



Young Parents Logic Model

Selected Annotated Bibliography



Healthy Teen Network

Young Parents Logic Model: Selected Annotated Bibliography

Meagan E. Williams and Milagros Garrido

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Healthy Teen Network
1501 Saint Paul Street, Suite 114
Baltimore, MD 21202
www.HealthyTeenNetwork.org

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Introduction

To ensure that our logic model was evidence-based, we reviewed existing literature throughout the development of our logic model and used recent research findings to inform the determinants. In the annotated bibliography below, we have selected articles that address key components of our logic model.

Methods

In September 2019, we searched CINAHL and SCOPUS for peer-reviewed articles to review for inclusion. We used separate search strategies for each of our eight goals (*see Figure 1, Goals, Young Parents Logic Model, and Figures 3-9 for the detail of each separate goal*) and scanned the references of selected articles to find additional studies. Initial inclusion criteria included the following:

- Article was published between January 1, 2014 and December 31, 2019
- Primary study population included young people who were pregnant and/or parenting
- Study was performed in the United States
- Article addressed one or more of the eight goals included in our logic model

We reviewed the titles and abstracts of all studies and saved 476 articles for further review. After excluding articles that did not meet our initial inclusion criteria, did not address determinants, used data collected before 2014, or evaluated a specific program, we had a final sample of 38 studies. Guided by the goals in the logic model, we categorized the studies and hand-selected relevant ones to include in this bibliography. In each annotation, key information about determinants that were used to inform our logic model is bolded and italicized.

Due to gaps in recent literature, we decided to include some studies that fell outside of our selected inclusion criteria. Most studies included in this annotated bibliography use primary data collected after 2014; however, we have selected some studies that used secondary data or data collected as early as 2007. In addition, we included three studies that evaluated a specific program because we felt that the study conclusions were applicable to broader contexts. For each study included in the annotated bibliography below, an asterisk (*) indicates that while the study provides important information used to inform our logic model, it did not align with our initial criteria for review. Future studies should continue to address important research gaps related to our goals (e.g., housing stability, financial stability, and STI prevention among young parents) and expand the literature base to include other populations of adolescent parents (e.g., young fathers, rural adolescents, young people with higher-risk pregnancies).

Increase time gap between pregnancies among young people who are pregnant and/or parenting

Chacko, M. R., Wiemann, C. M., Buzi, R. S., Kozinetz, C. A., Peskin, M., & Smith, P. B. (2016). Choice of postpartum contraception: Factors predisposing pregnant adolescents to choose less effective methods over long-acting reversible contraception. *Journal of Adolescent Health, 58*, 628-635.

Although long-acting reversible contraceptives (LARCs) are the most effective forms of contraception, postpartum adolescents' choice of contraceptive methods after delivery vary significantly and often do not include LARCs. This study measured determinants of choosing non-LARC contraceptive options after delivery within a sample of primarily Latina or African American pregnant adolescents.

Adolescents choosing non-LARC methods were more likely to have negative attitudes toward LARCs and believe that LARCs were ineffective. They were less likely to have had conversations with their parents or partners about birth control. The intention to choose non-LARC hormonal methods was associated with pregnant adolescents' tendencies to avoid making decisions to reach their goals, suggesting that following up with goal-setting behaviors may increase LARC uptake among this population. Participants selecting non-hormonal or short- or medium-acting hormonal contraception over LARCs were less likely to have experienced a prior pregnancy and were more likely to perceive themselves as having limited financial resources.

* Lewin, A., Mitchell, S., Beers, L., Schmitz, K., & Boudreaux, M. (2016). Improved contraceptive use among teen mothers in a patient-centered medical home. *Journal of Adolescent Health, 59*(2), 171-176. <https://doi.org/10.1016/j.jadohealth.2016.04.007>

Increasing use of condoms and contraception among adolescent mothers is important in delaying subsequent pregnancies, particularly among mothers who are in a romantic relationship with their baby's father. This study used a longitudinal survey to assess the effectiveness of a patient-centered medical home care program in increasing contraception and condom use among African American adolescent mothers in Washington, DC.

The program used a holistic model of care to simultaneously provide services to mothers under the age of 19 and their children, who were 6 months of age or younger. Authors compared outcomes of program participants to outcomes in a similar population who only attended standard pediatric care, measured using a survey at baseline and a follow-up survey 12 months later. The authors accounted for several known covariates that impact use of contraception, including age, whether the teen was in a relationship with the father of the baby, school attendance, and depression (measured using a 20-item scale). They determined condom and contraception use using questions from the National Longitudinal Study of Adolescent Health, and categorized abstinence as a form of effective contraception.

Results showed that being in a relationship with the baby's father was associated with lower condom use, and after controlling for relationship status, there was not a statistically significant impact of the program on condom use. Participation in this model of care was associated with greater use of contraception among adolescent mothers after 12 months.

*** Maravilla, J. C., Betts, K. S., Couto e Cruz, C., & Alati, R. (2017). Factors influencing repeated teenage pregnancy: a review and meta-analysis. *American Journal of Obstetrics and Gynecology*, 217(5), 527-545.e31. <https://doi.org/10.1016/j.ajog.2017.04.021>**

The purpose of this meta-analysis was to find determinants associated with repeat births among adolescents. Protective factors included effective contraceptive use and academic factors such as higher levels of educational attainment and school continuation. Risk factors for repeat births included depression, history of abortion or miscarriage, and multiparity. Some partner-related factors, such as living with a partner or having a wide age gap between partners, also served as risk factors for repeat births among this population. While the data used in this meta-analysis were collected over a large time window (1997-2015), the study informs our logic model by providing a broad perspective on factors that have consistently been associated with repeat teenage births over time.

