

# What is the Impact of the Adolescent Family Life Program on Scheduled Baby Immunization and Breastfeeding Behavior and Follow-Through Amongst Teen Mothers?

## ABSTRACT

Teenage pregnancy in the United States has decreased over the past 25 years, yet research shows that the personal and societal repercussions of adolescent pregnancy are recurrent and perpetuate a cycle of poverty, lack of education, poor health, and vulnerability. The Adolescent Family Life Program (AFLP) was established to support demonstration projects focused on preventing or decreasing the sexual activity of adolescents and to provide teen parents with care education for improved child health in areas of breastfeeding and immunization. The present study aimed to examine the impact of the AFLP on scheduled baby immunizations and breastfeeding behavior and follow-through amongst adolescent mothers. The sample included 469 adolescent females who were parenting and participating in an AFLP Care demonstration project. Study results identified a significant relationship between the AFLP and participants' behavior and follow-through with breastfeeding. No significant association could be reported between participation in an AFLP and baby vaccinations. The implication of the AFLP evaluation is that more study and research need to be conducted to determine effective ways to increase child health care behavior amongst adolescent mothers.

## INTRODUCTION

### Significance of Study

- The United States has one of the highest rates of teen pregnancy of all other nations.
- The fiscal burden to United States taxpayers equals approximately \$28 billion per year.
- Female adolescents who become pregnant report 50% lower high school graduation rates and are much more likely to experience poverty throughout their life. Children born to teen mothers, are more likely to experience higher deaths, hospitalization, and adverse life conditions.

### Purpose

- To assess the impact that the Adolescent Family Life Program has on teen mothers in adopting the practices of breastfeeding and baby immunization

### Research Question

- What is the impact of the Adolescent Family Life Program on scheduled baby immunization and breastfeeding intention and follow through amongst adolescent mothers?

### Hypothesis

- Adolescent mothers who participated in an AFL care program will demonstrate a higher percentage of baby immunization and breastfeeding behavior and follow-through than adolescent mothers in comparison group.

## LITERATURE REVIEW

### Societal and Personal Impact of Teenage Pregnancy

- Adverse implications of childbirth for teenage mothers range from immediate and life-long health risks, lack of educational attainment and lifetime earning potential, intimate partner violence, poverty, and social stigma (Hovdestad et al., 2015).
- Incidence of teenage pregnancy is generally greater amongst minority and economically disadvantaged populations (Ventura et al., 2014).

### Childhood Immunizations

- Vaccines are credited for significant reduction in preventable disease and have improved infant mortality (Ventola, 2016).

### Breastfeeding

- Breast milk offers health and economic benefits to mother and child (Olaiya et al., 2016).

### Research Limitations

- Original study design revealed baseline differences between comparison and intervention groups (Rosenberg, 2013).
- Original study design included AFLP that allowed open and rolling enrollment in programs (Kan et al., 2015).

## METHODS

### Evaluation Design and Data Collection Procedures

- The current study utilizes secondary data from the Cross-Site Evaluation of the Title XX Adolescent Family Life Program (AFLP) funded in 14 States, 2008-2011.
- AFLP Care prevention programs were selected for inclusion based on similar approaches in their curricula; home visiting, case management, mentoring and school-based activities.
- Respondents completed self-administered baseline and follow up questionnaires
- The current study's research design is longitudinal with a one-group, pre-test- post-test design.

### Sample

- Data was extracted from data set two of ICPSR 34398. Data represented 12 AFLP Care programs in 10 different locations.
- Respondents consisted of 469 female participants in an AFLP
- Parenting at the time of baseline data collection.
- Required to read in English or Spanish.
- Respondents self-reported as Hispanic or non-Hispanic Black or African American.
- All under the age of 19. Mean age = 17.18 (Intervention Group), 17.6 (Comparison Group)

Demographic Information (N = 469)

