ADDRESSING TEEN PREGNANCY IN RURAL SETTINGS THROUGH COMPREHENSIVE TEEN-FOCUSED PRENATAL PROGRAMS

by

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During an internship at Magee-Womens Hospital, I had the opportunity to work with the teen centered prenatal care program. Through my interactions with the teens, I found that it is very beneficial to them to have access to a prenatal care program that is teen-focused. I wondered if access to the same type of program would be beneficial to pregnant teens in rural areas.

Although rates have declined, teen pregnancy continues to be a public health issue with significant social and economic implications. Pregnant teens are a vulnerable population at higher risk for poor prenatal and post-partum outcomes. Pregnant teens have unique circumstances that require a different approach than that provided to pregnant adults. Teen parents lack parenting skills and are at a higher risk for child abuse and neglect. Teen mothers are less likely to finish high school and more likely to have poor long-term outcomes. Teen pregnancy in rural settings is as much of an issue as teen pregnancy in urban settings, however, the availability of teen-focused prenatal services in rural areas are disproportionately low. Pregnant teens in rural areas are limited to seeking care in adult-focused clinics or traveling to neighboring urban counties for teen-focused services.

Providing care in a teen-focused setting allows teens to learn needed skills in a supportive atmosphere. A teen-focused program addresses issues such as increasing the use of contraception to prevent subsequent pregnancies; it also provides nutritional counseling, teaches parenting

skills, encourages continued education, and identifies available resources. Teen Outreach is an example of a comprehensive teen centered education program located in Washington County, PA. The program provides prenatal, post-partum, and parenting education for pregnant teens in a rural setting. The purpose of this thesis is to address the need for comprehensive teen-focused prenatal programs in rural areas.

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PREFACE

I would like to thank my husband and children for being so supportive and patient with me throughout this process. It seems like it took forever and you guys were troopers during it all. I know that having you guys in my life has inspired me to work hard. I am reminded daily of how truly blessed my life is with you in it.

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I would like to express my admiration for Mary Jo Podgurski, she has worked hard for decades to help young mothers achieve their highest potential. Her work is truly inspirational and her dedication is obvious. I would like to thank her for taking time to provide me with information on her program; I wish her much success in the future.

1.0 INTRODUCTION

Teen pregnancy continues to be a health issue in the United States that has significant social and economic implications. According to Healthy People 2010, half of all pregnancies in the United States are unintended; that is, at the time of conception the pregnancy was not planned or not wanted. Unintended pregnancy rates in the United States have been declining, with rates remaining highest among teenagers, women aged 40 years or older, and low-income African American women. Approximately one million teenage girls each year in the United States have unintended pregnancies. The cost to U.S. taxpayers for adolescent pregnancy is estimated at between \$7 billion and \$15 billion a year.

Pregnant teens tend to have a higher risk for pre-term labor, low birth weight infants, and poor postpartum outcomes. They are more likely to initiate prenatal care later in their pregnancy and more likely to receive inadequate care. Pregnant teens lack access to available resources and often engage in poor health behaviors. Teen mothers are more likely to commit child abuse due to lack of effective parenting skills, higher rates of depression, and elevated stress levels. Research suggests that teen mothers are less likely to finish high school and more likely to end up in low paying jobs. Often, teen mothers from low socioeconomic backgrounds end up in a cycle of poverty.

Although pregnancy rates in rural areas are comparable to urban areas, the availability of teen focused services is disproportionate. Pregnant teens in rural areas lack access to teen

focused prenatal services. Problems with transportation and shortages of available services make it difficult for them to benefit from teen focused care. Pregnant teens often have to seek prenatal care in adult focused clinics. These clinics are geared towards adult women and do not effectively meet the unique needs of pregnant teens.

The Teen Outreach program provides adolescent-focused care to pregnant and parenting teens. Since the inception of the program teen pregnancy rates in Washington County have declined and the rate of teen mothers who graduate from high school has increased. Pregnant teens in rural areas need access to teen focused prenatal services to ensure the best outcomes for mother and baby. With a little bit of education, assistance, support, and encouragement young mothers can endeavor to reach their highest potential.

2.0 LITERATURE REVIEW

2.1.1 Pregnancy Rates

Adolescent pregnancy, birth, and sexually transmitted disease (STD) rates are much higher in the United States than in most other developed countries such as Great Britain, Canada, France, and Sweden (Darroch, Singh, & Frost, 2001). The age at which teenagers begin sexual activity is about the same across these countries; however, American teenagers are more likely to have multiple partners. Research suggests that only 38% of American teens use contraception to prevent unintended pregnancies. According to National Vital Statistics Reports, teenage pregnancy rates have declined steadily since 1991. This decline included both 10-14 year-olds and 15-19 year-olds. However, the latest statistics show that pregnancy rates among 15-19 year-olds rose three percent in 2006 while pregnancy rates among 10-14 year-olds continue to decline.

2.1.2 Prenatal Issues

Pregnant adolescents are a very vulnerable population, experiencing disproportionately high rates of adverse birth outcomes, including low birth weight (LBW) infants and infant mortality (Flynn, Budd, & Modelski, 2008). It is estimated that 33-50% of pregnant teens receive no prenatal care. Lack of prenatal care increases the risk of premature birth, low birth weight and

infant mortality. Because a large percentage of teens do not receive prenatal care, adolescent mothers are two to three times more likely than slightly older mothers to have low birth weight infants or infants who do not survive. The most commonly cited reasons for teens not to get prenatal care are 1) lack of knowledge regarding its importance, 2) lack of transportation, and 3) lack of health insurance.

