How an Adolescent’s Childbearing Affects Siblings’ Pregnancy Risk: A Qualitative Study Of Mexican American Youths

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An adolescent's pregnancy and childbearing surely have profound effects on her family. With more than 400,000 teenagers giving birth in the United States every year, and with most of these teenagers continuing to live with their families after their babies are born, these effects clearly have important practical implications. Furthermore, how a family reacts to a teenager's childbearing likely has significant ramifications for whether other adolescents within the family also become pregnant. And numerous reports have documented that teenage pregnancies tend to occur within families, and among sisters. Indeed, a teenager's childbearing might increase her siblings' risk of pregnancy for several reasons. Social modeling explanations would suggest that a teenager's childbearing increases her siblings' acceptance of early parenting by exposing them to this type of role model. Having an older sister who has had a teenage birth might legitimize teenage parenthood as an acceptable and permissible life course option. Siblings might also view teenage parenting as less of a stigma as they get used to seeing their sister in the mothering role, and as members of her family, neighborhood and community accept her in that role. They may even idealize her situation as her family and community begin to treat her as an adult because of her motherhood.

Another way that a teenager's childbearing might increase her siblings' risk of pregnancy is by altering their mothers' parenting. For example, one study found that mothers became more lenient with and less attentive toward their other children after their teenage daughter gave birth. Another reported that the mothers of childbearing teenagers were more critical and punitive, and less supportive than were other mothers. That same study revealed that mothers' harsh, critical parenting was associated with their teenage child's increased likelihood of being sexually experienced. Numerous other studies have also found that mothers' lack of warmth and closeness and infrequent communication with their children are related to adolescents' increased risk of becoming pregnant or fathering a child, although whether these aspects of mothers' parenting change once a teenage daughter has a baby is unknown. Nevertheless, mothers' parenting and their relationships with their children may change after a teenage daughter gives birth, and these changes may increase the risk of early pregnancy involvement for other teenage children within the household.

However, a teenager's childbearing might also give rise to protective factors, which prevent other adolescents within the family from becoming pregnant or fathering a...
child. For instance, mothers might increase their attentiveness to their children or monitor them more vigilantly, and family members might explicitly discourage adolescents from early sexual activity and early parenting. Mothers might also attempt to use the older daughter’s experience as an object lesson, emphasizing the older sister’s having become pregnant as behavior not to emulate. Siblings themselves might be strongly motivated to postpone parenthood after witnessing the difficulties of teenage parenting. These effects illustrate adaptive responses to a teenager’s childbearing. Understanding such protective effects would offer important insights into preventive strategies that occur naturally within families and that might be easily harnessed into interventions that help families in which one teenage pregnancy has occurred to prevent others.15,16

The goal of the current study was to understand the circumstances that emerge in the wake of a teenager’s childbearing that might increase or decrease siblings’ risk of teenage pregnancy or fatherhood. The study focuses on Mexican American families, for several reasons. Latinos have the highest teenage birthrate and teenage pregnancy rate of any U.S. racial or ethnic group, and the Latino teenage birthrate has been most resistant to decline.3,17 Moreover, teenage childbearing is more common among Latinas of Mexican origin than among those with origins elsewhere in Latin America.18 However, because Mexican American families typically have strong proscriptions against nonmarital pregnancy and childbearing,19 they might experience higher levels of conflict and dissonance following an unmarried adolescent’s childbearing than other families. Thus, although the effects revealed in the current study may not be representative of effects in all families, they are likely reflective of those in many Mexican American families that have experienced a teenager’s childbearing.

METHODS
Participants
From 2005 through 2007, some 41 Mexican American youths whose older adolescent sisters were mothers participated in interviews about how their sister’s childbearing had affected them and their families. In all families, the teenage mother was unmarried, and she was the first family member to have had a teenage birth. This qualitative study was part of a larger longitudinal questionnaire study, which involved 122 younger siblings of teenage parents. For the overall study, we recruited siblings by first identifying eligible older sisters—Mexican American women aged 15–19 who were pregnant for the first time and intended to carry their pregnancy to term and keep their child, and who had no siblings who had been involved in a teenage pregnancy. Older sisters were recruited from community clinics, high schools and program centers of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) throughout southern California. We then invited siblings to participate in the overall study if they were 12–18 years of age, lived with the older (pregnant) sister and were biologically related to her. Ninety-five percent of eligible younger siblings participated.

