



P R A M S

Pregnancy Risk Assessment Monitoring System

Unintended Pregnancy Among Florida Women Having a Live Birth, 1996-97

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Abstract - Pregnancy Risk Assessment Monitoring System (PRAMS) data for both 1996 and 1997 are used to examine unintended pregnancy among women having a live birth. The purpose of this study is to find socio-demographic variables that are related to women having a live birth as the result of an unintended pregnancy. Another purpose is to determine if there is a relationship between intendedness of pregnancy and certain negative health behaviors and/or poor birth outcomes. The study identifies age, race, marital status and poverty as socio-demographic factors related to intendedness of pregnancy. This study found no relationship between intendedness of pregnancy and negative health behaviors or poor birth outcomes. However, the study did find that the socio-demographic factors associated with unintended pregnancy are also associated with poor health behaviors and poor birth outcomes. Decreasing the number of unintended pregnancies in these socio-demographic groups will therefore improve health behaviors in pregnant women and birth outcomes in Florida.

PRAMS Overview

PRAMS (the Pregnancy Risk Assessment Monitoring System) is a joint surveillance project between the Florida Department of Health and the U.S. Centers for Disease Control and Prevention, designed to monitor the physical, economic, and social health of Florida's mothers and newborns. PRAMS is a mail survey with telephone follow-up of a random sample of recent mothers of live-born infants, completed when the infant is approximately three months old. Minority and low birth weight infants are over-sampled. 5370 mothers were sampled in 1996 and 1997 with 4237 surveys completed, for a response rate of 78.9%. The results presented are weighted to reflect the total population of Florida mothers and infants, as non-respondents to the survey are somewhat different from respondents.

Unintended Pregnancy Among Florida Women Having a Live Birth

Introduction · Unintended pregnancy is recognized as a public health concern. Reducing the percent of pregnancies that are unintended to 30% is one of the nation's Healthy People 2000 objectives. Based on PRAMS data, it is estimated that in 1996/97, 47.8% of live births in Florida were the result of an unintended pregnancy.

Several socio-demographic characteristics have been linked with unintended pregnancy. Significant differences in the prevalence of unintended pregnancy have been linked to race/ethnicity and level of education (Williams et al., 1997). Williams et al., found that Anglo women and women who had attended college were less likely to have an unintended pregnancy. Another study found that unintended pregnancies occurred disproportionately among teenage mothers, poor women and women whose race was Black or Alaska Native (Alaska Department of Health and Social Services, 1995). Henshaw (1998) found the rate of unintended pregnancy to be highest for women ages 18-24, unmarried women, women with low income, and Black or Hispanic women. The Oklahoma State Department of Health (1993) found that "Overall, higher rates of unintended pregnancy were found among the following sub-populations: teens, African Americans, women living under the poverty level or receiving public assistance, and unmarried women." This study will examine the relationship between unintended pregnancy and the following socio-demographic variables: age, race, education, marital status, and poverty. The objective is to identify the socio-demographic characteristics of Florida women who had a live birth as the result of an unintended pregnancy.

Unintended pregnancy has been shown to be associated with prenatal and postnatal behaviors that may be detrimental to both mother and infant. The West Virginia Office of Maternal and Child Health (1998) found that women with intended pregnancies were more likely to seek first trimester prenatal care than women with unintended pregnancies. Another study found that women who gave birth as the result of an unintended pregnancy were more likely to smoke during the last three months of pregnancy, more likely to drink during the last three months of pregnancy, more likely to have inadequate prenatal care, and more likely to experience physical abuse during pregnancy, compared to women who gave birth as a result of intended pregnancies (South Carolina Department of Health and Environmental Control, 1995). Breastfeeding behavior has also been found to be different for unintended versus intended pregnancies. Women who have a live birth as a result of an unintended pregnancy have a higher risk of not breastfeeding than women whose pregnancies were intended (Dye et al., 1997). Hickey et al. (1997) found that Black women who had an unintended pregnancy were more likely to have inadequate maternal weight gain than Black women who had an intended pregnancy.

This study examines whether prenatal and postnatal behaviors are different for Florida women who had a live birth as the result of an unintended pregnancy compared to women who had a live birth as the result of an intended pregnancy.

