

ADOLESCENT PREGNANCY PREVENTION IN THE LOWER RIO GRANDE  
VALLEY: POLICY, PROGRAMS, AND ACCESS TO CLINICAL CARE

A Dissertation

by

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Submitted to the Office of Graduate and Professional Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

DOCTOR OF PUBLIC HEALTH

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May 2019

Major Subject: Health Promotion and Community Health Sciences

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## ABSTRACT

Adolescent pregnancy is a public health issue nationally as well as in Texas. In the United States, the birth rate was 27 births per 1000 adolescents ages 15-19 in 2016. In Texas, the adolescent birth rate was 52 births per 1000. The ways in which to address adolescent pregnancy are controversial. Adolescent pregnancy prevention initiatives often spark debate regarding the types of comprehensive programs that should be made available to adolescents. Texas remains focused on abstinence-based efforts that are seldom effective and that often exclude preconception care for adolescents. As a result, the state has high rates of adolescent births, particularly in the Lower Rio Grande Valley. All counties that comprise this largely Hispanic, border region exhibit high rates of adolescent births. Compared to women in general, pregnant adolescents are at increased risk for adverse maternal and child outcomes including permanently interrupted education and associated poverty, and for infants, low birth weight and preterm delivery. Comprehensive reproductive health services and programs to reduce adolescent pregnancy in the Lower Rio Grande Valley are crucial to improve child health.

This dissertation focuses on identifying agencies, programs, and best practices currently in place to address adolescent pregnancy prevention in the region. In addition, organizations and programs in place throughout the state that remain unavailable to adolescents residing in the Lower Rio Grande Valley were identified. Furthermore, the analysis compared reproductive health services offered in Texas with those in other United States-Mexico border states. Methods for this study included a literature review and data collection from online resources provided by organizations, such as reports, to

identify current programs in the Lower Rio Grande Valley region. To ensure data were comparable and accurate, adolescent birth rates were gathered from the County Health Rankings. A total of seven organizations were identified including five that implement adolescent pregnancy prevention initiatives in the Lower Rio Grande Valley and three initiatives throughout the state of Texas. Rigorous evaluation of these programs and services and the implementation of evidence-based programs in the Lower Rio Grande Valley would provide a foundation for improving the lives of young women and childbearing outcomes.

## DEDICATION

For my grandmother, Florestela. Te extraño.

## ACKNOWLEDGEMENTS

I would like to thank and acknowledge my committee chair, Dr. Ann V. Millard. I would not be where I am today without her unwavering kindness and support. Thank you for believing in me and supporting my interests. You are the true definition of a mentor. I would also like to recognize my committee members Dr. Nora Montalvo-Liendo, Dr. Nelda Mier, and Dr. Brandie Taylor, for their guidance and encouragement. It was an honor working with such a wonderful group of strong, intelligent women.

A special thanks to Dr. John O. Spengler for his role in my transition over to the McAllen campus and support throughout this process. Furthermore, I would like to thank Dr. Lisako Mckyer for her uplifting words and kindness. Additionally, I want to acknowledge the staff and faculty at Texas A&M University for making my time at the university a great experience. I would also like to express my gratitude to Dr. Brandie Taylor, Dr. Perez Patron, and the Maternal and Child Health Certificate Program at the School of Public Health. I am grateful for the many opportunities placed on my path because of the program.

Furthermore, I am grateful for the encouragement and love bestowed upon me by my loving parents and sister who have supported me throughout these past five years. I would also like to thank Andres Chavez III for his patience, encouragement, and partnership throughout this process. Lastly, I would like to thank and acknowledge the Gates Millennium Foundation for funding my education. I am forever grateful.

## CONTRIBUTORS AND FUNDING SOURCES

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This work was supervised by a dissertation committee consisting of Professor Ann V. Millard and Professor Nelda Mier of the Department of Health Promotion and Community Health Sciences, Professor Nora Montalvo-Liendo of the College of Nursing, and Professor Brandie Taylor of the Department of Epidemiology and Biostatistics. The student completed work for the dissertation independently.

### **Funding Sources**

There are no outside funding contributions to acknowledge related to the research and compilation of this document.

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## 1. INTRODUCTION

Adolescent Pregnancy is a public health issue for adolescents residing in the Lower Rio Grande Valley of Texas. This dissertation will evaluate the literature regarding preconception care among adolescents. In addition, current initiatives in place in the Lower Rio Grande Valley of Texas to prevent adolescent pregnancies will be identified, described, and analyzed.

This predominantly Hispanic South Texas region is composed of four counties exhibiting high rates of adolescent births. Starr, Hidalgo, Willacy, and Cameron Counties all have adolescent birth rates higher than the national average (“County Health Rankings,” 2018). Starr county had an adolescent birth rate of 92 births per 1000 girls ages 15-19 in 2016 (“County Health Rankings,” 2018). Hidalgo County had a birth rate of 76 births per 1000 girls while Cameron and Willacy Counties both exhibited birth rates in the lower seventies that same year (see Table 2) (“County Health Rankings,” 2018). Furthermore, the current birthrate for adolescent girls in the state of Texas between 15-19 years of age is 41 births per 1000 girls (County Health Rankings, 2018). The rate remains greater than the national birth rate of 27 births per 1000 girls (County Health Rankings, 2018).

Adolescent pregnancy results in numerous adverse pregnancy outcomes for both infants and adolescent mothers. Approximately 66% of adolescent births in the United States occur to mothers who are less than 18 years of age and who often remain unprepared, both financially and emotionally, for pregnancy and parenthood (Maness, Buhi, Daley, Baldwin, and Kromrey, 2016). In addition, education attainment is largely

affected by such adolescent pregnancies (Nord, Moore, Morison, & Myers, 1992).

Adolescent mothers are less likely to graduate high school which undoubtedly affects their potential career aspirations and economic stability (Packham, 2017). Unfortunately, only about 50% of adolescent mothers will become high school graduates by the time they reach the age of 22 (Maness et al., 2016). Approximately 30% of adolescent girls who drop out of high school do so because of the responsibilities associated with motherhood (Ng and Kaye, 2012). Adolescent mothers are more likely to live below the poverty line following their departure from their parents' home. (Ng and Kaye, 2012). Consequently, about 63% of adolescent mothers receive public benefits within the first year following the birth of their child (Ng and Kaye, 2012).

In addition to the adverse outcomes adolescent mothers face, children born to adolescents are greatly affected. Approximately 33% of adolescent girls forgo healthcare visits throughout the first trimester of their pregnancy and are less likely to seek essential prenatal care increasing their risk of complications from such births (“Health and Well-Being,” 2018). Chen et al. (2007) concluded that infants born to adolescent mothers are more likely to endure adverse health outcomes such as lower birth weights and pre-term deliveries. Additionally, infants born to adolescent parents are more likely to be abused and neglected (“Health and Well,” 2018). Academically, these children perform poorly in school when compared to their peers (Klein, 2005).

The promotion of preconception care among adolescents has the potential to improve outcomes for adolescents and their future children (Dean, Lassi, Imam, Bhutta, 2014). Preconception care is defined by the Center for Disease Control and Prevention

(CDC) as initiatives that strive to improve health outcomes for women and their babies by recognizing and modifying social, behavioral, and biomedical risks to women's health and pregnancy outcomes (CDC, 2014; Atrash et al., 2008; Goodfellow et al., 2017). According to the CDC, it is recommended that every woman of reproductive age, including adolescents, receive preconception care due high rates of unintended pregnancies (Upadhyia, Jalazo, Connor, Mistry, and Cheng, 2016).

Preconception care assists in decreasing adverse pregnancy risks such as low birth rates, preterm deliveries, birth defects, and fetal death (Atrash et al., 2008). Such interventions include counseling adolescents on promoting behaviors that could optimize health such as adolescent pregnancy prevention (Atrash et al., 2008). Adolescence is a favorable period to encourage the development of a reproductive life plan which may aid in reducing the rate of adolescent pregnancies (Charafeddine et al., 2014; Dean et al., 2017; Dean et al., 2013). Family planning initiatives encourage and empower women of reproductive age to create a plan that allows them to identify when and if they want to have children (Dean et al., 2014). Such planning has the potential to decrease unintended pregnancies by over 70% leading to a decrease in the number of abortions performed (Dean et al., 2014). However, preconception care is often discouraged during the adolescent period because many members of the public see it as encouraging pregnancies among youth (Upadhyia et al., 2016). Thus, preconception care is often considered inappropriate for young girls of childbearing age (Goodfellow et al., 2017).

## 2. PRECONCEPTION CARE AMONG ADOLESCENTS: BARRIERS AND OPPORTUNITIES FOR IMPROVING THE HEALTH OF YOUNG GIRLS AND WOMEN

### 2.1. Introduction

Preconception care is defined by the Center for Disease Control and Prevention (CDC) as initiatives that strive to improve health outcomes for women and their babies by recognizing and modifying social, behavioral, and biomedical risks to women's health and pregnancy outcomes (CDC, 2014; Atrash et al., 2008; Goodfellow et al., 2017). Maternal and Child health outcomes are strongly influenced by a mother's health prior to pregnancy (Goodfellow, Frank, McAteer, and Rankin, 2017; Charafeddine et al., 2014; Atrash et al., 2008). Such care, known as preconception care, often occurs prior to a woman's first pregnancy including during adolescence and can include methods to prevent pregnancy such as comprehensive sex education (Mason, Chandra-Mouli, Baltag, Christiansen, Lassi, and Bhutta, 2014). Comprehensive sex education programs emphasize and promote the use of contraceptives to prevent pregnancies among adolescents and considered a component of preconception care (Kirby, 2008). It is strongly recommended that every woman of reproductive age receive preconception care due to the high rates of unintended pregnancies (Upadhya, Jalazo, Connor, Mistry, and Cheng, 2016). However, when discussing preconception care among women of reproductive age, very rarely do we associate this with adolescent reproductive health.

