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EARLY ADOLESCENCE

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Early Adolescent Family Formation

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In the United States, adolescent family formation has been considered a major social problem since the late 1970s. The sources of concern are multiple. First, teenage childbearing is associated with risks for the mother and her child, including health problems, reduced life chances, and a greater likelihood of living in poverty. Second, a large and increasing proportion of births to teenagers are nonmarital; this appears to compound these risks. Third, the rate of teenage childbearing in the United States far exceeds those in other Western, industrialized countries (Alan Guttmacher Institute, 1986). The high rate of adolescent pregnancy in the United States results in close to half a million births annually (Pittman & Adams, 1988). These births have huge social as well as personal costs: In 1988, annual public spending to support families begun with an adolescent birth approached \$20 billion (Center for Population Options, 1989).

Until recently, little attention was given to early adolescent childbearing, probably because births to girls under age 15 represent a relatively small proportion of teenage births. Social concern increased, however, following reports that the prevalence of sexual activity is increasing in this age group (e.g., Hofferth, Kahn, & Baldwin, 1987). Because young adolescents are especially poor contraceptors, increases in sexual activity are likely to result in higher pregnancy and birth rates for this group.

The prior inattention to young adolescent reproductive behavior has resulted in a paucity of data concerning sexuality and childbearing in youngsters under age 15. This chapter explores the available informa-

tion on this topic. Initially, data on early adolescent reproductive behavior is reviewed, including findings on sexual activity, contraceptive use, pregnancy, and births, as well as the consequences of early adolescent childbearing. Next, some of the developmental and contextual factors that may contribute to early adolescent family formation are explored. Finally, recommendations for research and policy are discussed. Where possible, existing data on young adolescents are cited. Because most studies have not considered adolescents under age 15 as a separate group, however, it is necessary at times to extrapolate from data on older teenagers.

EARLY ADOLESCENT SEXUALITY AND CHILDBEARING

The rate of sexual activity among young adolescents has increased over the past few decades. Three percent of girls born in 1950–1952 had sex by the time they turned 15, as compared to 13% of girls born 15 years later (Hofferth et al., 1987). Moreover, a national survey conducted in 1983 indicated that 17% of the men born in the early 1960s initiated sex prior to age 15 (Hayes, 1987). In 1988, one third of 15-year-old males reported intercourse experience (Sonenstein, Pleck, & Ku, 1989). Thus, a sizable and increasing proportion of young adolescents are sexually experienced.

This conclusion is sobering in light of young adolescents' poor contraceptive practices. Approximately 30% of girls who initiated intercourse prior to age 15 report having used contraceptives at first intercourse, as compared to more than 50% of those who became sexually active at later ages (Zelnik & Shah, 1983). Moreover, young adolescents are slow to adopt contraception after they become sexually active. According to one national survey, only 23% of girls under age 15 at first intercourse started using a contraceptive method within a month after initial intercourse, whereas 42% delayed contraceptive use for more than 1 year. In contrast, only 15% of 18- to 19-year-olds delayed contraceptive use for over 1 year (Hofferth et al., 1987). Because an estimated half of premarital adolescent pregnancies occur within 6 months after first intercourse (Zabin, Kantner, & Zelnik, 1979), the tendency to delay contraceptive use places sexually active young adolescents at high risk for pregnancy.

Because of these trends in sexual activity and contraceptive behavior, the pregnancy rate for adolescents under age 15 has been increasing over the past few decades. In 1987, 16.6 girls per 1,000 in this age group became pregnant as opposed to 13.5 per 1,000 in 1973. The birth rate for these young adolescents, however, actually declined slightly over

the same period, due presumably to increased use of abortion (Henshaw, Kenney, Somberg, & Van Vort, 1989). In the first half of the 1980s, over 50% of pregnancies to girls under 15 were terminated by abortion, a higher proportion than was found among older teenagers. The remaining pregnancies resulted in 10,000 to 12,000 live births each year (Hayes, 1987). Because young adolescents are unlikely to marry to legitimate a pregnancy, almost all of these births occurred out of wedlock. In 1985, over 90% of births to girls under age 15 were nonmarital (Pittman & Adams, 1988).