The two main factors that cause these adverse health outcomes among babies born to teens are lack of access to resources and individual health behaviors. Often pregnant teens do not have access to needed services. There may be problems with securing transportation to and from appointments, understanding the requirements for assistance programs, and providing information to complete applications, for example, some teens do not know their social security number. Teens often make poor choices with individual health behaviors. They are more likely to choose nutritionally poor foods, engage in risky sexual behaviors, and participate in alcohol and drug use. Some pregnant teens continue with these types of individual health behaviors throughout their pregnancies.

One third of teens do not receive adequate prenatal care due to initiating prenatal care later in the pregnancy. Teens are less likely to consistently attend prenatal visits and follow the recommendations of their physician. Of the teens who are receiving prenatal care, many are not being educated on all of the available resources. One of the resources that tend to be underutilized by teens is the Women, Infants and Children (WIC) program. This program offers nutritional support in the form of food vouchers for pregnant women, infants and children up to five years of age. WIC can provide pregnant teens with nutritious foods and information on healthy eating. Research suggests that the program is not utilized more due to lack of information about the program and teens feeling shamed to use it.

Pregnant teens face many issues that are unique to their circumstances. For instance, very young pregnant teens may be required to have their parents sign consent forms for them to be treated. Teens under a certain age cannot drive and may not be able to obtain gainful employment. This may make it more difficult for them to get to prenatal appointments or pay for transportation services. Adolescents tend to be in unstable relationships and can often have conflict within their families. Due to this issue, sometimes a pregnant teen lacks the social support needed during her pregnancy. It is very common for pregnant teens to have problems in school. Providing comprehensive prenatal care to adolescents can prove to be difficult as this group has an increased prevalence of mental health problems and risk behaviors such as substance use and abuse. In addition to the challenges already identified, pregnant teens may have to deal with the stigma that sometimes comes along with being young, unwed and pregnant.

2.1.3 Teen-focused Prenatal Care

For teens who do seek prenatal care, a teen-centered program is the ideal situation. The most effective programs include an adolescent-centered practice with an interdisciplinary team, home visiting, and follow-up of mother and infant for one or two years postpartum (Bensussen & Saewyc, 2001). Teen-focused clinics provide information and education that is geared specifically toward an adolescent population. Printed materials and pictures portray population specific images and create a positive atmosphere. In a study that compared teens who received prenatal care in a teen-focused program with teens who received care in an adult-focused program, the overall outcomes were better for girls in the teen-focused group. The research showed that teens were seeking continuity in care and were more likely to attend follow-up visits if scheduled with the same clinician. At the teen clinic, the same clinician was more likely to

follow teens throughout their pregnancy. In the adult-focused program, patients were often scheduled with a different clinician.

In the same study, teens who received care at the teen clinic received significantly more maternity support visits on average, were less likely to have cesarean section or forceps/vacuum-assisted deliveries and had infants with significantly higher birth weights than teens seen at the adult clinic. Higher birth weights reduce the chance of the newborns needing intensive care services. The teen clinic group was more likely to receive a 48-hour discharge home nursing visit, to return for a two week postpartum check-up and six to eight week exam, and 87.7% of the teens seen in the teen clinic were using a contraceptive method by eight weeks (Bensussen & Saewyc, 2001).

2.1.3.1 Teen Prenatal Care Costs

The social and economic costs of necessary medical care and social support for pregnant teens are considerable, as this population is disproportionately poor. National estimates for Aid to Families with Dependent Children (AFDC), food stamps, and Medicaid for teens alone totaled \$16.6 billion in 1986 (Kay, Share, Jones, Smith, Garcia, & Yeo, 1991). With the cost rising, some states are taking steps towards trying to improve prenatal care among teens. Adequate prenatal care has been shown to help reduce costs by reducing infant morbidity and mortality.

The state of Michigan established a network of teen health centers to provide health and medical services. Research was conducted to determine whether or not it is cost effective to provide health programs exclusively aimed at teens rather than to integrate services to adolescents into existing programs (Kay et al. 1991). One facility was a community-based program designed specifically for adolescents and the other facility was a traditional university medical center. The study looked at the differences in the process of care between the two

facilities and evaluated the resulting costs and pregnancy outcomes of the teen-focused program with traditional care in terms of the following criteria: 1) The average number of prenatal visits per client, 2) the percentage of clients beginning prenatal care during the first trimester of pregnancy, 3) the percentage of clients with full term births, 4) the percentage of clients with low birth weight births, 5) the percentage of clients with maternal complications, 6) the percentage of infants born to clients requiring neonatal intensive care, and 7) the value of resources consumed in delivering prenatal care.

In addition, differences in postpartum pregnancy rates and use of contraception were assessed. The teen-focused program utilized peer education that stressed pregnancy prevention and provided comprehensive primary care in addition to prenatal care. Patients at the teen-focused program received more prenatal care visits but used fewer technology-intensive resources than patients at the traditional clinic. Patients who received care at the teen-focused clinic had higher rates of contraceptive use postpartum and lower rates of subsequent pregnancies than those at the traditional clinic. The research found that comprehensive teen-focused prenatal care was more cost effective than traditional clinic based care: average cost of all resources consumed was \$776 per patient at the teen-focused clinic and \$1,918 per patient at the traditional medical center. The results of the study support the conclusion that a community-based teen health clinic center can provide high quality prenatal care to adolescents in a cost effective manner (Kay et al. 1991).