Unintended pregnancy has also been associated with poor birth outcomes. One reason for poor birth outcomes is that women who have an unintended pregnancy are less likely to receive prenatal care in the first trimester than women who have an intended pregnancy. This late entry into prenatal care increases the likelihood of a poor birth outcome (West Virginia Office of Maternal and Child Health, 1998). Hopkins et al. (1995) looked at the influence an unwanted pregnancy has on low birth weight. They found that for White mothers who had an unwanted pregnancy, there was a higher proportion of low birth weight births, compared to White mothers who gave birth as a

Unintended Pregnancy Among Florida Women Having a Live Birth

result of a wanted pregnancy. They did not find the same relationship between low birth weight and wantedness for Black and Hispanic Mothers.

This study also examines whether pregnancy outcomes differ for Florida women that had a live birth as the result of an unintended pregnancy compared to women who had a live birth as the result of an intended pregnancy.

An in depth analysis, such as the one done here, of live births resulting from unintended pregnancies and the effects on women and children in Florida had not been previously done. This analysis provides program staff in Florida with information that could guide their efforts to improve maternal and child health.

Methodology - This analysis used data from the Pregnancy Risk Assessment Monitoring System (PRAMS). PRAMS is a population based, random sample mail/telephone survey of new mothers in Florida. The mothers are selected each month from the state's birth certificate file. Approximately equal numbers of women are chosen randomly from four strata: 1) mother is White or Asian/Pacific Islander and infant has low or unknown birth weight, 2) mother is White or Asian/Pacific Islander and infant has normal birth weight, 3) mother is Black, American Indian, other races, or race is not reported and infant has low or unknown birth weight, 4) mother is Black, American Indian, other races, or race is not reported and infant has normal birth weight. Statistical weights are applied to the data to adjust for selection probability and non-response, so that inferences can be made about all live births in Florida. Selected items from the birth certificate are included for each respondent.

The analysis in this report includes the 3,954 mothers who responded to the question on intendedness of pregnancy in 1996 and 1997. The PRAMS question reads, "Thinking back to just before you got pregnant, how did you feel about becoming pregnant?" There were 238 women that did not respond to this question or their answer was "I don't know". Table 1 shows the number and percent for each response. Out of the 3,954 who responded, 16.2 percent wanted to become pregnant sooner, 34.2 percent wanted to become pregnant later, 36.0 percent wanted to become pregnant then, and 13.6 percent did not want to be pregnant then or at any time in the future. Unintendedness is defined as the responses "wanted to become pregnant later", or "not then or any time in the future". Out of the 3,952 women who responded 47.8% had a birth as the result of an unintended pregnancy.

Table 1. Numbers and Percents for Responses to the PRAMS Question on Intendedness of Pregnancy.

Response	Sample Size	Weighted Number	Weighted Percent
Wanted to become pregnant sooner	651	56,699	16.2%
Wanted to become pregnant later	1,421	119,817	34.2%
Wanted to become pregnant then	1,277	126,374	36.0%
Didn't want to become pregnant then or at anytime in the future	605	47,759	13.6%
Unintended (wanted to be pregnant later or never)	2,026	167,576	47.8%

Unintended Pregnancy Among Florida Women Having a Live Birth

Several crosstabulations were created using SUDAAN software. The crosstabulations show the weighted percentage of women with each socio-demographic characteristic who had a live birth as the result of an unintended pregnancy.

To examine whether the socio-demographic characteristics of women who had a live birth as the result of an unintended pregnancy were different than the characteristics of women who had a live birth as the result of an intended pregnancy, unadjusted odds ratios were calculated for the following variables using SUDAAN software: age, race, education, marital status, and poverty. A logistic regression was then run in SUDAAN to examine the relationship between intendedness and each of the socio-demographic characteristics listed above individually, while adjusting for the other socio-demographic characteristics. The PRAMS questions and definitions of each variable used in this analysis can be found in Table 6. All variables used in this analysis were divided into two groups. Table 6 provides definitions for these groups.

Women who had a live birth as a result of an unintended pregnancy may be more likely to engage in unhealthy behaviors than women who had a live birth as the result of an intended pregnancy. The following dependent variables are analyzed: smoking during pregnancy, infant's exposure to tobacco, alcohol use during pregnancy, breastfeeding, routine well baby care, adequacy of prenatal care, adequate maternal weight gain, infant's sleep position, smoke alarm use. A logistic regression is also run and the following variables are adjusted for: age, race, education, marital status, and poverty.

