CHARACTERISTICS AND EXPERIENCES OF ADOLESCENT PARTICIPANTS IN THE FLORIDA MATERNAL, INFANT, AND EARLY CHILDHOOD HOME VISITING PROGRAM

Florida MIECHV Program Evaluation
University of South Florida College of Public Health
Chiles Center for Healthy Mothers and Babies

Abimbola Michael-Asalu, Rema Ramakrishnan, Leandra Olson,
Amber Warren, Pamela Birriel, and Jennifer Marshall

Introduction

This is a summary report of data collected as part of the evaluation of the Florida Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program. The University of South Florida (USF) MIECHV Program Evaluation Team conducted a cross-sectional, mixed methods analysis to describe characteristics and experiences of adolescent participants served by the Florida MIECHV program.

Pregnant adolescents and their offspring are at higher risk for experiencing health, social, and developmental hazards, such as substance abuse, intimate partner violence, depression, delivery complications, low educational attainment, and repeated pregnancies on the part of the adolescents while their offspring are predisposed to prematurity, poor birth outcomes, failure to thrive, neglect, abuse, and teen pregnancies of their own[1-3]. The purpose of this study was to 1) compare the characteristics of pregnant adolescents and adolescent mothers served by the Florida MIECHV program to those of non-adolescent participants in the program and 2) examine the experiences of adolescent participants in the program.

Quantitative data were retrieved from the Florida Home Visiting Information System (FLOHVIS). Qualitative data were drawn from a larger dataset of transcripts from telephone interviews conducted with MIECHV participants in 2014 and 2015. The data sets comprised entries collected from participants in all three evidence-based home visiting models implemented in Florida: Parents as Teachers, Nurse-Family Partnership, and Healthy Families America.

- Parents as Teachers is targeted towards educating families using evidence-based curriculum/practices through training and certification of parent educators. The program goals are to increase the knowledge base of child development amongst enrolled parents, thereby improving parenting practices and school readiness. Families are enrolled as teachers beginning with pregnancy and may continue until the child enters kindergarten.
- Nurse-Family Partnership (NFP) is a program conducted by trained nurses aimed at improving the health and well-being of low income and first-time pregnant women. The program is geared towards linking participants to needed health services, reducing alcohol, substance and tobacco abuse, improving parent-child relationships through promotion of mental health, decreasing subsequent unintended pregnancies, and aiding self-sufficiency of mothers. NFP also focuses on school readiness.
- The objectives of Healthy Families America are: development of positive parent-child relationships and parenting behaviors, reducing child abuse incidences, child injuries and consequently emergency department use, increasing children's social-emotional well-being, and improving school readiness. It is designed for parents facing challenges like history of child abuse, domestic violence, mental health issues, and low income. Families are typically enrolled prenatally or within three months of the infant's birth and remain in the program until the child's fifth birthday.

Each of these models are based on human ecology and self-efficacy/self-sufficiency[4-6] and have relatively similar data collection and entry system. Home visiting staff are trained on data collection methods to improve data quality and reliability.

Methods

Quantitative

The study population consisted of all females enrolled in the Florida MIECHV program between April 08, 2013 and February 29, 2016. Secondary data analysis was conducted on FLOHVIS data using Statistical Analysis System (SAS 9.4, Cary NC). The variables included in the analyses were: type of home visiting model, race, ethnicity, marital status, education, history of child abuse/neglect and/or abuse/neglect resulting in involvement with child welfare system, current/previous substance abuse problems, intimate partner violence, postnatal depression (measured by the Edinburgh Postnatal Depression Scale), annual household income, perceived parental stress, type of health insurance, and employment status. Descriptive and bivariate statistics were generated for the demographic, socioeconomic, and health behavior variables. For the bivariate analyses, chi-square tests were used for categorical variables and t-tests/Wilcoxon Mann-Whitney tests for continuous variables.

Qualitative

The USF MIECHV program evaluation team conducted in-depth, semi-structured phone interviews with home visiting participants, including adolescents, from 11 programs in Florida to better understand their home visiting experience. From July-September 2014, team members conducted phone interviews with participants from Alachua, Bradford, Duval, Escambia, Pinellas, and Putnam; and from January-March 2015, participants from Broward, Hillsborough, Manatee, Miami-Dade, Orange, and Southwest Florida (i.e., Collier, Hendry, and Lee Counties) were interviewed.

To recruit participants, home visitors distributed flyers to families within the selected MIECHV programs that detailed the purpose of the phone interviews and contact information for the USF MIECHV evaluation team. Interested participants directly contacted the evaluation team to schedule a date and time for their interview. Interviews were conducted via phone, and each participant provided verbal consent to participate. The phone interviews lasted an average of 20 minutes, and all were digitally audio-recorded. Each participant received a $25 Wal-Mart gift card as compensation for participation.

