INMUJERES, 2013) and elsewhere in Latin America (Agreda, 2008). This reluctance has been hypothesized to be a result of cultural taboos (Agreda, 2008). For Latinos in the US, one study has shown that the more often the parents talk about SRH topics, the more likely the adolescent is to share parents' views (Guilamo-Ramos et al., 2007). If the parent has negative views of SRH, it may be more difficult to reach the adolescent. In a 2013 qualitative study conducted in Bolivia, Nicaragua, and Ecuador, providers recommended emphasizing community engagement with SRH services, particularly with schools and parents, as they are the 'gate-openers' for adolescent SRH (Lina Jaruseviciene, 2013). These recommendations are also supported by the literature on Latino families in the U.S. who have also been shown to be reluctant to talk about SRH with their children (Raffaelli, 2001).With Latino families, focusing on parents' communication skills in particular has been an effective strategy; an increase in communication between Latino parents and children is associated with less sexual risk taking (Hutchinson, Jemmott Iii, Sweet Jemmott, Braverman, & Fong, 2003) lower frequency of sexual intercourse and fewer sexual partners (Miller, 2000) and more consistent condom and contraception use (Buzi, 2009). A recent ChildTrends report also presented evidence supporting parental involvement in SRH among Latino adolescents (ChildTrends, 2014).

Evidence Based Interventions

Evidence-Based Interventions (EBIs) targeting sexual risk behavior have been compiled in several EBI repositories. These include databases from the U.S. Department of Health and Human Services (DHHS, 2015), The National Campaign to Prevent Teen and Unplanned Pregnancy, the University of Pennsylvania School of Nursing's Evidence-based Program and Training database, the Community Guide Risk-Reduction Interventions for Adolescents, as well

as the Center for Disease Control and Prevention's Replicating Effective Interventions (for HIV) and Contraceptive Guidance for Providers (CDC, 2014). The interventions described below may be good candidates for adaptation to the context of Mexico.

"Families Talking Together," is an adolescent pregnancy prevention intervention that targets parents of Latino adolescents living in the US and has been shown to be effective in delaying the onset of sexual activity. The intervention uses skill-based techniques to develop parents' communication skills and provides informational pamphlets parents can use to reinforce adolescent SRH knowledge (Guilamo-Ramos V, 2011). Nine months after the intervention, 6% of the intervention group reported ever having sex, compared to 22% of the control group (Guilamo-Ramos V, 2011). The intervention can be implemented by promotors in three two-hour community-based sessions or by clinicians in a 30-minute session with a brief follow-up. All intervention materials are available in Spanish, including training manuals and evaluation materials.

Our findings suggest that incorporating interventions into the health promoters' work at the schools may be more feasible than clinic-based interventions, The Parent-Adolescent Relationship Education (PARE) is an EBI that targets middle school age youth (ages 11-14) and their parents and is implemented in school-based settings. Although this program only exists in English, it would be an appropriate model to assess for adaptation to Mexico, especially given the existing partnerships with schools. This intervention is implemented as an after-school program targeting pregnancy prevention and STI prevention and is implemented in four sessions. The first two are given separately to youth and their parents, and the next two bring parents and their children together to engage in role-plays and discussions. These sessions were then followed up with three additional "booster" sessions conducted at six month intervals. The

evaluation found that the intervention group was significantly more likely to have achieved social control (demonstrated by an increase in parental rules regarding sex and risky behaviors) and self-control (prevention knowledge and resistance responses to hypothetical scenarios (Lederman, Chan, & Roberts-Gray, 2008).

Cuidate! is an HIV-risk reduction intervention developed for Latino adolescents in the U.S. that can be implemented in after-school or community-based settings. Cuidate! has been shown to be effective in reducing frequency of sex, number of sexual partners, and frequency of unprotected sex. The evaluation also found that the intervention group reported higher consistent condom use one year after the intervention (Villarruel, 2006). Cuidate! is implemented in six one-hour modules, and all materials, including training manuals, are available in Spanish.

Many of these evidence-based interventions are "packaged" as a set, including intervention guidelines, curriculum materials, training manuals, and in some cases evaluation instruments. However, implementing evidence-based interventions in new settings or with different populations may require adaptation for the specific community where it will be used (McKleroy et al., 2006). This will be especially important for Mexico considering the country's regional differences.