Evidence suggests that most young adolescents who deliver their babies choose to keep them. In 1982, for example, an estimated 93% of unmarried mothers between the ages of 15 and 19 kept their children (Bachrach, 1986), suggesting that 7% potentially chose adoption. Although separate estimates are not available for adolescents under 15, it is unlikely that their rates are substantially higher than the total figures. Of course, young adolescent girls are not necessarily raising their babies alone. Because very young mothers are more likely to remain with their parents (Furstenberg & Crawford, 1978), they may have more child-care support than do older mothers.

Subgroup Differences

There are striking subgroup differences in rates of adolescent sexual activity, pregnancy, and childbearing. Throughout adolescence, sexual activity rates are higher for boys than for girls, and for African-Americans than for Whites. Black males in particular, report high rates of early intercourse, and some data suggest that prepubertal intercourse is not uncommon in this group (Udry, 1982). Less is known about Hispanic youth, although their rates of sexual activity appear to fall between Whites and African-Americans (Fennelly, chapter 19, this volume). In a 1983 survey of young adults, 12% of White males and 5% of White females reported having intercourse prior to age 15. Among Hispanics, the rates were 19% for males and 4% for females, and among African-Americans they were 42% for males and 10% for females (Hayes, 1987). Recent national data show the same pattern among 15-year-old males: 26% of Whites, 33% of Hispanics, and 70% of Blacks reported having had intercourse (Sonenstein et al., 1989). Pregnancy and birth rates follow a similar pattern, at least among older adolescents. Among 15- to 19-year-old women, the pregnancy rate for African-Americans is two times that for Whites; for Hispanics it is 1.7 times that for Whites. Birth rates for both African-Americans and Hispanics are

over twice the rate for Whites (Henshaw et al., 1989). Rates of early sexual activity, pregnancy, and childbearing also vary by socioeconomic status (SES), being higher among poor adolescents (Chilman, 1986).

CONSEQUENCES OF EARLY ADOLESCENT CHILDBEARING

Risks to the Adolescent

There is substantial evidence that early adolescent childbearing entails increased risks for mother and child. Mothers under 15 are at higher risk of health problems: They experience more complications during pregnancy and delivery, more miscarriages and stillbirths, and higher maternal morbidity and mortality. Although many of these health risks could presumably be reduced with adequate nutrition and prenatal care, some negative outcomes appear to result from the mother's physical immaturity. Even with good health care, mothers under age 15 have somewhat higher rates of toxemia, anemia, prolonged labor, premature labor, and mortality (Hayes, 1987).

The negative social and economic consequences associated with teenage childbearing may also be exacerbated among early adolescent mothers. In general, the younger the mother at the time of birth, the lower her educational attainment, although this relationship is stronger for Whites than Blacks (Mott & Marsiglio, 1985). Lack of schooling in turn increases the likelihood of poor employment, poverty, and welfare dependency. Despite the overall relationship between earlier childbearing and lower educational attainment, some data suggest that girls who become mothers before the age of 16 may be more likely to complete high school than those who give birth between ages 16 and 18 (Hayes, 1987). This is probably because very young mothers are less likely than older mothers to make other adult transitions (e.g., getting married, establishing a separate household, getting a job) that make staying in school more difficult (Furstenberg & Crawford, 1978).

Women who begin childbearing prior to age 15 tend to have higher subsequent fertility. This relationship appears to be weaker for African-Americans than Whites, and weaker in recent cohorts than it was in the 1970s (Hayes, 1987). When high fertility co-occurs with low educational attainment the long-term prognosis for adolescent mothers is particularly poor (Furstenberg, Brooks-Gunn, & Morgan, 1987). Therefore, early adolescent childbearers may be at particular risk for long-term difficulties. How long these effects persist may depend on the population. In one long-term follow-up of Black teenage mothers, girls

who became mothers at age 15 or less were not worse off in middle adulthood than those who began childbearing at age 16 or 17, once other background variables were controlled (Furstenberg et al., 1987). Teenage mothers as a group, however, fared worse than women who delayed childbearing until their 20s.

Finally, teenage childbearing is associated with marital instability (Hayes, 1987). Although many of these women marry, they are less likely than older mothers to stay married, and are more likely to end up raising their children in single-parent households. These patterns contribute to the young mother's economic distress because economic outcomes tend to be better for teenage mothers who enter stable marital relationships (Furstenberg et al., 1987).