Participants were asked a series of questions relating to their perceptions of their home visiting experience including: parts of the home visits that are most helpful to them; their relationship with their home visitor; the utilization of home visiting lessons and activities in their daily life; the types of referrals they receive; and access to healthcare and mental health services.

Interviews conducted in English and Spanish were professionally transcribed verbatim and translated to English, if applicable; and Haitian-Creole interviews were transcribed and translated by

bilingual research staff. All recordings and transcripts were simultaneously reviewed to ensure accuracy and qualitative, thematic content analysis was conducted by trained research staff from the evaluation team. The evaluation team further reviewed the interviews conducted with adolescent participants to assess and describe main findings. Self-reported demographic information was also recorded and entered into Qualtrics Survey Software.

Results

Quantitative

The total number of study participants from FLOHVIS was 1,785 which included 246 adolescent females between the ages of 14 and 19. This accounted for 13.8% of total program participants. The Nurse-Family Partnership home visiting program had the highest proportion of adolescents enrolled in their program (66.7%, n=164) compared to the other model types (Healthy Families Florida (21.1%) and Parents as Teachers (12.2%)), of which most are aged 18-19 (n=109). A higher proportion of adolescents who were Black (52.7%) versus White (38.9%) were enrolled in the program compared to an almost equal proportion of non-adolescent participants (47.7% Black, 47.5% White). Ethnic distributions of adolescents were roughly similar to non-adolescents, with slightly higher proportions of Hispanic adolescent participants (28.6% vs. 23.7%). The majority of adolescents (n=239, 98.0%) as well as adults were single (n=1,217, 79.9%).

Overall, women (age ≥ 20 years) enrolled in the Florida MIECHV program had low educational status with almost half having less than a high school education (44.0%). As it would be assumed given their age, 100% of those aged 14-17 had a high school/less than a high school/GED education. However, it is notable that 93.8% (n=76) of the 173 adolescents aged 18-19 years had a high school/less than a high school/GED education. Only 6.2% (n=5) of adolescents ages 18-19 had more than high school/GED, compared to 44% of non-adolescents. Nearly a third, 25.6% (n=33) of adolescents were employed (17 full-time), compared to 45.6% of non-adolescents. Four adolescents under age 18 were employed (3 full-time, 1 part-time). Additionally 5.1% (n=12) of adolescents did not have any form of health insurance, including 2.8% (n=2) of adolescents aged 14-17 and 6.1% (n=10) of ages 18 - 19.

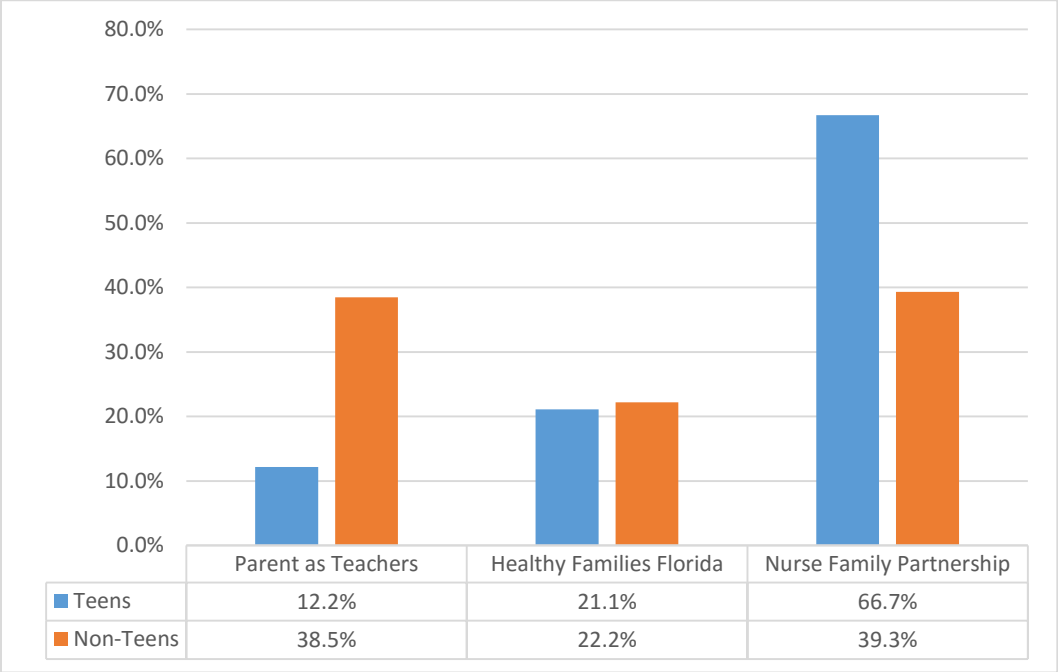
Seventeen (7.0%) adolescents reported current or past substance abuse, compared to 22.3% of adult participants. About 13% (n=32) of adolescents reported experiencing a history of child abuse or neglect compared to 25.0% (n=381) of adult participants. Most of the adolescents with a positive self-reported history of child abuse were 18-19 years old (n=24). Analysis of perceived parental stress and postpartum depression scores showed similar values to older participants (mean stress score was 12.2 among adolescents vs. 11.8 for non-adolescents; median depression score was 6.0 among adolescents vs. 5.0 for non-adolescents); however, these score

differences were not statistically significant. Similar results were observed for subgroup analysis of adolescents (median depression scores 5.0 versus 6.0, and median perceived parental stress scores 14.0 versus 11.0 for adolescents aged 14-17 and 18-19, respectively).