Unintended pregnancies may have more adverse birth outcomes than intended pregnancies. Unadjusted odds ratios are calculated for the relationship between intendedness and the following variables: preterm birth, low birth weight, very low birth weight, time infant spent in hospital after birth, infant admitted to ICU, time mother spent in hospital after birth, assisted ventilation > 30 minutes, and infant returned to hospital after birth. A logistic regression is also run for the above variables, and the following variables are adjusted for: age, race, education, marital status, and poverty.

Results · Table 2 shows the weighted percent of births that resulted from unintended pregnancies in each of the socio-demographic groups. Each socio-demographic characteristic was divided into two groups (refer to Table 6). For each socio-demographic characteristic, one group had much higher percentages of unintended pregnancy. For example, 71.6% of unmarried women had a live birth as the result of an unintended pregnancy, while only 35.6% of married women did. Also, 72.8 percent of women younger than 18 or older than 39 had a live birth as the result of an unintended pregnancy, while 44.7% of women between 18 and 39 years of age had a birth as the result of an unintended pregnancy. The percent of live births from unintended pregnancy is extremely high at 79.4%, when only women under 18 years of age are included (data not shown).

Figures 1A and 1B show the percentage of live births resulting from an unintended pregnancy for women with every combination of the socio-demographic

Unintended Pregnancy Among Florida Women Having a Live Birth

variables in Table 2, except education¹. For unmarried, Black, poor women who are less than 18 or greater than 39 years of age, 90.0% of their births were the result of an unintended pregnancy. This can be contrasted with the 28.7% of married, non-Black, non-poor, women between the ages of 18 and 39 who had a live birth as the result of an unintended pregnancy.

Table 2. Weighted Percent of Live Births that Resulted from Unintended Pregnancies for Selected Socio-demographic Characteristics.

Socio-demographic Characteristics	Weighted Percent Unintended
Age	
Less than 18, Over 39 years of age	72.8
Between 18 and 39 years of age	44.7
Race	
Black	71.8
Non-Black	41.2
Poverty	
Poor	58.7
Not Poor	37.8
Education	
Less than High School	63.9
High School or More	43.7
Marital Status	
Unmarried	71.6
Married	35.6
All Women	47.8

n=3,500

Table 3 shows the unadjusted odds ratios and the adjusted odds ratios for the socio-demographic variables age, race, marital status, and poverty by intendedness of pregnancy (variable definitions are in Table 6). All of the unadjusted odds ratios for these socio-demographic variables and intendedness were statistically significant. Marital status had the strongest association with intendedness. Unmarried women were 4.59 times as likely to have an unintended pregnancy compared to married women. The weakest association was between poverty and intendedness. Women who are poor are 2.35 times as likely to have an unintended pregnancy than women who are not poor.

¹ When education was included in the model with the other four socio-demographic variables, the relationship between education and unintended pregnancy was no longer statistically significant. Therefore, education was not included in Table 2 or Figures 1A and 1B.

