Teen Pregnancy and Sexually Transmitted Infections in Youth: A Community Prevention EvidenceBased Program in Texas, USA

Infecciones de Transmisión en la Juventud: Un Programa de prevención comunitario basado en la evidencia, en Texas, EE.UU.

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Abstract

Teen pregnancies and sexually transmitted diseases (STDs) continue to be a major health, social and financial problem across the country, and especially in Texas. While national research has shown that abstinence education is not working, the Texas Legislature, Texas School System and the Lubbock community still require "Abstinence-Only" education. The current paper is based on a community prevention evidence-based program in Lubbock, Texas entitled "Teen Straight Talk" (TST, 2007). TST is designed to educate and provide information on the topics of body image, teen and peer pressure, depression and suicide, along with understanding sexuality and how the body works, abstinence, contraception, teenage pregnancy, STDs, protection and sexual responsibility. The program reduces barriers between adults and parents and the youth they care for. TST is a joint effort among faculty, undergraduate and graduate students from Texas Tech University and Texas Tech University Health Sciences Center and community partners. Empirical data has been collected since 2008 to fulfill the program main goals: a) Understand parent's knowledge and attitudes on sexual development as well as increase awareness of needs and benefits of comprehensive sexual education programs for parents and adolescents; b) Train volunteer students to promote healthy teenage sexual development in the Lubbock Community, c) Deliver comprehensive, medically, psychologically and sociologically correct sexual education to families and teenagers concerning risk and protective factors related to sexual activity. Empirical and social implications of TST are discussed.

Key words: Teenage Pregnancy, Sexually Transmitted Infections (STI), Sexually Transmitted Diseases, Community Prevention Evidence-Based Program, Evidence-Based Practice.

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Resumen

El embarazo juvenil y las infecciones de transmisión sexual (ITS) continúan siendo un problema de salud, económico y social de índole mayor en Estados Unidos particularmente en Texas. Mientras evidencia empírica a nivel nacional demuestra que la educación basada en abstinencia no funciona, la legislatura en Texas, el sistema educativo en las escuelas y en las comunidades de Texas aun requieren que se utilicen los programas de "Solo-Abstinencia." Este artículo esta basado en un programa comunitario de prevención basado en evidencia empírica en Lubbock, Texas llamado "Teen Straight Talk" (TST, 2007). TST fue diseñado para educar y proveer información sobre los temas de imagen corporal, presión de pares y adolescentes, depresión y suicidio, en conjunto con el desarrollo sexual y el entendimiento acerca de cómo funciona nuestro cuerpo, abstinencia, métodos anticonceptivos, embarazo juvenil, enfermedades de transmisión sexual, protección y responsabilidad sexual. El programa intenta reducir las barreras entre adultos y padres de familia y sus hijos adolescentes, y se ha implementado en ingles y español. TST es un esfuerzo conjunto entre investigadores, estudiantes de pregrado y postgrado en Texas Tech University y Texas Tech University Ciencias de la Salud y líderes comunitarios. Desde el 2008, datos empíricos han sido recolectados para evaluar las metas del proyecto: a) Entender el conocimiento y las actitudes de los padres acerca del desarrollo sexual y a la vez informar acerca de la necesidad y los beneficios de los programas comprensivos de educación sexual para padres y adolescentes, b) Entrenar estudiantes voluntarios para promover la salud y el desarrollo sexual de los adolescentes en la comunidad de Lubbock, C) Difundir educación sexual que es comprensiva y correcta a nivel medico, psicológico, y social para familias y adolescentes sobre factores protectores y de riesgo relacionados a la actividad sexual. Implicaciones empíricas y sociales sobre TST serán discutidas.

Palabras Claves: Embarazo Juvenil, Infecciones de Transmisión Sexual (ITS), Enfermedades de de Transmisión Sexual. Programa Comunitario de Prevención basado en Evidencia Empírica, Práctica Basada en la evidencia.

Teen pregnancy, teen births, and sexually transmitted infections (STIs) rates have been a continuous problem. International data show that adolescents in the U.S. have the highest STIs, pregnancy, and birth rates among the developed countries of the world (Bay-Cheng, 2003; Klein, Sabaratnam, Pazos, Auerbach, Havens, & Branch, 2005; Sutton, Brown, Wilson, & Klein, 2002). Much of the research that has explored adolescent development has been fueled by concerns about health and social outcomes of risk taking behaviors which has been informed by the alarming official statistics on adolescent sexual activity (Klein et al., 2005). Epidemiological evidence suggests that American youth are initiating sexual activities at progressively younger ages (CDC, 2005; O'Donnell, O'Donnell, &

Stueve, 2001) and with a wide variety of sexual practices (Rosenthal, Smith, & de Visser, 1999).