As would also be expected given their age, a statistically significant difference (p-value <0.0001) exists when adolescent's income was compared with adult participants enrolled in MIECHV. The median annual household income for adolescents was $6,000 versus $12,000 for adults. Similar results were observed for within-adolescent age categories. The median annual household income for adolescents aged 14-17 was $2,400 while it was $6,000 for the older adolescents aged 18-19 (p-value 0.03).

The analysis of intimate partner violence (IPV) showed similar results between adolescents and non-adolescents (9.6% versus 10.3%); however, a higher proportion of adolescent aged 18-19 reported experiencing IPV compared to their younger counterparts (11.3% versus 5.5%, p-value 0.22).

DISTRIBUTION OF FLORIDA MIECHV PARTICIPANTS BY TEEN STATUS



	Parent as Teachers	Healthy Families Florida	Nurse Family Partnership
Teens	12.2%	21.1%	66.7%
Non-Teens	38.5%	22.2%	39.3%

Figure 1 Distribution of Florida MIECHV Participants by Teen Status and Model Type

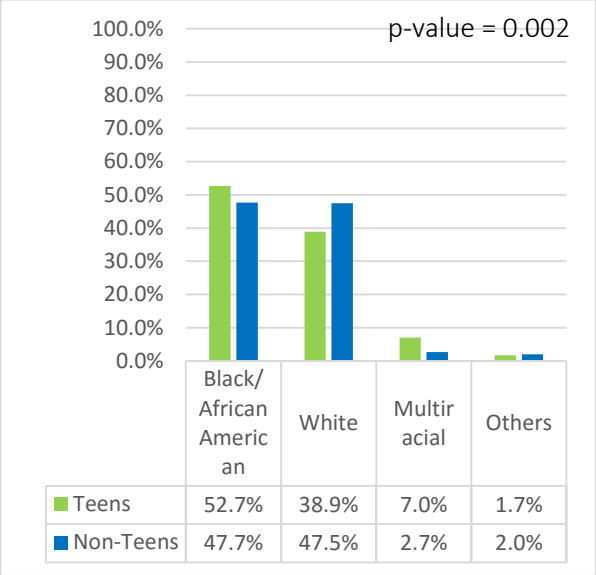


Figure 2 Distribution of Florida MIECHV Participants by Teen Status and Race

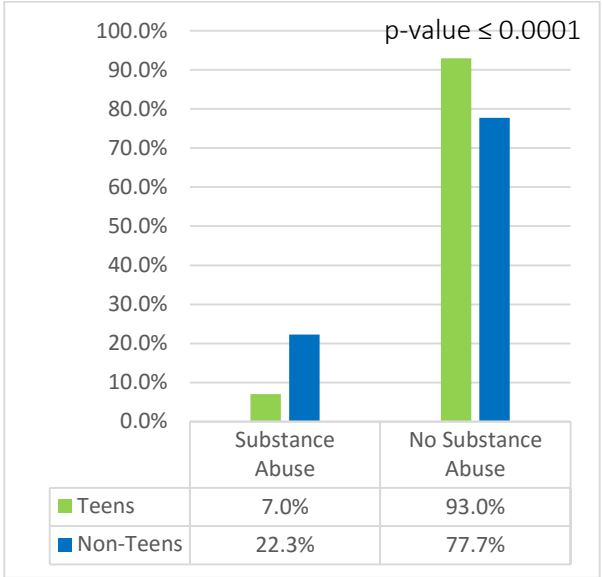


Figure 3 Distribution of Florida MIECHV Participants by Teen Status and Current/Past History of Substance Abuse

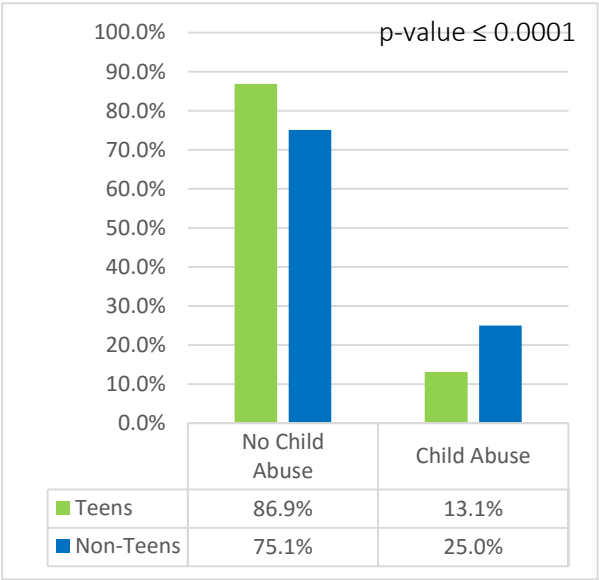


Figure 4 Distribution of Florida MIECHV Participants by Self-reported History of Child Abuse or Neglect

