A REVIEW OF RISK AND PROTECTIVE FACTORS RELATED TO REPEAT TEEN PREGNANCY WITH A FOCUS ON TRENDS IN NORTH CAROLINA

by
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ABSTRACT

Repeat teen pregnancy is a health issue often hidden behind falling statistics of teen pregnancy rates across the country. With its own unique challenges and influencing factors, this issue warrants further research and discussion within the public health sector, as it poses a multitude of health and social risks for successful transition from adolescence into adulthood. Specifically within North Carolina, rates of repeat teen pregnancy have plateaued at nearly 30% of all teen births, indicating a need to change the policies and efforts to better serve at risk teens. Disparities exist among racial groups, and repeat teen pregnancy exhibits a complex relationship to poverty, necessitating creative and holistic interventions. Policy change within North Carolina is necessary, to ensure that teens have access to health and social services and are also able to continue their education. To tackle this complex issue, it is necessary that we shift the conversation away from one of blame and stigma to one of opportunity and understanding as to why teens may choose to parent earlier than the social expectation. Teens can indeed be successful parents if given the proper tools, education, and support along the way.
INTRODUCTION

Childbirth is a time of immense change for a new parent, influencing life physically, emotionally, and socially. For teenage parents, childbirth brings with it additional complexity, as seeking family support, completing education, maintaining physical and emotional health, and rising to the challenge of parenting can be overwhelming for most teens to tackle. Despite these hardships, many teen parents quickly follow the first birth with a second pregnancy and birth, making their chances for future opportunity all the more challenging. While it may seem confusing that a teen would give birth to a second child while still struggling to raise her first, this is precisely why it is crucial to understand the influential factors at play. It is this societal conundrum, and its corresponding risk and protective factors, which will be explored in the following pages.

Consequences of Repeat Teen Pregnancy

While teen birth rates have been declining steadily in the last decade, repeat teen births are shockingly common with a variety of consequences. For the purposes of this paper, teen birth is defined as that which occurs before a woman turns 20, with a repeat teen birth also occurring within this time frame. Though an adolescent body is capable of carrying a pregnancy and delivering a child from the onset of menstruation, challenges from developmental and societal perspectives lead health care providers to classify these teen pregnancies as “high risk.” Of all annual teen births in the United States, approximately 20% are repeat births, often in close proximity to the first. Various studies cite repeat teen births occurring within 24 months of the first birth in 20-30% of cases. Indeed, these second, third, and fourth infants exhibit several of the negative
health consequences associated with closely spaced births, such as preterm birth, low birth weight, and small size for gestational age.\textsuperscript{3} As discussed in Healthy People 2020, it is a public health goal to reduce teen pregnancy, reduce pregnancy recurrence within 18 months, and increase intendedness of pregnancy,\textsuperscript{4} objectives which are all relative to teen births. From a behavioral/social perspective, teens with repeat births are less likely to receive prenatal care, complete school, or achieve economic self-sufficiency, and they are more likely to have dependency on welfare and to raise children with emotional and behavioral problems. It can be argued that the \textit{children} of these teens are the most adversely affected.\textsuperscript{5} Teen parenting is also closely linked to school failure, with emphasis on the fact that additional children make success in school more challenging.\textsuperscript{6} From an economic perspective, consequences of teen pregnancy and repeat births have implications for individual families as well as the society as a whole. Only 70\% of teen parents earn a GED certificate, just over half earn a high school diploma, and only 10\% complete a two- or four-year college program. This results in mothers’ average annual income of only $6,500 for the first 15 years of parenthood, with an average income of $12,000 provided by partners when they are involved.\textsuperscript{7} In essence, families headed by teen parents end up living in poverty, and reliance on public assistance programs is a necessity when families are earning so little. The cost is of teen pregnancy is estimated to be $9.4 billion to US taxpayers annually.\textsuperscript{8}

\textbf{Life Course Model}

Life course considerations relate to the issue of repeat teen pregnancy as adolescence, childbirth, and infancy are all significant times in the life course. According to the
Maternal and Child Health Bureau, life course theory explores the relationship of broad environmental or social factors on the timing of health patterns among members of a community. While this can help to shed light on disparities among populations, it also identifies factors influencing a person’s full potential for health and wellbeing. This framework can be applied to repeat teen pregnancy as a means of exploring differences among groups and decision-making around childbearing. For example, Herrman describes many teens’ decisions around repeat pregnancy to be highly influenced by their surroundings. Among groups of African-American teens, repeat pregnancy was seen as a result of an accelerated life course, where norms around sex, caring for children, and life opportunities may all encourage early, multiple childbearing. Other studies have similarly seen differences in life course by cultural groups, including accelerated family timetables, separation of marriage and reproduction, age-condensed family structure, and intergenerational care giving or grandparent childrearing.