Teen Pregnancy

As previously mentioned, the U.S. has the highest teen pregnancy and teen birth rates among the Western developed world (Klein et al., 2005; Sutton et al., 2002) with the U.S. having reported twice the teen birth rates of both Canada and Great Britain (Klein et al., 2005). About 900,000 15-19 year old adolescent females become pregnant in the U.S. each year, with 78% of those as unwanted pregnancies (CDC, 2000). Texas had among the top ten highest birth rates in the U.S. with more than 60 births per 1,000 females between 15-19 years of age

(Mathews, Sutton, Hamilton, & Ventura, 2010).

Adolescent pregnancy costs U.S. taxpayers an estimated \$9 billion dollars annually (Hoffman, 2006). The costs include the increased healthcare expenses because of the heightened risk of having low birth weight babies, preterm births, and infant mortality which people younger than 20 years of age have higher risk of having than those who are older than 20 years of age (Mathews et al., 2010). But this cost does not stop after the adolescent has given birth. Teen moms have worse school outcomes. with fewer teen moms graduating from high school (Klein et al., 2005). Lower educational attainment has been shown to contribute to lost tax revenue from teen moms who have lower educational attainment and lower income due to less education (Hoffman, 2006; Hoffman, 2008; Klein et al., 2005). Teen moms are more likely to live in poverty and less likely to have effective parenting skills (Coley & Chase-Lansdale, 1998; Klein et al., 2005) which lends to increased costs for foster care (Hoffman, 2006). The lack of parenting skills can also contribute to negative outcomes for the children of adolescent parents including: increased incarceration rates in adolescence and adulthood, lower school achievement with higher than average dropout rates, more health problems, unemployment as adults, and a higher likelihood of also being a teen parent (Hoffman, 2006; Hoffman, 2008). It has been suggested that when teens avoid will pregnancy, thev have "more opportunities and control over their lives...there will be less poverty, [and] lower public costs" (Boonstra, 2009b, pp.18).

The estimated one year cost of the 230 children born to teens in Lubbock County in 2004 was \$4,485,000.00. By 2008, over 360

children were born to teen moms in Lubbock County. In 2009, one average, six Lubbock teenage girls, became pregnant each week. According to the health department, Lubbock County ranks number one in the state for teen pregnancies. In 2008, more than 300 Lubbock County adolescents became pregnant up from 214 in 2005 (TDSHS, 2008). During 2004, only two Lubbock zipcode had a teen pregnancy rate below the national rate. The remaining zip codes ranged from two to 11 times the national averages (See Table for more statistics). In both 2005 and 2006, only two U.S. STATES had a higher Chlamydia rate than Lubbock COUNTY. Lubbock statistics from 2004-2008 show a birth rate among teens per 1,000 females age 10-17 of 246.2 accounting for 1,231 births from 2004-2008. This rate has steadily increased from 227 live births in female teens 10-17 in 2004 to 269 in 2008.

Furthermore, it has been estimated that the lifetime cost per low birth weight baby is \$436,514. This is a cost that we all play a part in paying not just the parents of the low birth weight baby. (A rough estimate of the low birth weight babies born at Covenant Medical Center in Lubbock found that out of 4,400 births, mothers age 19 and older delivered only 4.4% low birth weight babies, while those teen mothers ages 18 or younger delivered almost 41% of their babies as low birth weight babies.) That cost of \$436,514 per low birth weight baby starts to add up rapidly. The lack of sex education in Lubbock is very costly to not only the physical and emotional health and future of our teens and their possible babies, but also to the teens' families and each member of the community at large.

Sexually Transmitted Infection (STIs)

STIs statistics suggest that rates are disproportionately high in teens (Klein et

al., 2005) with nearly half of all new STIs occurring in people younger than 25 years of age (Roberts & Sonenstein, 2010). The Centers for Disease Control and Prevention (CDC) estimated that approximately 3 million adolescents become infected with a new STD infection annually (Robinson et al., 2007). In the U.S., it is estimated that one in four adolescent females between the ages of 10-19 will contract at least one of the most common STIs (Gavin, Catalano, David-Ferdon, Gloppen, & Markham, 2010; Roberts & Sonenstein, 2010).