2.1.4 Parenting Issues

Teens face unique obstacles once they become parents. After delivery, teen parents face significant socioeconomic issues and are more likely to experience depression and low self-

esteem. The incidence of child abuse and neglect is substantially higher among teenage mothers. Approximately eleven percent of the children of adolescent mothers are victims of child abuse (Maynard, 1996). In addition, children of teen parents are at increased risk for behavior disorders, cognitive deficits, and hospitalizations for unintended injuries.

Research has shown that there is considerable variability in adolescent parenting skills and mother-child interaction among adolescent mothers (Thomas & Looney, 2004). Many young mothers are still immature and simply lack the skills and knowledge needed to be an effective parent. Factors such as low self-esteem, depression, immature attitudes, and parenting beliefs contribute to inadequate parenting skills in adolescents, which can lead to child abuse and neglect. These inadequacies include inappropriate expectations of children, parental lack of empathy toward children's needs, strong belief in the use of corporal punishment as a means of discipline, reversing parent-child role responsibilities, and repressing children's power and independence (Thomas & Looney, 2004).

2.1.5 Long Term Outcomes

Becoming a mother as a teenager is associated with higher risk for a number of poor long-term outcomes. Teen mothers are less likely to finish high school, less successful in the job market, less likely to marry, and more likely to rely on public assistance than women who have children after their teen years. This population tends to have a higher school dropout rate than female teenagers in general and may have difficulty obtaining a GED. Teen mothers also tended to have more births by age thirty than the other mothers, and had spent a greater proportion of this time interval unmarried.

The background from which the teen mothers come, including socioeconomic status (SES), parental educational level and family history of teen pregnancy may have more of an effect on the long term outcomes than early childbearing. A study conducted by SmithBattle (2007) followed teen mothers over a sixteen year time span, from the time they gave birth until the time they were in their thirties. The teen mothers were indentified from three different backgrounds; low income, working class and middle class. Based on the results of this study, teens from an advantaged background tend to fare better than teens from a disadvantaged background. Teens from advantaged backgrounds had received a high school diploma and in some cases completed a college degree. Most of these teens had attended schools that provided on-site day care, parenting classes and transportation. Teens from low SES background were more likely to drop out of school during or after the pregnancy, were less likely to return to school, had a harder time obtaining a GED, and were more likely to have remained in low SES situation sixteen years later. In fact, after sixteen years, teen mothers in all but one case had replicated the class positions of their families of origin; that is middle class teens were solidly middle class, teens from working class backgrounds were working class, and impoverished teens were poor (SmithBattle, 2007).

Teens from a disadvantaged background lack options and resources available to assist them. These teens tend to remain in impoverished areas, be poorly educated, and obtain low paying jobs. Programs that help teen mothers to continue their high school education and develop employment skills can help to offset coming from a disadvantaged background. Three studies of teenage mothers who had received prenatal care in multidisciplinary, teen-focused programs with a maximum of two years follow-up demonstrated long-term effects. Outcomes twenty years later found that roughly two thirds of these mothers had completed school, no

longer depended on welfare, and had improved their employment status (Bessussen & Saewyc, 2001).

2.2 RURAL PRENATAL CARE

Nearly one quarter of the nation's youth live in rural areas and these same adolescents have or are exposed to significant levels of risk factors for early childbearing such as poverty, social isolation, and substance abuse (Robinson & Price, 1998). Pregnancy rates among rural adolescents fifteen to nineteen years old was 93.2 per 1000 in 1990 (Anderson, Smiley, Flick, & Lewis, 2000). Most programs that target pregnancy prevention and adolescent pregnancy are geared towards urban populations. Rural areas often receive little funding for these types of programs. The statistics suggest that there is not much of a difference between urban and rural adolescents. Like their urban counterparts, rural teens need access to comprehensive prenatal care.

Researchers at the University of North Carolina at Chapel Hill (UNC-CH) found that rural adolescent pregnancy had not been studied extensively; they were able to identify fewer than ten citations specific to rural adolescent pregnancy out of a review of over two thousand citations in ten online bibliographic databases (Anderson, Smiley, Flick, & Lewis, 2000). Based on this information, they conducted a study of adolescent pregnancy among eight Southeastern States (USDHHS Region IV) for the period October 1, 1993, to December 31, 1995. The major conclusions of the Southeastern Region IV study were as follows:

- 1. Adolescent pregnancy and childbearing are as prevalent in rural as urban areas.
- 2. Early childhood pregnancy to ten to fourteen years old is equally a problem, and many teens experience repeat pregnancies and multiple abortions by age twenty.
- 3. There are marked differences in the supply and distribution of abortion services in urban and rural areas in USDHHS Region IV.
- 4. Rates of poor birth outcomes are similar in urban and rural areas for teens of all races.
- 5. Public resources are directed at support for teen mothers and their infants rather than at prevention of teen pregnancies.
- 6. Special issues should be considered when addressing teen pregnancy in rural areas, such as (a) transportation services, (b) poverty and lack of health insurance, (c) the confidentiality factor, (d) provider shortages, (e) concentrations of minority populations, (f) low educational attainment and economic opportunities, and (g) lack of human services organizations (Anderson, Smiley, Flick, & Lewis, 2000).

The Missouri Rural Adolescent Pregnancy Project (MORAPP) was developed as a replication of the study conducted by the University of North Carolina but focused on Missouri adolescents. The Missouri Rural Adolescent Pregnancy Project sought to determine if there was a difference in pregnancy and birth rates of rural and urban adolescents, and to determine if there were similar services for adolescents in both settings.