FIGURE 5: DISTRIBUTION OF ADOLESCENTS BY EDUCATIONAL STATUS

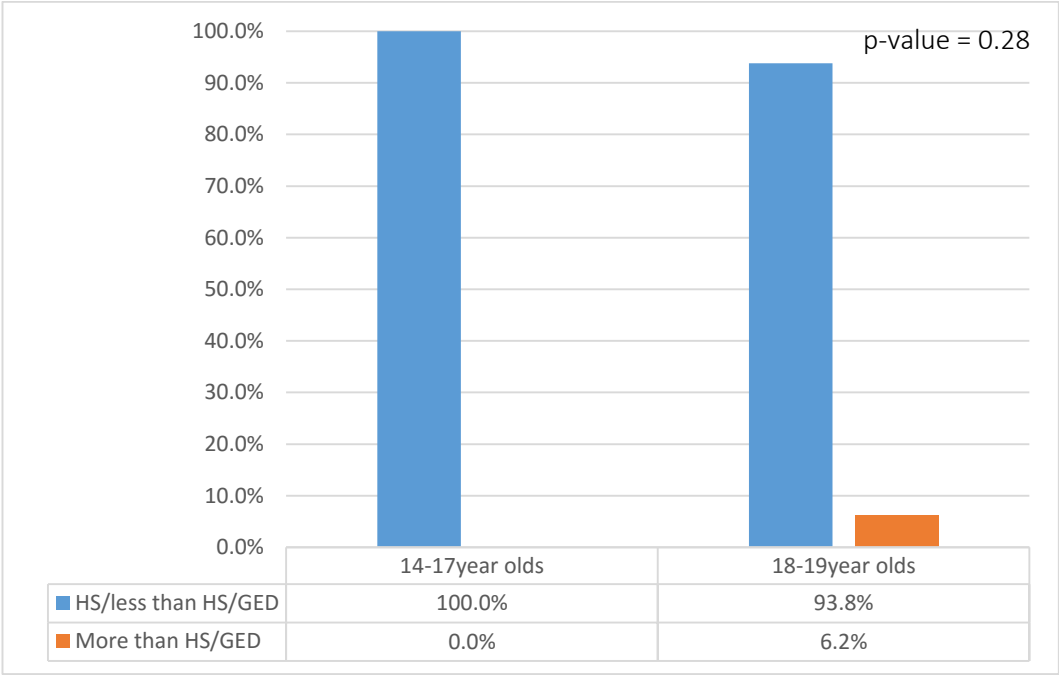


Table 1: Characteristics of Adolescent and Non-adolescent Participants in the Florida Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program, 2013-2016

MIECHV Participants Characteristics	Adolescents ≤ Age 19 (N=246)	Participants ≥ Age 20 (N=1,539)	
Characteristics	N (%)	N (%)	P-value
MODEL			
Parent As Teachers	30(12.2)	593(38.5)	<0.0001*
Healthy Families Florida	52(21.1)	341(22.2)	
Nurse Family Partnership	164(66.7)	605(39.3)	
RACE			
Black/African American	126(52.7)	718(47.7)	0.002*
White	93(38.9)	715(47.5)	
Multiracial	16(7.0)	41(2.7)	
Other	4(1.7)	30(2.0)	
ETHNICITY			
Hispanic	70(28.6)	362(23.7)	0.10
Non-Hispanic	175(71.4)	1166(76.3)	
MARITAL STATUS			
Married	5(2.1)	307(20.1)	<0.0001*
Single	239(98.0)	1217(79.9)	
SUBSTANCE ABUSE (current or past)			
No	226(93.0)	1,184(77.7)	<0.0001*
Yes	17(7.0)	339(22.3)	
HISTORY OF SELF-REPORTED CHILD ABUSE/NEGLECT			
No	213(86.9)	1,146(75.1)	<0.0001*
Yes	32(13.1)	381(25.0)	