Life course considerations must also be explored as they relate to adolescence and the capacity for decision-making. Herrman points out that the adolescent brain is more likely to make impulsive decisions or neglect family planning altogether, as perhaps a teen does not plan to have a repeat pregnancy, nor does she plan to prevent one. While no studies have explicitly posed connections between early life course events and a biological effect on repeat teen pregnancy, Lu and Halfon propose that a combination of early programming and wear and tear of chronic stress on the body could result in poor reproductive outcomes, and many of these factors are found increasingly within low-income populations where repeat teen pregnancy is more prevalent. This once again
points to racial disparities between groups experiencing teen pregnancy and repeat teen pregnancy as part of the expected life course.\textsuperscript{14}

**Socioecological Model**

As we explore the connection between a teen’s social and physical environment and risk for repeat pregnancy, it becomes important to consider the topic in terms of a socioecological framework. Adapted from Bronfenbrenner,\textsuperscript{15} the socioecological model dictates consideration of influencing factors on multiple levels: individual, interpersonal, community, and society. Figure 1 illustrates a visual socioecological model for repeat teen pregnancy.

![Figure 1, Socioecological Model for Repeat Teen Pregnancy](image)

For teen parents, many of the individual level factors originate from developmental and decision-making capacities discussed above, including future reproductive life planning and decisions around contraceptive use.\textsuperscript{16} It is also important to consider any past experiences that may affect how a teen interfaces with her surroundings, as associations have been made between adverse childhood experiences (ACEs) and increased
prevalence of adolescent pregnancy in general.\textsuperscript{17} It is reasonable to conclude that these same ACEs could influence repeat teen pregnancies. A dose-response association can be seen for women who experience of four or more ACEs during childhood, making it 1.5 times more likely that she will have an unintended first pregnancy, with exposure to frequent psychological abuse, frequent physical abuse of her mother by a partner, and frequent physical abuse being most closely correlated with later unintended pregnancies.\textsuperscript{18} Additionally, women who experience ACEs are more likely to have early initiation of sexual activity,\textsuperscript{19} which is known to be a risk factor for repeat teen pregnancy.\textsuperscript{2} For adolescent males, ACEs are also seen to be a significant predictor of teen parenting. Experience of any of the eight identified ACEs is associated with an increased risk of male involvement in teen pregnancy.\textsuperscript{20} Frequent physical abuse of their mothers increases a teen male’s chances of impregnating a female by 70\%, sexual abuse younger than age 10 increases the risk to 80\%, and sexual abuse with violence increases this risk to 110\%.\textsuperscript{21} Clearly, early experiences of violence and trauma increase the risk for later adolescent pregnancy and repeat pregnancy for all children.

Discussion of ACEs leads into influences on the interpersonal level, as the influence of a teen’s family is of particular importance, both in the past and present. Most teens are still living with their parents or guardians, and approval or disproval of the teens’ parenting will play a major factor on future behaviors.\textsuperscript{22} For teens, influences from her peers or the father of the baby will also be significant factors contributing to risk for repeat pregnancy. On the community level, many teen parents may still be engaged in school, and the information, access to care, and support that they receive from this community
will play a significant role. On the societal level, many factors increase the risk for repeat teen pregnancy, including access to healthcare and contraception; support for school and work, including access to child care and transportation; housing availability; and the design of public assistance programs. The risk for homelessness is increased for teens who are pregnant or parenting, indicating how easy it is for teen parents to “fall through the cracks” if necessary assistance is not provided and support from family is not an option. It is commonly argued that public assistance programs will in some way encourage young mothers to continue having children to reap the benefits; however, this view is shortsighted. While public assistance is helpful, it generally falls short of truly providing everything that a child needs, and realistically contributes very little to the emotional and energetic effort needed to raise healthy children. It is certainly important to examine the requirements of recipients in order to gain the benefit of public assistance and other support programs, but this view demonstrates a superficial understanding of parenting and all that is required to raise truly healthy children.