Preconception care focused interventions have the potential to decrease the likelihood of adverse pregnancy risks such as low birth rates, preterm deliveries, birth

defects, and fetal death among adolescents (Atrash et al., 2008). These interventions include managing preexisting conditions, reproductive health counseling for women of reproductive age, and recommending appropriate vaccinations (Atrash et al., 2008). In addition, preconception care allows women of reproductive age to improve their overall health regardless of pregnancy intent (Atrash et al., 2008). For this reason, it is suggested that a shift should occur from prenatal care to preconception care early on in life (Atrash et al., 2008). Ultimately, the purpose of preconception care is the promotion of health throughout the life course for women, adolescents, and their children (Atrash et al., 2008). However, little is known about the link between preconception care and adolescent pregnancy prevention. One theory as to why preconception care is often discouraged during the adolescent period is to prevent the promotion of sex among youth (Upadhyaya et al., 2016). According to Goodfellow and colleagues (2017), preconception care is often deemed inappropriate for young girls of childbearing age. Given this information, a literature review was conducted to identify current barriers and opportunities for implementing preconception care among adolescents.

## **2.2. Methodology**

The Texas A&M University's Medical Science Library PubMed database was used to select articles for this literature review. In addition, articles were selected from a collection of articles obtained during a Title V maternal and Child health internship that took place August 2017 with the Department of State Health Services in Austin, Texas. Inclusion criteria for the articles included the following: 1) Articles must be relevant to the topic of preconception care among adolescents to prevent pregnancy; 2) Articles

published between 1998 to 2017 were included. Articles were initially evaluated based on relevant titles and abstracts. The full text was then evaluated for inclusion.

## **2.3. Findings**

### **2.3.1. Preconception care**

The Center for Disease Control and Prevention currently has four goals in place to improve health outcomes for women of child bearing age and their infants and has identified ten recommendations for ensuring such goals are met (Atrash,2008; Kotch 2013; see Table 1). These recommendations include increasing consumer awareness regarding preconception care and its importance through educational efforts and tools that appropriately target various individuals (Lu, 2007). In addition, ensuring health care coverage for individuals living in low income areas to ensure access to preventative preconception care is also highly encouraged. Another recommendation includes the promotion of individual responsibility by encouraging individuals to construct a reproductive life plan regarding future potential pregnancies. The organization also recommends that interconception care interventions be prioritized during the interconception period in women who have experienced negative birth outcomes during a previous birth.

Furthermore, the organization aims to encourage women with an elevated risk of adverse outcomes, who have been identified through a preconception risk screening, to take part in interventions aimed at reducing such risks. The CDC also recommends monitoring improvements to preconception health through research and surveillance efforts. Regarding research, the organization aims to increase the promotion of evidence-



based programs intended to improve preconception care. Public health initiatives should also aim to include preconception care components into current public health programs. Lastly, the organization recommends that women and their partners be provided a risk assessment, counseling, and educational information during primary care visits (Lu, 2007).

Risk assessment, health promotion and interventions for such risks are all components of preconception care (Freda, Moos, and Curtis, 2006; Lu, 2007). According to Lu (2007), the health promotion component of preconception care includes family planning and the promotion of healthy behaviors among individuals. In terms of health promotion, preconception care encourages family planning through the development of a reproductive life plan. If a woman does not plan to have children, she would then be encouraged to utilize contraceptives as a method of preventing pregnancy. In terms of promoting healthy behaviors, preconception care involves the promotion of safer sex practices, effective contraceptive usage, balanced nutrition, and physical activity (Lu, 2007). In addition, the use of alcohol and of substance abuse are strongly discouraged. This reiterates the idea that preconception care is often used to promote the health of women in general regardless of pregnancy intent (Lu, 2007).

According to Mason et al. (2014), preconception care is provided to individuals prior to pregnancy. Preconception care begins during the adolescent period and during the first years of the reproductive portion of the life course (Mason et al., 2014). In short, preconception care would assist in ensuring the health of all women of reproductive age (Freda, Moos, and Curtis, 2006). Preconception care provides women and adolescents

the ability to identify modifiable risk factors that can be addressed early on, thereby improving the health of women and adolescents prior to pregnancy (Nobles-Botkin, Lincoln, and Cline, 2016).

### **2.3.2. Benefits of preconception care for adolescents**

According to Dean et al. (2014), adolescent girls often lack the education, support, or tools needed for motherhood. Thus, the promotion of preconception care among adolescents has the potential to improve health outcomes for adolescents and their future children (Dean, Lassi, Imam, Bhutta, 2014). Through the utilization of a lifestyle approach, preconception care can impact the way adolescents are equipped to transition to adulthood. Preconception care acknowledges the multiple issues that challenge adolescent girls today, which include issues such as domestic violence and peer pressure to engage in risky sexual behaviors. This inevitably increases their risk of contracting sexually transmitted diseases and unplanned pregnancies. Unplanned pregnancies, regardless of a mother's age, place infants at risk during the fetal development period (Nypaver, Arbour, and Niederegger 2016). Adolescents are at a particularly vulnerable position of adverse health outcomes for both adolescent mothers and their infants due to the lack of counseling provided for pregnancy outcomes during adolescence (Upadhyaya et al., 2016). According to Dean et al. (2014), adolescent pregnancies are more likely to result in maternal death due to complications versus pregnancies among women in their twenties. In addition, adolescent pregnancies result in decreased educational and career opportunities for young adolescent girls (Dean et al., 2014). Given these adverse

outcomes, it is imperative that preconception interventions that aim to improve adolescent reproductive health be prioritized (Dean et al., 2014).

Adolescence is a favorable period to encourage the development a reproductive plan which may aid in reducing the rate of adolescent pregnancies (Charafeddine et al., 2014; Dean et al., 2017; Dean et al., 2013;). Family planning encourages and empowers women of reproductive age to create a plan that allows them to select when and if they want to have children (Dean et al., 2014). Family planning has also been proven to decrease infant and maternal deaths (Dean et al., 2014; World Health Organization, 2010; Singh, Darroch, Ashford, and Vlassoff, 2009). Furthermore, such planning decreased unintended pregnancies by over 70% leading to a decrease in the number of abortions performed (Dean et al., 2014; World Health Organization, 2010).

Reproductive life planning may also aid in decreasing the number of individuals living below the poverty line while improving equity issues in such areas (Dean et al., 2014; World Health Organization, 2010). Investing in preconception care initiatives would assist in improving the overall health of adolescents in general and would positively affect communities currently plagued by high rates of adolescent births (Dean et al., 2014).

Preconception care for adolescents requires the implementation of interventions that educate and empower adolescents to make informed decisions regarding their reproductive health (Mason, Chandra-Mouli, Baltag, Lassi, and Bhutta, 2014). The authors note several interventions that utilize multiple methods to achieve this. Interventions aimed at reducing unwanted or early pregnancies includes interventions

whose goals include ensuring adolescent girls remain in school. Providing adolescent girls with comprehensive sex education was also encouraged. In addition, comprehensive interventions that utilized a multipronged approach were shown to reduce the risk of adolescent pregnancies. Dean et al. (2014) concluded that comprehensive programming that utilized methods such as youth development, sexual education, no cost contraceptives, recreational activities and educational support proved to decrease the risk of adolescent pregnancies by over 40 percent. The need to implement education programs for adolescents on various contraceptive options through community wide approaches is vital to decreasing unplanned pregnancies in this population (Dean et al., 2013; World Health Organization, 2010). Interventions that encourage safer sex practices and access to contraceptives may also assist in the prevention of adolescent pregnancies (Dean et al., 2013; Mason et al., 2014; Mueller et al., 2017).

Adolescents may also receive preconception care when visiting a physician for a preventative care visit (Upadhyia et al., 2016). This is done through reproductive counseling sessions that prioritize the importance of pregnancy outcomes (Upadhyia et al., 2016). Counseling regarding contraceptives may reduce the risks that stem from a lack of reproductive planning which results in unintended pregnancies (Dean et al., 2013). A study by Upadhyia et al. (2016) revealed that adolescents lack comprehensive counseling that would prioritize healthy pregnancies. A total of 291 low-income, African American women were surveyed at a practice in Maryland to gather information on their preconception care history and overall health. The data analysis of the study revealed

that adolescents were less likely to receive preconception care counseling than their adult counterparts. It also concluded that adolescent centered family planning tools would assist adolescents in familiarizing themselves about the topic of preconception care while ultimately beginning the conversation with adolescents about childbearing. However, counseling regarding pregnancy outcomes is largely ignored due to the overwhelming emphasis on discouraging adolescents from becoming pregnant (Upadhyia et al., 2016). Thus, the topic of preconception care among adolescents remains taboo creating one of many barriers experienced by adolescents attempting to receive preconception care services.

### **2.3.3. Barriers of preconception and interconception care for adolescents**

There are multiple barriers hindering the implementation and promotion of preconception care for adolescents. Such barriers include a lack of universal messaging, programs, and access to health services for adolescents. In terms of messaging, there is a current lack of universal messaging for adolescents regarding the promotion of preconception care. Because of this, there is often a lack of awareness regarding the significance and role preconception care has on overall general health of young women (Goodfellow et al., 2017). In a study by Goodfellow et al. (2017), health care professionals noted that awareness about preconception care and its significance was lacking among women of childbearing age including adolescents. The study utilized used focus groups and survey questionnaire to gather data from healthcare professionals. It was concluded that women of reproductive age who were not planning to have children were less likely to take on an active role in improving their health and wellbeing

prior to a pregnancy (Goodfellow et al., 2017). Furthermore, health care professionals felt that the topic of preconception care was not a priority to women of childbearing age (Goodfellow et al., 2017). In a study conducted by Charafeddine and colleagues (2014), adolescents lacked knowledge regarding preconception health and its benefits. It was also noted that preconception care is not included in the health education curriculum in schools (Charafeddine et al., 2014). Moreover, preconception care was not a topic of discussion between parents and their adolescent children (Charafeddine et al., 2014).