Strengths and Limitations

The scope of this study was limited to the perceptions of providers. It would be beneficial to also study YFS from the perspectives of adolescents as well. While there was much consensus around certain findings, such as the desire for training, more consistent monitoring and feedback, the need for SRH education, the sample was too small to reach saturation on themes with more variation. In qualitative research, a level of saturation is expected for reliability of the findings. While saturation was obtained in this study for themes that showed

little variation and were stated by a large majority of participants, other themes were not saturated. Similarly, the small sample size did not allow conclusive comparisons across institutions or locations. Future studies seeking to understand differences in geography and resource allocation should study more facilities within each site (Juárez F et al, 2010). Special attention should be paid to the ISSSTE as these were the locations where such differences were most evident in this study.

Public Health Implications

Many organizations and governments, including Mexico, have recognized the need for a multi-tiered approach to address adolescent health. The very basis of YFS is that it requires multiple avenues in order to promote change. What this qualitative study has done is highlight providers perspectives regarding YFS, and detailed the recommendations for improved programming by developing further training on adolescent health, increasing parental involvement, and incorporating evidence-based programming. In 2015, the Mexican Government published a report for the adolescent SRH plans for 2014-2018. In this report, many of the issues providers identified here were also identified by the government as areas for improvement. In this way, the results of this study provide additional support and evidence for the approach that the Mexican Government is adopting for upcoming years.

Appendix

Appendix 1: Spanish Interview Guide

Guía de entrevista cualitativa para prestadores de atención

Aplicar consentimiento informado y posteriormente realizar la entrevista en un lugar con privacidad y comodidad para el/la entrevistado/a. Plantear cada pregunta con referencia al tipo de atención estudiado (haya o no programa específico con relación a esa atención; por ejemplo, si no hay un programa específico para violencia de pareja, pero sí se ofrece atención al respecto): salud reproductiva para adolescentes, violencia de género/de pareja o salud materna.

1. ¿Me puede describir de manera resumida cómo funciona el programa de [salud reproductiva para adolescentes, violencia de pareja o salud materna*], o la atención que se ofrece en esta área*? *Dejarlo hablar y luego indagar sobre lo que no mencionó:*

    1.1. ¿Qué actividades se llevan a cabo dentro del programa/la atención [*de salud reproductiva para adolescentes/violencia de pareja/salud materna*]?
    1.2. ¿Cuáles son las metas del programa/en cuanto a este tipo de atención?
    1.3. En su opinión, ¿qué resultados logra el programa/la atención?
    1.4. ¿Cuántas personas trabajan en el programa o en la atención [*de salud reproductiva para adolescentes/violencia de pareja/salud materna*] y cuál es su formación?
    1.5. ¿Diría que se trabaja en equipo dentro del programa/la atención [*de salud reproductiva para adolescentes/violencia de pareja/salud materna*]?
        1.5.1. Si la respuesta es sí:
            1.5.1.1. *Primero:* ¿cómo funciona ese trabajo en equipo? ¿quién hace qué o cómo interactúan (colaboran)?
            1.5.1.2. *Segundo:* ¿cómo diría que se logra este trabajo en equipo en el programa? ¿qué aspectos o condiciones que existen aquí facilitan que se dé este trabajo en equipo?
        1.5.2. Si la respuesta es no:
            1.5.2.1. *Primero, explorar en general si sugerir/inducir respuestas:* ¿por qué no? ¿en qué sentido no hay trabajo en equipo?
            1.5.2.2. *Segundo:* ¿qué diría que impide el trabajo en equipo?

2. Usted que trabaja aquí y conoce el ambiente, ¿qué diría que piensan el personal que labora específicamente dando atención [*de salud reproductiva para adolescentes/violencia de pareja/salud materna*]:

    2.1. sobre cómo se debe de dar la atención dentro del programa/la atención que se ofrece?
    2.2. sobre qué actividades debe de incluir el programa/la atención que se ofrece? Es decir, qué piensan los demás sobre qué se debe de hacer dentro del programa/la atención [*de salud reproductiva para adolescentes/violencia de pareja/salud materna*]?

2.3. En general, ¿usted cree que están de acuerdo las personas que trabajan en este programa/ofreciendo este tipo de atención, sobre *cómo* se debe de dar la atención [*de salud reproductiva para adolescentes/violencia de pareja/salud materna*]?
2.4. ¿O hay diferencias de opinión sobre cómo dar la atención?

3. Aquí en esta unidad médica, ¿qué piensan las personas que trabajan aquí sobre la importancia que tiene la atención [*de salud reproductiva para adolescentes/violencia de pareja/salud materna*]?

4. En su opinión, a nivel estatal y jurisdiccional, los directivos, ¿qué piensan sobre el programa/la atención [*de salud reproductiva para adolescentes/violencia de pareja/salud materna*]?

   4.1 ¿qué piensan los directivos a nivel jurisdiccional y estatal sobre cómo funciona el programa/la atención [*de salud reproductiva para adolescentes/violencia de pareja/salud materna*]?

