Adolescent Mothers Programs to Improve Child Outcomes and Prevent Child Maltreatment

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Adolescent pregnancy and teen parenting are topics that garner attention across a wide spectrum of our culture from medical-social-legal professionals to MTV viewers. A simple exercise will clarify the range of material about this subject. First, search Google for "Adolescent Pregnancy" to get about 6,200,000 results, ranging from U.S. Centers for Disease Control and Prevention (CDC) statistics to *Teen* magazine. Second, go online to PubMed to get 2,160 citations dating from 1967. Many of these citations overlap, using information from professional sources. Many sources combine their data with individual case studies of teen parents. Yet the major portion of all this material is retrospective—information gathered after the fact. Data are based on former teen parents, utilizing their age at the birth of their first baby and looking at later outcomes.

A notable exception is the current TV program called *16 and Pregnant* that deals with teens and their infants. Statistics abound in the general media on outcomes such as high school completion rates, levels of poverty, repeat pregnancies, and child protection reports. This presents a dismal picture of the future for teen parents and their children.

Epidemiology

Pregnancy rates have fallen in the past 20 years to an all-time low. The rate for girls ages 15–19 years dropped to 29.4 births per 1,000 births in 2012 from 31.3 per 1,000 in 2011. This is fewer than half the 61.8 per 1,000 births recorded in 1991 (CDC, 2012; Guttmacher, 2010). Although the numbers of pregnancies for girls younger than 15 years are small and, therefore, not deemed statistically significant, they represent an extremely high-risk group of youngsters. According to the CDC's *Vital Signs* report, they represented 0.4% of all births in 2010 and accounted for 13,520 births in 2008 (CDC, 2013). Studies have shown consistently that 20%–30% of adolescent pregnancies occur in girls who have given birth to at least one child (Manlove, 2011). A recent publication from the CDC reports data about repeat pregnancies in adolescent girls who had their first child before age 15. Statistics covering 2007–2010 present a graphic picture of the failure to address this issue of repeat pregnancies. In 2010, there were 364,859 deliveries to adolescents age 15–19, 66,761 (18.3%) of which were repeat pregnancies. Of that 18.3%, 8,397 (12.6%) were the delivery of a third child, and 1.7% of the 364,859 deliveries were four or more children (CDC, 2013).

The Adolescent Mother

A long list of risk factors and negative outcomes for adolescents and their children has been reported over the years, from medical sources (American Academy of Pediatrics [AAP], 2001) to literature from state and government publications (CDC, 2012). The risk of teen pregnancy increases when the age of first sexual contact is younger than 15, when teens do not use contraceptives, if the partner of the girl is older, and if there are multiple partners (Weiss, 2007). Such factors result in an adolescent who is ill-prepared physically or emotionally for the pregnancy and parenthood. This is reflected in the many problems, both medical and psychosocial, that are experienced by these teens and their children. The prenatal medical issues include poor or no prenatal care and premature deliveries. Those who fall into this category continue other risk-taking behaviors such as alcohol consumption, drug use, and unprotected intercourse, adding to the prenatal burden for the fetus. The concern about low prepregnancy weights in the adolescent parent group may become a minor issue with the rise of overweight and obese adolescents in America. In the clinical setting, there are far more overweight-obese adolescent girls than underweight patients. This population has a greater risk of the onset of diabetes and hypertension during the pregnancy and of preeclampsia at the time of delivery. In the postpartum period, these same adolescents have poor follow-up medical care and no adequate contraception, resulting in the often-repeated statistic that teen mothers are "likely" to have a second child within the 24 months after delivery of their first child.

While seen as a unique phenomenon of the United States, the topic of adolescent parents and their infants can also be found in the Canadian medical literature. In 2004, Leslie and Dibden (2004, p. 561) reviewed "the paediatrician's role" in the care of teens and their children. A more recent article was published in *Pediatrics* from Canada, comparing teens, young adults, and adult women at the time of delivery (Kingston, Heaman, Fell, &

Chalmers, 2012). In a survey of 6,400 new mothers, the authors found, as other studies have noted over the years, that adolescents had late or no prenatal care. Their data on the social histories of their teen cohort were quite revealing. They showed that 41% of the teens had experienced physical abuse in the past 2 years, twice the rate in young adults and 5 times the rate reported by their adult cohort. One fourth of the those teens reporting abuse had more than three episodes of abuse during those 2 years, more often by family members.