EDUCATION			
High School/Less than HS/GED	94(95.0)	792(56.1)	<0.0001*
More than High School/GED	5(5.1)	621(44.0)	
INTIMATE PARTNER VIOLENCE			
No	170(90.4)	1,049(89.7)	0.77
Yes	18(9.6)	120(10.3)	
DEPRESSION SCORES (median, IQR)[a]	6.0(7.0)	5.0(7.0)	0.34
INCOME (median, SD)[a]	6,000(12,500)	12,000(14,500)	<0.0001*
PERCEIVED STRESS SCORES (mean, SD)[b]	12.2(8.1)	11.8(7.5)	0.57
HEALTH INSURANCE			
No Insurance	12(5.1)	203(13.7)	<0.0001*
Gov./Public Insurance	218(92.0)	1,175(79.2)	
Private Insurance	4(1.7)	93(6.3)	
Other Insurance	3(1.3)	12(0.8)	
EMPLOYMENT			
Unemployed	96(74.4)	619(54.4)	<0.0001*
Part-time	16(12.4)	211(18.5)	
Full- time	17(13.2)	308(27.1)	

* Statistical significance: *p≤.05*; [a] Wilcoxon-Mann Whitney test; [b] Independent sample t-test

Abbreviations: SD = standard deviation; IQR = inter-quartile range; HS = high school; GED = General Education Diploma

Results of chi-square tests

Dataset: Florida Home Visiting Information System (FLOHVIS)

Table 2: Characteristics of Adolescents in the Florida Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program, 2013-2016

MIECHV Adolescents Characteristics	Adolescents aged 14-17 (N=73)	Adolescents aged 18-19 (N=173)	
Characteristics	N (%)	N (%)	P-value
MODEL			
Parents As Teachers	5(6.9)	25(14.5)	0.13
Healthy Families Florida	13(17.8)	39(22.5)	
Nurse Family Partnership	55(75.3)	109(63.0)	
RACE			
Black/African American	35(48.6)	91(54.5)	0.84
White	31(43.1)	62(37.1)	
Multiracial	5(6.9)	11(6.6)	
Other	1(1.4)	3(1.8)	
ETHNICITY			
Hispanic	25(34.7)	45(26.0)	0.17
Non-Hispanic	47(65.3)	128(74.0)	
MARITAL STATUS			
Married	0(0.0)	5(2.9)	0.14
Single	73(100)	166(97.1)	
SUBSTANCE ABUSE (current or past)			
No	69(94.5)	157(92.4)	0.54
Yes	4(5.5)	13(7.7)	

HISTORY OF SELF-REPORTED CHILD ABUSE/NEGLECT			
No	65(89.0)	148(86.1)	0.53
Yes	8(11.0)	24(14.0)	
EDUCATION			
High School/Less than HS/GED	18(100)	76(93.8)	0.28
More than High School/GED	0(0.0)	5(6.2)	
INTIMATE PARTNER VIOLENCE			
No	52(94.6)	118(88.7)	0.22
Yes	3(5.5)	15(11.3)	
DEPRESSION SCORES (median, IQR)[a]	5.0(6.5)	6.0(7.0)	0.84
INCOME(median, IQR) [a]	2,400(10,000)	6,000(14,160)	0.03[#]
PERCEIVED STRESS SCORES (median, IQR) [a]	14.0(16.0)	11.0(10.0)	0.07
HEALTH INSURANCE			
No Insurance	2(2.8)	10(6.1)	0.22
Gov./Public Insurance	70(97.2)	148(89.7)	
Private Insurance	0(0.0)	4(2.4)	
Other Insurance	0(0.0)	3(1.82)	
EMPLOYMENT			
Unemployed	23(85.2)	73(71.6)	0.26
Part-time	1(3.7)	15(14.7)	
Full- time	3(11.1)	14(13.7)	

* Statistically significant *p≤.05*; [a] Wilcoxon-Mann Whitney test; [b] Independent sample t-test
Abbreviations: SD = standard deviation; IQR = inter-quartile range; HS = high school; GED = General Education Diploma
Results of chi-square test
Dataset: Florida Home Visiting Information System (FLOHVIS)

Qualitative

There were a total of 103 phone interviews conducted by trained research staff from the USF MIECHV evaluation team with participants from each program. Of those, 15 interviews (five in 2014 and ten in 2015) were with adolescents including one conducted in Spanish and one in Haitian-Creole. Adolescent interview participants received MIECHV home visiting services in Bradford (n=1), Broward (n=1), Duval (n=2), Escambia (n=1), Hillsborough (n=3), Miami-Dade (n=3), Putnam (n=1), and Southwest Florida (n=3). The age of these adolescents ranged from 15-19 years; all were female, almost half (n=6) identified as Black, and a quarter (n=4) as Hispanic. About half (n=8) had not completed high school and a quarter (n=4) stated currently being a student. Almost all (n=13) stated being single (87%), and three of the participants (20%) were still pregnant at the time of the interview. Of the participants who had already given birth (n=12), their child's age ranged from 19 days to 20 months old.

Summaries and key quotes from the in-depth, semi-structured interviews conducted with participants are shared below to add context and detail to the quantitative findings regarding participants' feedback on the home visitor-participant relationship; parenting education and resources; and supporting education and employment. Full reports of all Florida MIECHV program evaluation participant interviews for 2014 and 2015 are available online at http://health.usf.edu/publichealth/chiles/miechv/state-evaluation.