*** Sober, S., Shea, J. A., Shaber, A. G., Whittaker, P. G., & Schreiber, C. A. (2016). Postpartum adolescents' contraceptive counselling preferences. *The European Journal of Contraception & Reproductive Health care*, 22(2). <https://doi.org/10.1080/13625187.2016.1269161>**

In this study, researchers facilitated semi-structured interviews with adolescents in a postpartum unit of a large U.S. hospital on their needs and preferences regarding postpartum contraceptive counseling. Most participants reported not wanting another pregnancy for at least six years and indicated that repeat pregnancy prevention was either “very” or “extremely” important to them at that time. Reasons cited for wanting to delay future pregnancies included a desire to finish school, workload and financial considerations, and the desire to be more prepared for future pregnancies. Participants reported that their doctors provided the most accurate and helpful sources of contraceptive information, and that providers created a comfortable environment for contraceptive counseling by engaging their patients in conversation and allowing them to make their own decisions without pressuring them toward a particular option. The majority of participants preferred in-person counseling with a physician, beginning before birth, so that they could leave the hospital after birth with their chosen birth control method. While these study results cannot necessarily be extrapolated to other populations whose prenatal care and birth experiences are different than those studied here, the study provides important information on adolescents’ preferences on the modality of prenatal contraceptive counseling.

*** Stevens, J., Lutz, R., Osuagwu, N., Rotz, D., & Goesling, B. (2017). A randomized trial of motivational interviewing and facilitated contraceptive access to prevent rapid repeat pregnancy among adolescent mothers. *American Journal of Obstetrics and Gynecology*, 4, 423.e1-423.e9. <https://doi.org/10.1016/j.ajog.2017.06.010>**

Improving contraceptive counseling practices is an important way to increase use of contraception and reduce rapid repeat pregnancies for postpartum adolescents. In this randomized controlled trial, low-income adolescent mothers were randomized into either a control group or the Teen Options to Prevent Pregnancy program. Participants in the control group received care as usual, while program participants had increased access to contraception (via transportation assistance and an added contraceptive clinic) and monthly meetings with nurses trained in motivational interviewing.

After 18 months, there were significantly fewer repeat pregnancies and births (including unintended repeat pregnancies) in the intervention group compared to the control group. There was a 13.7% absolute increase in long-acting reversible contraceptive use among participants who were involved in the program, and program involvement did not increase sexual risk behavior (e.g., sexual intercourse without a condom). It is unclear what combination of program activities led to fewer repeat pregnancies and births, but taken together, the motivational interviewing program combined with reduced barriers to contraception access was an effective strategy for delaying subsequent pregnancies among this population.

Reduce the incidence of STIs, HIV, and AIDS among young people who are pregnant and/or parenting

* Kuo, C. C., Zlotnick, C., Raker, C., Tzilos, G., & Phipps, M. G. (2014). HIV risk among pregnant teenagers with a history of interpersonal violence. *Journal of Aggression, Maltreatment & Trauma*, 23(7), 740-750. <https://doi.org/10.1080/10926771.2014.933945>

This cross-sectional study reported on the relationships between experiences of interpersonal violence, depressive symptoms, and HIV risk behaviors among pregnant adolescents at a prenatal care clinic in the northeast United States. Self-reported data were collected at multiple time points during pregnancy and after birth. Measured HIV risk behaviors included lack of condom use in the month prior to pregnancy (reported by 66.4% of participants), age of first sexual experience (on average, participants reported being 14.2 years old), and age of first vaginal intercourse (on average, 14.5 years old). Three yes-no questions measured respondents' histories of interpersonal violence, and depression was measured on a 17-item scale.

Participants who reported a history of interpersonal violence were significantly more likely to report HIV risk behaviors (e.g., lack of condom use and earlier sexual experiences) and higher depressive symptoms compared to participants who did not report a history of interpersonal violence. There was not a significant effect of race or ethnicity on HIV risk behaviors in this population, "suggesting that history of interpersonal violence increases risk for HIV regardless of race or ethnicity." Although causality cannot be determined given the study design, the study supports the association between experiences of interpersonal violence and HIV risk behaviors among pregnant adolescents.

Anderson, C. & Perez, C. (2015). Adolescent psychological birth trauma following cesarean birth. *Pediatric Nursing, 41(2), 78-83.*

Research suggests that pregnant and parenting adolescents have an elevated risk of depression, interpersonal violence, and pregnancy complications that may lead to a cesarean birth. This study investigated the associations between these factors and psychological birth trauma among adolescents who have experienced a cesarean delivery.

Within 72 hours of delivery, adolescents who underwent a cesarean delivery were invited to participate in a survey on their birth experiences, past traumatic experiences, and mental health. Adolescents were at highest risk of rating their births as traumatic if they also reported depressive symptoms, intimate partner violence and other unresolved past traumatic experiences, and preterm birth. These interconnected risk factors can help inform interventions to reduce birth trauma among adolescents by identifying those who are at particularly high risk before, during, and after birth.