Social Issues for Adolescent Parents

The statistics from The National Campaign to Prevent Teen Pregnancy are quite revealing (2002). One third of parenting adolescents, both males and females, are themselves products of adolescent parent(s). Daughters of teen parents are 22% more likely to become teen mothers themselves than their same-age peers. The majority of adolescent parents are poor. The economic burden for the care of an adolescent mother and her child has steadily mounted over the years (Hoffman, 2006) but is most profound in the subset of teen mothers who have a second child within that 24 month period after the birth of their first child. They are less likely to finish high school, obtain any vocational training, or keep a job (Stewart & Kaye, 2013).

Adolescent parents have a higher rate of maltreatment when they were children. Adolescent mothers are twice as likely to have a reported case of abuse or neglect when compared with mothers who delayed pregnancy until age 20–21 (Hoffman, 2006). In addition, 48% of adolescents in foster care have been pregnant by age 19 compared with 27% of adolescents in the general population (Stewart & Kaye, 2013); and 5% of all teen mothers report that they were homeless at the time of delivery (18–19-year-olds). Pregnant and parenting adolescents report high levels of intimate partner violence, both as victim and as perpetrator (Jacoby, Gorenflo, Black, Wunderlich, & Eyler, 1999; Sue Newman & Campbell, 2011). This, coupled with mental health issues, significantly increases the risk of infant neglect by adolescent mothers (Bartlett, Raskin, Kotate, Nearing & Easterbrooks, 2014). This issue of partner violence was not addressed in AAP reviews until the most recent report in 2012 (Pinzon, Jones, & AAP, 2012).

Research by Manlove and her colleagues (2002) found two factors that can affect the rate of adolescent pregnancies. Adolescents who as children were enrolled in preschool and child care programs that focused on improving education among disadvantaged children had fewer pregnancies and births than a cohort not in such programs. Participation in school, sports, and religious activities was associated with positive reproductive health behaviors, that is, fewer pregnancies.

Infant Medical Issues

The medical problems in the newborn period for the infant of the adolescent mother reflect the poor or nonexistent prenatal care received by the mother. Infants are often premature, low birth weight infants with the problems associated with these presentations (Chen et al., 2007). If their adolescent parent is not compliant with follow-up medical care, these children don't receive adequate preventive care, as is mirrored in studies showing low immunization rates in this population. They are at greater risk for accidental trauma. One study demonstrated that, compared with older mothers, adolescent mothers perceived less danger in situations and, therefore, may place their infants at greater risk and subsequent injuries (McClure-Martinez & Cohen, 1996).

The child of teen parents is twice as likely to be placed into foster care as a child born to older parents (Stewart & Kaye, 2013). Based on U.S. data, mothers under age 15 through age 18 account for over 61% of first foster care infant placements, accounting for 23.1% in the 18–19-year-old mothers, 24.9% of 16–17-year-old mothers, and 13.5% of age 15 and under teens (Chapin Hall, 2008). These statistics reflect the clinical observation that the youngest of the adolescent parent population usually lives with her infant in her family home or with extended family.