The state of Missouri has 114 counties; for this study each county was categorized as either rural or urban and detailed information was gathered. Table 1 identifies the types of services and distribution of these services across rural and urban counties.

Table 1. Missouri Counties with Adolescent Fertility Services (Total Counties = 114)

Types of Adolescent Services	Rural Counties (n=92)	Urban Counties (n=21)
Adolescent Prenatal Care	26 counties (28%)	11 counties (52%)
Adolescent Family Planning	21counties (23%)	7 counties (33%)
Abortion Services	1 county (1%)	6 counties (29%)

There are more than four times as many rural counties as urban counties in the state of Missouri. As can be seen in Table 1, a higher percentage of urban counties offer adolescent services compared to the percentage of rural counties. Of the 92 rural counties, only 23% offer adolescent prenatal care services; of 21 urban counties, 52% offer adolescent prenatal care services. At least half of the urban counties offer adolescent prenatal care services, while only one-fourth of the rural counties offer the same services.

The study found that maternal and child outcomes were worse in rural settings. There was a higher infant mortality rate among rural adolescent mothers and a higher rate of low birth weight infants. There were more teens with inadequate weight gain and preterm births in rural settings. The study also found that rural mothers age ten to fourteen years old were less likely to receive any prenatal care than older teens in either urban or rural settings. Another important factor is socioeconomic status. The highest percentage of teen births (34%) was found in Pemiscot County where approximately 31% of the population lives below the poverty line. The poorest counties in any region of the country tend to have the highest birth rates to teens, regardless of whether the county's population is predominantly black or white (Anderson, Smiley, Flick, & Lewis, 2000).

2.2.1 Rural Pennsylvania

The state of Pennsylvania rates ninth in the nation for the number of teen births (Pennsylvania Rural Health Association, 2003). Forty-eight of the sixty-seven counties in Pennsylvania are considered rural. In the state of Pennsylvania, the statistics in rural and urban teen pregnancy outcomes are similar in all but a few areas. In the year 2000, fifteen percent of the births in rural areas were to mothers who did not complete twelfth grade compared to fourteen percent in urban

areas. Three percent of rural births did not occur in a hospital setting while only two percent of urban births did not occur in a hospital setting. Twelve percent of rural births were not attended by a physician compared to eight percent of urban births. The rate of uninsured children is higher in rural areas at twenty-one percent compared to urban areas at eight percent.

Pennsylvania's Rural Counties Erie Susquehanna Warren McKean Bradford Tioga Potter Crawford Wayne Forest Wyoming Cameron Sullivan Venango Pike Lycoming Mercer Clinton Clarion Luzerne Monroe Columbia Clearfield Lawrence Union Centre Carbon Butler Armstrong Snyder North ampton' Schuylkill Beaver Indiana Mifflin ehigh Juniata: Cambria Blair Allegheny Huntingdon Perry Bucks Westmoreland Washington Lancaster Philadelphia Bedford Somerset Fulton Franklin Fayette York Adams Greene Source: United States Census Bureau, Census 2000 Rural Urban

Figure 1: Rural and Urban Counties in Pennsylvania

Unlike the public transit system that serves most urban areas, public transportation is either sporadic or nonexistent in rural Pennsylvania (Pennsylvania Rural Health Association, 2003). Pregnant teens often have difficulty getting to and from prenatal appointments and often have to travel upwards of fifteen miles to get to the nearest prenatal clinic. Travel distances can be even greater if they want to go to a prenatal clinic that is teen focused.

The number of teen services available in rural areas is less than the number of services available to teens in urban areas. For example, a web search of "teen prenatal services in Allegheny County, PA" (an urban area) produced 16,500 results. A web search of "teen prenatal services in Juniata County, PA" (a rural area) produced 642 results. Also, some rural counties promote teen services in neighboring urban counties.

According to Price and Hertzberg (2006), rural Pennsylvania is poorer compared to urban Pennsylvania than it was at the end of the prosperous 1970's; this is true for rural Pennsylvania as a whole and within each of rural Pennsylvania's western, central, and eastern regions considered separately. Many pregnant teens in rural Pennsylvania come from low income backgrounds. All of these conditions combined increase the chance of young teen mothers receiving less than adequate prenatal care, having poor postpartum outcomes, and continuing in a cycle of poverty.

3.0 TEEN OUTREACH

Teen Outreach is a comprehensive education program developed by the Academy for Adolescent Health. This program is based in Washington County, Pennsylvania, a predominately rural county. The program employs fifteen staff members and serves approximately 158 teens a year throughout Washington, Greene and Fayette counties. Information on the Teen Outreach Program was obtained from personal communication with Mary Jo Podgurski, RNC, MA, FACCE, President of the Academy for Adolescent Health, Inc.

The staff of this program aim to educate, empower, and prepare young people for many of the issues they will have to face as they get older. The program started in 1988 in collaboration with The Washington Hospital and originally provided sex education in local school districts. It eventually evolved into a broad outreach program covering many teen issues. Teen Outreach still provides teen sexuality education to the local school districts but now also offers education in the form of community in-services at churches, youth groups, and community centers. The program also provides home-based education on an individual basis.

One of the most recent aspects of the program is collaboration with other healthcare professionals through periodic in-services and training to teach healthcare providers how to be sensitive to adolescent needs. These specific services are available through a new project called the Adolescent Healthcare Communication Project (AHCCP). Having a working relationship with local healthcare professionals and hospitals allows the program to maintain a solid referral

base. Teen Outreach had several referral sources including schools, health care providers, clinics, children and youth services, and families and friends. This, along with the work that staff does, has allowed Teen Outreach to build a solid reputation in the community over the years.