BACKGROUND

Historical Trends

In general, teen pregnancy rates have been falling steadily since the early 1990s. North Carolina’s teen pregnancy rate has consistently been lower than the national average (Figure 2), but interestingly the teen birth rate in North Carolina has remained higher than the national average (Figure 3). In other words, more North Carolina teens that get pregnant actually give birth to a child. It could be hypothesized that the more prevalent
religious culture in the South affects attitudes around terminating a pregnancy, decreasing the likelihood that a teen would seek or have access to abortion.

**Figure 2, Sources: NC State Center for Health Statistics; Kost et al.**

**Figure 3, Sources: Adolescent Pregnancy Prevention Campaign of NC; Martin et al.**
Of note, it is clear in comparing Figures 2 and 3 to Figure 4 that the percent of repeat teen pregnancies in North Carolina and percent of repeat teen births in the US have not been falling as steadily as teen pregnancy and birth rates in general. Rates in North Carolina have held steady with approximately 25-30% of all teen pregnancies being repeat pregnancies, and rates of repeat teen births have remained constant in the US around 20%. It is important to theorize why this steady decline in teen pregnancy has somehow left out those who are already parenting: could it be related to culture, policy, or other social factors? This question is important to bear in mind as we continue the discussion.

**Differences among Racial Groups**

It is easily seen in the Figures 5 and 6 that substantial disparities for teen pregnancy and repeat pregnancy exist among racial groups. Both within North Carolina and throughout
the US, Caucasian teens experience lower rates of teen pregnancy, birth, and repeat birth compared to African-American and Hispanic teens.

Figure 5, Sources: NC State Center for Health Statistics; Adolescent Pregnancy Prevention Campaign of NC

Figure 6, Source: Centers for Disease Control and Prevention
Pfitzer, Hoff, and McElligott\textsuperscript{27} found that teens enrolled in a support program were more likely to experience a repeat pregnancy if they were Hispanic or had a Hispanic partner. Health disparities within society among different racial groups can be found in countless measures related to health status and disease prevalence, and this inextricably linked to poverty and socioeconomic insecurity among these groups. In many ways, discussions around the prevention of repeat teen pregnancy are operating under the assumption that all teens are free to make choices about their lives, regardless of personal history, family situation, and structural influences.\textsuperscript{28} Put differently, we view the issue through the prism of the white middle class.\textsuperscript{29} If we closely examine the various realities experienced by different racial groups within the US, it can quickly be seen that the choices and opportunities presented to all are not equal. Certainly in some cases, differences among groups may be attributed to cultural norms or traditions for the family. For example, Bouris et al.\textsuperscript{30} specifically discuss ways which parents of Latina teens could become more engaged in preventing rapid repeat teen pregnancies to address the high prevalence among this group. In many other cases of minority teen parents, however, these differences in opportunity may be the result of systematic oppression over time. One does not have to look far to see health inequity played out for a variety of minority groups, particularly African-American and Hispanic individuals, and it is known that poor health will come to those at social, economic, and environmental disadvantage.\textsuperscript{31} Varying social opportunities among groups can account for differences in life expectancy, access to care, experience of trauma, chronic health conditions, teen pregnancy, and repeat teen pregnancy, to name a few.
Literature Review

While the focus of this paper is repeat teen pregnancy, it is helpful to understand the major risk and protective factors associated with teen pregnancy in general, partially because many of these factors are shared between the two issues.

Many studies have investigated potential risks predictive of teenage pregnancy. Cavazos-Rehg et al. found drug and alcohol use, the death of a parent, and diagnosis of an early conduct disorder to all be predictive of later teen pregnancy. As mentioned previously, a history of any adverse childhood experiences is highly predictive of adolescent pregnancy, with a dose-response evident. In concurrence with our discussion of ACEs, the Healthy Teen Network published a review of the correlation between interpersonal and family violence and teen pregnancy, as each can increase the risk of the other. Teen homelessness can also have a mutually predictive influence on the risk for teen pregnancy. Similarly, school failure or disengagement from school can both predict teen pregnancy and be the result of it. In terms of demographics, Hispanic and Black teens are more likely to experience pregnancy than White teens, and teens living in the South and Southeast have higher rates of teen pregnancy than those living in other parts of the country.