Some research suggests that early parenthood also has detrimental effects on males (Card & Wise, 1978). For example, high school dropout rates are higher for teenage fathers than for other males (Marsiglio, 1987). Although it is unclear whether dropout precedes or follows parenthood, such findings may reflect effects of early parenting. Recent research suggests that educational deficits are greatest for males who move in with their partners (Robbins & Streetman, 1990). Reduced educational attainment should in turn depress the occupational status and earnings of these young males. Virtually nothing is known about males who become fathers in early adolescence. It is not even clear how many boys this includes. Because most girls tend to become involved with somewhat older males (Zelnik & Shah, 1983), the number of young adolescent fathers is probably small.

Risks to the Child

The children born to teenage mothers also appear to be at risk. Babies of teenage mothers, especially mothers under 15, are more likely to be born prematurely or with low birth weight (Hayes, 1987), outcomes that increase the risk of poor health and developmental problems. In early childhood, the children of teenage mothers show poorer cognitive performance and more socioemotional and behavioral problems than do those born to older mothers (Brooks-Gunn & Furstenberg, 1986). These differences are small, however, and are largely accounted for by differences in SES. That is, they appear to be due more to the effects of poverty than to incompetent parenting stemming from the mother's youth. Effects are larger among older as compared to younger children and more common among boys than girls.

The potential significance of these small early deficits is suggested by the few studies that have followed the children of teenage mothers into

adolescence. A long-term follow-up of an African-American, urban sample revealed high levels of school failure and misconduct among the adolescent offspring, as well as earlier sexual activity and more illicit substance use (Furstenberg et al., 1987). Thus, early and continued disadvantage may translate into cumulative deficits for the children of teenage mothers.

FACTORS AFFECTING EARLY ADOLESCENT CHILDBEARING

Although some adolescent girls may seek to become pregnant (e.g., Franklin, 1988), intentional pregnancies constitute only a small proportion of all adolescent pregnancies (Zelnik & Kantner, 1980). Data on girls under 15 indicate that virtually all of their pregnancies are unintended (Alan Guttmacher Institute, 1981). Given this, the keys to early adolescent childbearing lie not in factors leading girls to desire a pregnancy, but in the social and individual factors that contribute to early sexual activity, ineffective contraception, and, if pregnancy occurs, a decision to bear the child. In the following sections, factors affecting these decision points are reviewed.

Early Adolescent Sexual Activity

A growing proportion of young people experience their first sexual intercourse during early adolescence. Two main explanations have been offered for this trend, one biological, the other sociocultural. From a biological perspective, the argument has focused on the timing of pubertal development. From a sociocultural perspective, it has been argued that sexual activity among U.S. adolescents is linked to broader demographic shifts and to societal changes in sexual permissiveness (Chilman, 1986).

Several recent studies have documented an association between pubertal development and adolescent sexual behavior. A relationship has been found between androgen levels and sexual activity for White adolescent boys (Udry, Billy, Morris, Groff, & Raj, 1985) and between androgen levels and sexual motivation (but not intercourse) among White adolescent girls (Udry, Talbert, & Morris, 1986). Unfortunately, similar studies with other ethnic groups have not been published.

Pubertal development may also have an effect on sexual behavior, regardless of hormone levels. Some researchers have noted a relation-

ship between level of physical maturity and adolescents' sexual experience, although the strength of the relationship appears to differ by race and gender (Udry & Billy, 1987). Others have found that girls who mature early tend to become sexually experienced at younger ages. These pubertal effects are probably mediated by social responses to the adolescents' appearance. Mature adolescents are more likely to be viewed as attractive sexual partners; they are also more likely to associate with older peers, which in turn is associated with early intercourse (Magnusson, Stattin, & Allen, 1985). In addition, physically mature girls appear to be granted more autonomy by parents, which could increase their opportunities for sexual activity (Brooks-Gunn & Furstenburg, 1989).

Despite the evidence that pubertal development plays a role in early adolescent sexual activity, puberty alone cannot account for the recent trend toward earlier intercourse. Puberty has been occurring at younger and younger ages over the last century (Eveleth, 1986), but this gradual trend toward earlier puberty does not match the dramatic increase in adolescent sexual activity that occurred during the 1960s and 1970s (Petersen & Crockett, in press). Thus, age at pubertal onset may help account for individual differences in the timing of first intercourse but cannot explain the overall trend toward earlier sexual initiation.