Figure 1A

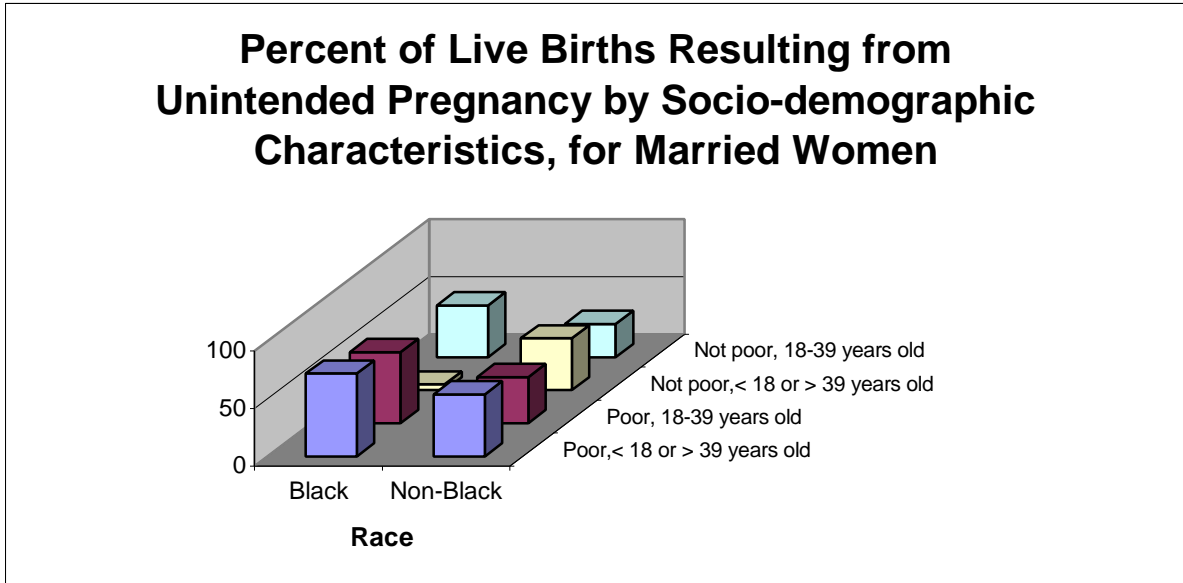
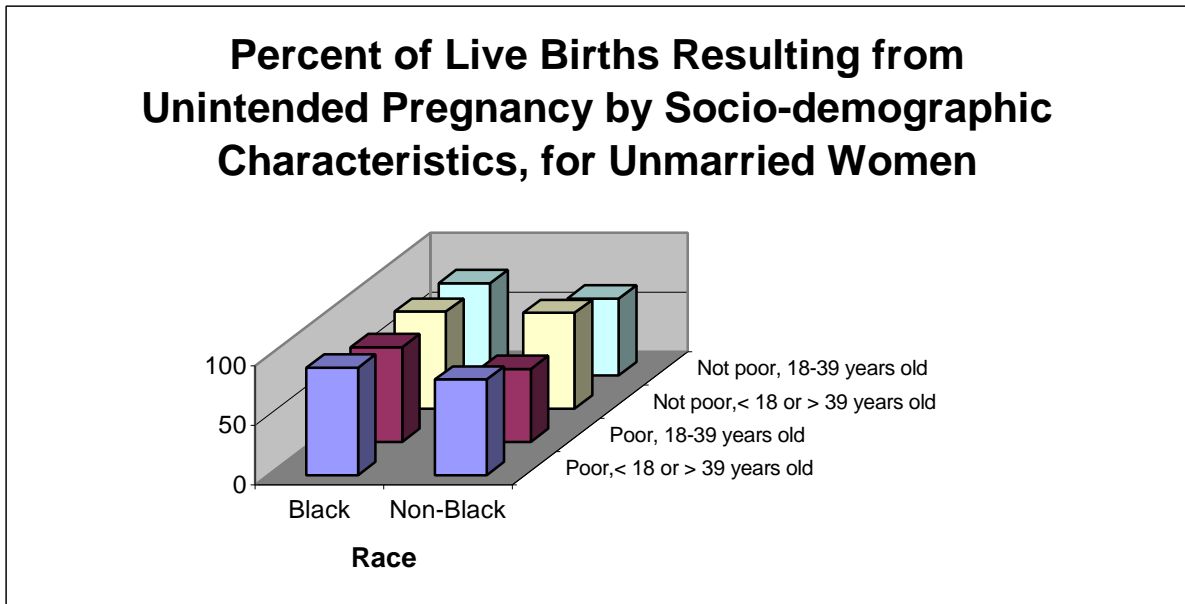


Figure 1B



The adjusted odds ratios in Table 3 show the relationship between births that result from an unintended pregnancy and each socio-demographic variable while adjusting for the effects of the other socio-demographic variables on intendedness. After being adjusted, all of the odds ratios for intendedness remained statistically significant. The relationship between marital status and intendedness resulted in the largest adjusted odds ratio. After adjusting for the other socio-demographic factors, unmarried women were still 3.04 times as likely to have an unintended pregnancy compared to married women. Race also has a strong association with intendedness after adjusting

Unintended Pregnancy Among Florida Women Having a Live Birth

for the effects of other socio-demographic variables. Black women are 2.16 times more likely to have an unintended pregnancy compared to non-Black women. Education was not an independent predictor of unintended pregnancy when race, age, marital status and poverty were in the model.