Adolescent Parenting and Child Maltreatment

Dialogue in the literature concerns maternal age and child maltreatment. Babies born to teenagers have increased risk for neglect and abuse based on assumptions that young mothers are uncertain of their roles and can be frustrated by the demands of infant care. Some studies indicate that young maternal age is a risk factor for abuse, including fatalities, while others indicate the presence of reporting biases that may confound the findings (Buchholz & Korn-Bursztyn, 1993; Overpeck, Brenner, Trumble, Trifiletti, & Berendes, 2011). For example, statements suggesting that the children of teen parents suffer higher rates of abuse and neglect than would have occurred if those mothers had delayed childbearing appear in many articles regarding adolescent parenting often without independent data addressing the many confounding variables. In 1992, Connelly and Straus used a nationally representative sample based on the age of the mother at the time of the birth of the abused child. They concluded that the younger the mother, the greater the rate of child abuse, but there was no significant relationship when the mother's age was measured at the maternal age at the time of the abuse. They did conclude that the greater risk was associated with large families and in minority populations, but caretaker age as a risk factor for some forms of maltreatment cannot be demonstrated because research findings are inconsistent (Connelly & Straus, 1992).

Buchholz and Korn-Bursztyn (1993) noted that abuse and neglect are more common in conditions of poverty and isolation, factors that are present in higher numbers of teen parents. Women who were younger at the birth of their child had higher rates of abuse than older mothers. Accidents, infectious diseases, burns, poisoning, and superficial injuries are the most common diagnoses

in the children of teen mothers brought to medical attention (Buchholz & Korn-Bursztyn, 1993). Flanagan, Coll, and Andreozzi (1995) used a small cohort of adolescent mother-infant dyads to conclude that living apart from related adults was the strongest risk factor associated with maltreatment in adolescent parents.

Researchers also found predictive relationships between contextual risk factors for abuse and maternal potential for child maltreatment in first-time adolescent mothers (Dukewick, Borkowski, & Whitman, 1996). Lack of preparation for parenting for the pregnant adolescent was the strongest predictor of child abuse potential. That potential was also related to parental misperception of the child's abilities to understand and comply with parental requests. To prevent abuse, the study concluded, others will need to help the adolescent mother increase "inhibitory mechanisms" for behaving aggressively with children rather than focus on decreasing the level of stress that the mother perceives. The term *more likely* is used in the literature when referring to higher rates of abuse and neglect in teens compared with older mothers.

It is likely that the social, economic, and environmental factors that promote teenage childbearing also create many of the negative outcomes attributed to maternal age alone in older studies, such as during the 1990s (Hoffman & Maynard, 2008). In a recent review of this issue, Lachance, Burrus and Richmond Scott, (2012) concluded that the lack of rigorous evaluations may be attributable to inadequate emphasis on and insufficient funding for the evaluation as well as the challenges confronted by program evaluators working with this adolescent population. More recent reviews of the topic of adolescent childbearing reflect this shift away from a focus on age alone to concepts related to theories and applications of those theories in the care of adolescent parents (Ruedinger & Cox, 2012; Savio Beers & Hollo, 2009). An online presentation by Manlove (2011) provides an overview of adolescent childbearing trends and programs to support adolescent-headed families focusing on those parents age 18 and over.

Models for Secondary Prevention

There are many programs designed, based on limited data, to serve pregnant and parenting teens by incorporating one or more of the elements thought to improve outcomes. An expert panel workgroup targeted a lack of "deep" bench research and studies of best practices that would reach teens, engage them, and retain them in service programs. The panel found that the implementation of the care components of successful programs must be studied and replicated (Corcoran & Pillai, 2007). Secondary prevention programs may be classified as community based, school-community based, and multiagency-medical-facility based. Funding for community-based programs is often founded on statistics of the incidence of adolescent births in a specific geographic area (Clay, Paluzzi, & Max, 2011).