In terms of interventions, initiatives specific for adolescents regarding preconception care is scarce. In a study by Upadhyia and colleagues (2016), researchers found that there are currently preconception care models that target adolescents with chronic conditions, however, preconception care models promoting the overall health for adolescents are lacking. This is even more apparent in lower income areas (Mason et al., 2014). According to Mason and colleagues (2014), low and middle-income areas often lack preconception care programs that assist in decreasing the likelihood of maternal and infant mortality and morbidity among women of reproductive age including adolescents (Mason et al, 2014). Such care has the potential to address these issues in marginalized and impoverished communities including those with high rates of unplanned pregnancies (Mason et al, 2014).

Regarding services, adolescents often lack access to needed health care services (Rew, 1998; Romero et al., 2015; National Latina Institute for Reproductive Health, 2013). This is especially true for marginalized and low-income communities (Dean et al., 2013; National Latina Institute for Reproductive Health, 2013). According to

Romero and colleagues (2015), ensuring that adolescents access and utilize reproductive health services is vital to decreasing existing disparities regarding adolescent birth rates. Differences regarding adolescent birth rates are largely due to disparities that exist in accessing preconception care in the form of reproductive health services (Romero, Middleton, Mueller, Adellino, and Hallum-Montes, 2015). These services include those that fall under the preconception care umbrella such as routine checkups, counseling and treatment of sexually transmitted infections, and contraceptive services (Romero et al., 2015) Access to such services at a reduced rate is crucial for adolescents to obtain needed services. This is because cost remains a significant barrier for adolescents (National Latina Institute for Reproductive Health, 2013).

Poverty plays a significant role regarding the health of adolescents (Kotch, 2013; Rew, 1998). Adolescents that reside in households that are poorer are more likely to have higher rates of adolescent pregnancies, chronic illnesses, behavior issues, disabilities, lack health insurance, and often have unmet medical needs (Kotch, 2013). In addition, access to these services remains largely dependent on whether adolescents have the proper transportation to and from health care facilities (National Latina Institute for Reproductive Health, 2013). In addition, minorities and marginalized communities may experience additional barriers in accessing needed health services (Rew, 1998; Mason et al, 2014).

According to Rew (1998), adolescent Latinas often face financial, social, and political barriers when attempting to access health services. Issues such as poverty, language barriers, and racism hinder the ability for adolescent Latinas to obtain needed

health care services (Rew, 1998). Immigration status continues to remain a barrier for many adolescents living along the United States-Mexico border (National Latina Institute for Reproductive Health, 2013). Undocumented adolescents often face greater difficulties in obtaining reproductive health care services due to costs and fears associated with deportation (National Latina Institute for Reproductive Health, 2013; Rew, 1998).

According to Rew (1998), adolescent Latinas often forgo obtaining essential health care services due to immigration status. In addition, undocumented adolescents are often unable to provide clinics with the required paperwork needed to obtain free or reduced services (National Latina Institute for Reproductive Health, 2013). Moreover, issues of confidentiality and mistrust often deter adolescents from seeking services (Elster, Jarosik, VanGeest, and Fleming, 2003; Romero et al., 2015; Burack, 2000). In a study conducted by Burack (2000), adolescents feared physicians would disclose information discussed during reproductive health care visits thereby adversely affecting the number of adolescents seeking services.

#### **2.4. Conclusion**

Preconception care provides adolescents with the ability to improve their knowledge and skills regarding the adoption of healthy behaviors (Dean et al, 2013). Such care allows for the opportunity to improve the following among adolescents: nutrition, sexual behaviors, substance use, intimate partner violence, and family planning (Dean et al, 2013). However, the promotion of preconception care during the adolescent period is often discouraged and considered inappropriate for adolescents (Upadhyia et al.,



2016; Goodfellow et al., 2017). Therefore, preconception care for adolescents requires the cooperation of multiple entities such as community members, health care providers, school systems, and parents (Dean et al, 2013). This cooperation is needed when addressing the lack of universal messaging, programs and access to health services among adolescents.

To address the issue of messaging, multiple marketing methods that acknowledge adolescents as a target population for preconception care should be pursued (Goodfellow et al., 2017). In addition, preconception care should be a topic of discussion between parents and their children to provide a foundation in which preconception care is prioritized throughout the life course (Goodfellow et al., 2017).

In terms of programs, utilizing existing programs including programs not related to preconception care should be pursued (Dean et al, 2013; Goodfellow et al., 2017). This can include utilizing youth development programs to assist adolescents in developing negotiation and refusal skills needed to avoid risky sexual behaviors (Dean et al., 2013). Additionally, existing preconception care interventions may also be adapted to adolescents. Initiatives that target adolescent reproductive health are vital to assisting in educating adolescents on the importance of preconception care (Upadhyia et al., 2016). Life planning tools may also aid in beginning the conversation about preconception care among youth (Upadhyia et al., 2016; Dean et al., 2014).

Addressing the lack of access to services among adolescents should be prioritized. Special consideration should be given to marginalized groups experiencing higher rates of adolescent pregnancies. Ensuring confidentiality while providing access

to care is essential. Further research on preconception care marketing strategies and initiatives regarding preconception care for adolescents should be pursued. Such changes have the potential to positively impact pregnancy outcomes and the overall general health of adolescent girls and women.

### 3. ADOLESCENT PREGNANCY PREVENTION IN THE LOWER RIO GRANDE VALLEY: POLICY, PROGRAMS AND ACCESS TO CLINICAL CARE

#### **3.1. Introduction**

Adolescent pregnancy is a public health issue nationally as well as in Texas. In the United States, the birth rate was 27 births per 1000 adolescents ages 15-19 in 2016. In Texas, the adolescent birth rate was 52 births per 1000 (County Health Rankings, 2018). Counties in South Texas were affected by higher rates of adolescent pregnancy that same year (County Health Rankings, 2018). Starr County had an adolescent birth rate of 92 births per 1000 while Hidalgo County had an adolescent birth rate of 76 births per 1000 (County Health Rankings, 2018).

The ways in which to address adolescent pregnancy are controversial, and methods to reduce adolescent pregnancy remain a topic of discussion for public health professionals and policymakers alike. Political differences among policy makers and the general public have resulted in indecision on how to address and approach a solution to this public health issue. Adolescent pregnancy prevention initiatives often spark debate regarding the types of comprehensive programs that should be made available to adolescents (Kirby, 2008). In politically conservative states such as Texas, the implementation of comprehensive programs that include the promotion of health education on contraceptives is politically unpopular as shown below in legislative changes in Texas over the past 10 years. The state remains focused on abstinence-based efforts that are seldom effective (Kirby, 2008). As a result, the state has high rates of adolescent births, particularly in the Lower Rio Grande Valley. Between 2015 and 2017,

Texas' adolescent birth rate remained high at 55 births per 1000 adolescents ages 15-19 to 49 births per 1000 (County Health Rankings, 2018).

The issue of adolescent pregnancy in the Lower Rio Grande Valley is of great concern. All counties that comprise this largely Hispanic, border region exhibit high rates of adolescent births (County Health Rankings, 2018). Compared to women in general, pregnant adolescents are at increased risk for adverse maternal and child outcomes including permanently interrupted education and associated poverty, and for infants, low birth weight and preterm delivery (Chen et al., 2007). Given these adverse outcomes, comprehensive reproductive health services and programs to reduce adolescent pregnancy in the Lower Rio Grande Valley are crucial to improve child health. As discussed below, in an evidence-based public health approach, effective programs would include youth-friendly initiatives, family planning programs, and policies and practices promoting comprehensive sex education.

This comprehensive review identified agencies, programs, and best practices currently in place to address adolescent pregnancy prevention in the Lower Rio Grande Valley of South Texas (see Figure 3.1). In addition, organizations and programs in place throughout the state that remain unavailable to adolescents residing in the Lower Rio Grande Valley were identified. Furthermore, the analysis compared reproductive health services offered in Texas with those in other United States-Mexico border states. Methods for this study included a literature review and data collection from online resources provided by organizations, such as reports, to identify current programs in the Lower Rio Grande Valley region. To ensure data were comparable and accurate,

adolescent birth rates were gathered from the County Health Rankings. A total of seven organizations were identified including five that implement adolescent pregnancy prevention initiatives in the Lower Rio Grande Valley and three initiatives throughout the state of Texas. The programs in the Lower Rio Grande Valley were largely abstinence-based. Rigorous evaluation of these programs and services and the implementation of evidence-based programs in the Lower Rio Grande Valley would provide a foundation for improving the lives of young women and childbearing outcomes.

### **3.2. Background**

In 2003, adolescent pregnancy prevention along the United States-Mexico Border was declared a binational priority by the United States-Mexico Border Health Commission (McDonald et al., 2014; US-Mexico, 2003). The commission aimed to reduce pregnancies among adolescents between the ages of 15 and 19 residing along the border (US-Mexico, 2003). The organization's plan of action, Healthy Border 2010, included increasing adolescent programs that assist parent and adolescent communication regarding sexual health. In addition, the commission suggested the promotion of preconception care among individuals of reproductive age to encourage healthy behaviors among this population. To accomplish this, the commission suggested the expansion of reproductive health services for adolescents in the form of family planning programs that include confidential services for youth and the expansion of sex education initiatives in border communities (US-Mexico, 2003).

In 2016, the state of Texas was ranked 4<sup>th</sup> highest in the nation in adolescent birth rates (CDC, 2018). The current analysis reports statistical rates for adolescents 15-19 years of age because data on that age range is generally available. Data on younger women would be relevant, however is not collected consistently. As is often true with demographic rates, different sources vary; however, the compared rankings shown in this chapter hold in all sources consulted for this work. As noted above, the current birthrate for adolescent girls in Texas between 15 and 19 years of age is 52 births per 1000 adolescents (County Health Rankings, 2018). This rate remains higher than the national birth rate of 27 births per 1000 (County Health Rankings, 2018). The birth rate for Hispanic adolescents is considerably higher than among other adolescent girls in the United States (McDonald, Mojarro, Sutton, & Ventura, 2014).