Table 3. Unadjusted and Adjusted Odds Ratios with 95% Confidence Intervals (C.I.) for Socio-demographic Characteristics Associated with Women who had a Live Birth as the Result of an Unintended Pregnancy

Variables	Unadjusted Odds Ratios for Women with Unintended Pregnancy (with C.I.) - Group 2 is reference group	Adjusted Odds Ratios for Women with Unintended Pregnancy (with C.I.) - Group 2 is reference group
Age	3.30 (2.09, 5.22)	2.02 (1.22, 3.32)
Race	3.63 (2.77, 4.74)	2.16 (1.60, 2.93)
Marital Status	4.59 (3.40, 6.19)	3.04 (2.17, 4.28)
Poverty	2.35 (1.80, 3.08)	1.45 (1.07, 1.96)

n=3,506

Table 4 shows the unadjusted and adjusted odds ratios for the association between health behaviors and intendedness. The relationships between intendedness and the following health behaviors were analyzed: smoking while pregnant, tobacco exposure, drinking while pregnant, inadequate well baby care, physical abuse during pregnancy, inadequate weight gain during pregnancy, placing the baby on its stomach to sleep, not having a smoke alarm in the house, inadequate prenatal care, and not breastfeeding at least one month.

The unadjusted odds ratios for intendedness and tobacco exposure, inadequate well baby care, physical abuse during pregnancy, putting the baby to sleep on its stomach, inadequate prenatal care, and not breastfeeding at least one month were statistically significant and ranged from 1.66 to 2.98. The association between intendedness and adequacy of prenatal care resulted in the largest unadjusted odds ratio. This unadjusted odds ratio tells us that women who gave birth as a result of unintended pregnancy were 2.98 times as likely to have inadequate prenatal care as women who gave birth as the result of an intended pregnancy.

The relationship between intendedness and physical abuse during pregnancy resulted in the second largest unadjusted odds ratio. Mothers who gave birth as the result of an unintended pregnancy were 2.84 times as likely to be physically abused during their pregnancies than women who gave birth as the result of an intended pregnancy.

The smallest statistically significant unadjusted odds ratio was for the association between intendedness and placing the baby to sleep on its stomach. Women whose pregnancy was unintended are 1.40 times as likely to place their infant to sleep on its stomach as women whose pregnancy was intended.

The following variables had non-statistically significant associations with intendedness, based on the confidence intervals of the unadjusted odds ratios: smoking while pregnant, drinking while pregnant, inadequate weight gain during pregnancy, and

Unintended Pregnancy Among Florida Women Having a Live Birth

not having a smoke alarm in the home. From this bivariate analysis it seems that these variables are not related to intendedness of pregnancy.

The adjusted odds ratios in Table 4 show the relationships between certain health behaviors and births that result from an unintended pregnancy while adjusting for the following socio-demographic variables: age, race, marital status, poverty, and education. After being adjusted, none of the odds ratios were statistically significant,

Table 4. Unadjusted and Adjusted Odds Ratios with 95% Confidence Intervals (C.I.) for the Association Between Women Having a Live Birth as the Result of an Unintended Pregnancy and Several Health Behavior Variables

Dependent Variables	Unadjusted Odds Ratios for Women with Unintended Pregnancy (with C.I.) - Group 2 is reference group (see Table 6)	Adjusted Odds Ratios for Women with Unintended Pregnancy (with C.I.) - Group 2 is reference group
Smoking While Pregnant (n=3438)	1.51 (1.00, 2.26)	1.39 (0.87, 2.22)
Tobacco Exposure (n=3310)	1.66 (1.05, 2.61)	1.30 (0.76, 2.21)
Drinking While Pregnant (n=3434)	1.21 (0.68, 2.16)	1.72 (0.91, 3.24)
Inadequate Well Baby Care (n=3084)	1.88 (1.26, 2.81)	1.50 (0.96, 2.35)
Physical abuse During Pregnancy (n=3493)	2.84 (1.52, 5.30)	1.66 (0.85, 3.25)
Inadequate Weight Gain During Pregnancy (n=2957)	1.29 (0.92, 1.81)	1.19 (0.82, 1.74)
Baby is Put to Sleep on Stomach (n=3320)	1.40 (1.05, 1.87)	1.22 (0.89, 1.69)
Home Does Not Have Smoke Alarm (n=3354)	1.36 (0.90, 2.06)	0.98 (0.61, 1.57)
Inadequate Prenatal Care (n=3324)	2.98 (1.76, 5.06)	1.65 (0.90, 3.01)
Not Breastfeeding at Least One Month (n=3285)	1.71 (1.30, 2.26)	1.24 (0.91, 1.68)

although the point estimates for all except smoke alarms are elevated. All of these odds ratio estimates got smaller in the adjusted analysis. For factors where the unadjusted odds ratio was statistically significant, but the adjusted odds ratio was not, the effects of intendedness on these health behaviors is weak and no longer statistically significant. So the relationship between intendedness and the health behaviors must have been associated with one or more of the socio-demographic variables.