Bledsoe, S. E., Rizo, C. F., Wike, T. L., Killian-Farrell, C., Wessel, J., Bellows, A-M. O., & Doernberg, A. (2017). Pregnant adolescent women's perceptions of depression and psychiatric services in the United States. *Women and Birth, 30(5), e248-e257.* <https://doi.org/10.1016/j.wombi.2017.02.006>

This study explored low-income, pregnant, minority adolescents' experiences with depression, use of psychiatric services, and barriers to accessing these services. Participants were eligible for this qualitative study if they screened positive for depression at their prenatal clinic, though participants generally did not recognize their symptoms as depression and did not seek out psychiatric treatment.

Participants identified practical, psychological, family, and cultural barriers to psychological service use. Use of psychiatric services among this population depended on whether these services had flexible scheduling, whether family members had positive histories with services, and whether parents were positively involved in the care. Adolescents were more likely to seek out psychiatric services if the services reduced barriers such as transportation, if they reduced stigma or fear about mental health treatment and promised relief, and if parents approved of treatment services without forcing young parents to seek them out. Additionally, cultural gender roles served as both a barrier and facilitator among Latina participants. Some adolescent mothers viewed mental health treatment as secondary to addressing other needs of the family; however, those who viewed help-seeking as a way to improve infant outcomes were more likely to seek out mental health services.



Increase physical and mental health and well-being among young people who are pregnant and/or parenting

Buzi, R. S., Smith, P. B., Kozinetz, C. A., Peskin, M. F., & Wiemann, C. M. (2015). A socioecological framework to assessing depression among pregnant teens. *Maternal and Child Health Journal*, 19, 2187-2194. <https://doi.org/10.1007/s10995-015-1733-y>

This study assessed determinants of pregnant adolescents' depressive symptoms from a socioecological perspective. Lower levels of involvement from the baby's father; past experiences of physical, sexual, or verbal abuse; higher exposure to community violence; and lower levels of social support (particularly family support) were associated with higher levels of depression among pregnant adolescents. Although the study used validated self-report instruments to measure depression, it should be noted that these measurements only collected data on depressive symptoms that occurred within the past week. Therefore, it is unclear whether these symptoms were present before or during pregnancy, which may be an important distinction when using these study results to inform clinical treatment of depression.

Constantine, N. A., Slater, J. K., Carroll, J. A., & Antin, T. M. J. (2014). Smoking cessation, maintenance, and relapse experiences among pregnant and postpartum adolescents: a qualitative analysis. *Journal of Adolescent Health, 55*, 216-221. <https://doi.org/10.1016/j.jadohealth.2013.12.027>

Although research on strategies to facilitate cigarette-smoking cessation during pregnancy exists, its generalizability to adolescent populations is unclear. This study identified determinants of smoking cessation during pregnancy among adolescents. Low-income pregnant and postpartum adolescents who had a history of cigarette smoking, and who reduced smoking behaviors significantly during pregnancy, were recruited to participate in semi-structured interviews with the research team.

Many adolescents reported that pregnancy motivated them to decrease cigarette-smoking behaviors due to knowledge that the habit could harm the developing fetus. Relapse during pregnancy was triggered by stressful events for some participants. Most participants returned to regular smoking behaviors after the pregnancy ended, noting reasons such as lack of cessation support, stress, and the perception that it would no longer hurt their infants. Adolescents who did not return to smoking cited reasons such as having social support, wanting to leave "reckless behaviors" behind as they transitioned to motherhood, and wanting to protect their infant's wellbeing.

Dumas, S. A., Terrell, I. W., & Gustafson, M. (2018). Health and social needs of young mothers. *MCN, The American Journal of Maternal & Child Nursing, 43*(3), 146-152. <https://doi.org/10.1097/NMC.0000000000000427>

Improving the health of adolescent minority mothers requires addressing their unique barriers and health care needs. Researchers conducted focus groups with mothers aged 18-24 who were recruited from a pediatric clinic and analyzed focus group data to identify main themes. Results suggested several barriers to receiving adequate care, such as long wait times, scheduling difficulties, and lack of insurance. Many participants experienced feelings of discomfort, pain, and violation during their health care appointments. Other common challenges noted by participants included lack of childcare, financial stress, conflict within their support systems, and barriers to obtaining contraception.

Participants gave several suggestions for improving health care with these unique challenges in mind, which revolved around three themes: clinic logistics, material support, and clinical services. They wished for improved communication and flexibility within healthcare services, as well as on-site services such as a pharmacy, WIC office, and baby supplies. Young mothers expressed a desire for improved communication on topics such as contraception and condom use within the healthcare setting.

Kennedy, A. C., Bybee, D., & Greeson, M. R. (2015). Intimate partner violence and homelessness as mediators of the effects of cumulative childhood victimization clusters on adolescent mothers' depression symptoms. *Journal of Family Violence*, 30(5), 579-590.
<https://doi.org/10.1007/s10896-015-9689-7>

The goal of this study was to determine whether homelessness and intimate partner violence during adolescence are mediators of the relationship between childhood violence victimization and current depressive symptoms among low-income, urban adolescent women who are pregnant or parenting. Variables of childhood-onset victimization included witnessing intimate partner violence, physical abuse by a caregiver, and sexual victimization, all before the age of 12. Study participants reported high levels of childhood and adolescent violence exposure and high rates of homelessness. Compared to adolescent mothers with low childhood victimization, mothers with childhood histories of violence were more likely to report current depression. Both adolescent intimate partner violence victimization and homelessness were shown to be important mediators of the relationship between child violence exposure and current depression.