Texas is the second largest state in the U.S.; for reporting purposes, Texas has been divided into 11 geographical regions (THSHS, 2008). The Texas Department of State Health Services compiles and reports STIS, also known as sexually transmitted diseases (STDs), and other infectious disease rates to government officials and the public. Region 1 consists of 41 counties including Lubbock County. In 2008, of the reported cases in Texas, Region 1 contributed: 3,780 cases of Chlamydia, 1,087 cases of Gonorrhea, and 67 cases of Syphilis.

STIs also have a substantial financial impact on society with both direct costs of medical visits. diagnostic testing. treatments, and procedures, but also indirect cost which includes lost wages due to missing work for illness related to the STIS, and intangible costs associated with pain and suffering of having an STIS (Chesson, Blandford, Gift, Tao, & Irwin, 2004). In addition, STIs have an impact on not only current public costs related to treatment but also future reproduction, health, and the cost of developing prevention programs (Chesson et al., 2004). The statistics make it clear that adolescents are putting themselves at high risk for STDs and pregnancy; however, it is unclear if parents, teachers, religious leaders, schools administration, or policy makers should be addressing adolescent sexuality issues or if abstinence-only or abstinence-plus should be used in SBSE programs (Blinn-Pike et al., 2000).

Sexual Education

High rates of adolescent pregnancy, birth, and STIS infections indicate that adolescent making poor behavioral reproductive health choices (Blinn-Pike et al., 2000). In the face of continued problematic rates of adolescent pregnancy and STIs, it is important to understand the sources of sexual health information (Robert æ Sonestein, 2010). researchers have attribute high rates of teen pregnancy and STIs and their costs to the lack of science-based and medically accurate sexual education adolescents are given basic information about how their bodies work and the signs and symptoms of pregnancy and STIs (Bay-Cheng, 2003; Ott, Rouse, Resseguie, Smith, & Woodcox, 2011; Sutton et al., 2002).

Both federal and state governments in the U.S. have made efforts to legislate education to promote adolescent abstinence from sexual intercourse; all 50 states have mandated HIV education in public schools and the majority of states have required some form of sexuality education in their public schools, which school district policies abstinence-only school based sexuality education (Blinn-Pike, Berger, & Holloway, 2000). For over a decade beginning in the early 1990s, the U.S. federal government provided federal funding to states that implemented abstinence-only education in their public schools (Bay-Cheng, 2003; Harris & Allgood, 2009). It has been suggested that abstinence-only education

works best for preteen and younger adolescents but it loses its effectiveness for older adolescents who need more comprehensive information and access to contraceptive methods (Coley & Chase-Lansdale, 1998).

Abstinence-plus educational curriculum provides complete information by defining all forms of sex, contraception, and STIS prevention, some even provide information pertaining to the complete adolescent system" psychological, emotional, and physical health (Bay-Cheng, 2003). In 2003, only 14% of all school based sex education programs in the U.S. were abstinence-plus education programs (Bay-Cheng, 2003). With the continued problem of high rates of and adolescent pregnancy STIs, communities have begun to be more involved in finding intervention and prevention programs that best suit the needs of their local community with the hope of eliminating or at least reducing these negative adolescent outcomes (Harris & Allgood, 2009).

Community Education

Many communities see the critical need "to improve the social, academic, and health outcomes of young people," (Gloppen, David-Perdon, & Bates, 2010, pp. S42) and have allowed, invited and even supported comprehensive sexual education programs to provide teens with "knowledge, skills, confidence, and motivation to make healthier behavior choices" (Gloppen et al., 2010, pp. S42). In the last ten years, there has been an important push for sexual education with an emphasis on medically accurate and science-based informational curriculum (Ott et al., 2011). Communities have considered a wide range of public and private programs that have been developed to educate adolescents about sexuality and

sexual development and reduce adolescent pregnancy and STIS rates (Mathews et al., 2010). These partnerships are important because research suggests that we must also consider that all of these physical and cognitive changes that are occurring during adolescence are not in a "social vacuum but...in a diverse and changing contextual environment" (Graber et al.. pp.254).Community groups serving rural populations, like Lubbock, Texas, have to either dramatically adapt or create new programs for educating adolescents (Ott et al., 2011). This can be a major problem. Science-based sexuality education prevention and interventions programs seem to be effective in promoting positive health choices and some communities have an increased interest in adopting sciencebased programs; however, this interest is not always supported with community resources or funding (Ott et al., 2011).

