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Pregnancy Intention and Contraceptive Use at Six Months Postpartum Among Women With Recent Preterm Delivery

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Abstract

Objective—To describe pregnancy intention and contraceptive use among women with a recent delivery that occurred at 35 weeks gestation or fewer and who were enrolled in a large-scale randomized control trial.

Design—In this descriptive study we used data from assessments conducted at 6 months postpartum as part of a randomized controlled clinical trial, the Philadelphia Collaborative Preterm Prevention Project (PCPPP).

Participants and Setting—Participants were recruited following a preterm birth (PTB) in one of the 12 urban birth hospitals. All women enrolled in PCPPP, who completed their 6-month postpartum assessment, and who were sexually active at the time of that assessment ($n = 566$), were included in the analysis.

Methods—Data were collected during face-to-face interviews. Study questionnaires included questions about participants' plans for the timing of subsequent pregnancies, contraceptive behaviors, and other health variables.

Results—Nearly all of the participants (90.1%, $n = 509$) reported they did not want to get pregnant within one year of the index PTB. However, more than one half of these women (54.6%) reported contraceptive practices of low or moderate effectiveness. Most predictive of intending another pregnancy within the year was the death of the index PTB infant (odds ratio [OR]= 18.2, 95% confidence interval [CI] [8.9, 37.0]).

Conclusions—Discordant pregnancy intention and contraceptive use were reported among this group of mothers of PTB infants who are at particularly high risk for a poor outcome of any subsequent pregnancy. The findings highlight the need for further investigation of the causes, correlates, and consequences of discordant pregnancy intentions and contraceptive practices.

Keywords

preterm prevention; postpartum; prematurity risks; pregnancy intention; Philadelphia Collaborative; Preterm Prevention; Project; interconception care; unintended pregnancies; contraceptive use

Approximately 65% to 75% of all infant mortality in the United States is attributable to births occurring at low gestational ages (<37 weeks), and these premature births account for almost one half of all chronic and severe morbidity in young children (Institute of Medicine [IOM], 2006). The epidemiology of preterm birth (PTB) suggests that the cause is multifactorial and quite complex. The known medical and behavioral risk factors include smoking, obesity, and psychosocial stress (Denney, Culhane, & Goldenberg, 2008; Goldenberg, Culhane, Iams, & Romero, 2008). In addition, African American women have relatively high PTB rates compared to White women, and women in low-socioeconomic status (SES) groups have relatively high PTB rates compared to women in higher SES groups. These differences according to race/ethnicity and SES have been documented in various settings for diverse study populations and have been persistent over time (Elo et al., 2009; Geronimus, 2001; Geronimus, Hicken, Keene, & Bound, 2006; Messer, Kaufman, Dole, Savitz, & Laraia, 2006).

The most salient maternal risk factor for PTB is a history of premature birth. Women with a previous preterm birth have anywhere between a two- to sixfold greater risk for a second, repeat preterm birth when compared to women with a previous full-term birth (Adams, Elam-Evans, Wilson, & Gilbert, 2000; Kistka et al. 2007). Unfortunately, relatively little is known about the specific health-related conditions and behaviors that account for this increased risk. Absent from the literature, for example, are data pertaining to the contraceptive practices and pregnancy intentions among women with previous preterm births. This is somewhat surprising given the well-documented

Contraceptive practices and pregnancy intentions among women with recent preterm births have not been explored.

connections between inconsistent or ineffective contraceptive use on the one hand and unintended pregnancies, suboptimal pregnancy intervals, and poor pregnancy outcomes on the other (Centers for Disease Control and Prevention [CDC], 2010; DeFranco, Stamilio, Boslaugh, Gross, & Muglia, 2007; Finer & Henshaw, 2006; Rodrigues & Barros, 2008; Watson, Rayner, King, Jolley, & Lumlry, 2010; Zhu, 2005).

To address this gap in the literature we examined the pregnancy intentions and contraceptive practices of postpartum women who had a recent preterm birth. Data for the analysis were collected from 6-month postpartum assessments routinely completed as part of the Philadelphia Collaborative Preterm Prevention Project (PCPPP). Additional information about this project can be found in a previous publication (Webb et al., 2010).