Protective influences have not been afforded as much attention in the research regarding teen pregnancy, but a handful of studies point to specific factors for prevention. Hillis et al. found that family strengths such as family closeness, support, loyalty, protection, importance, love, and responsiveness to health care needs all protected against teen
pregnancy. In fact, the protective influence of these strengths was so significant, it could mediate detrimental effects of ACEs experienced by teens to prevent pregnancy. Certain services, such as the home visits and community support provided by Healthy Start, have been shown to effectively reduce teen pregnancy, though the same effects were not seen in reducing repeat teen pregnancy.\textsuperscript{36} Considering health care for teens, it has also been found that a positive relationship with a primary care provider increased teens’ self-efficacy for pregnancy prevention.\textsuperscript{37} This gets at the importance of caring for the physical body, as well and the emotional and psychological needs of patients, improving health from a holistic perspective allowing the patient to emerge with a stronger sense of self-efficacy and goals for the future, undeniably important for this population.

Specific to repeat teen pregnancy, less has been studied related to risk and protective factors. Findings from a retrospective case control study of teens participating in a teen parent support program indicated that those who experienced a repeat pregnancy were more likely to be Hispanic or have a partner who was Hispanic; more likely to have experienced a poor initial pregnancy outcome, such as miscarriage or stillbirth; more likely to be in a stable relationship with the father of the baby; and more likely to have self-reported suicide attempts and to have a serious psychiatric history.\textsuperscript{27} For teens experiencing any form of physical or sexual violence after a first birth, the chance of a repeat birth within 18 months was found to increase.\textsuperscript{38} Earlier onset of sexual activity is correlated to multiple teen pregnancies in the future.\textsuperscript{2} Additionally, older age at menarche and higher rates of self-reported aggression were found to increase chances of a repeat pregnancy within 24 months.\textsuperscript{39}
The data predicting risk for repeat teen pregnancy is spotty at best. We can begin to see a trend in terms of the complex relationship between teen pregnancy and poverty: poverty makes these mothers more susceptible to early parenting, and early parenting exacerbates poverty and school failure. Each family situation will be different, and it is therefore also difficult to pinpoint where parental support or involvement with the father of the baby may either prevent or enable subsequent births. In much of the research on repeat births, involvement of the teen father is largely neglected, thus it is difficult to assess his role in the issue. From the data currently available, we can identify some of the most obvious risk factors for repeat pregnancy. However, more research is needed in the areas of protective factors, roles of family members including parents of the teens, and role of the teen father.

INTERVENTIONS
Interestingly, when we look to interventions specifically targeting repeat teen pregnancy, it is uncommon to find this as a primary programmatic goal. More commonly, goals of appropriate parenting, mother and child health, and completion of school are given primary focus. While these certainly decrease the likelihood that a teen will experience a subsequent birth, repeat pregnancy prevention remains in the background. One intervention found to focus on prevention of repeat pregnancy as a primary goal is a multi-faceted program utilizing public health nurses to deliver services. Based on collaboration of a school, the public health department, and the community hospital, this program was found to decrease school-wide repeat teen pregnancy rates from 25% at the start of the program to a school-wide rate of 7% after 20 years, indicating a significant
decrease despite the fact that the study was uncontrolled. Similarly, a randomized, controlled intervention using home-based mentoring by college-educated single black mothers trained as lay health workers had a significant positive effect of preventing repeat pregnancy after just two home visits. The intervention exhibited a positive dose-response with increasing numbers of visits, though the effects diminished over time post-intervention.

The intent of examining those interventions which have been successful at preventing repeat teen pregnancies in the past would be to identify characteristics of these promising interventions. However, it is first important to establish what we mean by “success.” Success could mean preventing a second pregnancy altogether during the teenage years. It could mean preventing only those pregnancies which a teen identifies as unplanned or unintended. Indeed, Healthy People 2020 targets intendedness and spacing of pregnancy, indicating that these are appropriate measures of successful family planning. Definitions of success may also vary among cultural groups; as discussed previously, for some families working with limited opportunities, becoming a mother early in the reproductive years is not necessarily considered negative. Based on an evaluation of interventions aimed at preventing repeat teen pregnancies, Klerman suggests several recommendations for successful programs, ranging from the types of staff to employ to the methods used to communicate with and empower teens. Her recommendations are wide-ranging, also including incorporation of contraception and means of eliciting family member support. Indeed, several studies have highlighted the importance of contraceptive use to physically
prevent a subsequent pregnancy,\textsuperscript{1,42-43} with general recommendations for long-term contraceptive options such as the implant or intrauterine device.