Table 3: Characteristics of Adolescent Participants Interviewed by the Florida Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program Evaluation Team, 2014-2015

MIECHV Adolescents Characteristics	**Adolescents ≤ Age 19** (N=15)
Characteristics	**N (%)**
MODEL	
Parent As Teachers	2(13.3)
Healthy Families Florida	1(6.7)
Nurse Family Partnership	12(80.0)
RACE	
Black/African American	6(40.0)
White	6(40.0)
Multiracial	2(13.3)
Prefer not to answer	1(6.7)
ETHNICITY	
Hispanic	4(26.7)
Non-Hispanic	11(73.3)
MARITAL STATUS	
Married	1(6.7)
Single	13(86.6)
Prefer not to answer	1(6.7)
EDUCATION	
Less than high school/GED	8(53.3)
High school/GED	7(46.7)
More than high school/GED	0(0.0)
EMPLOYMENT	
Unemployed	13(86.7)
Part-time	2(13.3)
Full- time	0(0.0)
NUMBER OF CHILDREN IN HOUSEHOLD	
One child [a]	11(73.3)
Two children	0(0.0)
Three or more children	4(26.7)
ASSISTANCE WITH DAILY CHILDCARE AND ACTIVITIES [b]	
No other adult	3(20.0)
Spouse/partner	1(6.7)
Family member	8(53.3)
Friend	0(0.0)
Other	4(26.7)

[a] Current pregnancy was counted as one child in the household

[b] Total responses exceed N=15 due to 'select all that apply' option

Abbreviations: GED = General Education Diploma

Home Visitor-Participant Relationship

The home visitor-participant relationship was described in a positive way by the adolescent participants. The participants interviewed described feeling comfortable around their home visitor, whom they found to be funny, nice, helpful, sweet, caring, cool, proactive, and determined. The adolescent participants considered the relationship and interactions with their home visitor to be a big stress-reliever, as well as the best part of the home visiting program. Adolescent participants stated that their home visitor was the best person that they could talk to about any problems or doubts, as their home visitors were available, always open to any questions, and gave the best advice. Others categorized their home visitor as either a very good friend, like a big sister, or a nurse and counselor combined — to the point of becoming attached.

"I have become attached to her because of how helpful she has been. I would describe her as… For me she's excellent. I think she's a wonderful person because she's helped me a lot, with any doubts I ask her when she comes I don't have to call anywhere else. She's always ready to help me or the baby with anything we need. If there's anything I need, she takes care of it right away. If she needs to come before the visit date she does. You know."

"She's funny. She makes me laugh. She tells me what to do, like tell me the right things to do. She's cool, pleasing. She wants to help."

"My home visitor is a really good nurse. She's always open to any questions I have to ask her. She's very proactive and she loves to help me. There's nothing that she wouldn't help me with."

"She's so nice, she's so sweet. They maybe need to get her an award. Because I don't think a lot of people come into my house. I'm not a social person but I make exceptions for her. I like her to come around all the time. I wish she comes around all the time, even if there isn't anything to talk about, I tell her I wished she came around."

"It's a good relationship. She helps me out all the time, that's it. It's a good relationship. She helps me out, she's there when I tell her I need help with something like when I need help with my baby – she's there."

"She's really helpful, caring, determined. I can't really say anything bad about her. She's like a very good friend for me as well."

"I actually like meeting with her. She doesn't make you feel uncomfortable, you can talk about anything. She's more like a nurse and a counselor put together like that."

"Overall, I think the home visit helps me the most because I can actually talk to her. It's a big stress reliever. I've got to just talk to her, sit down and talk. We could talk about everything and she gives me the best advice that she's had and all of that. She's just there for me overall. So, I think that's the best part about everything."

"It means a lot to me and my daughter. I really appreciate the program and the help that I get from her. It just means a lot to me."

"She takes her job really seriously which I love her about that. I love how she comes and she makes sure everything is okay and how I'm doing and then we get to the lesson."

"I really like her. I feel comfortable around her. With any problems that I have, she's the best person that I can go to and talk to. She's like a big sister. She's really nice and helpful."

Parenting Education and Resources

Adolescent participants found informational support provided by the home visitor very helpful, more specifically in terms of how to take care of themselves during pregnancy. Other information was important as well, i.e., what to expect during labor; what and how to feed the baby; and how to take care of their newborn's basic needs, from dental care to vaccinations and daycare. The home visitors provided useful parenting education about what to expect and address each month, such as: safe sleeping, comforting when teething, tummy time, and crawling to enable the baby's motor skills. This informational support was vital, especially for these first-time mothers. Instrumental support was also discussed among the adolescent participants. Resources that were mentioned were daycare, food pantries, Goodwill, furniture vouchers, and assistance in finding a car seat, bassinet, and/or crib.