Adolescent girls living along the United States-Mexico border region have higher birth rates than do Hispanic adolescents elsewhere in the United States (McDonald et al., 2014). According to McDonald and colleagues (2014), the birth rate for Hispanic adolescents between the ages of 15 and 19 living in the border region was 73.8 births per 1000 girls in 2009. In comparison, the birth rate for Hispanic adolescents between the ages of 15 and 19 years of age residing in non-border regions was 64.6 births per 1000 that same year (McDonald et al., 2014). In 2014, 70,000 births occurred to mothers between the ages of 15 and 19 years of age living along the United States-Mexico border (Campa, Millard, and Flores, 2017).

This comprehensive review focuses on high rates of pregnancy of Hispanic adolescent girls living along the Lower Rio Grande Valley. The four counties of the Rio

Grande Valley, which consist of Starr, Hidalgo, Willacy, and Cameron Counties, are home to a largely Hispanic population (Gomez, 2015). Several areas in the region house colonia communities that lack proper infrastructure (Gomez, 2015). Poverty plagues the region and the area is medically underserved (Gomez, 2015; see Table 1). In 2016, Starr County had an adolescent birth rate of 92 births per 1000 females ages 15-19 (“County Health Rankings,” 2018). Its neighboring county, Hidalgo County, had 76 births per 1000 females (“County Health Rankings,” 2018). Cameron and Willacy Counties had birth rates in the lower seventies that same year (see Table 2; “County Health Rankings,” 2018). All four counties had birth rates that were exceptionally high compared with the average for Texas that year, 52 per 1000 (County Health Rankings, 2018; see Martin et al., 2018; see also Figure 3.2).

### **3.2.1. Sex education in Texas Public Schools**

Texas does not require sex education or Human Immunodeficiency Virus (HIV) education of students in public schools (“Sex Ed,” 2018). Schools that wish to offer such education must use caution. In accordance with state law, public schools providing such courses must stress the importance of abstinence until marriage to students (“Sex Ed,” 2018). Abstinence-Only Until Marriage education includes programs that teach abstinence as the single morally correct option for adolescents regarding sexual encounters (“Sex Ed,” 2018). These types of programs for youth censor vital information regarding contraceptive options that have the potential to prevent sexually transmitted infections and pregnancy (“Sex Ed,” 2018). Abstinence Plus education includes programs that educate students on contraceptives including

condom usage and methods to prevent sexually transmitted infections (“Sex Ed,” 2018). Educators, however, must highly emphasize and encourage the idea of abstinence among students due to state law.

Comprehensive sex education states that abstinence is the most effective method for avoiding unplanned pregnancies and sexually transmitted infections (“Sex Ed,” 2018; Kirby, 2008; Stranger-Hall and Hall, 2011). In addition to abstinence education, comprehensive sex education also informs youth on contraceptives and condom usage to decrease the risk of sexually transmitted infections including HIV and unplanned pregnancies (“Sex Ed,” 2018; Kirby 2008). This type of education allows youth to formulate and explore their own options and values regarding sexual activity and encounters (“Sex Ed,” 2018). In Texas, 58.3% of public schools provide abstinence-only education while 16.6% provide abstinence-plus education courses (“Sex Ed,” 2018). Unfortunately, 25.1 % of Texas public schools do not provide any form of sex education (“Sex Ed,” 2018). Parental consent is not required for students who attend courses on sex education or HIV; however, parents have the option of having their child removed from the classroom if they believe the information provided is inappropriate (“Sex Ed,” 2018).

Research conducted by Stanger-Hall and Hall (2011) concluded that states that had a greater emphasis on abstinence-based policies, such as Texas, had increased rates of adolescent pregnancy and births. Current research suggests that Abstinence Until Marriage education remains ineffective when compared to comprehensive sex education (Kirby, 2008). In a systematic review of over 56



studies that evaluated the impact of comprehensive sex education and abstinence-based programs, Kirby (2008) concluded that comprehensive sex education programs were more likely to delay the initiation of sexual activity among adolescents than abstinence-based programs.

### **3.2.2. California**

When compared to other border states such as California, Texas falls short in providing programs that may aid in reducing adolescent births. California does not accept Abstinence-Only-Until-Marriage Education Funding and instead implements medically accurate, age-appropriate sex education in public schools (Hernandez et al., 2011). In addition, the state has increased access to contraceptive services for adolescents (Hernandez et al., 2011). These efforts allowed for the state of California to drastically reduce the adolescent birth rate in the state by nearly 77% between 1991 and 2016 (Constantine & Navarro, 2003; Hernandez et al., 2011). The rate was reduced from 73.8 births per 1000 females to 17 births per 1000 females ages 15 through 19, greatly limiting the adverse effects associated with adolescent pregnancies (Constantine & Navarro, 2003; Hernandez et al., 2011).

### **3.2.3. Adverse adolescent pregnancy outcomes**

Adolescent pregnancy results in several adverse pregnancy outcomes. Current research suggests that maternal age, as well as social and economic factors such as a lack of access to health care, plays a role in such outcomes (Althabe, 2015). About 66% of adolescent births in the United States occur to mothers who are less than 18 years of age and who often remain unprepared, both financially and emotionally, for pregnancy and

parenthood (Maness, Buhi, Daley, Baldwin, and Kromrey, 2016). It is estimated that about 33% of adolescent girls forgo healthcare visits throughout the first trimester of their pregnancy and are less likely to seek essential prenatal care, increasing their risk of complications (“Health and Well-Being,” 2018).

Children born to adolescent mothers are at increased risk of multiple health, economic and social issues. Chen et al. (2007) concluded that infants born to adolescents are more likely to endure adverse health outcomes such as lower birth weights and preterm deliveries. Furthermore, children born to adolescent parents are more likely to be abused and neglected (“Health and Well,” 2018). Academically, the children perform poorly in school when compared to their peers (Klein, 2005). Furthermore, children born to adolescent mothers experience depression more often (Klein, 2005).

In addition to the adverse effects their children may face, adolescent mothers often experience multiple negative outcomes (Maness et al., 2016). Educational attainment is often limited by adolescent pregnancies (Nord, Moore, Morison, & Myers, 1992). Only about 50% of adolescent mothers will become high school graduates by the time they turn 22 (Maness et al., 2016). In addition, only about 2% of adolescent mothers will receive a college degree (“Educational Outcomes,” 2018). It is estimated that about 30% of adolescent girls who drop out of high school do so because of a pregnancy and parental responsibilities (Ng and Kaye, 2012). Adolescent mothers who move out of their parents’ home are more likely to live below the poverty line (Ng and Kaye, 2012). As a result, about 63% of adolescent mothers receive public benefits within the first year following the birth of their child (Ng and Kaye, 2012).

### **3.3. Methodology**

This study identified initiatives that prevent adolescent pregnancies in the Lower Rio Grande Valley of Texas. Primary and secondary data were collected between 2013 and 2018 using a qualitative approach. The criteria for inclusion were programs and organizations that directly or indirectly promoted the prevention of adolescent pregnancies in the region. Organizations that targeted adolescents but did not address adolescent pregnancy were excluded. Because this study utilizes information from publicly available sources and other resources, Institutional Review Board approval of research is not required. A literature review was conducted utilizing peer-reviewed articles from the Texas A&M University Medical Science Online Library, Texas A&M University's Main Library databases (Medline Pubmed and EBSCOHost), and the world wide web. The following key terms were used to conduct this search: adolescent pregnancy prevention, teen pregnancy prevention, adolescent pregnancy, adolescent preconception care, Lower Rio Grande Valley, Texas-Mexico border, and United States-Mexico border. Data and information were extracted from various online sources (see Figure 3.3). Furthermore, as a public health student, the author monitored services in adolescent pregnancy prevention in the lower Rio Grande Valley for 6 years, including attendance at meetings of the local chapter of the Texas Campaign to Prevent Teen Pregnancy (The Rio Grande Valley Teen Pregnancy Prevention Coalition) intermittently during that time.

Initiatives described as covering the entire state but that do not reach the Lower Rio Grande Valley were included for comparison. These programs include some of those

implemented by the Department of State Health Services, the Campaign to Prevent Teen Pregnancy, and Healthy Futures of Texas. In addition, this study compares best practices of organizations in a joint project with the U.S. Mexico Border Health Commission. Data on organizations and programs included the following: program and services available, type of organization, target population, funding source, and whether adolescents needed parental permission to participate in each initiative.

### **3.4. Findings**

In the past seven years, a number of policy changes have occurred restricting access of adolescents to reproductive health services due to laws and regulations passed by the Texas State Legislature. Many of these laws focus on access of young women to clinical settings offering contraceptive services. The narrow access to clinical settings offering reproductive health services and the narrow nature of reproductive health educational programs are significant factors in limiting pregnancy prevention by adolescents.

#### **3.4.1. Barriers to accessing reproductive health services for adolescents residing in the Lower Rio Grande Valley**

Access to reproductive health services can be an important factor for adolescents in pregnancy prevention. Historically, Planned Parenthood provided a clinical setting with reproductive healthcare and education on pregnancy prevention throughout the United States. The organization provided a confidential setting where adolescents who were sexually active or who were deciding to become sexually active were able to access information about pregnancy and sexually transmitted infection prevention. In the

absence of comprehensive sex education in schools and parental discussion of sexuality at home, the clinical setting became a crucial location for teens to access birth control education and supplies.

A study conducted by the National Latina Institute for Reproductive Health (2013) and the Center for Reproductive Rights concluded that for adolescents living in the Lower Rio Grande Valley, barriers to clinical care included the cost of care, lack of transportation, and immigration status. The two organizations devised a shared methodology to interview and conduct focus groups in the Rio Grande Valley for the study which aimed to collect information regarding access to reproductive health care in the region (National Latina, 2013). Thus, the lack of accessibility to clinics is among several barriers adolescents face when seeking affordable reproductive health care services (National Latina, 2013; "The Texas", 2018; "Texas Youth", 2018).