"Sex education can give youth the skills and knowledge they need to refuse sex or to practice safer sexual behaviors and...provide them [teens] with the motivation and confidence needed to use those skills" (Gavin et al., 2010, pp. S76). It is concerning public health officials that adolescents are not getting the health information that they need (Robert & Sonenstein, 2010). In addition to the sexual educational curriculum conundrum, there are other factors that contribute to finding an effective program for rural areas including "fewer available sexual health services, increased poverty, geographic isolation and transportation challenges, less tolerance of diversity, and communities opposed to sex education" (Ott et al., 2011, pp. 175). Ott and associates (2011) explored the "best practices in sex education and what is possible on the community level" (pp. 174).

These problems are multifaceted and there is not one, simple approach that can be done to magically reduce the high rates of teen pregnancy, births, and STIs. Robert and Sonenstein (2010)state that "Clinicians, educators, and public health officials should encourage parents to discuss STDs and birth control methods with their adolescents and should provide support to them [parents] so that they are providing comfortable accurate information" (pp.536). Some communities have formed partnerships between the private sector and parents of teens (Boonstra, 2009a). In addition, Parents would appreciate receiving information and support from others in their community including teachers, school personnel, or medical professionals (O'Donnell et al., 2005).

Parent Education

During puberty, there are social and emotional processes that affect adolescent development and behaviors (Biro & Dorn, 2006; Graber et al., 2009). Adolescents receive feedback from their peers, parents, educators, their culture, and the media about their changing bodies and what behaviors are expected of them with their mature body forms and most successfully integrate their perception of their own development with that of others in their contextual environment (Graber et al., Parent-child relationships 2010). transformed rather than abandoned during adolescence with regular, daily parentadolescent communication of normal, everyday issues being an important factor in this transformation (Young et al., 2001). Research suggests that parents are an important source of health information for adolescents, including for information regarding sexual health (Gray et al., 2005; Green & Documet, 2005). Adolescents have consistently reported their parents among the top four sources of sexual information (Sutton et al., 2002).

Green and Documet (2005) report that "parental involvement and communication can promote health behaviors, thus preventing teen pregnancy, human immunodeficiency virus (HIV), and other sexually transmitted diseases" (pg. \$100). Over time, studies have shown that adolescents learning about report contraceptive behaviors from parents (Sutton et al., 2002). Health professionals encourage parents to discuss sex and sexuality and to be accurate comfortable talking with their teens (Robert & Sonenstein, 2010). Parent education that helps parents identify real life moments that could open a discussion about sexuality issues could be effective in arming parents to discuss values, expectations, and family rules with their developing adolescent (O'Donnell et al., 2005). Those that facilitate opportunities to talk about sex and start talking openly with their children at young ages found it easier to talk to their children in later life (Wilson et al.. 2010). Parents who are comfortable communicating with their adolescents about sexual issues and decision making could be more likely to initiate those conversations (Green & Documet, 2005).

Educating parents has given parents information so that they can understand their major role in shaping adolescents' sexual identity and behaviors (O'Donnell et al., 2005). Parents have a significant impact on their sons' and daughters' behaviors which many times they underestimate (O'Donnell, Stueve, Wilson-Simmons. Agronick. Duran, & Jeanbaptiste, 2005). When parents underestimate their impact on their

adolescents' behaviors and the risks that their sons and daughters encounter, they might have ineffective or inappropriate parenting methods and communication with their adolescents (O'Donnell et al., 2005; Robert & Sonenstein, 2010). Even if parents understand the risks that their adolescents face, they could feel that they do not have the education or information that they need to lead their adolescents safely into young adulthood (O'Donnell et al., 2005). Studies suggest that "parents can be taught how to communicate with their children about these subjects" (Green & Documet, 2005, pp. \$100).

Many researchers believe that parent-child communication of sexual topics important to adolescent sexual behaviors with studies linking parent-child communication to delayed sexual initiation, increased birth control method utilization. and increased condom use (Robert & Sonenstein, 2010). Prior research adolescent pregnancy prevention has tried to identify assets and protective factors that equip adolescents to "avoid the pitfall of riskv sexual behaviors and its consequences" (Klein et al., 2005, S95).