An alternative explanation focuses on broader societal changes in sexual attitudes and permissiveness (Chilman, 1986). Chilman noted that the historical shifts in adolescents' sexual attitudes and behavior were accompanied by demographic changes such as a rising divorce rate, an increase in single-parent families, a trend toward later marriage, and an increase in out-of-wedlock births among women of all ages. These changes, as well as more permissive sexual attitudes, probably influenced adolescent sexual behavior. Therefore, the historical increase in early adolescent sexual activity is best understood as an outgrowth of broader societal trends.

Subgroup Differences. As previously indicated, there are substantial subgroup differences in the reported prevalence of early adolescent intercourse. Rates are higher among boys than girls, among low-SES than high-SES groups, and among African-Americans than Whites and Hispanics. Surprisingly little is known about what produces these subgroup differences. Racial differences in timing of puberty, for example, are too small to explain the large differences in sexual behavior. Attempts to explain racial differences in terms of psychological and social variables have also met with limited success. Studies suggest that the racial differences remain when socioeconomic indicators are con-

trolled (Furstenberg, Morgan, Moore, & Peterson, 1985, cited in Hayes, 1987), and even when a broad array of developmental, behavioral, academic, and family variables are controlled (Alexander et al., 1989).

Effects of Poverty. The impact of poverty has been at the heart of theorizing about the early initiation of sexual activity. One prominent hypothesis has been psychological, suggesting that impoverished circumstances offering little hope of future success provide few disincentives for early sexual activity (Chilman, 1986). Other influences may operate at the community or neighborhood level. Hogan and Kitigawa (1985), for example, reported an association between poor neighborhood quality and teenage sexuality rates. The mechanisms for such neighborhood effects are not well understood. One possibility is that poor neighborhoods provide more role models for early sexual activity and nonmarital childbearing. Another is that poor neighborhoods are associated with a lack of effective parental monitoring. Community size may also be a factor because high population density is associated with higher rates of teenage sexual activity (Franklin, 1988).

Sexual Norms. A related explanation for subgroup differences in teenage sexual activity involves differing sexual norms and pressures. Boys, for example, probably feel more peer pressure to be sexually active than do girls, who may experience pressures both to engage in and to delay intercourse. Unfortunately, most of the data are on girls only, providing few opportunities for gender comparisons. Jessor, Costa, Jessor, and Donovan (1983) found that similar personality and contextual variables contributed to timing of sexual initiation for both genders in their White middle-class sample. A study of poor, urban Blacks, however, suggested that the meaning of sex may differ for girls and boys, with early intercourse being associated with more deviant behavior among girls (Ensminger, 1990).

The role of sexual norms in ethnic differences is supported by the finding that a substantial number of African-American boys may experience prepubertal sexual intercourse (Udry, 1982). In such cases, social rather than biological factors appear to govern sexual initiation. Other aspects of adolescent sexual behavior also appear to be governed by social norms. White adolescents, for example, appear to engage in a specific sequence of sexual behaviors prior to initiating intercourse. They progress from holding hands to kissing, to petting above the waist, to genital stimulation, and then to intercourse. African-American adolescents, on the other hand, appear to follow a different pattern, with intercourse coming earlier in the sequence (Smith & Udry, 1985).

Differences in norms could also operate at the community level. Some data indicate that there is a greater perceived tolerance concerning teenage childbearing in Black, urban communities (Hayes, 1987). This tolerance could be interpreted by teenagers as sexual permissiveness. The prevalence of peer sexual activity in the school or community may also influence adolescents' attitudes about appropriate behavior. In one study, African-Americans in segregated schools showed higher rates of sexual activity than those in integrated schools where their rates were closer to those of White students (Furstenberg et al., 1985, cited in Hayes, 1987). Although type of school may have been confounded with SES, there is the intriguing possibility that contact with different sexual norms affected the behavior of the African-American students.

Family Influences. Family socialization factors may also underlie some subgroup differences. Early sexual activity is associated with low parent educational attainment, large family size, and growing up in a single-parent family (Chilman, 1986). These family variables could operate by affecting the values and expectations to which adolescents are exposed, the role models they see, and the amount of supervision they receive. Growing up in a single-mother family, for example, is associated with earlier sexual intercourse for girls (Newcomer & Udry, 1987). The mother may act as a role model for dating and nonmarital sexual relationships. Single mothers may also be less capable of monitoring their daughters' activities, and failure to monitor girls' early dating experiences has been linked to early intercourse (Hogan & Kitigawa, 1985). Other family models of early sex and childbearing may also be important: Early intercourse is more common among girls whose sisters were teenage mothers (Hogan & Kitigawa, 1985) and among adolescents with older siblings (Haurin & Mott, 1990). Finally, a poor parent-child relationship is associated with early sexual activity among girls (Chilman, 1986). Some researchers have suggested that girls who lack adequate support and intimacy at home are more likely to seek close relationships elsewhere.