Despite the fact that these may not reach all parenting teens, school-based programs remain popular. If school-based, these interventions should include an element of dropout prevention.\textsuperscript{44-45} Some advocate for the use of school-based child care centers for teen parents,\textsuperscript{46} as this has been shown to increase the chance that she will remain in school and thus be less likely to experience a repeat pregnancy. On the contrary, the argument has been made that these child care centers would incentivize a teen to become pregnant again to take advantage of the service (though this view assumes that the difficulties of parenting outside of child care hours would not influence the decision for a teen).

Interventions based in primary care settings may also be effective, as the Young Parent Program boasted a repeat teen pregnancy rate of less than 1\% over 3 years thanks to case management, health and mental health services, and overall increased support for parenting teens.\textsuperscript{47} Themes for interventions appear to be moving in the direction of strengths-based models, such as Porter & Holness'\textsuperscript{48} theory outlining ways that nurses can increase resilience among parenting teens to prevent a subsequent pregnancy. While home visiting has been shown to have mixed results with preventing repeat teen pregnancy, the importance of education and empowerment in this realm has also attracted conversation for more effective interventions.\textsuperscript{49} Additionally, to address the whole person, interventions should be trauma-informed, as it is clear from the literature that
many parenting teens are likely to have a history of physical and sexual violence and trauma. According to the National Child Traumatic Stress Network, trauma-informed care helps teen parents to form healthy relationships with supportive adults, partners, and peers, and to strengthen attachment with their own children. This can be accomplished in a structured environment by teaching the parent to tune into their child to respond to the affect or need rather than the behavior; modeling adaptive coping with the child’s behavior; and praising and reinforcing positive behavior of the child.\textsuperscript{50} Interventions, we are learning, must ideally be holistic in nature, draw upon strengths, and involve various players on the socioecologic spectrum that influence a parenting teen.

Clearly, designing and funding such interventions is an uphill climb. Logistically, bringing together a multitude of community partners to provide these holistic interventions is a huge challenge for most communities. Additionally, the time and resources needed to study and evaluate interventions for effectiveness is a challenge for public health practitioners in this fiscal climate. Ethical concerns and issues of privacy and consent when dealing with minors are also important considerations. For some teen parents, there may also be the challenge of intended pregnancy,\textsuperscript{39} as many interventions assume that repeat teen pregnancies are not intended or wanted by participants and their support systems. According to the National Survey of Family Growth in 2012, 35\% of repeat teen pregnancies were in fact intended. These teens with intended repeat pregnancies were likely to be married, to have had an intended first pregnancy, a prior poor obstetrical outcome, or intended repeat pregnancy by their partner.\textsuperscript{51} Despite the limited opportunities for teens who bear multiple children as a young age, these intended
pregnancies pose a particular challenge for reducing rates of repeat teen pregnancy within a population, and these families will likely require intensive community support.

**POLICY IMPLICATIONS**

As the general healthcare climate in the US moves toward prevention through implementation of many aspects of the Affordable Care Act, teen pregnancy certainly has its place at the table. While many current policies, like current interventions, do not specifically target repeat teen pregnancies, it is safe to assume that attention will be afforded to both issues. The ACA established the Personal Responsibility Education Program to replicate evidence-based models aimed at delaying sexual activity, increasing condom or contraceptive use, and reducing teen pregnancy. Evidence shows that these programs should include comprehensive, medically accurate information on both abstinence and contraceptive use. The ACA also restored funding for abstinence education, though this would not be particularly helpful for teens already parenting. The ACA additionally established the Pregnancy Assistance Fund, administered by the Office of Adolescent Health, to provide a network of services to pregnant and parenting teens. Goals include completion of education and access to healthcare, housing, child care, and other supports, with a particular focus on victims of domestic violence, sexual violence, sexual assault, and stalking. North Carolina was one of the 17 states to receive this grant. The ACA also created the Maternal, Infant, and Early Childhood Home Visiting program to use evidence-based home visiting programs nationwide, many of which are serving adolescent mothers. This type of home visiting is often able to provide the holistic wrap-around support mentioned as being a successful intervention for preventing repeat teen
General access to contraception has also improved under the ACA, with a wider range of contraceptive options (including long-lasting methods) being considered part of the essential services required to be covered by insurance providers, and access to these methods will surely decrease many unintended teen pregnancies.\textsuperscript{43}