Several of the programs offered through teen outreach utilize peer education as a positive method of educating young people. The peer educators are formally trained by staff members. The program established an adolescent advisory board to review curriculum and provide insight into adolescent needs and culture. The Teen Outreach peer educators accompany adult educators to middle schools and elementary schools. They help provide role playing, interactive learning experiences and discussions on relationships, peer pressure, and postponing sexual activity. Through Real Talk Performers, the peer educators create and perform cutting edge original educational drama for both young people and adults. This group has received five first place awards at the Pennsylvania Coalition to Prevent Teen Pregnancy annual Youth Conference in Harrisburg and was awarded the Coalition's Youth Advocacy Award in October 2003. By providing a very interactive program, Teen Outreach has no problem involving teens. The program also has vans and drivers to provide transportation to teens who need it.

3.1 TEEN OUTREACH PHILOSOPHY OF EDUCATION

The staff at Teen Outreach are a dedicated group of individuals. They realize that this is not a nine-to-five job and adhere to the following philosophy:

Empathy is your pain in my heart - Author Unknown

- All young people are worthy of respect and will be given equal educational opportunities
 regardless of gender, race, ethnicity, life style or belief system. Gender stereotypes and
 sexist language will be avoided.
- Outreach education is multicultural, promoting awareness of the individual needs of students from all backgrounds. Narrow-mindedness or discrimination will not be tolerated.
- Parents should be the foundation of a pyramid of good health. Parent/youth communication in the vital area of human sexuality is to be promoted and encouraged.
- Education should be an interactive, joyous and invigorating experience. The only way to be empathic to a young person's needs is to truly listen to that young person.
- Risk behavior is discussed clearly and accurately, avoiding the imposition of shame or guilt.
- Students are encouraged to speak openly and directly to Outreach educators, with a promise of confidentiality. In cases of abuse or physical/mental danger, the student is advised that the Outreach educator will need to break confidentiality to the proper authorities. Every attempt will be made to involve the student in the decision making process and advise the student of the necessary course of action.
- Outreach educators have no time limit on their caring for kids. Students may contact an
 Outreach educator whenever necessary.
- There is no better education than that given by example. Outreach professionals are cognizant of their role as models for youth and conduct their lives accordingly.

- Effecting behavioral change in the area of healthy sexuality is a challenge. There are no magic bullets or simple solutions. Our efforts must be caring, consistent, constant, and collaborative in the community.
- No one cares what an educator says until it is clear that the educator cares.

3.2 TEEN OUTREACH PROGRAMS

Teen Outreach is an umbrella program that has several smaller programs under it. These programs range from basic sexuality education to more involved parenting education.

3.2.1 Postpone, Prevent, Prepare (PPP)

The Postpone, Prevent, Prepare (PPP) program is the oldest of all the teen outreach programs. The program was initiated in 1989 and today reaches over 10,000 students from 39 schools in four different counties. This program uses educational classes to emphasize postponing sexual involvement, preventing pregnancy/sexually transmitted diseases, and preparation for childbearing. The PPP program offers classes that are fun, dynamic, interactive, and draw on educational theories that encourage experiential learning. These sessions empower young people with the skills they need to attain sexual health through postponing sexual involvement, reducing risk, and removing misinformation regarding sexuality.

The sessions are divided into the topics of postponing sexual involvement, preventing pregnancy by focusing on abstinence as well as prevention, and avoiding sexually transmitted infections and HIV/AIDS. The material on postponing sexual involvement includes emphasizing

the difference between sex, love, and lust and helping students discover goals and aspirations for relationships. Myths and misconceptions about sexuality and pregnancy are dispelled and teen pregnancy issues are incorporated into the classes. Many learning tools are used to reinforce key points, for example, the use of the "Empathy Belly." The HIV/AIDS discussion centers around the fact that AIDS is a disease usually associated with risky behaviors, and students are taught refusal and decision-making skills which enable them to avoid these behaviors. Positive communcation with parents is stressed and relationship and communcation skills are modeled. The PPP program involves peer role playing closely supervised by a health care professional skilled at facilitating discussion on sensitive subjects. Since Teen Outreach began in 1989, the pregnancy rate has decreased significantly. The information in figure 2 shows a 43% decrease in teen pregnancy among fifteen to seventeen year olds since Teen Outreach began.

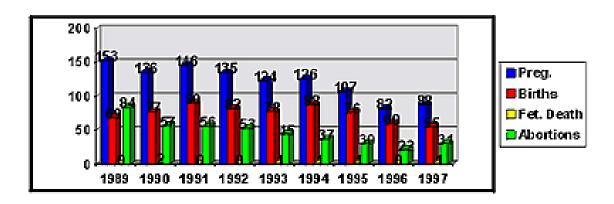


Figure 2: WASHINGTON COUNTY TEEN PREGNANCIES REPORTED BY OUTCOME AGE = 15-17

The information in Figure 3 shows a 39% decrease in teen pregnancy among eighteen to nineteen year olds since Teen Outreach began.