The first 75 siblings enrolled in the overall study were invited to participate in the interview,* 55% (31 girls and 10 boys) agreed. A significantly higher proportion of girls than of boys agreed to be interviewed (69% vs. 33%; chi-square=9.2, p<.01). The primary reason for refusal was “too busy.” Most siblings (78%) were interviewed when the sister’s baby was about eight months old (range, 6–10 months); because of a lag in funding for the interview portion of the study, the remainder were interviewed when the child was about three years old. Siblings were, on average, 15.2 years old at the time of the interview. Most siblings were born in the United States (85%); the rest were born in Mexico. The older sisters had been, on average, 16.9 years old when they gave birth. All of the infants had been carried to term and were healthy at birth and throughout their first year. The average family income of those interviewed was $18,500 per year, and 63% of families were receiving government financial assistance when the youths enrolled in the study. The average participating family consisted of six persons, of whom 4.5 were children (including the teenage mother and her baby).

Data and Analysis
The interviews were typically conducted at youths’ homes in as private an area as possible. Interviews were conducted by the third author, who was a Spanish-speaking graduate student, who had also conducted the questionnaire component of the study and thus was familiar to the youths. Interviews were conducted in English, were audio-taped and typically lasted about one hour. Participants were paid $20 and assured of the anonymity of the information they provided. The content and protocol of the interviews were approved by the Protection of Human Subjects Review Board of the researchers’ university.

The interview included approximately 30 questions about the effects of the older sister’s childbearing, with several probes incorporated so that youths could expand on their responses and provide examples as appropriate. A typical question was “Has your sister having a baby affected your mother’s parenting or how strict or lenient she is with you?” The interview guide and protocol are available from the authors upon request.

All interviews were transcribed into a Word file by the interviewer. A grounded theory approach was used to identify themes that emerged in the interviews. Grounded theory methods are used to generate theories based on empirical data.20 In contrast to more phenomenological, descriptive approaches, or traditional deductive theory-testing approaches, grounded theory seeks to identify conceptual categories within a data set and to determine

*Only one sibling per family was invited to take part in the interview, typically the oldest younger sibling.
how they help explain the phenomenon under study. Accordingly, despite our familiarity with the literature on adolescent childbearing, we did not have preformed hypotheses about the effects of adolescent childbearing on families or siblings.

The investigators read each interview, noting generally the changes that participants attributed to the sister’s childbearing. We then discussed all changes, classified each effect as a pregnancy risk or protective factor on the basis of well-established findings in the literature, and developed an initial coding scheme, which included eight risk and 11 protective factors. The interviews were then reread, with the coding scheme in mind. No additional insights were generated. Thus, the initial set of themes was considered theoretically saturated, and a complete list of codes was agreed upon.

The first five interviews were coded independently by the first and fourth authors, using the coding scheme of risk and protective factors and applying NVIVO software. The interviews yielded an average of 37 blocks of text—i.e., responses or comments by interviewees—that fit the study codes (range, 30–50 blocks of text per interview). In some instances, the same text segment was assigned more than one code. Intercoder reliability was calculated as the number of agreements divided by the total number of agreements and disagreements. Initial reliabilities ranged from 79% to 94% per interview and averaged 89%. The disagreements were discussed, and code definitions were expanded, amended or deleted. For example, a narrative coded as “feels sorry for older sister” was deemed too vague and deleted from further analysis. The code “mother discourages youth from early parenting” was expanded into “explicitly discourages” and “indirectly discourages” categories, and the codes “spends less time with mother” and “feels less close to mother” were merged into one code, because they reflect similar processes and almost always occurred together.

The five interviews were then recoded (again by the first and fourth authors), using the revised coding scheme, which included six risk and 11 protective factors. Agreement at that time was 100%. The fourth author then coded the remaining 36 interviews. Intercoder reliability was calculated between the first and fourth authors on a new set of five interviews approximately one month later. This comparison yielded 94% reliability.