   4.2 ¿qué opinan los directivos a nivel jurisdiccional y estatal su importancia?

5. En su opinión, ¿cómo podría funcionar mejor la atención para la *violencia de género/la atención para la salud reproductiva de adolescentes/la salud materna*?

6. En su concepción, ¿qué debe de incluir (que ahora no incluye) la atención para *la violencia de género/la atención para la salud reproductiva de adolescentes/la salud materna*?

7. ¿Cuál debería ser el enfoque desde el cual se presta la atención para *la violencia de género/la atención para la salud reproductiva de adolescentes/la salud materna*?

8. En su opinión, aquí donde usted trabaja las demás personas:

   8.1. ¿están de acuerdo con esta manera suya de concebir la atención?
   8.2. ¿En qué difieren las opiniones de las demás personas que trabajan aquí?

9. Aquí en esta unidad médica, dentro del programa/la atención [*de salud reproductiva para adolescentes/violencia de pareja/salud materna*]?:

   9.1. ¿cuáles son las normas, protocolos de funcionamiento, planes de acción, lineamientos o manuales que diría que le dan forma al programa? [*Dejarlo hablar y luego explorar cada uno: normas, programas de acción o lineamientos, cuáles manuales usan y qué tanto le sirven.*]
   9.2. ¿qué tanto diría que el personal de esta unidad médica conoce el protocolo de funcionamiento del programa/este tipo de atención, las indicaciones sobre cómo debe funcionar el programa/este tipo de atención?
   9.3. ¿qué opinión se tiene sobre el protocolo, los procedimientos o los lineamientos?
   9.4. ¿qué diría usted que hace falta, en cuanto a manuales, documentos o materiales para el personal de salud que trabaja en este tipo de atención? ¿qué le gustaría que hubiera en cuanto a manuales?

10. ¿Cómo conoció los lineamientos/procedimientos del programa?

    10.1. ¿Cómo aprendió sobre ellos?
    10.2. ¿Existen oportunidades para que usted y las demás personas que trabajan en el programa conozcan y discutan los lineamientos/procedimientos?

11. ¿Existen estrategias claramente definidas en los lineamientos del programa?

    11.1. ¿Me puede mencionar algunas estrategias, las más centrales o importantes del programa/la atención [*de salud reproductiva para adolescentes/violencia de pareja/salud materna*]?

12. ¿Está claro qué actividades deben de realizarse dentro del programa?

    12.1. ¿Los lineamientos especifican claramente las actividades que se deben realizar dentro del programa?
    12.2. [Sino lo menciona por nombre:] ¿Los lineamientos especifican claramente el protocolo que se debe seguir dentro del programa? En cuanto a pasos específicos, técnicas específicas, etc.

13. ¿Cómo se implementan aquí los lineamientos del programa? ¿Varía la manera en que los llevan a cabo, de lo que viene especificado en los lineamientos escritos? ¿Por qué varía?

14. En su opinión, aquí donde usted trabaja, ¿A usted lo/la apoyan para que pueda llevar a cabo el programa según los lineamientos? Y en general, ¿se le apoya para que pueda llevar a cabo el programa (aunque sea de manera un poco diferente de los lineamientos?

15. ¿Aquí se da algún tipo de reconocimiento del hecho de que usted lleva a cabo el programa?

    15.1. ¿Se le reconoce por el trabajo que hace relacionado a este programa?
    15.2. Y específicamente en cuanto al cumplimiento de los lineamientos, ¿se le da algún tipo de reconocimiento?

16. ¿Se monitorea el programa internamente?

    16.1. ¿Cómo se monitorean las actividades del programa?
    16.2. ¿Cómo se determina si el programa logró sus metas?
    16.3. ¿Qué se monitorea del programa y cómo?
    16.4. ¿A usted le devuelven información sobre los aspectos que se monitorean?

17. En su opinión, ¿existe lo necesario para que lleve a cabo el programa?

18. En su opinión, ¿realmente existe la posibilidad de llevar a cabo el programa con apego a la norma y el plan de acción o protocolo de atención?

19. ¿Qué es lo que lo/la motiva a usted para llevar a cabo el programa?
    19.1. ¿Se siente motivado/a a seguir el plan de acción o norma de atención?
    19.2. ¿Qué lo/la motiva en ese sentido?

20. ¿Cuál es su formación y qué capacitación específica ha recibido?