"Well, the nurse brings me all the information I need. She talks to me. Ever since I was pregnant it was about taking care of myself, and about what I should expect to notice each month. We talked about lots of things that were helpful to me."

"Taking care of yourself during pregnancy, taking care of your newborn growth, dental care for the baby… I think we have covered everything in the book."

"Because I'm the only child and I've never really been around babies like that. So, it helped me with learning about how to feed a baby, how to take care of a baby, how to help myself also while I was pregnant and things."

"The home visitation counselor answered all my questions and cleared all my doubts. She brought me a lot of information."

"I've covered everything from what to expect during labor, how to dress the baby, what to feed the baby. I've talked about vaccinations. Most recently we talked about day care for the baby. What to ask the people at day care and how to choose a day care that's good."

"Coming over to talk to me about basic needs that I need for my son, letting me know ahead of time what I'm going to go through."

"My nurse taught me everything that I needed to know about the baby. She taught me a whole bunch of stuff like stuff that I didn't know. Now we're working on my baby's time to teeth so she's teaching me how to hug my baby when she's crying or when she's cranky because the teeth are coming out."

"Safe sleeping, how to control your baby when he or she is crying and you don't know what to do, talking to your baby, teaching them stuff and when they start -right now, we're on the session when they begin to crawl - how to keep stuff off the floor and keep them out of reach of chemicals and choking hazards and stuff and all of that."

"We have tummy time and we make homemade toys we're having him play with and stuff to help him get his motor skills going."

"I would describe it as very helpful and it's a good program when you're new to being a parent and you don't really know much. I feel like she's very helpful. It will help you out a lot. It will teach you a lot of stuff that you really didn't know or you really wouldn't have thought of."

"I went to the Health Department and they gave me a flier that explained what it was so I called because I was interested, because I'm a first time mom and I was a teenager and they teach you some

things that you might not know. So I called then they gave me a call back. Then they scheduled the first meeting and ever since then she's been coming."

"If she didn't come and help me teach him how to crawl and how to… I wouldn't know how to do to because I'm a first time mom. She helps me to know, 'Oh you're supposed to do this.' When I first brought him home, I had crib bumpers in my crib and a whole bunch of toys in there. She told me that it's not supposed to be like that. She said we don't want him to roll over and suffocate and stuff like that. I would never have known that. That helped me out a lot."

"I was in high school when I got pregnant and I had nothing – I mean, other than a foster home."

"She comes and she bring the papers that either says what the baby should be doing at this month, ways to help him succeed at the things he's supposed to be learning. She brings toys. It's like an interactive kind of thing and then she gives me a lot of helpful information to help with him growing."

"I think because at least if you know that if your baby's dad is not there or you at least don't have anybody there, at least you have a nurse, somebody that you could talk to, could explain to you, could help you get to something that you need help but you are not getting help with. I would recommend my friends, anybody, even a random person."

"She gave me a paper – with a list of places if I want to go to school and stuff like that, stuff to help me if I run out of food at home like food pantries. She told me about Goodwill and a lot of stuff."

"She comes by and she gives me helpful information about how to take care of my infant - about the stages of birth, and she helps me find just like a car seat, bassinet, a crib; any necessities for the baby, she helps me find them at a low price or she helps me get them."

"She gave me a furniture voucher. I needed furniture. I needed a bed. She gave me a furniture voucher and now it got me a bed."

Supporting Education and Employment

Through the MIECHV program, the home visitors enabled adolescent participants to make decisions regarding education and employment for themselves, and daycare and school for their children. The home visitors and adolescent participants created a plan, and the home visitor assisted them to achieve goals, such as finishing school, losing weight, keeping their job, and planning for daycare.

"Anything in life that's revolving around my baby. Anything like stuff with day care and situations like, whether I should keep my job or not…"

"She asked me about it whether if I'm planning on putting him in day care. When I told her I got my job. I was like, 'Yes, I was going to try to.' He can now start school also. So she brought me a lot of information about what day cares do this and stuff like that."

"Recently, I had to take an exam for school so my nurse got me some practice questions and she helped me to study."

"Yes, like whenever - I was 16, I was still in high school. My goal was to finish high school. I've also had a weight loss goal. I've had a goal to go back to school to go to college. I've had a goal to – my job closed down two months after I had my son. My goal was to find more employment."

"What will I do after I have the baby? What career do I want to achieve after the baby? Do I plan on staying in school?"

"She's helped me try to find employment. I needed help with school because I was doing some home schooling and some regular school. If I ever needed help or something and she knew what she was doing and she would help me and stuff like that."

"[She] encouraged me to finish high school, told me that she knew I could do it, not to give up. She kept on encouraging me to keep trying for a job -encouraging me to go back to school and I haven't done it yet."

"Since right now, I'm thinking of starting another job so I'll be working two jobs. My boyfriend works. This is a lot right now so I haven't done it yet."