Recto, P. (2019). Mexican-American adolescents' views on factors that facilitate recognition and help-seeking for perinatal depression. *Issues in Mental Health Nursing*, 40(9), 821-824.
<https://doi.org/10.1080/01612840.2018.1557303>

This study used a framework that centralized mental health literacy, or "the individual's knowledge, beliefs, and attitudes concerning mental health conditions that facilitate its recognition, treatment, and management." Interviewing pregnant and parenting Mexican-American adolescents using this framework allowed the author to find contextual risk and protective factors for mental health treatment within this population. Important factors that influenced help-seeking for perinatal depression among the population included significant others' abilities to recognize depression, cultural values and beliefs about mental health treatment and availability of culturally-sensitive treatment plans, and double stigma around adolescent pregnancy and mental health.

Recto, P. & Champion, J. D. (2018). "We don't want to be judged": Perceptions about professional help and attitudes towards help-seeking among pregnant and postpartum Mexican-American adolescents. *Journal of Pediatric Nursing*, 42, 111-117.
<https://doi.org/10.1016/j.pedn.2018.04.010>

Perinatal depression among Hispanic adolescent women may go untreated due to structural barriers, cultural beliefs, individual perceptions of help-seeking, and unrecognition of depressive symptoms as a problem. Pregnant and parenting Mexican-American adolescents in urban high school parenting classes were recruited to participate in a questionnaire and interview. Participants reported difficulties recognizing perinatal depression, either because they were not aware that their symptoms were symptoms of depression or because they were preoccupied with taking care of their children. Many adolescents' depression was initially noted by someone else, like an adult. Factors that determined help-seeking behaviors included having empathetic non-judgmental providers that discussed important information and understood what they were going through. Factors that prevented participants from seeking mental health treatment included beliefs that depression is normal or should be kept to themselves, fear of judgment, structural barriers such as lack of transportation, and lack of trust in the provider.

Recto, P., & Dimmitt Champion, J. (2018). Mexican-American adolescents' perceptions about causes of perinatal depression, self-help strategies, and how to obtain mental health information. *Journal of Child and Adolescent Psychiatric Nursing*, 31(2-3), 61-69.
<https://doi.org/10.1111/jcap.12210>

The goal of this study was to examine pregnant and parenting Mexican-American adolescents' beliefs regarding causes and treatment of perinatal depression. Participant-identified risk factors for depression included interpersonal conflict with their parents or partners; loneliness and feelings of isolation; physical changes during pregnancy, such as hormonal fluctuations and weight gain, pregnancy and birth complications; and other demands of the transition to motherhood. Availability of child care, financial support, flexible schooling, and a wide variety of nonjudgmental information sources specific to adolescent mothers were identified as being helpful buffers against these stressors. Participants also identified self-help strategies to manage perinatal depression, including distractions (e.g., exercising, going out with friends, self-care, going to church), using motherhood as a motivation to finish school, and receiving support and information from others.

Torres, R. (2016). Access barriers to prenatal care in emerging adult Latinas. *Hispanic Health Care International*, 14(1), 10-16. <https://doi.org/10.1177/1540415316631504>

Prenatal care utilization is important in promoting positive maternal and infant health outcomes. This survey explored pregnant Latina adolescents' beliefs about actual and perceived barriers to prenatal care-seeking, and the impact of these perceptions on actual prenatal care-seeking behaviors.

Nearly all participants reported facing structural barriers to seeking prenatal care, including cost, transportation, long wait times, inflexible scheduling, and crowding. Participants reported not being able to leave school to attend appointments, so inflexible attendance requirements and inflexible clinic hours served as a barrier to seeking care for school-age participants. About half of participants were unsure whether their pregnancy was wanted, and many participants expressed feelings of depression or fatigue, all of which were identified as individual-level barriers to prenatal care-seeking. Eighty-nine percent of participants also identified drug and alcohol use as a barrier. Participants also expressed that someone else in their lives stopped them from seeking care at least once, indicating the importance of interpersonal factors.

While many of these barriers are likely applicable to more diverse populations, it only explored barriers among a young adult Latina population. Additionally, the scale used to assess barriers in this study was developed for African American women and may not have considered other barriers unique to Latina women.

Increase safe and healthy relationships among young people who are pregnant AND/or parenting with their partner(s), family, and peers

* Buzi, R. S., Wiemann, C. M., Smith, P. B., Kozinetz, C. A., & Peskin, M. F. (2015). Forms of intimate partner violence among pregnant adolescents. *Journal of Adolescent Health, 56*(2), s62.

Ample research has suggested that pregnant adolescents are at a particularly high risk of intimate partner violence victimization; however, there are fewer studies on the determinants of intimate partner violence perpetration among this population. This secondary data analysis explored intimate partner violence perpetration and victimization among pregnant African American and Hispanic adolescents from a socioecological perspective.