We conducted chi-square tests to determine whether the frequency with which various risk and protective factors were discussed differed by younger siblings’ gender and by whether the younger siblings’ niece or nephew was an infant (i.e., approximately eight months old) or a toddler (i.e., approximately three years old).

RESULTS

Risk Factors

The six risks found to derive from a sister’s teenage childbearing were as follows: perception that early parenting is not a hardship, schooling difficulties, desire to have a baby, depression and social isolation, reduced closeness or time spent with mother, and positive remarks from friends about the sister or her baby. Four youths discussed none of the risks, 22 youths reported one or two risks, nine youths discussed three risks and six youths discussed four of the six risk factors. None of the siblings discussed five or all six risks. Results of chi-square tests revealed no significant gender differences in the frequency of any of the risk factors and only one significant difference by the age of the participant’s niece or nephew: Youths who had a toddler niece or nephew were more likely to perceive that early parenting was not a hardship than were youths who had an infant niece or nephew (chi-square=12.11, p<.001).

The most commonly cited risk that derived from a teenage sister’s childbearing—mentioned by two-thirds of youths—was the perception that early parenting is not a hardship (Table 1). Many youths believed that given the family and school supports currently available to teenage mothers, the difficulties of early parenting are not great. Gabriela,* age 17, reflected this theme in the comment “I don’t think [teenage parenting is] that hard. You have your mom there, and the baby’s father; he’s helping too. ‘Cause like if you have your family, it could probably be okay. It would be a little bit hard, but you still have people to depend on to help you out.” Maria, age 12, said, “No, [teenage parenting is] not hard. ‘Cause there’s times that these girls have babies and go to high school, and they take their baby to school. So, if the schools let them take their babies, it’s not hard.”

Increased schooling difficulties—specifically, a decline in grades and less time for studying and doing homework—were reported by one-third of siblings. Angela, age 15, explained, “It’s changed, because sometimes I will be trying to study, and the baby will be coming up to me, grabbing my papers, grabbing my books, and sometimes she will tear my papers from my notebook. So, it’s kind of stressful to get my homework done at all.” Carlos, age 15, remarked, “It prevents me from going to sleep on time, and now I’m tired all the time at school. My grades sort of got worse just ‘cause of not doing homework or studying for tests.” Claudia, age 15, concurred: “[The baby] interferes with me doing my homework, my grades have suffered and getting to school on time is a problem. It’s also harder because of the fact that I can’t get my homework done. I’m scared that I might not be able to go to the next grade or something.”

When asked whether their sister’s having a baby had made them want to have a child, one-quarter of youths said that it had. Many appeared to idealize motherhood and their sister’s bond with her baby. Cyndi, age 14, reflected this theme, stating, “Yeah, it makes me seem like I want to have one too, ‘cause it seems cute to be a mom. ‘Cause in some way it’s kind of cool to have somebody to love you and stuff.” Erica, age 18, echoed this sentiment: “Yeah, because I see my sister and her, and

*All names of study participants have been changed.
they have a bond together, so I want that bond too.’ When asked whether his sister’s having a baby had made him want to have a child, Anthony, age 17, responded, ‘Yeah, ‘cause it’s a cute baby, and I want a cute baby.” Jessica, age 13, revealed another motivation, which was to achieve something of which she could be proud, stating, ‘Yeah, I want one too … in like my senior year though, like just as I’m getting out of high school … ‘cause like, I wanna be able to take care of my baby, you know, and see my baby grow up … and be proud that it’s my baby and I took care of it.”

One-quarter of youths discussed feelings of depression and social isolation. For many youths, depression stemmed from the responsibility of caring for their sister’s infant, resulting in the youth’s being “housebound.” Nadia, age 14, explained, “It’s like I always have to hang out here [at home] ‘cause of the baby. I have to watch him all day after school and sometimes at night if my sister goes out. I get bored, and my friends get tired from coming over here all the time. They’re always like, ‘Why can’t you come out with us?’ I’m like, ‘cause I have to watch him!” Marco, age 15, told a similar story: “Most days I have to stay home and take care of the baby instead of going out instead of with my friends. They always have cool things to do, and I’m stuck here.” Brooke, age 12, also housebound, explained, “Like usually I can’t do stuff ‘cause [my mother and older sister] have to go somewhere, and then I can’t go anywhere.”