Teen Straight Talk

Lubbock, Texas and that surrounding communities of West Texas have been plagued with problems including high rates of teen pregnancy, STIs, low birth weight babies, preterm births, infant mortality, neonatal complications, child physical and sexual abuse, juvenile crimes, drug and alcohol use among our children and poverty. In Lubbock, as across the state of Texas, abstinence only education is what is required to be taught in the high schools. Teens are not taught about how their body works, how they can become pregnant or contract an STD, or how to protect

themselves. With an alarming increasing rate of teenage pregnancy and STIs in the Lubbock community, Dr. Linda Brice, Texas Tech University Health Sciences Center School (TTUHSC) of Nursing, and Ms. Kathleen McPherson, Clinical Director of Dermatology Department in the TTUHSC School of Medicine, committed themselves to the development and delivery of a comprehensive sex education program regardless of the possible backlash from the conservative sector of the community. Dr. Brice and Ms. McPherson initiated a comprehensive sex education program designed to deliver factual and scientifically based, age appropriate information to Lubbock and area teenagers (Ages 13 - 18), 'tweens (Ages 10 - 12), and parents. Teen Straight Talk was born.

TST is a comprehensive, evidence-based research program on healthy sexual development that involves parenting, teenage physical, emotional and social development and community involvement. The roots of evidence-based practice can be traced back to the emergence of evidencebased medicine in the early 1990s. The reason that evidence-based practices was designed was to reduce the gap between practitioners use of research researchers cooperation with practitioners (Reynolds, 2000). Based on that approach, TST is designed to educate and provide information on the topics of body image, teen and peer pressure, depression and suicide, along with understanding sexuality and how the body works, abstinence, contraception, teenage pregnancy, STDs, protection and sexual responsibility. The program reduces barriers between adults and the youth they care about, and can be delivered in both English and Spanish. The TST program offers just the facts and provides resources. It does not preach or offer individual opinions. This project is designed to be an "Ice Breaker" and open up a line of communication between parents, grandparents, foster parents, aunts, uncles, and community leaders to be able to talk to their teens. Many adults and their children want to talk about these topics but are not sure what to say or what questions to ask or where to find the resources they need to conduct these conversations.

This 4 hour FREE program is offered three times a year (Spring, Summer, & Fall). TST targets parents and/or main caregivers (e.g., foster legal parents, guardians, grandparents, aunts, uncles, etc) because they may not know the correct terminology and facts about sexual health, and TST fills that void through comprehensive sex education for the parents and their children. Parent education is an important part of the TST program's basic approach about the responsibilities and consequences of being sexually active. Program components help to ease the discomfort that many parents feel about initiating the conversation. Parents may not know the correct terminology and facts.

The TST program is divided into two major parts. The first part of the program, "Teen Pressures," is presented by Texas Tech University (TTU) Faculty, Graduate Students and professional counselors found in the Lubbock community and surrounding West Texas area, and allows for open discussions on topics including: teen pressures, dealing with peer pressures, body image, good nutrition, depression and suicide, selfesteem, and sexuality. All issues that may lead to the high rate of teen problems such as depression, eating disorders, suicides, drug & alcohol abuse and sometimes teen pregnancies & STDs. The second part of TST program presents the "Big Decision," which is a comprehensive sex education program provided by TTUHSC OB/GYN Faulty and Residents, Medical Students, Nursing Faculty and Nursing Students. This program helps to open the lines of communication by instructing with pictures, diagrams and dialogue, along with providing resource materials for adults and adolescents on including: abstinence. responsibility and consequences, male and female anatomy, teen pregnancy, sexually transmitted infections, contraceptives and protection. At the end of each session, there is a question and answer section. In addition, community resource fairs are offered at each of the main presentations. One of the TST programs held in 2009 included three national speakers as well as 25 booths from community organizations that provide free information materials for all participants on multiple services available in the community for families and adolescents.

To better serve the target population and in addition to the 3 main community wide programs currently offered per year, TST will be delivered in the community in 1 ½ hour workshops during 26 weeks between January-December 2012. Those workshops will cover the same information presented in the main programs but will be presented in short modules that will allow the TST team to reach to families and adolescents who cannot attend to main programs. Additional advantages of having the 3 main programs plus the short workshops will be to follow-up with families and adolescents on a timely manner, providing them with additional information as well establishing TST as a permanent ongoing resource for the support of positive adolescent development and the well-being of families in the Lubbock community. The Lubbock TST program has approximately 1200 teenagers and adults since 2008. Since the TST program was launched in 2008, it has completed 12 community wide presentations; it has been

presented in all (4) Lubbock Boys and Girls Clubs, and has been presented to numerous organizations, news media, and at many health fair gatherings.