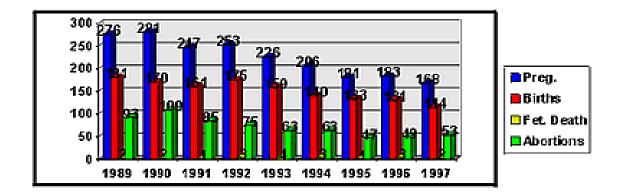


Figure 3: WASHINGTON COUNTY TEEN PREGNANCIES REPORTED BY OUTCOME AGE = 18-19

3.2.2 Parent/Youth Sexuality Education

The Parent/Youth Sexuality Education program is designed to increase communication between parent and child on sensitive issues such as puberty and sexuality. The classes are divided into parent/daughter and parent/son groups and target young people ages nine to twelve years old and youth ages thirteen to fifteen years old. These classes are unique, interactive, and dynamic; and are offered monthly at The Washington Hospital or in the community when requested by groups and organizations.

3.2.3 ECHO – Educate Children for Healthy Outcomes

The Educate Children for Healthy Outcomes (ECHO) program is an early intervention program that seeks to reach young people and their parents before a child is at risk for displaying

unhealthy behaviors. ECHO focuses on strengthening the parent/child relationship, improving communication skills, developing decision making skills, teaching tools for building self awareness and positive self esteem, empowering young people with strength to avoid risky behavior, and providing intensive mentoring for youth who have experienced abuse, abandonment, a sibling who experienced early child bearing and other challenging life events. One on one mentoring education for young girls/teens in grades 3 - 8 and their families is held weekly with long-term goals of increasing awareness of high risk behavior and environmental factors, improving self-esteem and self awareness, modeling healthy choices and positive communication and empowering parents/guardians to empower their children as adolescence begins. Educating children at an early age gives them the information they need to make healthy choices. ECHO is outcome-based and parents are an integral part of this mentoring program. The staff seeks to empower parents and guardians with parenting skills that are vital as adolescence looms. ECHO advisors are educators and social workers skilled at sharing information with the family. This information will help parents become an important source of support for their child as he or she reaches for adulthood. Advisors conduct home visits with parents/guardians to assess the child and the family's need and then conduct one on one weekly mentoring with target youth.

3.2.4 Real Dads Fathering Program

The Real Dads Fathering Program provides support, information and motivation to young fathers in the areas of parenthood, relationships, sexuality and responsible manhood. Specifically it offers peer support and discussion groups for fathers involved with teen moms, mentoring services, skill building home visits, and employment assistance. The fathering program is

committed to supporting, educating, and challenging young fathers to actively parent as well as identify a father's role in the family. Young fathers are encouraged to maximize their personal involvement and provide leadership, teaching, love, financial assistance, and guidance to help their children develop and grow. Often the young father is overlooked in teen pregnancy programs. Young fathers are linked with adult volunteers to establish a mentor relationship. Through these relationships the vital importance of fathering in a child's life is stressed and encouraged. The staff acknowledges the reality that children born to young mothers are more likely to be fatherless and endeavor to increase the quality of father involvement. They strive to stop the cycle of early childbearing and its consequences by reaching out to each young parent, both make and female, with mentoring that will model good parenting. This is a community leadership initiative that needs the help of experienced fathers. The harsh truth is that people instinctively parent as they are parented. If a boy's contact with his father is non-existent or negative, he has no role model for fathering well. Committed, caring community mentors can bridge the gap between the past and the future. Through this program the staff supplies the experience, the energy and the spirit to touch these young people forever.

3.2.5 Pregnant and Parenting Teen Program (PPT)

The Pregnant and Parenting Teen (PPT) program was implemented to help teens prepare for childbirth, develop parenting skills, accept responsibility as a primary caregiver, continue working towards their diploma and develop life skills to carry them past high school. The program focuses on the unique needs of pregnant and parenting teens.

Girls receive services from the time they find out that they are pregnant until they graduate from high school. The program stresses the importance of continuing education to

improve independence, family security and socioeconomic outcomes. If a young lady chooses to leave high school prior to graduation, she will receive assistance in getting her GED. Staff members will also assist her in developing skills to secure a job and any other issues such as housing, applying for assistance and child care. The PPT program maintained an 85% or higher graduation rate over the past fifteen years.

Much of the program is conducted with the use of trained staff members. These staff members make home visits every other week and stay in contact with teens via phone, text or email in between. They are able to develop a mentor relationship with the participants and help them through the transition process of being pregnant, having a baby, and becoming a teen parent. Prenatal education is conducted during the home visits and staff members can assist teens with making prenatal appointments or setting up transportation to and from the appointments. This helps to educate teens on the importance of prenatal care and increase the chance that they will keep the appointment. Girls are educated on the importance of post partum contraception to prevent subsequent pregnancies. The subsequent pregnancy rate last year was less than 3% for teens enrolled in the program.

By conducting these sessions in the home, staff members are able to provide education to the girls' parents on the importance of social support. They are also able to help the girls' parents prepare for having a new baby in the home. The staff helps educate the girls' parents on how to help the new mother while letting her develop a sense of being the primary caregiver.

The PPT program offers Doula services teens and their support persons. Doulas can assist with many issues from prenatal through postpartum. During the prenatal period, Doulas can be available to answer questions. Doulas provide labor support with positioning, comfort measures, relaxation, breathing and reminders for staying hydrated. The Doulas can also offer

encouragement and coaching to the teen's support person. Doulas usually provide at least one post partum visit and can assist with issues such as breast feeding, baby positioning, and rocking techniques.

After the baby is born, new parents continue to get home visits for parenting education and life skills development. New parents are educated on what to expect for the first few months and how to deal with some of the difficulties associated with parenting. Their mentors are available to give them advice on how to deal with a crying baby, when they may need to call the pediatrician or just to offer encouragement. Participants are followed all the way through graduation and then phased out of the program.