One-fifth of youths said that they spent less time with their mother as a result of her new responsibilities as a grandparent. Lourdes, age 17, commented, ‘Yeah, I feel mad ‘cause [my mother] is always taking care of [the baby], and she ignores us.” Brenda, age 14, when asked if her relationship with her mother had changed since her older sister had a baby replied, “Yes, because there is no more time. Like we get less time with her ‘cause she likes to spend more time with the baby, and she has to work longer to make more money for the baby. So I don’t really see her all that much.”

One in five youths reported that their friends had made positive comments about how cute the baby was or how “cool” the older sister was for being such a young parent. Laura, age 13, stated, “My friends are like, ‘Where’s the baby? Oh, she’s so cute. She’s so pretty. Has her hair grown in yet?” We considered such comments risks because of their positive reinforcement of young parenting.

### Protective Factors

The 11 protective themes that derived from a teenage sister’s childbearing were as follows: increased motivation to delay parenting, appreciation of the difficulty of parenting, mothers’ explicitly and—separately—implicitly discouraging youths from early parenting, increased closeness or time spent with mother, mothers’ differentiating youths from the older sister, mothers’ increased strictness and protective factors. Six youths discussed two or three protective effects, 31 youths discussed 4–6 protective factors and four youths discussed seven. The frequency of protective effects did not differ by youths’ gender or the age of the sister’s child at the time of the interview.

The most commonly cited protective factor—which was discussed by all but one youth—was an increased motivation to avoid early parenting. Ana, age 16, explained that her sister’s having a baby “has made me want to wait to have a baby, ‘cause it takes a lot of guts to do it. So I’m like, nah, I have to wait until I’m more prepared to be a mom. Not right now…. I’m not even close to being prepared.” Juan, age 15, commented, “I want to wait, ‘cause [my older sister] doesn’t look like she’s having that much fun. She has to stay home and watch the baby and stuff, so I’m like, nah.” Emily, age 16, bluntly stated, “I want to wait ‘cause now I know the consequences of having a baby. It’s taught me that I’m not ready yet.”

The second most frequently cited protective factor resulting from a sister’s teenage childbearing, discussed by 90% of youths, was an increased appreciation of the challenges of parenting. Melissa, age 12, said that her sister’s having a baby “has kind of shown me and taught me that it’s hard to raise a baby, and it takes a lot of patience and effort. It’s taught me that babies … need a lot of time and care and attention. It’s too much — too much — work.” Citing an appreciation of the personal and educational costs of early parenting, 16-year-old Christina stated, “Now I realize, you know, that having a baby takes away a lot from school and things you want to do. Everything gets harder. School is harder. Adding something else like a baby makes it real hard.” Yesinia, age 15, described...
recognizing the long-term responsibilities of parenting: "Now that I've seen my sister's baby, I see how hard it is to take care of a baby, and not just the parenting and all, but like with the stuff that the baby needs. You need to think of that little person depending on you always."

The third most common protective factor, cited by two-thirds of siblings, was mothers' explicitly telling them to delay parenting. Juan, a 15-year-old, stated, "She doesn't want me to screw up. She doesn't want for me to affect my life that way by having a child. She tells me... just get done with what you have to do. Then, when you have a steady wife, have money for it, then if you want to, go right ahead." Cyndi, age 14, said that her mother tells her that "I shouldn't be doing all these things, that I should wait, 'cause a baby—right now is not a good time for it."

In other points, 20% of youths reported that their mothers did not explicitly tell them to delay parenting, but that they felt implicitly that their mothers wanted them to. When Anthony, age 17, was asked if his mother wanted him to wait to become a father, he said, "She knows I'm gonna wait." When probed about whether his mother had actually said anything, Anthony responded "Um... well, she wants me to wait. Has she said anything? Um... no." Sometimes mothers vaguely or indirectly communicated their expectations to their children. For example, David, a 14 years old, stated, "She has said things like we can't have a baby in this house 'cause it's too much responsibility for us... 'cause we're not mature enough or something." Along these lines, when asked to give an example of anything their mothers might have said about how to delay parenting, only 7% of those interviewed reported that their mothers had mentioned contraception. For example, Miguel, age 15, stated, "My mom has said that if I ever have sex, I should wear a condom." Two girls, ages 15 and 16, reported that their mothers had told them to "use protection" and "take care of myself."