    20.1. ¿Cuáles cursos, talleres o programas de capacitación ha recibido con relación a su trabajo en el programa?
    20.2. ¿Le ofrecen y le facilitan la capacitación que usted necesita o quiere?
    20.3. ¿Siente que tiene la capacitación que necesita para llevar a cabo el programa? ¿Qué capacitación adicional quisiera? ¿Sobre qué temas, cuáles habilidades necesitaría capacitación?

21. ¿Qué infraestructura tienen para llevar a cabo este programa?

    21.1. ¿Es suficiente? ¿Qué más haría falta?
    21.2. Si tuviera todo el dinero del mundo para este programa, ¿qué compraría, qué le asignaría al programa en cuanto a espacios, equipo, personal?

22. Para resumir, en su opinión, aquí en este centro de salud/hospital:

    22.1. ¿qué cosas impiden o hacen difícil llevar a cabo el programa?
    22.2. ¿Qué cosas hacen falta para poder llevar a cabo el programa como se debe?

23. En su opinión, , aquí en este centro de salud/hospital:

    23.1. ¿qué cosas facilitan llevar a cabo el programa?
    23.2. ¿Qué es lo que posibilita llevar a cabo el programa como se debe?

Appendix 2: Qualitative Interview Guide for Health Care Providers [English Version]

Qualitative Interview Guide for Health Providers

Obtain informed consent and then conduct the interview in a private and comfortable place for the interviewee. Ask each question with reference to the type of service studied (whether or not there is a specific program in relation to that service; for example, it may be that there is not a specific program for intimate partner violence, but care is offered): sexual and reproductive health for adolescents, domestic violence or maternal health.

1. Can you briefly describe how the program works [sexual and reproductive health for adolescents, domestic violence or maternal health] or the services that are offered in that area? *Let them talk and then inquire about what was not mentioned*

   1.1. What activities are conducted within the program/service [of sexual and reproductive health for adolescents/domestic violence/maternal health]?
   1.2. What are the goals of the program in regards to that type of service?
   1.3. In your opinion, what results are achieved by the program/service?
   1.4. How many people work in the program or service [of sexual and reproductive health for adolescents/domestic violence/maternal health] and what is their training?
   1.5. Would you say that there is team work within the program/service [of sexual and reproductive health for adolescents/domestic violence/maternal health]?
   1.5.1. *If the answer is yes:*
   1.5.1.1. *First*, how does the team work function? Who does what or how they interact (collaborate)?
   1.5.1.2. *Second*, how would you say that this teamwork is achieved within the program? What aspects or conditions facilitate this team work?
   1.5.2. *If the answer is no:*
   1.5.2.1. *First, explore in general whether to suggest responses*: why not? In what sense is teamwork lacking?
   1.5.2.2. *Second,* what would you say prevents team work?

2. Given that you work here and are familiar with the environment, what would you say the staff working specifically providing service [of sexual and reproductive health for adolescents/domestic violence/maternal health] thinks:

   2.1. about how service should be provided within the program/service offered?
   2.2. about which activities should be included in the program/service offered? That is, what others think about what should be done within the program/service [of sexual and reproductive health for adolescents/domestic violence/maternal health]?
   2.3. In general, do you think there is agreement among people working in this program/offering this type of service, on how to provide care [of sexual and reproductive health for adolescents/domestic violence/maternal health]?
   2.4. Or are there differences of opinion on how to provide services?

3. Here in this medical unit, what do people who work here think about the importance [*of sexual and reproductive health for adolescents/domestic violence/maternal health*]?

4. In your opinion, the managers at a state and jurisdictional level, what do they think about the program/service [*of sexual and reproductive health for adolescents/domestic violence/maternal health*]?

   4.1. What do the managers at the jurisdictional and state level think about how the program/service [*of sexual and reproductive health for adolescents/domestic violence/maternal health*] functions?
   4.2. What do managers at a jurisdictional and state level think about its importance?

5. In your opinion, how could care for [*of sexual and reproductive health for adolescents/domestic violence/maternal health*] work better?

6. In your view, what should be included (that is not included now) in the service [*of sexual and reproductive health for adolescents/domestic violence/maternal health*]?

7. What should be the approach to provide service [*of sexual and reproductive health for adolescents/domestic violence/maternal health*]?

8. In your opinion, here at your workplace the people:

   8.1. agree with your way of thinking about providing service?
   8.2. How do their opinions differ among the other people working here?

9. Here in this medical unit, within the program/service [of sexual and reproductive health for adolescents/domestic violence/maternal health]?:

   9.1. What are the standards, operating protocols, action plans, guidelines or manuals that shape the program? *[Let them speak and then explore each: standards, action programs or guidelines, manuals used and their usefulness*].
   9.2. How familiar would you say the staff of this medical unit is with the protocol for running the program/this type of service, guidelines on how the program/service should operate?
   9.3. What opinion do you have about the protocol, procedures or guidelines?
   9.4. What would you say is missing in terms of the manuals, documents or materials for health personnel working in this type of service? What would you like to have in the manuals?