The "Teen Straight Talk" Program is part of a vision that many organizations individuals in Lubbock have dreamed of and worked for in order to try and reverse these high rates of women's health and social complications. The program serves a variety of Hispanic and other ethnic minority families and teens and a great majority of participants come from low-SES neighborhoods in Lubbock and surrounding rural small towns. TST is currently 100% financially supported by more than TST is currently supported by almost community, national state. and organizations, businesses and individuals in the Lubbock region. The program is presented by Texas Tech University (TTU) main campus & TTU Health Science Center (TTUHSC) faculty and medical doctors, graduate and undergraduate volunteer students and residents as well as educators and health professionals found in the Lubbock community and surrounding areas of West Texas. TST team of volunteers and presenters donate their time and are highly committed with positively impacting the lives of Lubbock families and youth.

Since 2008, with the approval of Texas Tech University Institutional Review Board, Dr. Linda Brice (Director of Programs) and Dr. Elizabeth Treios-Castillo (Director of Research & Grants) have been collecting data from participant parents/caregivers and adults on the psychosocial factors related to teen pregnancy and STDs including a program evaluation component to assess the effectiveness of TST. Data includes collection demographic information (e.g., age, sex, family structure, family income, country of origin,

immigration status, race/ethnicity, and location -urban-rural). A second section includes an instrument about parent-child communication adapted from the Human Sexuality Education Concepts Scale by Chamberlain, Mendiola, Cummings (1983). The subscale contains 30 items about parent-child communication regarding sexual topics that include physical and psychological changes during puberty, pregnancy, sexually transmitted diseases, peer pressure, among others. the subscale is rated using a likert-type scale ranging from 1="very little" to 5= "a great deal". the last section of the data collection instrument includes items about parental attitudes regarding sex education and sexual activities. This subscale was adapted from the Sex Education Inventory by Bennett and Dickinson (1980). The subscale contains 2 questions about who, according to the parent, should be responsible for educating teenagers regarding sexual development and behaviors (e.g., birth control. puberty. morality. sexual intercourse). Data collection also support the scholarly and professional training of graduate and undergraduate students and faculty collaboration across multiple disciplines at TTU main campus (Human Development Sciences, Psychology, Social Work, Sociology) and TTUHSC (Nursing and Medicine) who participate at all stages of the program planning and delivery to the community and the data collection and analyses process as well as production of empirical articles for publication. conference and other presentations. academic activities. Activities include presentations at national conferences: Society for Prevention Research (SPR), Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN); State conferences: Texas Council on Family Relations (Texas CFR) and local conferences: Region 16 Youth Summit, Building Strong Families. Faculty and graduate students from both campuses are involved in continuous training undergraduate volunteers. community leaders, and school personnel as well as they present the TST program at local schools, health fairs, the Boys & Girls Youth Clubs, and community meetings and workshops. Undergraduate students participate in many TST activities as volunteers and/or for course credit and practicum.

TST the traditional deficit merges identifies orientation research that adolescent problems and factors that lend to those problems. To help teens, the TST program developers also "employ strength-based orientation. focus on understanding, foster[ing] and the developmental experiences and resources that enhance educational, social, and health outcomes" (Benson. Mannes. Pittman, & Ferver, 2004, pp. 782). The model that TST uses promotes healthy behaviors prevents unhealthy behaviors. specifically risky sexual behaviors, through parent and adolescent sexuality education. Preliminary analysis of evaluation data suggests that TST is useful in educating parents about sexuality and sexuality related topics.

TST has recently started the program at middle and high school students (takes about 5 weeks to present per grade) and school parents' night at surrounding communities (15-20 miles away) and faith-based institutions. The program was presented to 6th-12th grade male and female students at one of the Independent School Districts in Lubbock County with the involvement of approx 25 graduate and undergraduate students.TST is also being taught by medical students in the high school Health Classes in the largest

Independent School Districts in the county, and has been taught at the local Boys & Girls Clubs, community centers and soon in one of the local churches to their youth.