Whereas one in five youths reported spending less time with their mothers, more than half described a shift that led to their spending more time with their mothers. Nadia, age 14, explained, "I spend more time with my mother, 'cause like my sister is apart now. Like she's with the baby, and I'm with my mom, and my little sister too. So we're together more now." Many youths described developing a special closeness with their mothers by jointly caring for their sister's baby. Ashlee, age 12, said that her sister's childbearing has made her and her mother much closer: "Over these last couple months, we've been really close, because [we] are the ones that... watch [the baby]. So, we're always together now."

Another protective factor was mothers' purposely differentiating the younger sibling from the parenting sister. This theme (cited by 29% of participants) was evident when youths described their mothers' telling them to "not be like your sister." Jessica, age 13, explained, "My mom totally expects more of me now, 'cause she doesn't want me to do the same thing, the same mistakes that my sister did. She'll say, 'I don't want you to come out like her. You should wait' [to become a parent]." In some instances, the mother explicitly criticized the older sister for her pregnancy to the younger sibling. One younger sister, Sara, age 14, reported, "Like, my mom will tell me to just go to school, be careful, just don't do something bad, and don't be dumb like your sister." Letisha, age 16, confided, "Like my mom is always telling me to not be like my sister... She'll be like 'Don't end up like her.'"

One in four youths described their mothers' increasing their strictness and diligence in monitoring them. Gabriela, 17 years old, stated, "Yeah, my mom is more strict now, 'cause now I can't really go out because she's scared that maybe I'll go and get pregnant too or something." Ana, age 16, agreed: "My mom is more strict, more protective, like now she is more scared that I will do the same thing, so she keeps an eye on me all the time. She's always telling me like, 'Oh, you have to tell me who your friends are, you have to tell me this or where you're going.'" Marla, age 14, commented, "My mom is not more strict, just more protective. Like she tries to explain to me stuff I shouldn't do or places I shouldn't go."

Nearly one-quarter of youths spoke about having higher school aspirations as a result of their sister's having had a baby. Anthony, age 17, said, "It makes me want to have a job for when I have kids, and to be able to support them and stuff." Yessica, age 15, stated, "I just want to do well in school now, finish school and start what I want to do."

Twelve percent of youths said that their older sister had specifically discouraged them from teenage parenting. Mariela, age 12, confided, 'She is my idol, and she told me to keep my grades up and to study more. She gives me advice to not get pregnant. She told me to not have a baby because it's been very difficult for her." Laura, age 13, commented, "She has told me all the things she went through, and she doesn't want that to happen to me."

Likewise, 12% of younger siblings wanted to improve their behavior so that they could be a positive role model for their niece or nephew. Ana, age 16, reported that her sister's having a baby "has made me do better, 'cause I want to be an example for my niece someday, so she can look towards me and say, 'Oh my tia finished school, and she did good.'" Claudia, age 15, shared this view: "I used to go to parties all the time and do underage drinking. Sometimes I'd come home a little bit drunk, and somehow I don't think that's a good example for me to be a good role model [for my niece]." Manuel, age 15, confided that his sister's childbearing "has been good, 'cause I'm not in the streets getting into trouble. I'm mostly here [at home]. I'm not... um... you know, I don't do bad things anymore."
DISCUSSION

Interviews with the younger siblings of teenage mothers revealed several processes through which an adolescent’s childbearing affects siblings’ pregnancy risk. Siblings spoke about several effects that might increase their likelihood of early pregnancy, including not perceiving early parenting as a hardship and experiencing increases in school difficulties, depression or social isolation. All such factors have been associated with an elevated likelihood of teenage pregnancy, and might explain the increased pregnancy rates among the siblings of parenting teenagers. However, older sisters’ childbearing also yielded several protective effects, including youths’ increased appreciation of the difficulty of parenting, mothers’ explicitly discouraging teenage parenting, and mothers’ increased strictness and protectiveness. Youths’ narratives revealed how families attempt to prevent additional teenage pregnancies within their family.