Within North Carolina, there are several policy implications involving repeat teen pregnancy. It is important to examine the state Medicaid program, as this is the insurance by which many teen parents will be covered. In choosing not to expand Medicaid, certain teens may fall outside eligibility for Medicaid, as this is dependent on their parents’ income in North Carolina as well as many other states.\textsuperscript{54-55} Without the benefits of Medicaid, these teen could face barriers accessing contraception to prevent subsequent pregnancies. North Carolina does support a state-wide Adolescent Parenting Program through the Teen Pregnancy Prevention Initiative, with the main goals of completing education and preventing subsequent teen births.\textsuperscript{56} Additionally, North Carolina is one of the recipients of the Pregnancy Assistance Fund, and this grant is funneled to the Young Moms Connect program in five under-resourced counties with high rates of teen pregnancy. Young Moms Connects is not focused explicitly on preventing repeat pregnancies, but rather offering mothers ages 13 to 24 with appropriate support and resources.\textsuperscript{57} North Carolina’s statewide policies also include Title IX implementation in schools, which mandate that pregnant or parenting teens must be given the same educational opportunities as all students. This includes admission into any separate educational program as voluntary, excused absences surrounding birth and recovery, and chances to make up work while out of school.\textsuperscript{58}
Rather than simply primary prevention of teen births, a potential policy platform for repeat teen pregnancies should be organized around several distinct domains which affect family health. Unfortunately, much of the current policy regarding teen families is focused on pregnancy prevention, rather than prevention of second pregnancies. The Healthy Teen Network\textsuperscript{59} advocates for identification of gaps and resources in the following areas: health and human services, housing, education, workforce and life skills development, child welfare and development, income security, and knowledge development and transfer. Using federal and state funding, programs can be developed to address these needs for parenting teens, and adjust their delivery based on the needs of the local community. Integrating these programs into school-based services may help keep teens engaged in their education, and it is also a great venue through which to intervene early with teens that are pregnant. Policies in schools must be bold and consistent, as it is all too easy for teens to fall below the radar, disconnected from available services at school or disconnected from schools altogether.\textsuperscript{60} Two important additions to this holistic approach to support teen parenting would be programs focusing on mental health as well as delivery of services using trauma-informed methods, as discussed previously. Policies aimed at supporting teen parents, and helping them to make set intentions and goals to prevent a subsequent pregnancy, must address the needs of the whole person and family unit.

**REFRAMING THE DISCUSSION**

As we continue to work toward a general aim of decreasing repeat teen births, it is worth stepping back to look at the way in which the current discussion is framed. Teen
childbirth in general is socially considered to be a negative occurrence in an adolescent’s life. Within the norm of middle-class European society, teens are expected to complete education, dependent on their parents until they venture out on their own following college or early vocation, rather than at this point becoming parents themselves. There is inarguably a trajectory which is expected to be followed as individuals transition from childhood into adulthood. However, this view does not consider the reality of many low-income urban teens, particularly African-Americans, who may be presented with far fewer opportunities and a shorter life expectancy. The same would likely be true for teens living in very rural areas, with fewer economic or educational opportunities. Certainly, repeat teen birth with a short interval between pregnancies is unhealthy for all women, regardless of age, race, or ethnicity, but parenting during the teen years in general does not in itself qualify as an unhealthy condition. Rather, teen pregnancy and repeat pregnancy are considered a “problem” based on social, cultural, and economic expectations for these youth. Indeed, several health risks discussed earlier tend to be more common among teen parents, though many of these could be attributed to the social stigma around teen childbearing and general poor healthcare opportunities for adolescents: delay in prenatal care, poor nutritional status, lack of education, low health literacy, etc. Perhaps to change the outcome of repeat teen pregnancy with poor health and social outcomes for young parents, we first must change the public view of teen parenting in general. The current view, influenced by media and the educational system, casts teen parenting as a highly moralistic decision, with the supposition that teens would not have gotten pregnant if they had simply had the moral character to make better decisions. In addition to what we know about adolescent brain development and decision
making, this view does not explain the complex relationship between teen parenting and poverty, and characterizes it as a medical health issue isolated from economic and social influences. To shift this public view and the frame through which we discuss repeat teen pregnancy, a truly socioecologic and life course lens is necessary, exploring the relationships among the many factors on each level which affect a parenting teen. Present and past influences of family, peers, healthcare, school, public services, policies, and other supports should not be left out of the conversation. Indeed, these are the influences which can affect outcomes for parenting teens and their children, beginning in early childhood and continuing through the life course into adulthood. Families must be educated about the risks associated with early trauma and ACEs, to properly handle any of these occurrences should they take place when children are young. As children grow into adolescents, educators, social workers, and health workers could provide appropriate, trauma-informed, and evidence-based education about pregnancy and parenting, to empower teens to make their own reproductive life plan choices early. Regardless of the outcome, whether a teen becomes pregnancy intentionally or accidentally, these professionals can offer support and education regardless of how they may feel about the choice being made to become a young parent. By receiving straightforward information, teens are more likely to hear the message being communicated: parenting is hard. Particularly for teens who are already parenting, the message can be emphasized that additional children will only make it more difficult to achieve goals that they have set for themselves. In
empowering teens to be in control of their reproductive choices and their life goals, repeat pregnancies and births can thus be prevented.