Continuous workshops and meetings are also conducted with faculty, graduate and undergraduate students for debriefing and evaluation of the program and target population needs, and planning/ completion of scholarly activities. Because the TST program serves a great portion of Hispanic families and youth, bilingual materials are also produced by bilingual graduate students and faculty. Efforts are being made for acquiring a lab space where students can work with TST data and to produce materials for community and school presentations; computers and other equipment (projectors, screens, and printer) are greatly needed for the continuation of the program.

Conclusions

Unlike numerous areas of medicine. societal medical issues often require a team approach to have any chance of impacting the issue in a positive way. Often, while the results of a disease or condition can be treated in a single patient by a single individual practitioner, the underlying problem is so vast no single provider could hope to have meaningful impact on the societal implications. Such is the case in teen pregnancy and sexually transmitted infections (STI). While a single practitioner can deliver a teen's pregnancy or treat her for STI's (or unfortunately often both) and might even council the individual on future prevention, they lack the time and skills to work on prevention on a societal level. The only approach with hope of success is to involve a team of researchers, physicians, nurses, other health care providers, specialist in high risk teen behavior, and community volunteers to offer community awareness, treatment, and an educational resource for all involved (teens, parents, practitioners, community leaders and educators). Teen Straight Talk has attempted to be that program for this community. Using the skill sets of members of the Schools of Nursing and Medicine, Faculty from the TTU campus and concerned community individuals, we have provided forums on the topics of teen pregnancy, STI's, peer pressure, overall teen wellness, STI screening and safe sexual practice. Teen Straight Talk has been slowly making policy and social changes in Lubbock, Texas and the surrounding rural communities of West Texas. TST efforts have translated into a definite policy change for the schools and for the community. The City Board of Health is currently revising its Abstinence-Only Education Policy in response to the impact of the Teen Straight Talk Program in the community; the board has informed that that they will soon address the Mayor and City Council to adopt our program throughout the community. TST has partnered with approximately 40 agencies and associations in the Lubbock community and Texas Tech University & Health Science Center campuses. In association with some agencies, external funding is being pursued for the development of joint programs that will provide comprehensive services for families and youth as well as provide professional opportunities grad/undergraduate students. Thus far, TST has received in-kind donations from some local TV & Radio stations and newspapers to advertise TST program activities as well raising awareness on the teen pregnancies and STDs problems. Though we are very appreciative of their kind support, we also understand that the TST program advertising costs won't be always sustained by donations. Thus, we are planning the

development of a website that could be maintained by the graduate students which will include detailed information of the TST program (calendar of activities, pictures, volunteering, etc), reliable and useful links for parents and teens, printable informational and scholarly materials on Adolescent Healthy Physical, Emotional, and Social development, and other appropriate materials or functions (e.g., posting questions for health professionals).

One of the most salient impacts of TST is reflected on the small changes adopted by the City Board of Health. We anticipate that our participation in Junior & High Schools will increase with the opportunity to work along with educators and school personnel to empower families and youth with comprehensive sexual education. multidisciplinary (TTU/TTUHSC) and multilevel nature (faculty, graduate/undergraduate students. community leaders & school personnel) of the TST program permits an examination of psychosocial, family, and community factors associated with teen pregnancy and STDs across varied populations—about 75% of the population served by the TST are ethnic minorities, low SES families, and rural populations. TST also informs health practitioners and professionals working with those populations about the impact of family involvement and psychosocial factors adolescents' healthy development and associated behavioral outcomes. It is anticipated that community agencies and non-profit organizations aiming to develop prevention/intervention programs to promote positive comprehensive development in teens and families will be benefited as well due to the close collaboration with TST personnel. implications Other broad include generating new information on ethnic/racial minorities, preparing the ground for future ELIZABETH TREJOS-CASTILLO, NANCY TREVIÑO-SCHAFER, LINDA BRICE, KATHLEEN MCPHERSON Teen Pregnancy and Sexually Transmitted Infections in Youth: A Community Prevention Evidence-Based Program in Texas, USA

research and community-university initiatives to healthy sexual development on adolescents and associated outcomes, and finally, providing training opportunities for graduate students in conducting community-based research, developing community outreach programs and increasing the participation of minority

individuals in research. Our team comprises bilingual professionals in nursing, medicine, mental health, behavioral/social sciences, community outreach, prevention and intervention with extensive experience working with minority populations, data collection and scholarly production.

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