"I use the community actually, that one. I use that one and it helped pay for my GED classes and, once I get enrolled in a regular job – I get a job - I haven't used that yet, the day care part yet, but it will probably happen soon."

Discussion

The results of this study indicate that a critical aspect of the Florida MIECHV teens is their low educational status. The far-reaching effects of low maternal education cannot be overemphasized. Low educational attainment in mothers increases risk for intellectual and social disadvantage in their children, which can also result in higher rates of antisocial behaviors and mental health problems later in life[7-11]. Furthermore, children of teens are at risk of poor developmental outcomes, malnutrition, child neglect and abuse[12,13], which can perpetuate a cycle impacting future generations.

Only 7.0% of adolescent participants reported a history of current or past substance use, which is far lower than the non-adolescent participants' reported rate (22.3%). It is also lower than the Florida state rate of adolescent substance use, which is 10.1%[14]. However, among adolescents, the rate of substance use was observed to be similar across the age categories (5.5% vs 7.7% for 14-17 years and 18-19 years, respectively). Though analysis on smoking status of adolescents was not possible due to insufficient sample size, literature shows that substance abuse is significantly predicted by tobacco use[15]. Additionally, adolescents are more likely to smoke during pregnancy[7,9,16]. This is important when considering the adolescent population; tobacco and substance abuse among pregnant adolescents not only can harm the

Among Florida MIECHV adolescent participants…

- *66.7% enrolled in Nurse-Family Partnership*
- *About a quarter were employed full- or part-time*
- *5.1% were uninsured*
- *17 out of 246 reported current or past substance abuse*
- *32 out of 246 reported experiencing child abuse/ neglect – a lower than expected prevalence*
- *Reported similar levels of stress and depression to non-adolescents participants*
- *A tenth reported history of intimate partner violence*

health and development of the fetus, but it can also affect the health and development of the adolescent mother [12,13].

The prevalence of self-reported child abuse/neglect among the adolescent population in this study is low (13.1%), which may be attributed to under-reporting or social desirability bias. Research shows that both sexual and physical abuse are significantly associated with an increased risk of adolescent pregnancy. This association is strongest when these two types of abuse co-occur[1,17]. Though the prevalence of IPV is low among adolescents enrolled in MIECHV (9.6%), most recent global analysis indicates that about 33% of ever partnered women aged 15 years and above has experienced physical and or sexual intimate partner violence in her lifetime[18,19]. In the U.S., 30-35% of women report having experienced IPV, with one-fifth of them experiencing IPV for the first time during adolescence[20,21]. The low prevalence reported may be attributed to under reporting or the tendency for adolescents with a previous history of violence in a relationship to view violent behavior as acceptable in present/future relationships[22,23]. Understanding IPV in adolescents can be used as a source of information for programs targeted towards reducing it.

Adolescents in the MIECHV program reported positive experiences with their home visitors. They considered home visitors as their friends, confidantes, advisors, and/or counselors who provided informational and instrumental support, and enabled them to be create and realize their goals for school, weight loss, employment, and daycare.

Limitations

We could not analyze smoking status and breastfeeding due to insufficient sample size. Additionally, the cross-sectional design makes it difficult to determine the impact that the home visits have on health behaviors or other risk factors. Although the home visitors are trained in data quality assurance, the reliability and timeliness of measurement by individual home visitors cannot be guaranteed. Also, several variables may be under-reported (e.g., history of child abuse, substance use).

Recommendations

The MIECHV program aims to support families experiencing higher risks by providing education, support, and referrals to optimize healthy physical, social, and emotional development. Thus, it should continue to develop and incorporate interventions that meet the particular needs of adolescents. Interventions towards re-integrating the adolescents back into the educational systems should be implemented which will require consideration of employment status, financial supports, and child care needs, to encourage self-efficacy and promote self-sufficiency. Additionally, assisting adolescent MIECHV participants in connecting with primary health care and family planning services will support their continued education. As part of their health promotion curricula, the MIECHV programs should also continue to support adolescent parents in refraining from or engaging in substance use/abuse.

The three home visiting programs funded by Florida MIECHV utilize a number of screening and assessment tools to identify needs, guide intervention and referrals, and to collect accurate data that will help us to understand the population served and the potential outcomes of the program. It is important to recognize that adolescent mothers may be reluctant to report environmental, health, or behavioral risk factors, and one needs to consider strategies to accurately assess and respond to risks and needs identified among these families. Continuing their role as trusted confidantes and counselors, the home visitors can assist the adolescents in the MIECHV program to identify their needs and work with program administrators and supervisors to tailor their visits accordingly.

For more information contact:

Jennifer Marshall, PhD, MPH, CPH
Research Assistant Professor, Lead Evaluator
USF College of Public Health, Department of Community and Family Health
(813) 396-2672
jmarshal@health.usf.edu
www.miechv.health.usf.edu

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