In 2011, multiple family planning clinics in the Lower Rio Grande Valley were forced to close their doors to many Valley residents (National Latina, 2013). Policy makers in the state of Texas approved the most drastic cuts to family planning in the United States ever recorded, a total state cut of \$73 million dollars for family planning (Packham, 2017; Gomez, 2015). The clinic closures disproportionately affected individuals residing in several rural, poverty-stricken communities in the Lower Rio Grande Valley (National Latina, 2013). Many individuals were unable to obtain essential reproductive health services and demand was then placed on a few select clinics in the state (National Latina, 2013). Delays resulted for those appointments at clinics that offer services at a reduced rate (National Latina, 2013).

In 2014 the majority of the remaining family planning clinics in the Lower Rio Grande Valley, known formerly as Planned Parenthood Association of Hidalgo County, chose to sever ties with Planned Parenthood due to political pressure from the Texas legislature related to the national organization's provision of abortions (Benavides, 2015). The statewide funding cuts to Planned Parenthood proved to be too much of a financial burden to bear for the local organization, which ended its affiliation with that organization and independently continued to offer services under the name of Access Esperanza Clinics (Benavides, 2015). This change in affiliation ultimately allowed the organization to receive state funding to provide affordable family planning services to Valley residents. Under either name, the local organization never has provided abortions.

Cost is a major barrier to seeking reproductive health services in the Lower Rio Grande Valley especially for adolescents less than 18 years of age seeking to maintain their privacy. Many Latino youth are covered by Medicaid until the age of 18; however, others may lack eligibility for Medicaid because of citizenship status. Poverty levels in the Lower Rio Grande Valley continue to be concerning. In 2017, 39.9% of individuals residing in Starr County and about 28.2% of the population residing in Hidalgo County lived below the poverty line ("United States," 2017). About 38.3% of individuals residing in Willacy County and 29.1% of individuals residing in Cameron County lived in poverty in 2017 ("United States," 2017). Adolescents who reside in households that are poorer are more likely to have higher rates of adolescent pregnancies, chronic illnesses, behavior issues, and disabilities (National Latina, 2013; see also Kotch 2013).

When they lack health insurance, they frequently have unmet medical needs (National Latina, 2013).

In addition, adolescents lack access to health care providers for a variety of reasons including transportation (National Latina, 2013). Public transportation in the Lower Rio Grande Valley remains limited while private transportation is often costly. This creates a challenge for adolescents who want to visit one of the few remaining clinics in the Lower Rio Grande Valley (National Latina, 2013). Adolescents residing in colonias have even greater difficulty as the majority of colonia residents lack basic transportation due to having only one vehicle per household that tends to be used by those with jobs to reach their work (National Latina, 2013). Adolescents are then forced to wait extended periods of time to reach a clinic (National Latina Institute for Reproductive Health, 2013).

Those who are undocumented are often at a greater disadvantage. Lack of documents for residency or citizenship remains a barrier for many immigrant adolescents living along the Lower Rio Grande Valley, where immigrants are numerous (National Latina, 2013). Adolescents who are undocumented have greater difficulties in obtaining reproductive health care due to costs and fears associated with deportation (National Latina, 2013). They often fear to leave their small communities to seek services (National Latina, 2013). In addition, undocumented adolescents are often unable to provide clinics with the paperwork required to obtain free or reduced services (National Latina, 2013).

### **3.4.2. Lower Rio Grande Valley initiatives to address adolescent pregnancies**

There are six entities that implement adolescent pregnancy prevention programs outside the clinical setting in the Lower Rio Grande Valley. Organizations and initiatives identified in the region are local to the region in some cases or branches of national and international organizations in others (see Table 3).

#### **3.4.2.1. BCFS Health and Human Services McAllen**

One initiative that assists in the prevention of adolescent pregnancy in the Lower Rio Grande Valley is provided by BCFS Health and Human Services-McAllen, a 501(c)(3) nonprofit organization. This office belongs to a large international organization that started in Dallas and now has major administrative offices in several U.S. locations and provides services through a wide variety of federal and state government contracts. Through the United States Department of Health and Human Services Family and Youth Service Bureau, BCFS Health and Human Services-McAllen was awarded the Sexual Risk Avoidance Education Grant (“Sexual Risk,” 2018). This federal grant allows the organization to implement one of three programs to reduce adolescent pregnancies (“BCFS,” 2018).

The organization is currently implementing the Educate, Empower, Encourage (E3) Program that utilizes the Promoting Health Among Teens! (Abstinence Only) curriculum (“Sexual Risk,” 2018). E3 is a federally funded school-based program that assists youth in making smart choices about their sexual health by choosing to abstain from intercourse and sexual contact (“BCFS,” 2018). The organization implements this 12-week abstinence-based education training for youth in the seventh grade who are



enrolled at the Pharr-San Juan-Alamo Independent School District in the Lower Rio Grande Valley ("BCFS," 2018). The target population for this initiative includes youth between the ages of 11 and 14 years ("BCFS," 2018). The organization reaches 1,375 youth each year through this program ("Sexual Risk," 2018). Participation in the program is voluntary for students and parental consent is required ("BCFS," 2018).

The organization also implements two state-funded evidence-based programs called Making Proud Choices! and Seventeen Days in community centers, BCFS Health and Human Services offices, and Texas Department of Family and Protective Services (DFPS) offices throughout Texas Department of State Health Services Region 11, which includes the lower Rio Grande Valley. The programs provide services to adolescents between 15 and 19 years of age ("BCFS," 2018). According to the Office of Adolescent Health, Making Proud Choices is a community-based program that aims to increase participants' knowledge, confidence, and skills needed to decrease their risk of adolescent pregnancy, Human Immunodeficiency Virus (HIV), and sexually transmitted infections ("Making Proud," 2018). The programs provide abstinence-plus education including information on contraception if students choose to be sexually active ("Making Proud," 2018). In addition to this program, Seventeen Days is also implemented by the organization in a community-based setting ("BCFS," 2018). The program targets females between 14 and 19 years of age ("BAE-B-SAFE," 2018). According to the Office of Adolescent Health, Seventeen Days utilizes a DVD that assists in educating adolescent girls about sexually transmitted infections and contraceptive options ("Seventeen Days," 2018). Adolescent girls participating in the program view scenarios

that spark discussion on decision making regarding adolescent relationships (“Seventeen Days,” 2018). The girls then practice what they would do if a comparable scenario occurred (“Seventeen Days,” 2018).

Research by Jemmott III et al. (1998) evaluating the Making Proud Choices! program concluded that adolescents who completed the program were more likely to consistently use condoms and were less likely to have unprotected sex at three months following participation in the program when compared to adolescents in the control group. These adolescents had a greater frequency of condom usage at each follow-up session (3,6, and 12 months) than adolescents in the control group (Jemmott III, Jemmott, and Fong, 1998). Regarding Seventeen Days, research by Downs et al. (2004) concluded that adolescents who completed the program were more likely to abstain from sexual intercourse three months following participation in the program. However, the effects of the program did not last. Participants in the study tended to engage in sexual intercourse in the three to six-month period following participation in the program (Downs et al., 2004).

#### **3.4.2.2 Boys and Girls Clubs**

The Boys and Girls Club, a national 501(c)(3) organization, currently implements the Skills Mastery and Resistance Training (SMART) moves education initiative that targets premature sexual activity and drug use in the Rio Grande Valley (Health and Human Services, 2017; “Boys and Girls Club-McAllen,” 2018; “Boys and Girls Club of Edinburg,” 2018). Through the Health and Human Services Commission Abstinence Education Program that is funded by the Administration on Children and

Families (ACF), the Boys and Girls Clubs in McAllen and Edinburg currently implement the SMART program with youth between the ages of 6 and 15 years (“Boys and Girls Club-McAllen,” 2018; “Boys & Girls Club of Edinburg,” 2018). The ACF provides federal funding for abstinence education to organizations that provide services to youth within communities with high rates of adolescent pregnancy, such as those in the Rio Grande Valley (Health and Human Services, 2017).

SMART strives to educate youth on resisting involvement in sexual activities and drug use through role-playing strategies, refusal skills, and assertiveness training (“Boys and Girls Club-McAllen,” 2018; “Boys & Girls Club of Edinburg,” 2018). In addition, the program assists participants in analyzing influences from peers and the media while strengthening participants’ skill regarding decision making (“Boys and Girls Club-McAllen”, 2018; “Boys & Girls Club of Edinburg,” 2018). The program’s overall purpose is to encourage abstinence from sexual activity and drug use (“Boys and Girls Club-McAllen,” 2018; “Boys & Girls Club of Edinburg,” 2018). Parents, staff, peer leaders and members of the community all take part in this initiative (“Boys and Girls Club-McAllen, "2018; “Boys & Girls Club of Edinburg,” 2018). An evaluation by St. Pierre et al. (1998) found that 57% of participants of the SMART program who were sexually active reported a slight decrease in sexual activity when compared to a control group. There was no significant change for participants who had not been sexually active and participated in the program, however (St. Pierre, Mark, Kaltreider, and Aikin, 1995; Roth and Brooks-Gunn, 1998).

### **3.4.2.3 Access Esperanza**

Access Esperanza, a 501(c)(3) organization in Hidalgo County, provides low-income individuals in the Rio Grande Valley with affordable health care and other services (“Services,” 2017). The organization’s mission is to assist individuals, including adolescents, in preventing unplanned pregnancies to ensure safer birth outcomes and healthier children (“Services,” 2017). The organization provides both preventive and family planning services to over fifteen thousand individuals (“Services,” 2017). The organization reaches an estimated ten thousand more people through community outreach education efforts annually (“Services,” 2017). These education efforts focus on building and maintaining healthy relationships, family planning, and informing the public about services offered at the clinics (“Services,” 2017). The Texas Health and Human Services Commission and the federal Title X Family Planning Program fund clinical services at the organization (“Services,” 2017). Education programs and patient services are also funded by donations from community members and grants from private foundations (“Services,” 2017). Under Title X funds, the clinic is federally obligated to ensure the privacy of its adolescent patients. Adolescent patients are able to obtain services without a parent or guardian present or parental permission (“Services,” 2017).