10. How did you learn about the guidelines/procedures of the program?
   10.1. How did you learn about them?
   10.2. Are there opportunities for you and others working in the program to learn and discuss the guidelines/procedures?

11. Are there clearly defined strategies in the program guidelines?
    11.1. Can you mention some strategies, the most central and important of the program/service [of sexual and reproductive health for adolescents/domestic violence/maternal health]?

12. Is it clear which activities must be performed within the program?

    12.1. Do the guidelines clearly specify the activities to be performed within the program?
    12.2. [If not mentioned by name]: The guidelines clearly specify the protocol to be followed within the program? In regards to specific steps, specific techniques, etc.

13. How are implemented the program guidelines? Does it vary the way they are carried out, from what is specified in the written guidelines? Why does it vary?

14. In your opinion, at your workplace, do you receive support to help you carry out the program according to the guidelines? And in general, do you receive support to help you carry out the program (even though a bit differently from the guidelines)?

15. Is there some type of recognition of the fact that you follow the program?

    15.1. Is there a recognition for the work done related to this program?
    15.2. And specifically for the guidelines fulfillment, do you receive some type of recognition?

16. Is the program monitored internally?

    16.1. How are the program activities monitored?
    16.2. How is determined whether the program achieved its goals?
    16.3. What is monitored about the program and how?
    16.4. Do you receive feedback about the monitoring evaluation?

17. In your opinion, is there what is needed to carry out the program?

18. In your opinion, is there really the possibility of carrying out the program with adherence to the rules and the action plan or service protocol?

19. What motivates you to carry out the program?

    19.1. Do you feel motivated to follow the plan of action or service rules?
    19.2. What is your motivation in this regard?

20. What is your background and what specific training have you received?
    20.1. What courses, workshops and training programs have you received in relation to your work in the program?
    20.2. Do they offer and facilitate the training you need or want?

20.3. Do you feel you have the training needed to carry out the program? What additional training would you like? What topics, what skills need training on?

21. What infrastructure is available to carry out this program?

    21.1. Is it enough? What else is needed?

    21.2. If you had all the money in the world for this program, what would you buy, what would you assign to the program in terms of space, equipment, personnel?

22. To summarize, in your opinion, here in this health center/hospital:

    22.1. What things prevent or make it difficult to carry out the program?

    22.2. What things are needed to carry out the program appropriately?

23. In your opinion, here in this health center/hospital:

    23.1. What things make easier to accomplish the program?

    23.2. What enables to run the program appropriately?

Appendix 3: Finalized Adolescent Sexual and Reproductive Health Codebook

Code	Code Definition
Attitudes/Norms	Attitudes (opinions, ways to see, approval, judgment) toward the norms, guidelines, specific scientific evidence about the kind of attention in the place where interviewees work.
Infrastructure/Input	Any mention of infrastructure available or not available, or the supplies that exist or not exist, that need, that arrive late or in an insufficient way, and supplies expiration date. It includes furniture, technical equipment, consumable supplies as condoms, gloves, anesthesia, medications for HIV prophylaxis, etc.
Evidence based mechanisms	Any way interviewees knew the rules, guidelines, procedures or manuals, or that they knew about scientific evidence such as how to care and why to care, including courses, meetings, Internet, an individual handed, boss or a colleague mentioned something or gave to the interviewee the document, learning by practice or through what others do too.
Gender Equality	Any mention of gender, or equality (without including the word gender) or of rights if it appears to refer to gender equity or to women's rights, when the interviewer is talking about sexual and reproductive health (of both genders). Also include any mention of men, in relation to health services.
Team	Any mention of "team work", of how they coordinate, the relationships with the rest of the personnel (good or bad, working as a team or not), except for references of supervisors or directors. But, if it relates to a physician who makes decisions, which the nurse carries out, and they are not referring to the physician as a "supervisor", then this will be included here as team work.
Training	Training received, needed or desired by the health personnel.
Communicating with adolescents	Any mention of strategies used, or strategies that should be used, to communicate with adolescents specifically. Communication can encompass face-to-face communication, communications through media, as well as other novel communication methods that may are mentioned by providers.
Conservative views	Comments made that reflect a traditional, or conservative ideology. References to differential treatment between men and women, references to religion, references to taboos, and references to long-held beliefs should be included.
Monitoring	Any mention of monitoring or of doing reports or registering activities.

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