Kahn and Moore (2010) found that home visiting programs that were longer in duration (> 1 year), involved four or more home visits during that time, and focused on early childhood were more effective. Studies have accumulated attesting to the fact that that attention to these factors may diminish the repeated pregnancy rate in this population (Meade & Ickovics, 2005; Raneri & Wiemann, 2007; Stevens-Simon, Parsons, & Montgomery, 1986). In 2012, Manlove, Terry-Humen, Mincielli and Moore (2008) summarized 20 programs to determine the elements associated with positive outcomes. For child outcomes, health (preterm births, low birth weight, and immunizations), behaviors, and development were reviewed. The researchers found little impact on low birth weight, with the best results in a program that had a home visiting model with a prenatal component. Parent programs did affect immunization rates with some change in child problem behaviors but not on cognitive development. Parent outcomes included reproductive health, mental health and behaviors, education, employment, and income, but these were less positive. There was minimal impact on substance use during pregnancy, parental mental health, parent education, employment, income, or repeat pregnancies. Improvement in the interaction among parents and children was not common nor was there an impact on the reduction of physical punishment in the programs reviewed. Positive findings appeared in the areas of improvement of parents' realistic expectations of their children and in the home environment, all in programs involving the provision of services during the prenatal period. A common theme was the success of a home visiting model focused on providing parenting education during the prenatal period. The researchers concluded that more information is needed on whether and how preterm births, hospitalization, and parental use of contraception can be improved through parent education.

One such educational effort is Community-Based Adolescent Prevention Programs (CBAPP), in which 26 community-based programs are funded in zip codes with the highest teen birth rates. To sustain this initiative, the Adolescent Pregnancy Prevention and Services Program (APPS) was funded to coordinate existing services and fill the gaps in services to adolescents, regardless of income (Chapin Hall, 2008). Another approach is teen parent programs based in schools, such as the California School Age Families Education (Cal-SAFE) program (2006). This program offered a comprehensive, integrated, community-linked, school-based program. The goals were to improve the educational experiences for pregnant and parenting students, increase the availability of support services for the students, and provide child care and developmental services for their children. During the period 2000–2004, almost 30,000 teens and 20,000 children were enrolled in the program in 460 middle and high schools with noteworthy results for both the teens and their infants. Over 75% of the teens completed their high school education and fewer than 1% had a repeat pregnancy while enrolled in the program. The data concerning the children were equally positive

with only a 7% rate of infants born less than 2,500 grams, and 94% were up to date for age-immunization status.

Healthy Teen Network catalogued all programs serving this population in the United States to create a national directory that would provide support to those individuals working in the adolescent health community (Clay et al., 2011). The survey included 105 programs throughout the U.S. and demonstrates the diversity and the regional variance of these programs, both in numbers of programs available and their accessibility. Over 450 programs were identified, but the majority of the states identified fewer than 20 programs:

- 16 states, as well as the District of Columbia, received Pregnancy Assistance Fund support in 2010.
- 27 states have Nurse–Family Partnership programs.
- 13 states, as well as Puerto Rico and the District of Columbia, maintain statewide directories of programs serving pregnant and parenting teens.

The Network's recommendations were twofold. They recommended that there should be a state-level coordinator either by expanding an existing state position or by creating a new staff position within an existing agency, such as the state health department. An alternative approach would be to support a position within an existing statewide nongovernmental organization or coalition. Such a state-level person or state agency would be responsible for tracking programs, policies, and services for pregnant and parenting teens. This would identify resources as well as gaps in device provision with the ultimate goal of increasing access to those services.

A medical home model with comprehensive and integrated medical care and social services can effectively address the complex needs of adolescent parents and their children (Cox, Buman, Woods, Famakinwa, & Harris, 2012). The program demonstrated improvement in the health care for the children and their adolescent mothers. The immunization rate for the children was 90.2% in the group completing the 2-year program. Repeat pregnancy rates were decreased compared with national averages that used DMPA, an injectable hormonal contraceptive agent, as a major factor in the reduced number of repeat pregnancies. The authors echoed the often-cited problems of doing research on this patient population, including lack of funding and the complex problems posed by this population. In a 1992 statement, modified in 2002, the American Academy of Pediatrics defined a medical home to include eight desirable characteristics: accessible, family-centered, continuous, comprehensive, coordinated, compassionate, developmentally appropriate, and culturally sensitive. These characteristics were applied to address the care of adolescent parents and their children (AAP, 1992, 2002).