Access Esperanza currently has five locations in Hidalgo County where adolescents can access reproductive health services (“Services,” 2017). These services include obtaining physical exams and multiple methods of birth control (“Services,” 2017). Adolescents can also receive testing for sexually transmitted infections and treatment if needed. In addition to these services the organization also implements the

peer education and outreach program, Entre Nosotros Outreach Project, which utilizes community health workers to do outreach in poverty-stricken communities, local schools, and colleges on ways in which individuals may avoid unplanned and unwanted pregnancies (“Community Education,” 2018). The community health workers travel to neighborhoods and colleges to educate individuals door to door and through health fairs (“Community Education,” 2018). Through these initiatives and services, the organization aims to improve the overall health and future for those living in Hidalgo County (“Community Education,” 2018).

Furthermore, the organization implements culturally appropriate initiatives for youth in Hidalgo County (“Services,” 2017). This is done through the organization’s Family Communication Workshops and Peer Education Outreach program (“Services,” 2017). During the Family Communication Workshops, participants learn about and discuss decision-making skills, parent and child communication, human anatomy, healthy habits, and hygiene (“Community Education,” 2018). This three-hour session also includes information about multiple birth control options and information on sexually transmitted infections (“Community Education,” 2018). In addition, the workshop aims to address the need for open dialogue between adolescents and their parents regarding pregnancy prevention methods and sexual intercourse (“Community Education,” 2018).

#### **3.4.2.4 Behavioral Health Solutions of South Texas**

Another program assisting parents in the Rio Grande Valley in communicating with their children about sex is the Families Talking Together initiative. The initiative is

being implemented in the Rio Grande Valley through Behavioral Health Solutions of South Texas (“Research Projects,” 2018). This 501(c)(3) nonprofit organization aims to implement various programs that promote healthy lifestyles among community members in the Rio Grande Valley through community engagement efforts. This parent-based initiative aims to decrease and prevent the initiation of sexually risky behavior among adolescents to decrease the rate of adolescent pregnancies (“Parent Education,” 2018). The initiative is made possible by a funding opportunity by the United States Department of Health and Human Services in collaboration with the Center for Latino Adolescent and Family Health (“Research Projects,” 2018). The initiative assists in educating parents on communicating with their children regarding sexual relationships and assists in creating adolescent-parent relationships (“Parent Education,” 2018). It was being implemented until the end of 2018 in Starr, Hidalgo, Willacy and Cameron Counties through the assistance of community health workers in each county (“Research Projects,” 2018).

Research evaluating Families Talking Together remains mixed. A study by Guilamo-Ramos and colleagues (2011a) concluded that adolescents participating in the program were less likely to engage in vaginal intercourse and that the frequency of sexual intercourse of participants had decreased significantly. However, another study concluded there was no significant reduction in the rate of sexual intercourse among adolescents who had participated in the Families Talking Together program when compared to a comparison group (Guilamo-Ramos et al., 2011b).

### **3.4.2.5 The Texas Campaign to Prevent Teen Pregnancy teen pregnancy coalitions**

The Texas Campaign to Prevent Teen Pregnancy is a 501(c)(3) nonprofit organization in the state of Texas. The organization currently collaborates with several adolescent pregnancy prevention coalitions in the state, including the Lower Rio Grande Valley, to assist these entities in pursuing adolescent pregnancy prevention initiatives throughout Texas ("Coalitions," 2018). There are currently 10 coalitions in the state, two of which are in the Lower Rio Grande Valley ("Coalitions," 2018). This includes the Lower Rio Grande Valley Teen Pregnancy Prevention Coalition in Brownsville and the Rio Grande Valley Teen Pregnancy Prevention Coalition in McAllen ("Coalitions," 2018). The organization works to create systemic change by increasing capacity among participating communities in the state through the organization's website and available resources through social media ("Coalitions," 2018).

Although the use of coalitions to address public health issues such as adolescent pregnancy has been popularized, they are not necessarily successful because of multiple factors (Brownson, Baker, Leet, Gillespie, and True, 2011). Coalition success depends largely on experienced leadership, member participation, and productive communication (Kramer et al., 2005). Research by Kramer and colleagues (2005) indicated that coalitions often struggled to sustain community members due to employment responsibilities. In addition, leadership roles are often voluntary and staff turnover remains high, an issue currently plaguing the Rio Grande Valley Teen Pregnancy Prevention Coalition in McAllen (Kramer et al., 2005).

### **3.4.2.6 School district initiatives - Big Decisions**

Big Decisions is an abstinence-plus education program that is implemented in over 20 school districts throughout the state (“Big Decisions,” 2018). The curriculum contains 10 modules that contain various activities that target eighth-grade students and high school seniors (“Big Decisions,” 2018). The information provided to adolescents contains current medically accurate information for youth (“Big Decisions,” 2018). The curriculum is currently being implemented in two school districts in the Lower Rio Grande Valley (“Big Decisions,” 2018). They include Donna Independent School District and Edcouch Elsa High School (“Big Decisions,” 2018). In addition, the U.S. Department of Health and Human Services Office of Adolescent Health recently funded a study that would evaluate the implementation of Big Decisions in Texas border school districts in San Felipe and Eagle Pass (“Big Decisions Evaluation,” 2018).

### **3.4.3 Texas initiatives addressing adolescent pregnancies unavailable in the Lower Rio Grande Valley**

#### **3.4.3.1 Texas Department of State Health Services Texas Healthy Adolescent Initiative**

The Texas Department of State Health Services (DSHS) currently implements Texas Healthy Adolescent Initiative, a community-based initiative taking place in select locations throughout the state that lists adolescent pregnancy prevention as one of its many objectives (“Texas Healthy,” 2018). The initiative’s goal is to develop a system that can assist in improving the overall health of adolescents in the state (“Texas Healthy,” 2018). In this network, both adolescents and adults work together to positively



impact health outcomes for youth in communities that have high rates of adolescent pregnancies, sexually transmitted infections, youth crime, drug abuse, poverty, and high school dropouts (“Texas Healthy,” 2018). The initiative’s objective is to encourage the use of positive youth development strategies such as integrating youth engagement in city government’s strategic planning efforts (“Texas Healthy,” 2018).

To address adolescent pregnancies, the initiative strives to leverage existing resources and construct partnerships to change behaviors that lead to adolescent births (“Texas Healthy,” 2018). The initiative provides parents and adolescents with a phone number that allows them to access information through text messages about several topics including relationships and challenges they may be facing (“Texas Healthy,” 2018). In addition, the initiative has assisted in challenging community norms about adolescents’ involvement in planning health initiatives and program development (“Texas Healthy,” 2018). The initiative is being implemented in areas such as Austin, Dallas Houston, Lubbock, San Antonio, South Central Texas, and Tyler. Unfortunately, the initiative has not been implemented in the Lower Rio Grande Valley (“Texas Healthy,” 2018). In addition, there is a lack of research that suggesting such strategies have been effective in decreasing the rate of adolescent births in the state.

#### **3.4.3.2 The Texas Campaign to Prevent Teen Pregnancy - Texas Youth Friendly Initiative**

The Texas Campaign to Prevent Teen Pregnancy currently implements an initiative with objectives similar to that of the Texas Healthy Adolescent Initiative. The Texas Campaign to Prevent Teen Pregnancy currently implements the Texas Youth

Friendly Initiative to assist in the prevention of adolescent pregnancies (*“Texas Youth,” 2018*). This initiative attempts to leverage existing resources and utilizes research of highly skilled experts to address current barriers in health care access for adolescents (*“Texas Youth,” 2018*). Current funding for this initiative is provided by the following entities: Episcopal Health Foundation, St. David’s Foundation, and the Houston Endowment (*“Texas Youth,” 2018*). The organization aims to increase comprehensive health services for adolescents and strives to ensure access to highly effective and quality services that include routine medical checkups (*“Texas Youth,” 2018*). These checkups include reproductive health screenings in which sexually active youth can be informed and educated on contraceptive methods that meet their specific needs (*“Texas Youth,” 2018*). The initiative addresses Texas’s current political climate as well as the state’s demographics and aims to build capacity among individuals throughout Texas (*“Texas Youth,” 2018*). This is done by advocating for adolescent-centered care in a clinical setting available through face-to-face clinical interaction with a healthcare provider. Seven clinics currently participating in this initiative have gained access to resources and tools to build capacity in multiple areas (*“The Texas,” 2018*). Such clinics undergo an eighteen-month process that allows them to become certified as champions for adolescents and centers of excellence (*“The Texas,” 2018; “Texas Youth,” 2018*). The initiative’s main objective is to increase the number of adolescents who have access to medical homes (*“Texas Youth,” 2018*). Ultimately, the initiative envisions a world in which more youth can have access to high-quality health care (*“The Texas,” 2018; “Texas Youth,” 2018*).

To achieve this, the initiative aims to decrease current barriers within communities for adolescents to gain access to affordable and targeted care in participating clinics (“The Texas,” 2018; “*Texas Youth*,” 2018). In addition, the initiative aims to create and establish a standard for adolescent-friendly services in the state of Texas (“The Texas,” 2018; “*Texas Youth*,” 2018). Furthermore, the initiative aims to create systemic change by increasing collaboration among organizations that serve adolescents and health care providers (“The Texas,” 2018; “*Texas Youth*,” 2018). Such change will occur by creating formalized links between the organization and participating clinics (“*Texas Youth*,” 2018). Unfortunately, none of the participating clinics in this initiative are in the Lower Rio Grande Valley (“The Texas,” 2018).

#### **3.4.3.3 Healthy Futures of Texas**

In 2010, under the Obama administration, \$190 million in funding was allotted to support evidence-based adolescent pregnancy prevention initiatives (“Sex Ed,” 2018). Unfortunately, the State of Texas did not apply for or receive any of this funding (“Sex Ed,” 2018). There are, however, eight organizations in the state that do receive this funding (“Sex Ed,” 2018). Currently, under the Trump administration, funding for these initiatives is at risk of being eliminated (“Sex Ed,” 2018). Nonprofit organizations remain steadfast, however, in their efforts to decrease adolescent pregnancies in the state.