Another aspect of this program is peer mentoring education. As a testament to the success of the program, many of the ladies who "graduate" from PPT stay on as peer mentors. These women feel so strongly about the importance of this program that they volunteer their time to help younger girls dealing with early childbearing issues. Once a month mentors organize events or group classes that cover various topics including child safety and sexuality education.

4.0 DISCUSSION

Pregnant teens benefit most from comprehensive teen-focused prenatal care programs. A comprehensive program should include prenatal care, education on a variety of topics, and mentoring to provide one-on-one support. Because teens have unique issues, the program should also provide nutrition counseling, transportation support, social services for referrals, and mental health counseling. Developing parenting skills, educational growth, and employment skills are important areas to address as well.

Providing adequate teen prenatal care, including prenatal education, helps to reduce preterm labor, infant mortality and increase birth weight in newborns. Prenatal services offered in a clinic that is geared toward an adolescent population with pictures and messages aimed at teens, would help insulate teens from some of the stress associated with stigmas. Teen programs can provide a welcoming atmosphere that contains printed materials with pictures of adolescent women, information and education geared specifically to teens and, best of all, other teens with whom they can relate. Using support services such as Doulas may help reduce the need for cesarean births and improve birth outcomes for mother and infant. Although Teen Outreach does not provide prenatal medical care, the staff offers support and guidance in scheduling and maintaining prenatal appointments with area physicians.

In addition to improving mother and infant outcomes, a comprehensive teen-centered prenatal program would address increasing contraceptive use and breastfeeding (U.S. Department of Health and Human Services, 2000). Post-partum education is imperative to help teen mothers to develop healthy lifestyle skills and care effectively for their babies. Teen Outreach provides post-partum education through the PPT program that aims to delay subsequent pregnancies.

Other goals of the U.S. Department of Health and Human Services (2000) include reducing child maltreatment. Teen parents often lack good parenting skills, a comprehensive program should provide parenting education for young mothers and fathers. Because many teen couples do not stay together, programs can equip teen couples with the tools to parent effectively if they choose not to remain a couple. Teen parenting education can be an effective intervention for improving parenting attitudes and beliefs; this can have a huge impact in terms of preventing adverse childhood experiences. Changes in immature attitudes and beliefs may motivate behavioral change in teen parents. Positive behavioral changes could include choosing healthy methods of discipline, developing skills to cope with crying babies, and maintaining newborn screening appointments. A teen's ability to develop these types of skills suggests an ultimate improvement in health promotion and disease prevention for her and her baby. Teen Outreach uses the PPT program to provide parenting education to young mothers. In home sessions allow staff members to teach effective parenting skills and assist teens in practicing what they learn. Teen Outreach uses the Real Dads Program to teach parenting skills to the young fathers. With both parents enrolled in programs that teach the same concepts, mothers and fathers can work together to effectively parent their children.

Eliminating welfare dependency and promoting continued education to improve employment opportunities are also important goals. A comprehensive program needs to address the difficulties that teen mothers face with staying in high school or obtaining their GED. There should be assistance available that provides quality childcare, transportation, and tutoring services. Mature women often have difficulty balancing work and motherhood; it is only common sense that young mothers will often have difficulty balancing school and motherhood. Mentors can assist young mothers in how to deal with juggling school work and parental responsibilities. The mentoring relationship between staff members and young mothers in the PPT program provides support for young mothers when they have difficulties completing school work while parenting. Staff members help set up tutoring services, arrange transportation or just be available to listen when teens need someone to talk to.

Teens in rural settings lack the same types of adolescent services available to their urban counterparts. Pregnant teens are often restricted to receiving prenatal care in regular adult centered clinics in rural areas or have to travel to neighboring urban counties to access teen focused prenatal care. To accommodate transportation issues, these programs may need to be based in schools or like the Teen Outreach program, involve home visits. Ideally, this would be in collaboration with a medical facility that provides teen centered prenatal care services. One of the deficiencies of Teen Outreach is that it does not work in collaboration with any medical facilities that provide teen centered prenatal care services. Prenatal medical care is provided by area physicians in adult-focused clinics and the information is not geared toward an adolescent population. Many pregnant teens may feel uncomfortable in these adult focused clinics due to staff insensitivity.

In general, Teen Outreach provides most of the services needed in a comprehensive teen centered prenatal care program. Although local clinics are not adolescent centered, the staff of Teen Outreach has initiated training to teach area physicians how to be sensitive to adolescent needs. Since the inception of Teen Outreach, Washington County teen pregnancy rates and subsequent pregnancy rates have declined and the rates of teen mothers who graduate high school have increased.

5.0 CONCLUSION

Adolescents sometimes have difficulty seeing past the current situation with which they are dealing. They may need education and assistance to think long-term and plan for their future. Educational information and clinical practices may need to be adjusted to meet the needs of short-term minded adolescents. Encouragement and support should be the foundation of any comprehensive teen program. Ideally, a comprehensive teen focused prenatal program would include all of the services previously mentioned. The program should start once a teen becomes pregnant and follow her through to adulthood, while helping her to establish a level of independence. Teens living in rural areas need to have access to the same types of services that their urban counterparts have.

More funding is needed to establish comprehensive teen-focused programs in rural areas. Comprehensive teen programs provide sexuality education aimed at preventing teen pregnancy and prevention of teen pregnancy is the first step towards ensuring a bright future for youth in rural settings. In the event of a teen pregnancy, however, teens in rural areas deserve reasonable access to teen-focused prenatal care. Pregnant teens in rural areas also need access to health insurance and transportation services to seek prenatal care. There is a need for teen pregnancy in rural areas to be addressed through comprehensive teen-focused prenatal programs.