In a self-administered survey, nearly a quarter of adolescents reported having physically assaulted their partners. Participants who reported perpetration of physical assault were more likely to report multiple drug use, exposure to community violence, involvement with police, and repeating a grade in school. There were also racial and ethnic differences between respondents, with African American adolescents reporting violence perpetration at higher rates than Hispanic adolescents. Compared to adolescents who did not use physical assault against their partners, perpetrators of physical violence were also more likely to report victimization ("reciprocal violence").

Herrman, J. W., Palen, L-A., Kan, M., Feinberg, M., Hill, J., Magee, E., & Haigh, K. M. (2019). **Young mothers' and fathers' perceptions of relationship violence.** *Violence Against Women, 25(3)*, 274-296. <https://doi.org/10.1177/1077801218780356>

Pregnant and parenting adolescent mothers and fathers in the southern United States were recruited for semi-structured focus groups about their experiences with relationship violence. The focus groups explored risk and protective factors for different forms of intimate partner violence, help-seeking behaviors among adolescents, and barriers and needs related to reducing violence.

Participants experienced several forms of intimate partner violence, including physical, emotional, verbal, and sexual abuse. Several forms of violence unique to young parents included sexual and reproductive coercion, emotionally abusive body shaming after pregnancy, and using children to control partners' behaviors. Many participants expressed feelings of jealousy and the need to control or monitor their partners' activities. Other sources of conflict included lack of communication skills, conflict with young parents' own families, and the stresses of adolescent development combined with the stresses of parenthood. Financial stress was also an important factor in these relationships, and some participants cited their partners' financial contributions as a barrier to leaving an abusive relationship. While many were reluctant to seek out help, participants identified support structures such as their own social network (e.g., friends, family), adolescent parent assistance programs, and community supports as facilitating help-seeking behaviors.

* Hoss, L., Toews, M. L., Perez-Brena, N., Goodcase, E., & Feinberg, M. (2019). **Parental factors as predictors of dating violence among Latinx adolescent mothers.** *Journal of Interpersonal Violence.* <https://doi.org/10.1177/0886260519862269>

This study used data from a self-report survey to determine the associations between parental stress, co-parenting quality, and intimate partner violence perpetration and victimization among Latinx adolescent mothers in central Texas. After controlling for frequency of contact with the coparent, parental stress was not associated with intimate partner violence perpetration or victimization. Authors note that previous research has identified "cultural resilience factors, such as familism values and strong support networks" among Latinx populations that may have weakened this relationship, so readers should take caution when extrapolating these results to non-Latinx adolescent parents. Results indicated that a lower quality co-parenting relationship is associated with intimate partner violence; however, the causality of this relationship—and the directionality of the causal relationship—remains unclear.

Kennedy, A. C., Bybee, D., Palma-Ramirez, E., & Jacobs, D. (2017). Cumulative victimization as a predictor of intimate partner violence among young mothers. *Psychology of Violence, 7(4), 533-542.* <https://doi.org/10.1037/t00543-000>

This study sought to examine the effects of cumulative violence exposure and victimization (including community, school, and family violence and sexual victimization) on experiences of intimate partner violence among adolescent mothers. Using a cross-sectional design, researchers collected life history data from pregnant and parenting adolescents. Experiencing any one type of victimization in childhood was associated with experiencing that same type of victimization in adolescence among this population, and data indicated relatively high levels of co-occurrence between these variables. Victimization in childhood was associated with an increased risk of intimate partner violence victimization throughout adolescence.

Although the reported experiences of violence exposure and victimization were significantly higher among this population than are reported in nationally-representative studies, results indicate that young mothers with high levels of violence exposure in childhood may be at increased risk of intimate partner violence later during adolescence.

Toews, M. L. & Yazedjian, A. (2014). Psychological and physical dating violence perpetrated by pregnant and parenting Latina adolescents. *Violence and Victims, 29(5), 872-884.* <https://doi.org/10.1891/0886-6708.VV-D-13-00024>

This study determined predictors of physical and psychological dating violence perpetration among a sample of Latina adolescents participating in a relationship education program. In this study, participants reported communication patterns and conflict resolution strategies (including physical and psychological violence) that they used with their partners within the past three months. Perpetration of psychological abuse was predicted by both perpetration of physical abuse and partner violence victimization. Perpetration of physical abuse was not predicted by physical violence victimization, although the variables were associated with one another; however, psychological abuse perpetration was a predictor of physical abuse perpetration. Both physical and psychological abuse perpetration among participants were inversely related to communication patterns with participants' parents, with more negative communication patterns being associated with a higher likelihood of perpetrating violence against a partner.

Increase educational attainment (i.e., high school, post-secondary education, vocational training) among young people who are pregnant and/or parenting

* Bravo, D. Y., Toomey, R. B., Umaña-Taylor, K. A., Updegraff, L., & Jahromi, L. B. (2017). Growth trajectories of Mexican-origin adolescent mothers' educational expectations. *International Journal of Behavioral Development*, 41(2). <https://doi.org/10.1177/0165025415616199>

This longitudinal study reported on risk and protective factors associated with educational attainment among Mexican-origin adolescents who were pregnant and parenting. Study questions measured participants' nativity, perceptions of economic hardship, educational attainment, expectations for their future educational attainment, academic engagement, and on-track status in school.