Healthy Futures of Texas is a 501(c)(3) nonprofit organization located in San Antonio, Texas, whose overall goal is to decrease adolescent pregnancies in the city and state (“Who We,” 2018). The organization utilizes evidence-based approaches that assist

in empowering community members, parents and youth alike (“Who We,” 2018). Funding for the organization is provided by the Health and Human Services Teen Pregnancy Prevention Program grant, private donations, and several sponsorships (“Healthy,” 2018; “Health,” 2018). The organization currently implements five programs including Big Decisions, the Big Decisions Evaluation Project, parent education, BAE-B-SAFE, and youth education (“Programs,” 2018).

Healthy Futures of Texas implements the BAE-B-SAFE Initiative through a partnership with three community colleges in the San Antonio area (“BAE-B-SAFE,” 2018). The initiative aims to prevent sexually transmitted diseases and unintended pregnancies among adolescents entering college. The program provides students with information that is medically accurate and connects them to healthcare providers in the area. The initiative’s overall goal is linking students to resources that empower them on reproductive health. Two programs are currently implemented under the BAE-B-SAFE initiative. This includes a program that utilizes components of the three evidence-based curricula including Gender Matters, Sexual Health and Adolescent Risk Prevention (SHARP), and Big Decisions.

In addition, the initiative also implements Seventeen Days as well as a one-session intervention that utilizes components from three evidence-based programs to instruct male students on human anatomy, contraceptives, and how to build and maintain healthy relationships. The session is derived from the following programs: Sexual Health and Adolescent Risk Prevention intervention (SHARP), Gender Matters, and Big Decisions. In addition, the organization also provides youth education. In collaboration

with several academies and school districts throughout the San Antonio area, the organization strives to implement sex education that is both medically accurate and inclusive. Furthermore, the organization implements many afterschool and summer sessions by collaborating with community organizations in the San Antonio area.

Lastly, the organization provides parent education. Healthy Futures currently implements workshops for parents to engage in constructive conversations with their children regarding sex (“Parent Education,” 2018). Parents are given instruction on how to improve their communication skills and how to address questions of their children. In addition, the organization offers an initiative called Big Decisions for Parents: Key Conversations. The initiative assists parents in obtaining the needed skills to communicate with their children. Parents are also instructed on what they can do to prevent their child from experiencing an unplanned pregnancy.

#### **3.4.4 United States-Mexico border state initiatives to address adolescent pregnancies**

Title X funded sites that deliver reproductive health services such as family planning to adolescents vary by border state (Campa et al., 2017). In 2017, Arizona had a 29 Title X funded sites. Five of these sites were in border counties (Campa et al., 2017). The State of New Mexico had 54 sites that provided family planning services through Title X funding. Eight of these sites were in border counties. California had a total of 345 sites that provided such services. Of these sites, 64 were in border counties. Texas, on the other hand, has 88 sites providing family planning services funded by Title X. Of these sites, 20 are in Texas border counties (Campa et al., 2017). Ten of these sites

are clinics located in the Lower Rio Grande Valley (“Find,” 2018). Five are Access Esperanza Clinics located in Hidalgo County (“Find,” 2018). In addition, there is a sixth clinic in Hidalgo County receiving Title X funding and the remaining 4 clinics are in Cameron County, while no clinics receive this type of funding in Starr and Willacy Counties (“Find,” 2018).

Access of adolescent girls to contraceptive services provided by Title X funding varies by border state (Campa et al., 2017). According to a report by the U.S Border Health Commission, Arizona provided contraceptive services to a total of 4,840 adolescent girls in 2014. In addition, New Mexico provided about 4,410 girls with these services. Furthermore, California provided services to about 154,870 adolescent girls while Texas provided services to 18,170 adolescent girls in the state (Campa et al., 2017). Comparable to Texas, Mexico has a large population of adolescents who lack reproductive health care (Villalobos et al., 2017). The country south of the Texas-Mexico border mirrors Texas in terms of high adolescent pregnancy rates and lack of reproductive health services availability for adolescents (Villalobos et al., 2017). According to Villalobos and colleagues (2017), only about 1/5 of providers in Mexico provide adolescent youth with high-quality reproductive health services. Mexican members of the United States-Mexico Border Health Commission Reproductive Health Technical Work Group noted there were several adolescent-specific clinics for youth in Mexico border states. However, each region varies in terms of adolescent health care availability. One reason for this may be the country's failure to incorporate youth-friendly healthcare protocols such as the extension of operating hours or providing safe

spaces specifically for adolescents to receive reproductive health counseling (Villalobos et al., 2017). Healthcare facilities that have spaces specific for providing reproductive health care counseling for adolescents are known to deliver better quality services (Villalobos et al., 2017). Access to such services such is greatly influenced by existing barriers within an adolescent's environment.

### **3.5 Discussion and conclusion**

Although Texas has a variety of initiatives that are implemented in multiple areas with high rates of adolescent pregnancy throughout the state, initiatives that aim to prevent adolescent pregnancies in the Lower Rio Grande Valley do not cover the adolescent population. Programs in the lower Rio Grande Valley are currently limited to those implemented through BCFS Health and Human Services McAllen, Boys and Girls Club in McAllen and Edinburg, Access Esperanza in Hidalgo County, Behavioral Health Solutions of South Texas, and two school districts in the Lower Rio Grande Valley. These programs are not large enough to cover the region, and Starr County is particularly lacking in coverage. Most of the programs implemented are offered in Hidalgo County, however, these programs do not expand to cover Starr County, the county with one of the highest adolescent birth rates in the Lower Rio Grande Valley.

Programs implemented by BCFS Health and Human Services McAllen and the Boys and Girls club are largely abstinence-based. Such programs have been proven ineffective in the prevention of adolescent pregnancies ("Sex Ed," 2018; Kirby, 2008; Stranger-Hall and Hall, 2011). The organization implements two other programs, Making Proud Choices and Seventeen Days, that are not comprehensive in nature and

are limited to adolescents who actively enroll and required parental consent for participation. In contrast, Access Esperanza remains one of the only organizations providing reproductive health services to adolescents in the region while also providing educational workshops for both adolescents and parents to obtain medically accurate, comprehensive information. Behavioral Health Solutions' Families Talking Together program also assists in improving communication among adolescents and their parents. Lastly, two school districts in the Valley currently implement an abstinence plus education program, Big Decisions, in select public schools in the Lower Rio Grande Valley.

Current initiatives said to be statewide include those implemented by the Texas Department of State Health Services, The Texas Campaign to Prevent Teen Pregnancy, and Healthy Futures of Texas. The Texas Department of State Health Services implements the Texas Healthy Adolescent Initiative which utilizes positive youth development strategies and takes a systems approach to improving the overall health of adolescents in the state ("Texas Healthy," 2018). However, the initiative remains a mystery to most who visit the department's website for information regarding the program. The website is vague and adolescent pregnancy prevention programs are not readily found on the site.

Another Texas initiative includes The Texas Campaign to Prevent Teen Pregnancy Texas Youth Friendly Initiative which aims to increase the number of adolescents who have access to health care and medical homes ("*Texas Youth*," 2018). Lastly, Healthy Futures of Texas is another organization making strides to reduce the



number of adolescent pregnancies and births in the state. Healthy Futures of Texas implements multiple programs that address adolescent pregnancies through comprehensive sex education, abstinence plus education and parent education (“Who We,” 2018). These initiatives that are described as statewide are not implemented in the Lower Rio Grande Valley.

In comparison to other adolescent pregnancy prevention initiatives implemented in other border states in the United States, Texas continues to remain stagnant in terms of the implementation of progressive adolescent pregnancy prevention initiatives and policies. Unlike Texas, the state of California refuses to accept Abstinence-Only-Until-Marriage Education Funding and instead implements sex education that is medically accurate and age appropriate for students in public schools (Hernandez et al., 2011). In addition, the state has increased access to health care services such as contraceptive services (Hernandez et al., 2011). Such efforts assisted with drastically reducing the adolescent birth rate in the state (Constantine & Navarro, 2003; Hernandez et al., 2011).

The promotion of comprehensive sex education and access to adolescent health care services should be prioritized in the state of Texas. Current abstinence-based education and policies do little to combat the high rate of adolescent births in the Lower Rio Grande Valley and Texas overall. Comprehensive sex education in Texas may aid in decreasing unplanned pregnancies among adolescents by providing adolescents with the necessary skills and knowledge to ensure preventative measures are taken should adolescents engage in risky sexual behaviors that may result in pregnancies (“Sex Ed,” 2018; Kirby 2008). Additionally, the expansion of adolescent health care services such

as those offered through Access Esperanza should be extended to cover the Lower Rio Grande Valley completely and other border regions as well. Such services would undoubtedly increase the number of adolescents receiving preventive information and contraceptives leading to a potential decrease in adolescent pregnancies.

Further research should focus on evaluating the current initiatives in place in the Lower Rio Grande Valley including those offered by BCFS Health and Human Services. Evaluating the effectiveness and overall use of adolescent health services and programs would aid in identifying successful initiatives and services that may be disseminated throughout the Lower Rio Grande Valley. In addition, comparisons with programs and services implemented in other border states and Mexico should be pursued in order to identify best practices for addressing adolescent pregnancy. Research regarding adolescents below 15 years of age in the Lower Rio Grande Valley should be pursued to complete data on adolescent pregnancy. Lastly, there is an urgent need for regional policymakers to address adolescent pregnancy as a serious public health issue in the Rio Grande Valley.

## 4. CONCLUSION

The promotion of preconception care in the form of comprehensive sex education and increased access to adolescent-centered reproductive health services in the state of Texas would likely reduce the high rate of adolescent pregnancies in the Lower Rio Grande Valley. In addition, however, public health practitioners and policy makers must address barriers that include cost, lack of transportation, immigration status, and accessibility to clinics in the Lower Rio Grande Valley while simultaneously navigating the conservative policies regarding the subject matter in the state of Texas. Though difficult, the future and wellbeing of adolescents and infants in the Rio Grande Valley relies heavily on improved policies in adolescent reproductive health and greater access to programs available to adolescents in the region.