In the models where neither the unadjusted odds ratios nor the adjusted odds ratios are statistically significant, the socio-demographic variables were evidently not masking the true relationship between the health behavior variables and intendedness.

Unintended Pregnancy Among Florida Women Having a Live Birth

Table 5 shows the unadjusted and adjusted odds ratios for the association between birth outcomes and intendedness. The relationships between intendedness and the following birth outcomes were analyzed: preterm birth, low and very low birth weight, number of nights hospitalized after delivery (both mother and infant), the infant was admitted to ICU after delivery, the infant had assisted ventilation for more than 30 minutes, and the infant had to return to the hospital after birth.

Table 5. Unadjusted and Adjusted Odds Ratios with 95% Confidence Intervals (C.I.) for the Association Between Women who had a Live Birth as the Result of an Unintended Pregnancy and Several Birth Outcome Variables

Dependent Variables	Unadjusted Odds Ratios for Women with Unintended Pregnancies - Group 2 is reference group (C.I.)	Adjusted Odds Ratios for Women with Unintended Pregnancies - Group 2 is reference group (C.I.)
Preterm Birth (n=3497)	1.20 (0.85, 1.68)	1.00 (0.67, 1.48)
Low Birth Weight (n=3490)	1.10 (0.90, 1.33)	0.80 (0.65, 0.99)
Very Low Birth Weight (n=3490)	1.20 (0.85, 1.70)	0.88 (0.60, 1.28)
More than 2 Nights in the Hospital - Infant (n=3386)	1.29 (0.96, 1.73)	0.95 (0.68, 1.33)
The Infant was Admitted to the ICU (n=3442)	1.26 (0.88, 1.79)	1.06 (0.71, 1.59)
More than 2 Nights in the Hospital - Mother (n=3452)	1.07 (0.78, 1.49)	0.84 (0.58, 1.21)
Baby Had Assisted Ventilation for More than 30 Minutes (n=3500)	1.66 (0.71, 3.85)	1.63 (0.62, 4.31)
Infant Returned to the Hospital After Birth (n=3338)	1.01 (0.65, 1.56)	0.83 (0.51, 1.34)

In Table 5, none of the unadjusted odds ratios were statistically significant. There seems to be no statistically significant relationship between the selected birth outcomes and whether the woman had a live birth as the result of an unintended pregnancy. All of the crude odds ratios (except assisted ventilation) are below 1.29 and the adjusted odds ratios are all below 1.06. The unadjusted preterm birth percent was 10.88 for intended births, and 12.76 for unintended births.

Logistic regression was used to calculate the adjusted odds ratios for each of the birth outcomes and intendedness. The following variables were adjusted for age, race, marital status, poverty, and education. Table 6 shows the adjusted odds ratios for each birth outcome and intendedness adjusted for socio-demographic characteristics. All of the odds ratios remained statistically insignificant after they were adjusted for socio-demographic factors and all got closer to 1.0. This shows that the socio-demographic variables were not concealing a relationship between each birth outcome variable and intendedness.

Discussion - This report provides information about which types of women are most at risk of unintended pregnancy. Family planning program managers can use this information to target the specific types of women at risk, to reduce the number of

Unintended Pregnancy Among Florida Women Having a Live Birth

unintended pregnancies. This study found that several socio-demographic factors were associated with unintended pregnancy. Age, race, marital status and poverty were all found to be statistically significantly associated with intendedness, even after adjusting for each socio-demographic variable, including education. Education was not found to be independently associated with unintended pregnancy once you controlled for the effects of age, race, marital status and poverty.

After adjusting for selected socio-demographic factors, this study did not find a relationship between having a live birth as a result of an unintended pregnancy and negative health behaviors before, during, and after pregnancy or poor birth outcomes.

It was surprising to find that there was no relationship between intendedness of pregnancy and health behaviors or poor birth outcomes. Other studies, some of which are mentioned in the introduction to this paper, have found a relationship. There could be several reasons why our results do not agree with previous studies. It could be that Florida women are different from the women studied previously. Only one of the previous articles limited their study to Florida women, but they were analyzing unwantedness instead of unintendedness. This leads us to another reason our results may not agree with previous studies.