Participants who were born in the United States had higher educational expectations than participants who were born in Mexico. Participants' higher expectations about their

future educational attainment were predicted by higher academic engagement and an on-track school status. Participants' own mothers' perceptions of their daughters' future educational attainment also predicted participants' educational expectations, suggesting the importance of parental support in encouraging educational attainment. Participants who reported negative socioeconomic factors such as financial strain reported lower expectations for their educational attainment. While Mexican-origin adolescent mothers' experiences and expectations likely differ from those of other minority groups, these results indicate that contextual factors such as parental support and perception of financial barriers play a role in determining young mothers' expectations for their own educational attainment.

Kennedy, A. C., & Adams, A. E. (2016). The effects of cumulative violence clusters on young mothers' school participation: Examining attention and behavior problems as mediators. *Journal of Interpersonal Violence*, 31(7), 1293-1307. <https://doi.org/10.1177/0886260514564161>

This study investigated the extent to which attention and behavior challenges mediate the relationship between cumulative violence exposure and school participation among poor, urban, adolescent women who are pregnant and/or parenting. In a self-administered questionnaire, participants recorded whether they had ever experienced specific forms of violence (i.e., community, physical, sexual, intimate partner) and the age at which they first experienced it. The questionnaire also measured attention and behavior problems that participants currently experience in school or experienced when they were last enrolled in school, as well as participants' histories of school participation.

Data revealed a positive correlation between each of the violence exposure variables, and many respondents (52.2%) experienced at least three types of violence prior to age 13. Exposure to multiple forms of violence before age 13 was found to be correlated with higher attention and behavior problems and lower participation in school. Behavior problems, but not attention problems, were found to mediate the relationship between violence exposure and school participation for participants with high exposures to violence—especially among those whose exposure included all types of violence and high exposures to witnessing intimate partner violence.

Watson, L. L., Vogel, L. R., & Wubbena, Z. (2017). Educational resiliency in teen mothers. *Cogent Education*, 4(1). <https://doi.org/10.1080/2331186X.2016.1276009>

This case study provided insight into the educational experiences of parenting adolescent mothers and the factors that facilitate academic success in the face of adolescent parenting. Authors sought to find what aspects of high school environments help young parents find the motivation to complete high school, and to understand the impact of stigma on educational attainment.

Young mothers shared in-depth narratives of their experiences within traditional and non-traditional school settings. All narratives included voicing obstacles to high school completion. Emotional struggles faced by these young parents included feelings of shame, sadness, fear, worry, failure, or self-doubt. Physical struggles such as time management, instability, and juggling multiple responsibilities (e.g., financially supporting a family while completing high school, with unreliable sources of childcare) were common among these mothers. Social struggles included facing judgment or disappointment from others, dealing with isolation and loneliness, and processing rejection from peers and adults.

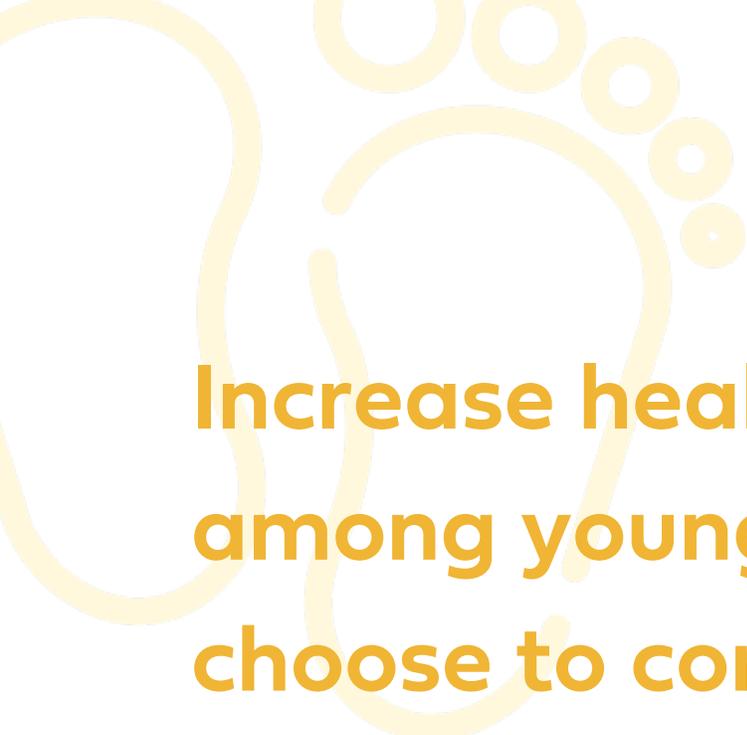
With this said, even in the face of stigma and uncertainty, young mothers overcame these obstacles by finding hope in their abilities to "beat the statistics" and "prove them wrong." Participants identified that family and educational support were instrumental in helping them achieve academic success. In order to be deemed as supportive, educational settings had to be flexible and individualized with encouraging teachers. Receiving support led mothers to persevere through and overcome their challenges. Given these data, study authors gave recommendations on creating supportive educational environments, including the appointment and training of a Title IX coordinator at each school; education and data collection regarding Title IX requirements; and the availability of safe, flexible child care for young parents who are attending school.

A large, light orange, stylized outline of a house with a chimney, positioned in the upper right corner of the page. The house has a simple roofline, a square chimney on the right side, and a rectangular door with a small circle representing a doorknob.