There remains the question of which type of program is most helpful to the individual adolescent parent. Determining which populations have a positive response to different interventions can help identify both risk and protective factors that may differ among populations of adolescent mothers (Jessor, Turbin, & Costa, 1998). Wakschlag and Hans (2000) identified two populations of teen mothers who would require very different types of interventions: teen mothers for whom adolescent childbearing was an adaptive life choice and teen mothers for whom childbearing was related to other problem behaviors. Such determinations need to be applied to programs being implemented with this age group. Within given communities, adolescent parenting is not identified as a problem but rather as normative. In such groups, extended families provide a structure for the young parent and her infant in a protective, nurturing environment. In the second, more troublesome group, that is adolescents with psychosocial issues, there is need for assistance outside the family structure, which is often chaotic and nonsupportive. The challenge is to identify members of these distinct groups and develop appropriate service models for them.

Models for Primary Pregnancy Prevention

Programs have been developed using similar modalities, namely community, school, and medical home models. The Community-Based Adolescent Pregnancy Prevention Program (CBAPP), funded by the New York State Department of Health, is one example (Chapin Hall, 2008). Community agencies in 26 counties with the highest rate of teen pregnancies, based on zip codes, were funded to serve adolescents ages 10–19 with a primary focus on 14–18-year-olds. The services included the following: (1) promotion of abstinence and the delay of sexual activity using appropriate sex education, (2) expansion of educational, recreational, vocational, and economical opportunities for this population, and (3) access to comprehensive family planning and reproductive health care services. Funding for other community agencies that had lowered their pregnancy rates is granted through another program, Adolescent Pregnancy Prevention and Services program (APPS). This funding was intended to continue the efforts of agencies that had been successful in reducing the teen pregnancy rate in their community. Several studies have shown the influence of school-based clinics on both general health and the sexual health of the students (Allison et al., 2012). Programs focusing on adolescent development and located in a medical home have been shown to be successful in reducing teen birth rates (Pinzon et al., 2012). More recently, Sieving et al. demonstrated that health services built on the concepts of youth development could reduce sexual risk taking behaviors in vulnerable youth (Sieving et al., 2013).

Primary prevention-intervention programs and curricula have been developed to address the needs of a population with the highest risk, young people in foster care or other out-of-home care. A unique subset of this population was the subject of an ongoing intervention (Kerr, Leve, & Chamberlain, 2009).

Adolescent girls, described as demonstrating "significant delinquent behaviors" (p. 421), were referred to foster care from the juvenile justice system. The study had a matched set of adolescents, assigned either to multidimensional treatment foster care or to group care. At the end of 2 years, there was a significant reduction in the incidence of pregnancy as well as related high-risk behaviors. The National Campaign to Prevent Teen Pregnancy and Unplanned Pregnancy has a "Special Focus-Foster Care" area on its Web site (**www.teenpregnancy.org**) as does the Adolescent Sexuality, Pregnancy Prevention and Parenting program (ASPPP) of the Child Welfare League of America (**www.cwla.org**). Many resources address the concerns of adolescent parents in foster care, providing material for professionals who work with this population. One such resource is the Center for Advanced Studies in Child Welfare at the University of Minnesota (**www.cascw.umn.edu**).

The Bellevue Hospital Program Model

In the early 1970s, two Bellevue pediatric nurses began an outreach effort to pregnant adolescents being seen in the hospital's adult Prenatal Clinic. Their activities were based on their clinical observations that the infants of adolescent parents received better medical care when their parents were themselves with their biologic parent or family member rather than when they were alone. Both parent and infant were less likely to get follow-up care when they lived alone, and these mothers were more likely to have another child before the second birthday of their infant. Staff recognized even then the increased risk for maltreatment in this population (Flanagan, Coll, & Andreozzi, 1995). Current national data show that this repeat pregnancy statistic (20%–30%) remains consistent to this day (CDC, 2012).

In 1976, a multidisciplinary team developed a program to address these concerns. The team consisted of those pediatric nurses, separate medical providers for the infant and the adolescent parent, social workers, nutritionists, and child development specialists. The team was able to access psychological and psychiatric assistance from the clinic-based Child and Adolescent Psychiatry Liaison Service for those teenagers needing mental health evaluation and treatment. To address the cultural needs of the Bellevue clinic patient population, 40%–50% of the multidisciplinary team was bilingual in English and Spanish.