This study may have defined variables differently than other studies. Race may have been studied as three groups instead of two, for example. These differences in measurement of variables can make a big difference in the results of analysis.

A third possible reason the results of this study do not agree with previous studies, is that previous studies may have adjusted for a different set of variables, or they may not have adjusted for any variables at all.

This analysis identifies the women most at risk of having a live birth as a result of an unintended pregnancy. There is little indication that unintendedness is associated with poor health behaviors or poor birth outcomes. However, every effort should be made to reduce unintended pregnancy because the women most likely to have an unintended pregnancy are also the same women most likely to have poor health behaviors or birth outcomes based on their socio-demographics. Being unmarried, Black, poor, young, and having low educational attainment have all been determined to be risk factors for poor health behaviors and poor birth outcomes. Therefore, if the frequency of unintended pregnancy in these women is reduced, we will also reduce the frequency of poor health behaviors and poor birth outcomes.

The percent of births as a result of unintended pregnancy in unmarried, Black, poor women under the age of 18, or over 39 years of age is 90%. When this percentage is contrasted to the 29% of married, non-Black, non-poor women between 18 and 39 years of age who give birth as a result of unintended pregnancy, it is obvious that there is a huge disparity. Family planning clinics and doctors should try to target these women for family planning counseling and services. Effort should be made to increase education and availability of family planning to all women of childbearing age, but especially unmarried, Black, poor women who are less than 18, or over 39 years of age. Reducing the percent of births that this group has as a result of unintended pregnancy can reduce both poor birth outcomes and the percent of newborns exposed to poor health behaviors before and after birth.

Unintended Pregnancy Among Florida Women Having a Live Birth

Future research should try to determine: what type, of contraception the women in each of these groups are using (if any), reasons for contraceptive failures, and reasons women are not using contraception. This information can further help reduce the percentage of births resulting from unintended pregnancy.

Unintended Pregnancy Among Florida Women Having a Live Birth

Table 6. List of Variables Used with Definitions.

<u>Variable</u>	<u>Definition of Variable</u>
Intendedness of pregnancy	PRAMS question - Thinking back to just before you got pregnant, how did you feel about becoming pregnant? Group 1: wanted to be pregnant later or not at all, Group 2: wanted to be pregnant then or sooner
Mother's age at baby's birth	Mother's age as listed on birth certificate, Group 1: Women less than 18 or over 39 years of age, Group 2: women ages 18 to 39
Mother's race	Mother's race as listed on the birth certificate, Group 1: Black, Group 2: White, American Indian, Chinese, Other Asian, Japanese, Filipino, Hawaiian, Other Non-White, and Alaska Native
Mother's marital status	Mother's marital status as listed on the birth certificate, Group 1: unmarried, Group 2: married
Household poverty	PRAMS questions: How many people live in your house, apartment, or trailer?, What was your family's monthly income from all sources, during the 12 months before your new baby was born (answer was categorized)? Household size and household income were used to place respondent's at or below 100% of the federal poverty line, if the poverty level was indeterminate for a respondent because the PRAMS categories overlap the federal poverty guidelines, then that respondent was included in Group 1. Group 1: poor, Group 2: not poor
Mother's education	Mother's education from the birth certificate, Group 1: did not finish High School, Group 2: High School or more
Preterm birth	Number of weeks gestation calculated by subtracting mother's LMP date converted to days (from birth certificate) from infant's birth date (from birth certificate) then dividing by 7, this number is then rounded down. (Gestation=Truncation(DOB-LMP/7) When the mother's LMP date was missing, gestation was imputed according to the method used in the Kotelchuck Index (see reference). Group 1: weeks of gestation 36 or less, Group 2: weeks of gestation 37 or more
Low birth weight	Birth weight in grams from the birth certificate. If less than 401 grams or greater than 5999 grams then the birth weight for that infant was not used. Group 1: 401 to 2499 grams, Group 2: 2500 to 5999 grams

(Continued) Table 6. List of Variables Used with Definitions.