Characteristic	With AFLP (n=219)	Without AFLP (n=250)
	Mean (SD)	Mean (SD)
Age (years)	17.18 (1.04)	17.6 (1.17)
Highest Grade Completed	10.40 (1.00)	10.83 (1.15)
Race and Ethnicity		
Non-Hispanic Black or African American	119 (53.3)	154 (61.6)
Hispanic	91 (41.6)	88 (35.2)

### Measures

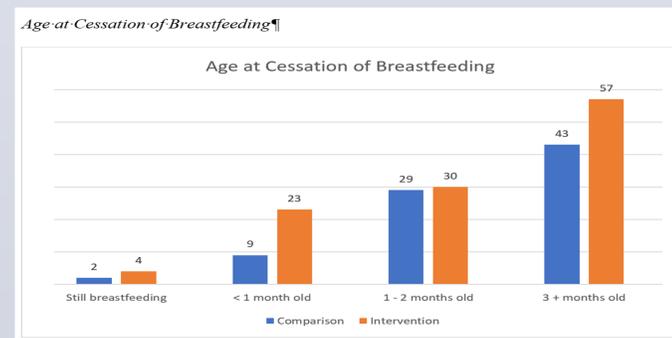
Dependent Variables	Independent Variable
<b>Breastfeeding behavior</b> (Ordinal) <ul style="list-style-type: none"><li>• Still breastfeeding</li><li>• Stopped under one month old,</li><li>• Stopped one month to two months old</li><li>• Stopped at three months or older</li></ul>	<b>Adolescent Family Life Program</b>
<b>DTaP Vaccination</b> (Nominal) <ul style="list-style-type: none"><li>• Yes /No</li></ul>	

## RESULTS

### Breastfeeding Behavior and Follow-Through

- Based on a chi-square test, there was a significant relationship ( $p=0.001$ ) in breastfeeding behavior and follow-through between the comparison and the intervention group
- Analysis showed that a slightly higher percentage of respondents still breastfeeding were participants in the intervention group, which supports the hypothesis of this study.

The following chart demonstrates the similarities in the data that were discovered through inferential analysis:



### DTaP Vaccination

- Based on a chi-square test, no significant relationship was found between respondents in the intervention group and obtaining DTaP vaccination for their child.
- Data showed that both the intervention and comparison group obtained DTaP vaccinations for their babies with similar percentages. This result did not support the research hypothesis.

## CONCLUSIONS

### Summary of Findings

Program evaluation analysis indicated a mixed result. Data supported the research hypothesis that teenage mothers participating in an AFLP would breastfeed longer but did not validate that teen mothers in an AFLP would vaccinate their babies with greater frequency than those in a comparison group.

### Breast feeding behavior and follow through

- Study results are consistent with existing research that reports parenting teens are more likely to develop the behavior of breastfeeding if they are provided education, support and mentoring (Čatipović, et al., 2017)

### Immunization (DTaP)

- Study results suggest that adolescent moms could be receiving baby vaccination information and support from other sources that had not been considered; possibly school, The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), or post-delivery in hospital.

### Implications for Practice and Policy

- Teenage pregnancy warrants continued study as adverse conditions for mother and child make this population vulnerable to a cycle of destructive outcomes.
- Mixed findings of this program evaluation reinforce the difficulty of creating one program that is effective for every participant.
- Finding new interventions to better engage and inform teenage mothers about health care for their children is still needed.
- A lack of peer-reviewed research on adolescent mothers and baby immunization behaviors presents an opportunity to study to understand this association.
- Future Research in this area of teenage mothers and health care education could explore the impact of technology in text messages and Instagram in supporting traditional teenage pregnancy interventions or possible effectiveness as a stand-alone intervention.

### Strengths and Limitations

#### Strengths

- Strengths of this research is that the sample is considered reliable in representing this vulnerable target population.

#### Limitations of research

- A high rate of attrition (reported by original study authors), during care intervention programs resulted in smaller sample sizes.
- Because of stigma attached to teenage pregnancy, it is not known if respondents answered questions candidly due to fear of being judged.
- Lack of peer-reviewed research on adolescent mothers and their baby vaccination behaviors.

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