Sexual Abuse. A final factor contributing to early adolescent sexual activity may be sexual abuse. Recent reports have documented a surprising amount of unwanted sexual experience among American teenage girls (Moore, Nord, & Peterson, 1989). In many cases, the experiences begin prior to or during early adolescence. Thus, a substantial proportion of sexually active young adolescents may have become so due not to their own desires but to factors beyond their control. Nonetheless, these experiences have implications for teenage family

formation: Early sexual abuse has been linked to subsequent sexual activity in adolescence and to teenage pregnancy (Butler & Burton, 1990).

Contraceptive Use

As noted earlier, young adolescents tend to be poor contraceptors. Younger girls are less likely than older teenagers and adults to have used contraception and, when they do use it, are less likely to use it consistently and effectively (Kantner & Zelnik, 1972). Younger girls are also more likely to rely on male methods (e.g., condom, withdrawal) and less likely to use a medical method such as birth control pills (Zelnik, Kantner, & Ford, 1981). Similarly, young adolescent males may be less likely than older males to use contraceptives: In a recent national survey, 48% of males who had intercourse between ages 12 and 14 used a condom at first intercourse, as compared to 60% of 15- to 19-year-olds (Sonenstein et al., 1989).

Young adolescents' contraceptive behavior probably reflects a combination of factors, including their cognitive level, the nature of early adolescent sexual activity, and cultural variables that influence their knowledge of and access to contraceptives. One hypothesis focuses on young adolescents' cognitive immaturity. Young adolescents are beginning to develop the capacity for abstract, logical thinking referred to as formal operations (Inhelder & Piaget, 1958). These advances should increase their ability to reflect on their behavior and to consider its possible long-term consequences. However, the capacity for formal reasoning develops gradually and may operate imperfectly, especially in early adolescence when it is just beginning to emerge (Keating, 1990). The use of formal reasoning may also depend on situational variables. Even among adults, the degree of logical thought revealed in a laboratory setting will not necessarily be applied in everyday situations. This is especially true in stressful circumstances or with emotionally "hot" topics. Given that young adolescents' decisions about sex and contraception are likely to involve such hot cognitions, the probability of logical, systematic reasoning is fairly low (Hamburg, 1986).

Research on formal operations also indicates that the consolidation of formal reasoning depends on appropriate environmental stimulation and support (Keating, 1990). In this regard, cross-cultural differences in reasoning about reproduction may be telling. In one study, U.S. and Canadian adolescents lagged behind those in England, Sweden, and Australia in demonstrating formal reasoning regarding "where babies come from" (Goldman & Goldman, 1982). The delay was attributed to

the lesser acceptability of teenage sexuality in North America and to the poorer quality of sex education. The impact of cultural context is underscored by cross-national data on teenage sex and pregnancy. Although rates of adolescent sexual activity in other Western, industrialized countries are similar to those in the United States, pregnancy rates are much lower (Alan Guttmacher Institute, 1986). Clearly, some young adolescents are able to use contraceptives effectively, given the right circumstances.

Based on these considerations, it seems probable that many young adolescents reason at the concrete operational level when making decisions about sex. This cognitive limitation could help explain their inconsistent use of contraceptives. For example, many girls seem to underestimate the risk of becoming pregnant. Pregnant girls report believing that they were not at risk because they were too young or had intercourse too infrequently or did not reach orgasm (Shah, Zelnik, & Kantner, 1975). Although misinformation certainly contributes to such beliefs, social cognitive skills may also be involved (Brooks-Gunn & Furstenberg, 1989). In particular, young girls may fail to understand the link between their behavior and possible outcomes or even to consider that such links exist. Or, lacking an extended time frame, they may be unable to imagine how the demands of motherhood would alter their daily lives and future opportunities.