Increase housing and financial stability for young people who are pregnant and parenting

*** Stargel, L. E., Fauth, R. C., & Easterbrooke, M. A. (2017). Home visiting program impacts on reducing homelessness among young mothers. *Journal of Social Distress and the Homeless*, 27(1). <https://doi.org/10.1080/10530789.2017.1396740>**

This study used data from a prior longitudinal study to assess the impact of a home visiting program on homelessness among adolescent mothers and their young children. Healthy Families Massachusetts was a statewide home visiting program that encouraged young mothers' independence by addressing educational attainment, economic stability, and housing concerns. Compared to adolescents who did not receive the home visiting program, program participants were less likely to report homelessness when their children were of school age. Data suggested a dose-response effect between greater number of home visits and decreased likelihood of concurrent homelessness. While the directionality of this association cannot be determined by these data, the study supports the possibility that utilizing home visiting services may serve as a protective factor against homelessness for young families.



Increase healthy, live births among young people who choose to continue their pregnancies

Grilo, S. A., Earnshaw, V. A., Lewis, J. B., Stasko, E. C., & Magriples, U. (2015). Food matters: Food insecurity among pregnant adolescents and infant birth outcomes. *Journal of Applied Research on Children*, 6(2).

Food insecurity serves as a significant barrier to consuming a nutrient-rich, well-balanced diet. Nutrition during pregnancy plays an important role in fetal development, and inadequate nutrition has been linked to negative birth outcomes. A goal of this study was to determine links between food insecurity and birth outcomes among pregnant adolescents, and to identify potential mediators between these associations. Adolescents were interviewed twice during pregnancy to assess food security status, nutritional quality, weight gain, and mental health status (depressive symptoms and anxiety). Birth outcome data were collected using adolescents' medical records and supplemented by interviews. Despite being associated with birth outcomes, weight gain did not appear to mediate the association between food security and birth outcomes. Depressive symptoms mediated the effect of chronic food insecurity on birth weight and gestational age.

Ickovics, J. R., Earnshaw, V., Lewis, J. B., Kershaw, T. C., Magriples, U., Stasko, E., . . . Tobin, J. N. (2016). Cluster randomized controlled trial of group prenatal care: Perinatal outcomes among adolescents in New York City health centers. *American Journal of Public Health, 106*, 359-365.

This randomized controlled trial compared birth outcomes among adolescents who received group prenatal care to outcomes among adolescents who received typical individualized prenatal care in a clinic setting. No young women included in the study were at high obstetrical risk. Group prenatal care included longer appointments and a social setting that allowed for more in-depth discussions on topics such as nutrition, relaxation, sexuality, and self-esteem. Participants in the group setting were less likely to have negative pregnancy outcomes (e.g., small for gestational age, preterm birth, NICU admittance) than women who were assigned to individual prenatal care only. Among women in the group setting, higher group attendance was associated with lower odds of delivering a preterm, small for gestational age, or low birth weight baby. Among infants who were admitted to the NICU, infants whose mothers attended more group settings spent fewer days in the NICU. Compared to participants who attended less than half of the group sessions, adolescents attending at least half of the group sessions had lower rates of rapid repeat pregnancy, higher rates of condom use, and "engaged in fewer acts of unprotected sex." Although it is unclear which aspects of this care (e.g., peer support, increased attendance), or what combination of these strategies, lead to positive outcomes, the study suggests that group prenatal care may be an effective strategy for improving birth outcomes among young urban women.

Solivan, A. E., Wallace, M. E., Kaplan, K. C., & Harville, E. W. (2015). Use of a resiliency framework to examine pregnancy and birth outcomes among adolescents: A qualitative study. *Families, Systems, & Health, 33*(4), 349-355. <https://doi.org/10.1037/fsh0000141>

Because most research on adolescent pregnancy and parenting focuses on its negative consequences rather than young families' lived experiences of resiliency, this study provides valuable insight into what factors result in healthy, non-complicated pregnancies and births among adolescents. Adolescent mothers who experienced pregnancies without physical complications, such as gestational diabetes or preeclampsia, and whose infants were born at full term with a healthy birth weight and did not require admission to the NICU, were invited to participate in an interview with a member of the research team. Participants identified personal attributes, attitudes, and resources that serve as protective factors against negative pregnancy and birth outcomes. These factors included a positive attitude toward pregnancy and birth, a sense of self-efficacy, the motivation to set and achieve goals, and resilience against stigma and stereotypes around young pregnancy. Young mothers identified social, emotional, and financial support (including housing) as being important resources as they navigate pregnancy and birth.

Torres, R., Kehoe, P., & Heilemann, M. V. (2018). Predictors of timely prenatal care initiation and adequate utilization in a sample of late adolescent Texas Latinas. *Hispanic Health Care International*, 16(1), 29-35. <https://doi.org/10.1177/1540415318764096>

Timely prenatal care seeking, according to the standards set by the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists, is important for ensuring positive pregnancy and birth outcomes. Adolescents—particularly Latina adolescents—have lower rates of prenatal care seeking than other racial and age groups in the US. This study surveyed postpartum Latina adolescents to find determinants of seeking out and fully utilizing prenatal care.

Postpartum US-born Latina adolescents with uncomplicated pregnancies were invited to participate in an online survey assessing prenatal care utilization. Despite having the belief that prenatal care was important, respondents had lower than average prenatal care attendance. Respondents noted several barriers that prevented them from seeking adequate prenatal care, including an inability to leave work or school and inflexible appointment times. Findings support the notion that partner support may be a determinant of early prenatal care seeking, as participants who lived with the father of their baby were more likely to attend prenatal appointments in their first trimester. Although depression was measured using a single self-report measure rather than a validated screening tool, participants' report of depression also predicted early prenatal care initiation.