Background: Contraceptive use, unintended pregnancy and pregnancy outcomes

Nearly one half of all pregnancies in the United States are unintended (CDC, 2010). These pregnancies occur either earlier than desired or after women have reached their desired family size (Klerman, 2000). Adverse outcomes associated with unintended pregnancy include child health and development issues, relationship instability, and low birth weight and prematurity (Frost, Finer, & Tapales, 2008; Hellerstedt et al., 1998; Shah et al., 2010).

Most women with unintended pregnancies report not using contraceptives, using them inconsistently, or using a method with low effectiveness (Cheng, Schwarz, Douglas, & Horon, 2009; Frost, Singh, & Finer, 2007). Overall, women of lower SES have lower rates of contraception use and higher rates of contraceptive failure and unintended pregnancy (Finer & Henshaw, 2006). The underlying forces contributing to these socioeconomic disparities are complicated and not fully understood. Observed racial and ethnic PTB rate disparities may be mediated, in part, by lower rates of effective contraception use resulting in higher rates of unintended pregnancy among women who, for other reasons, already have an elevated risk for delivering a low-birth-weight or premature infant.

In general, pregnancies that occur within 3 to 6 months after a previous birth are reported to be at increased risk for a variety of adverse outcomes including PTB (Cecatti, Correa-Silva, Milanez, Morais, & Souza, 2008; CDC, 2011; De-Franco et al., 2007; Klerman, Cliver, & Goldenberg, 1998; Rodrigues & Barros, 2008). Rodrigues and Barros showed that an interpregnancy interval of fewer than 6 months was a significant and independent risk factor for PTB (OR = 3.6, 95% CI [1.41, 8.98]). Hence, women with a previous preterm birth should of particular concern with respect to any mistimed or unwanted pregnancies involving a short interval between births.

Method

Study Sample

Data for this study were derived from the 6-month postpartum assessments completed on all women enrolled in PCPPP, a large-scale community based randomized control trial with coordinated interventions to reduce the most salient risk factors for PTB among women whose most recent delivery occurred prior to 37 weeks gestation. Specifically, the intervention arm targeted any identified maternal infection, periodontal disease, smoking, inadequate nutrition, maternal depression, and maternal stress. Prior evidence suggests that these risk factors comprise a cluster of specific conditions reflecting or contributing to systemic inflammation (SI), where SI arguably represents the underlying biological mechanism that increased the probability of a woman giving birth to a preterm infant (Wadhwa, Culhane, Raugh, & Barve, 2001). In the PCPPP trial all women who gave birth to a PTB infant in any of 12 Philadelphia hospitals during an 18-month period beginning in November 2004 were approached and (if consented) enrolled during their postpartum hospital stay. The eligibility criteria were delivery of a living singleton infant <35 weeks of gestation, English or Spanish speaking, and Philadelphia residency. Women sterilized during their postpartum hospitalization were considered ineligible because they were no longer able to become pregnant.

Of all eligible women approached for the PCPPP study 1,126 (77.7%) agreed to participate. Institutional review board approvals were received from all participating institutions, including the Philadelphia Department of Health, Drexel University, and the University of Pennsylvania. The PCPP study protocol involved clinical assessments by professional staff at 1-, 6-, 12-, 18-, and 24-months postpartum. Further details about the PCPPP, including data pertaining to the randomization process and recruitment and retention of participants over the course of the project, have been published else-where (Webb et al., 2010).

At the 6-month postpartum assessment, participants were asked several questions about their future pregnancy intentions and contraceptive practices. The responses to those questions are the basis for the findings presented below. The purposes of this analysis were to document the pattern of contraceptive use among a cohort of women who had just recently given birth to a preterm infant, examine the relationship between the effectiveness of their contraceptive use and their desire to prevent or delay subsequent pregnancies, and identify

sociodemographic and other factors that may be related to contraceptive use effectiveness and pregnancy intention. A total of 658 women completed the 6-month postpartum assessment. Of those, 566 (85.9%) were sexually active at the time and were included in the analysis.