The nature of early adolescent sexual activity may also contribute to ineffective contraception. Because young adolescents are just beginning to be sexually active, intercourse is typically infrequent and unplanned. Lack of planning is in turn associated with unprotected intercourse (Zelnik & Shah, 1983). Young adolescents are probably further disadvantaged by a lack of information about effective contraception. Sex education at the junior high level is less comprehensive than in high school and typically includes less information on contraception (Brooks-Gunn & Furstenberg, 1989). Consequently, misinformation about fertility and contraception may be especially common in early adolescence. Ignorance of pregnancy risks, inaccurate knowledge about the "safe" time of the month, and lack of knowledge about contraceptives, all of which are associated with ineffective contraception, can be attributed in part to lack of adequate sex education. In addition, young adolescents are least likely to have ready access to free, confidential family planning services and to contraceptives. Again, these circumstances are associated with failure to use effective contraception (Hayes, 1987).

Subgroup Differences. African-American adolescents have a higher rate of unprotected intercourse than do Whites. This difference, however, is due primarily to the fact that more African-Americans

initiate sexual activity at an early age; once age at initiation is controlled, Blacks and Whites are equally likely (or unlikely) to practice contraception (Hayes, 1987). Contraceptive use is also related to SES (Chilman, 1986). Adolescents with more highly educated parents and those from higher social classes are more likely to use contraception. Other family background variables may also be important, such as parental attitudes and communication about sex and contraception (Moore, Peterson, & Furstenberg, 1986).

Childbearing

Little is known about the decision processes affecting girls' responses to an unintended pregnancy. The girl's reaction may depend on a host of factors such as her educational aspirations, her relationship with the baby's father, her perceptions of family support for keeping the child, and the number of her peers who have become parents (Fox, 1982). Research has identified factors that distinguish girls who choose to keep their babies from those choosing adoption or abortion. These studies indicate that girls who choose to keep their babies tend to have poorer school achievement and lower educational and occupational goals than girls choosing abortion or adoption. They also tend to have less-educated parents and are more likely to come from poor and single-parent families (Hayes, 1987). Family and peer attitudes are also important: Girls who keep their babies come from more religious families than those who choose abortion, are more likely to have friends and relatives who are teenage single parents, and are less likely to have mothers and peers with positive attitudes toward abortion (Furstenberg, Brooks-Gunn, & Chase-Lansdale, 1989). Parental attitudes toward abortion appear to be particularly influential in the case of young adolescents (Hayes, 1987).

These findings suggest several reasons for choosing to keep the child: abortion attitudes and related religious values; role models for early childbearing; and the absence of future goals that would be jeopardized by early parenthood. A family history of teenage childbearing provides both role models and evidence of tolerant attitudes toward early parenthood; a high rate of early childbearing among peers gives similar messages with respect to community norms and fertility values. In some communities, early childbearing may even bring increased status and privileges. Ethnographic studies (e.g., Stack, 1974) describe how early childbearing in a poor, African-American community brings privileges such as entree into the community economic and social network. Indeed, important effects of neighborhood characteristics on adolescent

childbearing have been documented. The economic profile of the neighborhood and the prevalence of mother-headed households are both associated with a girl's likelihood of bearing a child out of wedlock, even when family characteristics are controlled (Brooks-Gunn, Duncan, Kato, & Sealand, 1991). In particular, the presence of middle-class neighbors and two-parent families seems to discourage early childbearing. Such neighborhood influences may operate by affecting mothers' ability to monitor their daughters' activities or through the provision of conventional adult role models. Finally, girls without good prospects for the future have little reason to avoid pregnancy, even if they do not actively seek it (Chilman, 1986). This argument is usually applied to girls in restricted economic circumstances, but it may also be important for young adolescents. Because young adolescents' future goals are usually not well articulated, their motivation to avoid an early pregnancy may be reduced.

With younger teenagers, unwillingness to acknowledge the pregnancy may also play a role in early childbearing. The cognitive immaturity that enables some girls to discount the risk of pregnancy may also lead them to deny the reality of an unintended pregnancy. Other young adolescents may simply postpone making a decision until abortion is no longer a viable option. Several reasons for delay have been suggested. Young teenagers may fail to recognize the signs of pregnancy, particularly because many experience irregular menstrual cycles. Others may deny the pregnancy. For some, geographical distance from clinics and hospitals as well as the costs of services may limit access to abortions (Alan Guttmacher Institute, 1981).

Whatever their reasons for continuing the pregnancy, teenagers who decide to bring a child to term tend to become more committed to their decision over the course of the pregnancy (Furstenberg et al., 1989). Family and friends become more supportive over time, and by the end of the pregnancy, most girls report feeling positive (Ooms, 1981). Unfortunately, the sense of well-being may be short-lived; some data indicate that self-esteem and perceived social support increase over the course of the pregnancy but then decline in the first year postpartum (Vicary & Crockett, unpublished data).