Increase the capacity of young parents to nurture the positive development of their children

Chopel, A., Soto, D., Joiner, B., Benitez, T., Konoff, R., Rios, L., & Castellanos, E. (2019). Multilevel factors influencing young mothers' breastfeeding: A qualitative CBPR study. *Journal of Human Lactation*, 35(2), 301-317. <https://doi.org/10.1177/0890334418812076>

This study sought to find facilitators and barriers to breastfeeding among young mothers from a social-ecological perspective. The research setting included areas of high poverty and low income, and most young mothers in this area have limited access to health care and breastfeeding support services.

The interview data presented in this study informed our determinants of breastfeeding initiation at the societal, community, and relationship levels. As young mothers identified various "roles" they play in different settings (e.g., workers, daughters, romantic partners), they identified barriers to breastfeeding that came with each role (e.g., little time to pump breastmilk at work, conflict with their own mothers). While some physical spaces were continuously supportive of breastfeeding mothers and thus created a safe and welcoming space to breastfeed, others (e.g., grocery stores) either were inconsistently supportive or discouraged mothers from breastfeeding while in their space. Compounded stigmatization of both breastfeeding and young motherhood served as an important structural barrier to breastfeeding, and many young

mothers sought out alternative feeding methods or alternative locations for feeding after experiencing negative remarks from others. Social support was a social facilitator for young breastfeeding mothers, especially support provided from peers who had breastfed before or trained support staff at agencies such as WIC.

Cota-Robles, S., Pedersen, L., & LeCroy, C. W. (2017). Challenges to breastfeeding initiation and duration for teen mothers. *MCN, The American Journal of Maternal/Child Nursing*, 42(3), 172-178. <https://doi.org/10.1097/NMC.0000000000000327>

In this study, participants received in-person breastfeeding education, encouragement, and support through the first month postpartum and throughout their participation in the program. Young parents who chose not to breastfeed their infants answered survey questions about barriers to breastfeeding initiation, and young parents who breastfed their infant and then stopped answered questions on their breastfeeding experiences and their decision to no longer breastfeed.

Among young people who chose not to breastfeed, the most common reason cited was that the mother planned to return to work or school. Other common reasons for not initiating breastfeeding included mothers' desire to leave their baby for several hours at a time, the belief that breastfeeding would be inconvenient, or the belief that formula feeding is as beneficial as breastfeeding. While some participants initially tried and then decided not to breastfeed due to reasons such as infant health complications, many participants decided not to breastfeed prior to birth based on their own beliefs and perceptions. Among breastfeeding families, most participants breastfed for less than 3 months. The decision to stop breastfeeding was most commonly influenced by physical pain, difficulty with latching on, and not having enough milk. Other barriers included mothers' return to work or school, maternal or newborn health challenges, self-weaning, or the perception that the infant was "too old" to continue breastfeeding.

Lewin, A., Mitchell, S. J., Waters, D., Hodgkinson, S., Southammakosane, C., & Gilmore, J. (2014). The protective effects of father involvement for infants of teen mothers with depressive symptoms. *Maternal and Child Health Journal*, 19(5). <https://doi.org/10.1007/s10995-014-1600-2>

Previous research shows that father involvement may lessen the impact of maternal depression on a child's social, emotional, and behavioral risk. Given that research indicates a higher risk of depression among young mothers compared to adult mothers, and that adolescent fathers are less likely to live with their children than adult fathers are, these study results are particularly salient to our population.

In this study, urban, low-income, African American young mothers were recruited from community health care clinics to participate in a structured interview. Researchers collected data on infant temperament, engagement, and responsibility of the infant's father, and maternal depressive symptoms over the past week, as well as demographic data on the infant and mother. Analyses revealed that although maternal depression was significantly associated with higher infant distress, young father involvement was significantly associated with lower infant distress and served as a buffer against the relationship between maternal depression and infant distress. Although the study only assessed two aspects of father involvement and involvement was only reported by mothers, this study provides important insight into the potential protective factor of father involvement on maternal mental health and child outcomes.

*** Jahromi, L. B., Umaña-Taylor, A. J., Updegraff, K. A., & Zeiders, K. H. (2016). Trajectories of developmental functioning among children of adolescent mothers: Factors associated with risk for delay. *American Journal on Intellectual and Developmental Disabilities*, 121(4), 346-363. <https://doi.org/10.1352/1944-7558-121.4.346>**

This longitudinal study identified risk factors for developmental delay among children of Mexican-origin adolescents. Authors interviewed adolescent mothers and their mother figures at five time points when their child was between 10-60 months old. Interviews explored mother-grandmother co-parenting experiences, maternal depressive symptoms, the child's development and temperament, and the home environment in which the child lived.

Authors identified three distinct groups of children whose mothers participated in the study: those who experienced delayed or decreased functioning by 24 months, those who were at risk for or recovering from a developmental delay at 5 months, and those who did not demonstrate a measured developmental delay and exhibited "normative/stable" functioning throughout the course of the study. Higher levels of co-parenting conflict, more maternal depressive symptoms, and fewer educational materials in the home were associated with greater risk for developmental delay among this population.