By shifting the conversation around teen parenting, it is plausible to think that it might begin to look more attractive to teens to become parents at an early age. With access to home visiting programs, subsidized child care, and Title IX accommodations in schools, teen parenting may indeed appear to have it perks. This view, once again, is shortsighted. Teen pregnancy will likely continue its decline, as a result of pregnancy prevention programs, evidence-based sex education, and increasing access to contraception to adolescents. However, the fact that repeat teen pregnancy has not followed suit points to the need for increased support for these families. If parenting teens can be properly engaged in services and encouraged (or perhaps mandated) to stay in school, the hope would be that future life goals would emerge. Whether related to education, career, or control over creating a supportive family unit, it would not be difficult for a teen to understand how additional children within a short time frame could compromise such goals. Teens who are left to sort these questions out on their own, without support of case management or involved school staff, are inherently more likely to neglect goal setting, act impulsively, and end up with a rapid repeat pregnancy. Thus, increasing support for parenting teens will serve as a conduit to better decision making and prioritizing overall, rather than incentivizing additional pregnancies and births.
CONCLUSION

To substantially decrease the rate of repeat teen pregnancies in North Carolina, specific changes would have to be made. Overall, it is important to approach the issue holistically, incorporating all aspects of the socioecological framework and considering effects of pregnancy and parenting from a life course perspective. Teens who are already parenting have specific needs related to future opportunities, their role as a parent, and the type of support that they need. It is important for service providers and policymakers alike to remember that teens and their extended families often know best what they need, and we should be gleaning this input by giving credit to the strengths of self-awareness, connectedness, and goal setting.

To begin, targets must be added to Healthy People 2020 and Healthy North Carolina 2020 related specifically to repeat teen pregnancy. Presently, no objectives exist which are specific to teen pregnancy at all, though current objectives in North Carolina include increasing high school graduation rate and decreasing unintended pregnancies. Along with these statewide health objectives, policies must be clear and comprehensive regarding parenting teens and completing school. While Title IX currently mandates that specific processes be in place, it is true that each school may interpret these mandates differently. Not only could parenting teens be afforded the same educational opportunities as their peers, but the educational system could be making extra efforts to accommodate these teens and keep them engaged in school. If we are truly investing in these young parents and the next generation, going the extra mile is justifiable. Case management, whether it be through a school, a pediatric office, home visiting, or any
other program, would be able to offer the supports to the teen parent using a holistic approach. Parenting skills and support could be offered, but health needs, with particular focus on access to long-acting contraception could also be a primary element of the case management. While North Carolina currently has case management in place through the Adolescent Parenting program and MIECHV programs in some areas, this effort could be scaled up. Particularly in rural areas, these supports are essential to teen parents’ success.

Overall, we can begin shifting the discussion to a model based on strengths rather than focusing on deficits. All too often, teens hear that they have “messed up” by becoming parents at a young age, and this is certainly no motivation to prevent them from having a second child. If they’ve already “messed up,” what’s the harm in “messing up” more? Given proper supports and access to needed services, teens can be successful parents and offer substantial contributions to society. Connection to service can facilitate goal setting and reproductive life planning, decreasing the risk that a teen would end up with a repeat pregnancy. By identifying and addressing risk factors, focusing on protective factors, and committing as a society to support this population, repeat teen pregnancy rates should decline in a mirror image to teen pregnancy rates in the future.


18. Dietz PM, Spitz AM, Anda RF, Williamson DF, McMahon PM, Santelli JS, Nordenberg DF, Felitti VJ, Kendrick JS. Unintended pregnancy among adult women exposed to abuse or household dysfunction during their childhood. *JAMA.* 1999;282(14), 1359-64.


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