The structure of the program was designed to enable the provision of ongoing care to the mother-infant dyad with coordinated care within a single clinic session, during which the child development staff provided an ongoing program centered around parenting issues and child development. These sessions incorporated themes from a curriculum that reviewed developmental stages, the issues and challenges of parenting at each stage, and coping strategies in the informal setting of the clinic playroom. Developmental screening tools such as the Denver and the Bayley were done in the playroom so that the adolescent mothers could have a practical demonstration of these milestones. Other topics presented in this environment included discussions of birth control methods and other current concerns of the mothers. This model received international attention (Grundström, 1983).

Discussions included in sessions with the teen mothers have grown to include numerous topics involving parenting and raising children (see Table 1). Teens are first asked to reflect on their new roles and changes in roles from child to parent. This includes role conflicts, the role of the new grandmother, and the role of the father. Teens are also asked to reflect on their lifestyle changes and curtailed social activities given their parenting responsibilities. They are provided examples of potential feelings in response to the new baby, frustrations, and reasonable expectations as parents. They are also given assistance to pursue their own educational goals, such as school return, facilities for parenting teens, or the

Table 1. Adolescent Group Topics

1. Reflecting on new role change and new roles within nuclear family
   a) Role conflicts
   b) Grandmother's role in advising and assisting
   c) Father's role
2. Reflecting on lifestyle change
   a) Parenting responsibilities
   b) Curtailed social activities
3. Handling feelings in parenting role
   a) Responses to baby (love, anxiety, frustration, anger)
   b) Expectations
4. Pursuing goals
   a) Continuing education
      1. Return to school
      2. GED
   b) Work
   c) Training programs
   d) Child care arrangements for above
5. Coordinating social needs with child care responsibilities
6. Living arrangements
   a) Privacy
   b) Family's response to new member
   c) Boyfriend's/husband's (residence and degree of participation)
7. Frustrations of parenting
   a) Curtailed social activities and freedom
   b) Role conflict with grandmother
   c) Baby's behavior (crying, crankiness, chronic medical needs)
8. Support systems
   a) Respite from parenting role
   b) Emotional support
9. Child care and babysitting arrangements
   a) Securing reliable help
   b) Welfare assistance for child care
   c) Schools for mothers with nursery facilities

General Education Diploma (GED). Work, training programs, and child care needs and potential financial assistance for these are also addressed. Social work staff assist teens with living arrangements and possible respite from their parenting role.

The Adolescent Mothers Clinic began as a weekly clinic session and then expanded to two sessions as the number of pregnant adolescents recruited to the program increased. This was enhanced by the enthusiastic efforts of the adult prenatal clinic staff as well as Labor and Delivery Room staff, who identified adolescents at the time of delivery who had had little or no prenatal care. Referrals to the program also came from other sources, such as the General Pediatric Clinic, the Emergency Room (a frequent site for the initial contact for a pregnant adolescent), and a multitude of community agencies. In the General Pediatric Clinic, the adolescent mother is often identified during a sick visit for her infant. The mother may have delivered at another facility or has been lost to follow up in our institution. With the closing of the inpatient services after Hurricane Sandy in 2011, all the enrolled pregnant teens delivered at other hospitals but then joined the Adolescent Parenting Program in the reopened clinic building. This protocol was in place until the main hospital reopened in the Spring of 2012.

An identified team of doctors, nurses, social workers, nutritionists, and child development specialists provide care to both mother and child within the framework of a scheduled clinic visit. Care is also offered to the father of the baby if he is an adolescent or young adult in need of medical services. Patients are referred from within Bellevue—general pediatric clinic, specialty clinics, psychiatric services, and emergency room. They also come from other hospital- and community-based adolescent programs, foster care agencies, child protective services, community physicians, and self/family/friends. Teens are first evaluated in the general adolescent clinic and then referred prenatally to the Bellevue Adolescent Prenatal Clinic. After delivery, the referral is made to the Adolescent Mothers Clinic.