<u>Variable</u>	<u>Definition of Variable</u>
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Unintended Pregnancy Among Florida Women Having a Live Birth

Very low birth weight	Birth weight in grams from the birth certificate. If less than 401 grams or greater than 5999 grams then birth weight for that infant was not used. Group 1: 401 to 1499 grams, Group 2: 1500 to 5999 grams
Smoking during last three months of pregnancy	PRAMS question - In the last 3 months of your pregnancy, how many cigarettes or packs of cigarettes did you smoke on an average day? Group 1: smoked, Group 2: did not smoke
Tobacco exposure of the newborn	PRAMS question - About how many hours a day, on average, is your new baby in the same room with someone who is smoking? (Women could not respond - "less than 1 hour") Group 1: 1 hour or more, Group 2: no hours
Physical abuse during pregnancy	PRAMS question - During your most recent pregnancy, did any of these people physically abuse you? Group 1: physically abused by someone during pregnancy, Group 2: not physically abused during pregnancy
Baby's sleep position	PRAMS question - How do you put your baby down to sleep most of the time? Group 1: on his or her stomach, Group 2: on his or her side or back
Adequacy of prenatal care	Used Kotelchuck Index which determines adequacy of prenatal care based on: first entry into prenatal care, number of prenatal visits, and number of expected visits based on month prenatal care began and length of gestation. Group 1: inadequate care, Group 2: intermediate care, adequate care and adequate plus care
Number of nights in the hospital - infant	PRAMS question - When your baby was born, how many nights did he or she stay in the hospital? Also based on type of delivery from the birth certificate. Group 1: more than 2 nights for vaginal delivery and more than 3 nights for cesarean delivery, Group 2: 2 nights or less for a vaginal delivery, 3 nights or less for delivery by cesarean
Infant admitted to ICU	PRAMS question - When your baby was born, was he or she put in an intensive care unit? Group 1: yes, Group 2: no

(Continued) Table 6. List of Variables Used with Definitions.

<u>Variable</u>	<u>Definition of Variable</u>
Number of nights in the hospital - mother	PRAMS question - When you had your baby, how many nights did you stay in the hospital? Also based on type of delivery from the birth certificate. Group 1: more than 2 nights for vaginal delivery and more than 3 nights for cesarean delivery, Group 2: 2 nights or less for a vaginal delivery, 3 nights or less for delivery by cesarean

Unintended Pregnancy Among Florida Women Having a Live Birth

Assisted ventilation longer than 30 minutes	Taken from the birth certificate Group 1: assisted ventilation greater than 30 minutes was checked on the birth certificate, Group 2: assisted ventilation greater than 30 minutes was not checked on the birth certificate
Infant returned to the hospital after birth	PRAMS question - Since your new baby's birth, has he or she had to go back and stay at least one night in the hospital for any kind of problem? Group 1: yes, Group 2: no
Drinking while pregnant	PRAMS question - During the last 3 months of your pregnancy, how many alcoholic drinks did you have in an average week? Group 1: drank, Group 2: never drank
Adequacy of well baby care	Based on the age of the baby at the time the PRAMS questionnaire was completed and PRAMS question - How many times has your baby been to a doctor or nurse for routine well baby care? Group 1: adequate number of visits for infant's age based on recommendations from the American Academy of Pediatrics Group 2: Inadequate number of visits for age based on recommendations from the American Academy of Pediatrics
Adequacy of weight gain during pregnancy	Based on: Mom's body mass index (as calculated by the CDC using Mom's height and pre-pregnancy weight from PRAMS survey), number of pounds mom gained during pregnancy from the birth certificate, weeks gestation (calculated the same way as it was for the variable Preterm birth), and minimum number of pounds that should be gained according to the American College of Obstetricians and Gynecologists. Amount of weight gain was adjusted for weeks gestation. Group 1: weight gain was too low, Group 2: weight gain was not too low

(Continued) Table 6. List of Variables Used with Definitions.
Variable **Definition of Variable**

Home has a smoke alarm	PRAMS question - Circle yes if "My home has a working smoke alarm. Group 1: no working alarm, Group 2: working alarm
Breastfeeding at least one month	PRAMS question - For how many weeks did you breastfeed your new baby? Weeks were converted to months by dividing the number of weeks by 4.3 and rounding up to the next month. If the respondent answered that she was still breastfeeding, then the age of the infant at the time the questionnaire was completed was substituted for number of weeks. Group 1: breastfed less than 1 month, Group 2: breastfed 1 month or more

If you would like additional information on how the variables were created, please contact Chrissy Gest at the Florida Department of Health, Bureau of Epidemiology, 2020 Capital Circle S.E., Bin # A-12, Tallahassee, FL 32399-1734

Unintended Pregnancy Among Florida Women Having a Live Birth

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