BIBLIOGRAPHY

- Anderson, N. E., Smiley, D. V., Flick, L. H., Lewis, C. Y., (2000) Missouri Rural Adolescent Pregnancy Project (MORAPP). *Public Health Nursing*, 17(5), 355-362.
- Barnet, B., Duggan, A. K., Devoe, M., (2003) Reduced Low Birth Weight for Teenagers Receiving Prenatal Care at a School-based Health Center: Effect of Access and Comprehensive Care. *Journal of Adolescent Health*, 33, 349-358.
- Bunsussen-Walls, W.& Saewyc, E. M. (2001) Teen-Focused Care Versus Adult-Focused Care for the High-Risk Pregnant Adolescent: An Outcome Evaluation. *Public Health Nursing*, 18(6), 424-435.
- Cox, J. E., Bevill, L., Forsyth, J., Missal, S., Sherry, M., Woods, E., (2005) Youth Preferences for Prenatal and Parenting Teen Services. *Journal of Pediatric Adolescents*, 18, 167-174.
- Crosby, R. A., DiClemente, R. J., Wingood, G. M., Rose, E., Lang, D., (2003) Correlates of Unplanned and Unwanted Pregnancy Among African-American Female Teens. *American Journal of Preventive Medicine*, 25(3), 255-257.
- Darroch, J. E., Singh, S., Frost, J. J., & Study Team. (2001) Differences in Teenage Pregnancy Rates Among Five Developed Countries: The Roles of Sexual Activity and Contraceptive Use. *Family Planning Perspective*, 33(5), 244-250.
- Finkel, E. (2005) Wellness Program Drives Ahead. *Modern Healthcare*, 35(50), 30-31.
- Flynn, L., Budd, M., Modelski, J., (2008) Enhancing Resource Utilization Among Pregnant Adolescents. *Public Health Nursing*, 25(2), 140-148.
- Fraser, A. M., Brockert, J. E., Ward, R. H., (1995) Association of Young Maternal Age With Adverse Reproductive Outcomes. *The New England Journal of Medicine*, 332(17), 1113-1117.
- Hardy, J. B., King, T.M., Repke, J.T. (1987). The John Hopkins Adolescent Pregnancy Program: An Evaluation. *Journal of Obstetrics and Gynecology*, 69(3), 300-306.
- Healthy People 2010. Leading Health Inidcators. Found on October 2, 2008 at http://healthypeople.gov/Document/html/uih/uih_4.htm

- Kay, B. J., Share, D. A., Jones, K., Smith, M., Garcia, D., Yeo, S. A., (1991) Process, Costs, and Outcomes of Community-Based Prenatal Care for Adolescents. *Medical Care*, 29(6), 531-542.
- Koniak-Griffin, D., Truner-Pluta, C. (2001) Health Risks and Psychosocial Outcomes of Early Childbearing: A Review of Literature. *Journal of Perinatal and Neonatal Nursing*, 15(2), 1-17.
- Maynard, R. (Ed.). (1996). Kids Having Kids: A Robin Hood Foundation Special Report on the Costs of Adolescent Childbearing. New York: Robin Hood Foundation.
- Menacker, F., Martin, J. A., MacDorman, M. F., Ventura, S. J., (2004) Birth to 10-14 Year Old Mothers, 1990-2002: Trends and Health Outcome. *National Vital Statistics Reports*, 53(7), 1-19.
- National Center for Health Statistics (2001) Smoking During Pregnancy Rates Drop Steadily in the 1990's, but Among Teen Mothers Progress Has Stalled. Retrieved October 2, 2008 from http://www.cdc.gov/nchs/pressroom/01news/smokpreg.htm.
- National Center for Health Statistics (2007) Teen Birth Rates Rise for First Time in 15 Years.

 Retrieved October 2, 2008 from http://www.cdc.gov/nchs/pressroom/07newsreleases/teenbirth.htm.
- Neuman, B., Beard, B.J. (1989) Teen Sexuality in a Rural Community. *Journal of Community Health Nurses*, 6(4), 245-253.
- Pennsylvania Rural Health Association, (2003) Pennsylvania Rural Health Care: Status Check III. Retrieved November 13, 2008 from http://porh.psu.edu/publications/statusiii.pdf.
- Podgurski, Mary Jo, Telephone Interview. October 30, 2008.
- Price, Mark, Herzenberg, Stephen, (2006) The State of Rural Pennsylvania. *The Keystone Research Center*, 1-45.
- Ripple, Rochelle P., (1994) Intergenerational Education: Breaking the Downward Achievement Spiral of Teen Mothers. *Clearing House*, 67(3), 143-146.
- Robinson, L. K., Price, J. H. (1998) Rural Junior High School Students' Risk Factors For And Perceptions Of Teen-Age Parenthood. *Journal of School Health*, 68(8), 334-339.
- SmithBattle, Lee, (2007) Legacies of Advantage and Disadvantage: The Case of Teen Mothers. *Public Health Nursing*, 24(5), 409-420.
- Thomas, D. V., Looney, S. W. (2004) Effectiveness of a Comprehensive Psychoeducational Intervention With Pregnant and Parenting Adolescents: A Pilot Study. *Journal of Child and Adolescent Psychiatric Nursing*, 17(2), 66-77.

Ventura, S. J., Abma, J. C., Mosher, W. D., Henshaw, S. K., (2008) Estimated Pregnancy Rates by Outcome for the United States, 1990-2004. *National Vital Statistics Reports*, 56(15), 1-26.