Adaptation to Parenthood

Mothers under 15 are thought to be at a disadvantage in assuming the maternal role. Young adolescents tend to be less cognitively and emotionally mature than older teenagers, and this may impair their ability to provide adequate parental care (Petersen & Crockett, 1986). Moreover,

the role requirements of parenting conflict with the typical developmental tasks of adolescence (Sadler & Catrone, 1983), which could detract from girls' maternal role performance. Research on adolescent parenting, however, has not provided clear-cut results. Although some signs of inadequate parenting have been identified in young teenage mothers (e.g., McAnarney, 1988), parenting competence is rarely measured directly and is often confounded with effects of low SES. Thus, the issue of maternal competence remains controversial.

In fact, the issue of maternal competence may be less central in the case of young adolescent mothers. Because these mothers are more likely to remain with their parents, they are likely to have the help of more experienced adults in caring for their children. The presence of the grandmother is often associated with better adjustment among the children of adolescent mothers (Kellam, Ensminger, & Turner, 1977).

RECOMMENDATIONS FOR RESEARCH AND POLICY

The preceding account of early adolescent family formation points to numerous gaps in our knowledge that need to be addressed in future research. First and foremost is the paucity of information on adolescents under age 15. Few studies of reproductive behavior focus on this age group. Typically, young adolescents have been either excluded from samples or pooled with older adolescents. Information on boys is particularly lacking. Clearly, if researchers, practitioners, and policymakers are to understand the dynamics of early adolescent family formation, more direct study of this age group is needed. In addition to national statistics concerning rates of sexual activity, contraceptive use, pregnancy, and childbearing among young adolescents, there is a need for more detailed information on the factors influencing their behavior at each of these decision points. For example, more research needs to target young adolescents' thinking about sex and reproduction and the meanings they attach to these behaviors. Such studies will necessarily consider not only the developmental status and individual characteristics of the adolescents but their family circumstances and community environment. In addition, differences related to gender, ethnicity, and social class need to be better understood; therefore, group comparisons should be followed by within-group studies that seek to identify the underlying psychosocial and economic processes affecting reproductive behavior and its outcomes. Finally, the role of sexual abuse in early adolescent sexual activity and pregnancy needs to be examined.

The present account of early adolescent family formation also has implications for social policy. Undoubtedly, one major goal is pregnancy prevention. Recommendations for prevention programs in early adoles-

cence are discussed by Crockett and Chopak (chapter 18, this volume). A second goal is providing ameliorative and support services. Young adolescent mothers and their children confront a unique set of risks related to the mother's cognitive and biological immaturity, lack of experience, and social stage. These mothers are less likely to recognize a pregnancy and less likely to think of appropriate courses of action; consequently, without intervention, they are unlikely to receive adequate nutrition and prenatal care. Without support and assistance, they are unlikely to show the foresight that will enable them to anticipate the child's needs and provide adequate nurturance. Socially, they are relatively inexperienced and may not know how to access services. And their stage of life is still a relatively dependent one, in which they rely on parents economically and emotionally. Therefore, ameliorative programs will need to consider young adolescent mothers' developmental status, as well as their social and economic circumstances.

One priority is the provision of prenatal and postnatal health services (Hayes, 1987). These services need to be familiar to adolescent girls and to their parents so that they will be accessed early in the pregnancy. They also need to be conveniently located and inexpensive. A second priority includes programs that help keep the young mother in school, including flexible class schedules, academic tutoring, and day-care services. Instruction in child development, information on childrearing, and contact with other young mothers would also be useful. A third priority is family planning to avoid a repeat pregnancy. Finally, the tendency for young adolescent mothers to live at home suggests the need for social services that support the family as a whole. The baby brings new family strains not only because of the additional demands for care and nurturance but because of the young mother's ambiguous status in the household as both daughter and parent, child and adult. Under these circumstances, the adolescent issue of autonomy is thrown into high relief, and family tensions may increase. Because parental support is very important in early adolescence, services to strengthen the family are recommended. These might include financial services, comprehensive health care, parenting education, and counseling. Programs that simultaneously enhance family support, improve the health and economic circumstances of the adolescent and her child, and equip the young mother with the academic and vocational skills needed to avoid poverty in the future will go far toward ameliorating the negative consequences of early childbearing.

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