Themes Related to Risk Factors

**Teenage parenting “is not that hard.”** For many youths, the supports in place to help teenage parents, such as school child care programs, appeared to minimize the hardships involved in early parenting. This is an important issue to address in adolescent pregnancy prevention programs; the message must be that special child care and programs; the message must be that special child care and

**My grades sort of got worse.”** Many younger siblings of teenage mothers expressed concern about declining grades and an inability to do homework both because they felt “tired all the time” and because of distractions caused by the sister’s baby. After-school study hall programs or places where youths can complete their homework in a quiet, supportive setting might be beneficial. In addition, youths’ informing teachers or a school counselor about their family situation might lead to an improved understanding of, for example, why they are consistently late with their homework or inattentive at school. Support and assistance at school might help them realize that they are not sufficiently mature for it. Interventions that are frank in pointing out the realistic hardships of raising a baby might help youths more clearly estimate the consequences of their behaviors that could lead to pregnancy.

**My mom tells me to wait.”** More than two-thirds of youths reported that their mothers explicitly told them to delay parenthood until adulthood. In some cases, mothers specifically told youths not to end up like their older sister. Sibling differentiation is a process whereby siblings purposely distinguish themselves from one another, with the intent of establishing unique roles and identities within the family. Mothers may unwittingly capitalize on this process by emphasizing to their children how dissimilar they are or can be. In this way, mothers constructively lessen the older sister’s influence on younger siblings and help younger siblings “detach” from the teenage parenting model exemplified by their older sister. Youths’ and mothers’ use of sibling differentiation warrants further study, particularly as it relates to younger siblings’ breaking away from high-risk behaviors established by older siblings.

Although many youths said that their mothers wanted them to delay parenthood, several described their mothers as unclear or ambivalent in this message. In fact, when asked whether their mother had specifically discussed how to delay parenting, only three siblings reported that their mothers had talked to them about contraception. Programs designed to help Latina mothers feel more comfortable in openly and candidly discussing sex and contraception with their adolescent children might be particularly valuable for these families.

**My mom is more strict, more protective.”** As a result of a sister’s teenage childbearing, many youths reported that their mothers more closely monitored them and their whereabouts. This is a very positive response, given that attentive, vigilant parenting is associated with delayed sexual activity and pregnancy. Mothers’ efforts to enhance their control of their children, while developing a more involved and protective approach to parenting, are to be commended and reinforced so that they continue.

Limitations

Only about half of youths who were invited to participate in the interview did so. These individuals may be unique on a variety of characteristics, such as openness, talkativeness and their reactions to their sisters’ childbearing. The themes that emerged here may not be representative of all siblings’ experiences. Further, the relatively large gender imbalance in the sample (significantly more girls than boys participated) may have affected results. We also...
remind readers that the sample consisted exclusively of Mexican American families and that results reflect only these particular families. Families' reactions to a teenage daughter's childbearing likely vary for specific racial and ethnic groups, and reactions described here may not be generalizable to families of other backgrounds.

We have presented only younger siblings' views, which may not mesh with those of the teenage mother, the youths' parents or other family members. Mothers' views about how their daughter's childbearing has affected their parenting would be particularly informative for pregnancy prevention efforts. Fathers' views on this issue also would be informative, as they have not been studied.

Conclusions
It is important to understand how a teenager's childbearing affects families and siblings so as to prevent additional teenage pregnancies from occurring within families. Interventions that address the risks identified in this study, as well as incorporate or build upon the protective themes, might be useful, given that teenage births among younger sisters of teenage mothers are 2–6 times as high as those of teenagers in the general population.6,8,10 Our findings about the family dynamics that result from a teenager's childbearing can help inform programs that work directly with teenage parents. And mothers themselves might benefit from learning their children's thoughts about and reactions to a teenager's pregnancy and childbearing. Indeed, efforts that encourage family involvement and discussion may be a worthwhile prevention approach.31 With continued research into families that have experienced teenage childbearing, we hope to further elucidate how this experience affects families and the pregnancy risk of other children in the household.

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