When a pregnant adolescent is identified in these various sites, a team member is notified and speaks to her about enrolling in the program. The criteria for admission to the program remain twofold, based on the age of the mother (less than age 18) and the willingness of the mother to participate in the program. Continuance in the program is also based on age (until the mother is age 18 and her infant at least 6–8 months of age) and ongoing participation in the program. As is true of many similar programs, these criteria are flexible, depending on the needs of both the infant and the mother.

The goals of the program, as explained to the new parents, are medical care for their infant and for themselves, divided but equal in their emphasis and importance. Standards of care for adolescent parents and their infants has been addressed and updated by the American Academy of Pediatrics in 1989, 2001, and again in 2012. For the infant, the goals are (1) the provision of well-child care, including immunizations using AAP guidelines and (2) monitoring of the infant's development, with intensive efforts for those infants with delays. For the adolescent parent, the goals are twofold: (1) stressing the need for an adequate birth control method and (2) education that best suits the adolescent's needs, with a return to school, a GED program, or an English as a second language (ESL) program as possible options.

Program Changes Over Time

The demographic makeup of the Adolescent Parent Program has changed to reflect the general pediatric profile at Bellevue Hospital over the years: 70% Hispanic, 10%–15% African American, 10% white, and 5%–10% other groups. In recent years, the Hispanic population has shifted from Puerto Rican born and Puerto Rican but born in NYC to a greater portion born in Central and South America and in the Dominican Republic.

Over time, the program has expanded to include prenatal care, educational referrals, and medical care for adolescent and young adult fathers. All services are provided in a designated adolescent area of the pediatric clinic. Now, the application of multidisciplinary teamwork begins with the identification and evaluation of a prenatal adolescent. The initial prenatal assessment is done either in one of the Adolescent Clinic sessions (for walk-in patients) or in the Adolescent Gynecology Clinic for those patients referred from other sources. During that visit, the pregnant adolescent meets the staff members who will follow her

through her pregnancy and later with her baby in the Adolescent Parent Program.

It is not unusual for adolescents to seek prenatal care at late stages of their pregnancy, often near term (Hoffman, 2006), so this initial assessment is designed to be comprehensive; medical (including all lab work), nursing, and social work evaluations are completed during this visit. The adolescent is then given an appointment to the Adolescent Prenatal Clinic, where she is seen by the OB staff for ongoing prenatal care as well as by their adolescent team. A prenatal "preparing for the baby" program is provided by the child development staff in the pediatric playroom. Partners of the pregnant adolescent are encouraged to participate in this program. In addition to sessions in the playroom, tours of the hospital's Labor and Delivery floor are conducted as the time of delivery approaches. All obstetrical services, except for those young people diagnosed with high-risk medical issues, are seen in the adolescent area of the General Pediatric Clinic. The adolescent team works with the high-risk clinic staff to assure ongoing services to that vulnerable population.

A component of the program that was so useful in identifying appropriate educational resources for the adolescent parents was the Babygram program, sponsored by the NYC Board of Education. Babygram was part of Project Return, a community education initiative to address the educational needs of pregnant and parenting teens (New York City Board of Education [OREA], 1993). It was intended to target teens who had dropped out of school or were at risk of dropping out because of pregnancy or parenting. A liaison from the program attended both the prenatal sessions and the Adolescent Parent Program sessions to help the young people indentify an appropriate school setting for them. This essential service was curtailed and subsequently eliminated as a result of municipal fiscal cuts. This effort is now done by the social work and child development staff in conjunction with community agencies.

Medical care for adolescent and young adult fathers was added to the services available to our adolescent parent population with the opening of the Adolescent and Young Adult Male Clinic, which meets in the afternoon during one of the Adolescent Parent Program sessions. If the young father is unable to attend that clinic, every effort is made to see the father during the same clinic session as his child and partner. Primary medical care such as immunizations are often given to both young parents in one clinic session. Young fathers are encouraged to participate in the parenting program in the playroom. When present, they are involved in the medical care of the infant and all discussions about future pregnancy planning.