### **4.1. Preconception care**

An earlier chapter reviewed the literature on preconception care because it allows adolescents the ability to improve their knowledge and skills regarding the adoption of healthy behaviors at an early age (Dean et al, 2013). Preconception care improves various components of adolescent health including their nutrition, sexual behaviors, substance use, intimate partner violence, and family planning (Dean et al, 2013). Thus, preconception care aims to improve the overall health of adolescents, including reproductive health, under a label that avoids politically stigmatized wording such as “sex education” and “family planning.” Although preconception care is beneficial to adolescents, its promotion during the adolescent period is often discouraged because many members of the public in some regions of the United States consider it

inappropriate (Upadhyaya et al., 2016; Goodfellow et al., 2017). This view is often due to the politicization of family planning services and sex education programs for adolescents which has often limited the availability and access to adolescent pregnancy prevention initiatives in politically conservative states.

#### **4.2. Programs and policies to address adolescent pregnancy in the Lower Rio Grande Valley**

As noted in an earlier chapter, Texas's conservative political climate has set policies narrowing the types of programs available for adolescents in the Lower Rio Grande Valley. Family planning clinics can allow adolescents to obtain reduced cost services and free contraceptives such as condoms and other forms of birth control (Packham, 2017). Such clinics provide over 1.5 million adolescents in the United States with services each year (Packham, 2017). In Texas, policy changes results in widespread clinic closures, leading to an average 3.4% increase in the adolescent birth rate over the course of 4 years following the closures (Packham, 2017).

Best practices for the prevention of adolescent pregnancies in the state are demonstrated through efforts made by organizations such as Access Esperanza and the Texas Campaign to Prevent Teen Pregnancy. These efforts aim to improve adolescent-centered reproductive health care services. Access Esperanza remains one of the only organizations providing reproductive health services to adolescents in the Lower Rio Grande Valley. In addition, the organization provides educational workshops for both adolescents and parents to obtain medically accurate, comprehensive information. The organization has developed a model of care for other clinics in the Lower Rio Grande

Valley by providing both adolescent health care services and educational programs. Unfortunately, the Texas legislature has continuously cut funding for family planning in clinics, such as Access Esperanza, and continues to advocate for abstinence-based programs (Packham, 2017; “Sex Ed,” 2018).

Partnerships and collaborations between various stakeholders may be pursued through the Texas Campaign to Prevent Teen Pregnancy’s Teen Pregnancy Prevention Coalitions, established in the Rio Grande Valley. Addressing the lack of access to adolescent health care services in the Lower Rio Grande Valley should be prioritized. In addition, public health practitioners should aim to collaborate and build capacity among school districts in the Lower Rio Grande Valley regarding the potential implementation of abstinence plus or comprehensive sexual education in public schools throughout the region. Strides to improve policy regarding comprehensive sex education in school districts in the Lower Rio Grande Valley should be pursued. These efforts have the potential to positively impact the lives of adolescents along this border region. Lastly, preconception care should be a topic of discussion between adolescents and their parents in order to provide a foundation in which preconception care is prioritized throughout the life course (Goodfellow et al., 2017).

#### **4.3. The future of adolescent pregnancy prevention in the Lower Rio Grande Valley**

The implementation of preconception care initiatives throughout the Lower Rio Grande Valley would assist in reducing teen pregnancy rates by increasing adolescents’ access to health services and information on prevention. Increasing their access to these services would require the cooperation of multiple entities including policy makers,

community members, health care providers, school systems, and parents (Dean et al, 2013). Ensuring adolescents receive proper and adequate health care is a goal that should be pursued throughout the state including the Lower Rio Grande Valley. Support from parents and policy makers is essential to the implementation of adolescent reproductive health programs in school districts, clinics, and the communities for adolescents throughout the Lower Rio Grande Valley.

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APPENDIX A

FIGURES

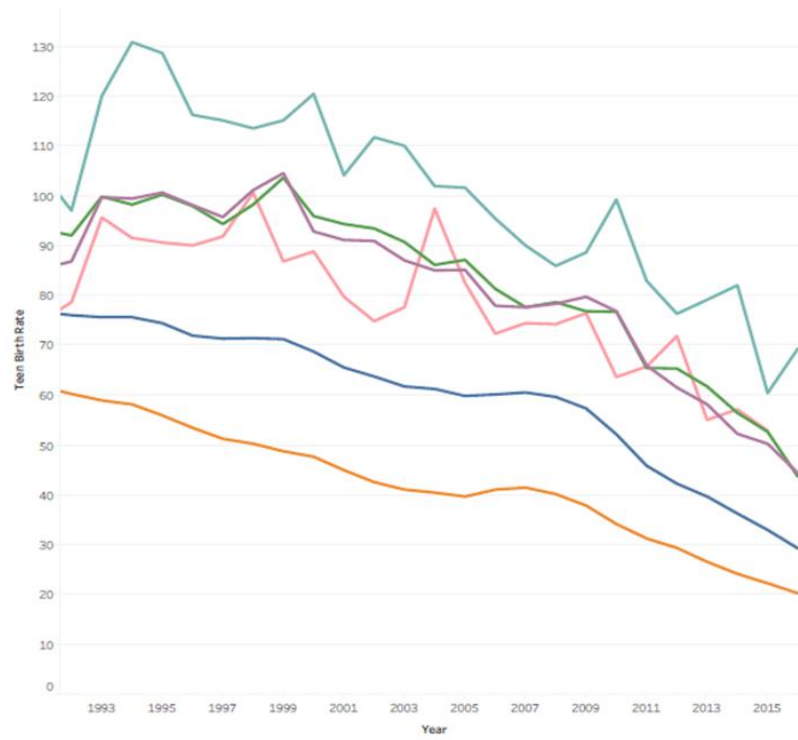


**Figure 3.1 The Lower Rio Grande Valley region with permission (National Latina, 2013)<sup>1</sup>**

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**Figure 3.2 Teen birth data (Teen Birth, 2018)**

Online Resources	Access Esperanza Clinics
	BCFS Health and Human Services – McAllen
	Behavioral Health Solutions of South Texas
	Boys and Girls Club
	Healthy Futures of Texas
	Report by the National Latina Institute for Reproductive Health and the Center for Reproductive Rights
	Texas Campaign to Prevent Teen Pregnancy
	Texas Department of State Health Services
	United States Border Health Commission
	US Department of Health and Human Services – Office of Adolescent Health

**Figure 3.3 Resources used for data collection**

APPENDIX B

TABLES

<b>Recommendations for improving Preconception Health</b>	
Goal 1	Aims to improve the behaviors and attitudes of both men and women in relation to preconception care by increasing the knowledge of preconception care health among all individuals.
Goal 2	Aims to ensure all women and men receive services related to preconception care which will ensure health prior to pregnancy.
Goal 3	Aims to implement interventions during the interconception period which can potentially decrease the risk of women having unfavorable pregnancy outcomes
Goal 4	Aims to decrease disparities concerning negative pregnancy outcomes

**Table 2.1 Recommendations for improving preconception health (Kotch, 2012)**

	% Hispanic Population	High School Graduate or Higher	Bachelor's degree or Higher	Median Household Income	% Living in Poverty	% Uninsured
United States	18.1%	87.0%	30.3%	\$55,322	12.3%	10.2%
Texas	39.4%	82.3%	28.1%	\$54,727	14.7%	19.4%
Starr County	96.3 %	48%	9.3%	\$26,682	39.9%	28.2%
Hidalgo County	92.2%	63.3%	17.4%	\$36,094	31.2%	29.7%
Willacy County	88.3%	63.1%	8.6%	\$28,817	39.3%	22.8%
Cameron County	89.7%	65.6%	16.8%	\$34,578	29.1%	29.5%

**Table 3.1 Socialdemographic characteristics (United States Census Bureau, 2018)**

	<b>Birth Rate per 1000 girls ages 15-19</b>
United States	27
Texas	52
Starr County	92
Hidalgo County	76
Willacy County	72
Cameron County	73

**Table 3.2 Teen birth rates in the Lower Rio Grande Valley in 2016 (County Health Rankings, 2018)**

<b>Organization</b>	<b>Target Population</b>	<b>Organization Type</b>	<b>Program(s) Implemented</b>	<b>Location</b>	<b>Funded By</b>
<b>Texas Department of State Health Services (TDSHS)</b>	Varies	State, governmental organization	Texas Healthy Adolescent Initiative	State Wide	State Funded
<b>Texas Campaign to Prevent Teen Pregnancy</b>	Ages 10-24	501(c)(3) non-profit	Texas Youth Friendly Initiative  Teen Pregnancy Prevention Coalitions	State Wide  State Wide - Two Coalitions in the Lower Rio Grande Valley	Donations
<b>Healthy Futures of Texas</b>	Varies	501(c)(3) non-profit	Big Decisions  Big Decisions Evaluation Project  Parent and Youth Education  BAE-B-SAFE	San Antonio Region and State Wide	Donations
<b>BCFS Health and Human Services – McAllen</b>	Middle School  High school  High School (Females)	501(c)(3) non-profit	Educate, Empower, Encourage  Making Proud Choices  Seventeen Days	Lower Rio Grande Valley	Federally Funded  State Funded  State Funded
<b>Boys and Girls Clubs</b>	Ages 6-15	501(c)(3) non-profit	Skills Mastery and Resistance Training (SMART) Moves Education	Lower Rio Grande Valley	Donations and Grant Funded
<b>Access Esperanza Clinics</b>	Varies	501(c)(3) non-profit	Direct reproductive health services  Peer Education and Outreach program (Entre Nosotros)  Family Communication Workshops	Lower Rio Grande Valley	Donations and Grant Funded
<b>Behavioral Health Solutions of South Texas</b>	(Parent Based – Ages vary)	501(c)(3) non-profit	Families Talking Together	Lower Rio Grande Valley	Federally Funded

**Table 3.3 Adolescent pregnancy prevention programs in the Lower Rio Grande Valley and Texas**