In 1976, the program did not list child maltreatment prevention as a primary goal but rather as the expected outcome of interventions directed specifically to the adolescent mother and her child. The multidisciplinary team acknowledged the barriers confronting pregnant and parenting adolescents, barriers seen daily by the staff of the pediatric clinic. Poverty, lack of education, and adverse childhood experiences were readily identified throughout this population. The team focused on achievable goals within the context of limited resources. The team could assist adolescents in finding appropriate schooling, using community resources to find those placements. The team could help young people damaged by childhood trauma to develop positive parenting skills. The team could provide ongoing, consistent attention to that needy adolescent so that she didn't get lost in a system not designed to provide care to such a population. That attention could be as simple as a reminder call or letter for her appointment for her birth control refill or as complex as a social worker helping a young person in a violent partner relationship (Pinzon et al., 2012).

For the 12-month period from October 1, 2005 to September 30, 2006, 63 teens were enrolled in the parenting program with a total of 120 infants during the same period. There were five repeat pregnancies in the same time period and four elected termination of pregnancy. The remaining pregnancy went to term and the family continues to be seen in the clinic parenting program. Two infants were reported to CPS for medical neglect (one infant with cystic fibrosis, a second infant with limited care postabdominal surgery), and one was reported for abuse (depressed skull fracture). One report was made from a school.

The Program Today

My colleagues and I compared the characteristics and outcomes of the 29 adolescent mothers and their infants in our program at Bellevue Hospital in 2011 with national statistics about teenage pregnancy to determine the effect of the program on measures of medical and psychosocial health of both the mother and child. The adolescent mothers who attended the adolescent mothers group and gave birth to children in 2011 had significantly more clinic visits over the entire year than those who did not attend the group for the entire year (p=.0006). No child abuse referrals among group mothers were identified. Within this group, 40% of the adolescent mothers and their families had had prior CPS contact. No significant changes in contraceptive use were found. For the infants at 12 months of age, we recorded significantly more (35.2%) infants with complete immunizations, surpassing NYC immunization rates. We concluded that infants of mothers attending adolescent mothers group had more well-child visits and exceeded NYC immunization rates, and that there were additional health benefits for these infants. Further study is needed to understand how to lengthen pregnancy interval and improve parenting skills for this high-risk group of teens.

The Bellevue Parenting Program is now a component of the clinical rotations of the NYU School of Medicine pediatric training curriculum. Students and house staff rotate through the program, both to provide services as well as see a parenting program in action. Our wish list for the Adolescent Team reflects the ongoing commitment to adolescent parents and their children: make such programs an integral part of pediatric training programs on a national level and restore funding to allow programs such as Babygram to be available to every adolescent parent in conjunction with child care for their children. Along with media attention to the falling teen pregnancy rate, there needs to be continued commitment to restore these successful programs.

Future Research

Based on programs initiated over the years and the results of such projects, the development of a screening tool for primary care providers might help to better identify those adolescents who are at most risk of becoming young parents with problems. It is easy to say that young people who engage in any high-risk behavior—be it alcohol, cigarettes, drugs, truancy, or sexual activity—should be counseled about contraception. A checklist of the psychosocial problems of such teens can provide an overview of their often chaotic home life. Such questions can be posed at routine medical visits but are usually not asked (Hassan et al., 2013). Which of these young people who go on to have a child will not be able to assume the responsibilities of parenthood and endanger their child? Which of these teens will have a family, either nuclear or extended, who will help them and avoid the pitfalls of early parenting? Which of these teens will have access to community agencies that provide those supports when there is no family input to assure the safety of the infant? The projects reviewed here have involved young people within certain frameworks—clinic-, school-, or community-based, or a combination of such service providers. The daunting task is to identify which program is best suited for the individual teen parent and her infant, and, if the young father of the infant is involved, what program would be most helpful to him. These questions need to be explored to develop a uniform approach to the delivery of services to adolescent families, an approach that can be researched and then implemented for this diverse group of adolescents.

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