Study Variables

Pregnancy Intention—Participants were asked at 6-months postpartum, “When would you prefer to become pregnant again?” For the purposes of this investigation women were categorized into groups of those who wanted to delay pregnancy for more than one year, including those who had no intention of becoming pregnant again anytime in the future versus those who intended to get pregnant relatively soon, anytime within the next year.

Contraceptive Use and Contraceptive Effectiveness—Participants were asked to name all of the contraceptive methods they were currently using and whether they used them consistently (all of the time) or inconsistently (only sometimes or infrequently). Women who used any highly reliable method (IUD, Norplant, patch, Depo Provera, or birth control pills) all of the time or who indicated they had a tubal ligation were classified as high in terms of the effectiveness of their contraceptive use. Women who used other reliable methods (female or male condoms, or diaphragm) all of the time were classified as moderate in terms of effectiveness of contraceptive use. All other women who used no method, unreliable methods (rhythm, withdrawal, foam, and spermicidal jelly or cream without condoms), or indicated they used any method only some of the time were classified as low in terms of the effectiveness of contraceptive use. The categorization of contraceptive effectiveness was guided by CDC empirical data on

Among mothers who reported wanting to delay pregnancy, more than one third practiced insufficient contraceptive methods.

contraceptive theoretical and contraceptive use effectiveness (CDC, 2010).

Sociodemographic and Other Characteristics—Basic sociodemographic characteristics collected at the time of enrollment and used in the analysis included ethnicity/race, age, education, marital status, and nativity. Also included in the analysis were the number of previous live births (parity), and whether the (index) preterm infant was still living at the time of the 6-month postpartum interview, because those factors might reasonably be expected to influence a woman's pregnancy intention and pattern of contraceptive use.

Statistical Analyses

Simple frequency distributions and cross tabulation analyses were used to describe the contraceptive methods used, the relationship between pregnancy intention and effectiveness of contraception use, and the sociodemographic and other factors associated with pregnancy intention and contraceptive effectiveness. We examined the factors associated with contraceptive effectiveness separately for women who reported that they intended to delay pregnancy for at least one year. We did so first because the women who want to prevent pregnancy are of most interest to those who wish to provide contraceptive services to those most in need, and second, identifying the characteristics associated the subgroups of women with suboptimal contraceptive practices is important for targeting such services.

Finally, multiple logistic regression analyses were conducted to determine if any of the statistically significant relationships between the sociodemographic and other characteristics were independently associated with pregnancy intention and/or effectiveness of contraceptive use. Adjusted odds associated with their respective 95% CI were calculated.

The Hosmer-Lemeshow goodness-of-fit chi-square statistic was calculated to assess the logistic regression model fit. All statistical analyses were conducted in Stata 11.2.

Results

A statistical description of the study sample is presented in Table 1. The sample was predominantly non-Hispanic Black (73.1%) and U.S. born (92.2%). The majority was younger than age 25 years (55.1%). Approximately one of every five (22.1%) women age 20 or older did not complete high school. More than one half (54.4%) had at least one or more prior live births. At some point between the index PTB and the 6-month PCPPP postpartum visit, 69 (12.2%) experienced the loss of their premature infants. The vast majority (89.9%) intended to delay pregnancy for at least one year.

Table 2 shows that the form of birth control method most frequently used was male condoms (47.0%), followed by Depo Provera (30.2%), and birth control pills (22.4%). Even though only a small percentage of women had a desire to become pregnant within the next year, and they were sexually active, a sizable number reported that they either used withdrawal alone (16.3%) or no method at all (13.8%).

Data pertaining to the relationship between pregnancy intention and effectiveness of contraceptive use effectiveness for the sample are presented in Table 3. Effectiveness was either low (39.7%) or moderate (16.7%) as opposed to high (43.6%) according to the definition described earlier. Not surprisingly, effectiveness was more likely to be high among those who intended to delay getting pregnant for at least another year, compared to those that did not (45.4% vs. 27.3%). Notably, the majority (54.6%) of women who intended to delay pregnancy reported contraceptive behaviors that we classified as relatively low or moderate.

There were no significant differences related to pregnancy intention according to race/ethnicity, education, or foreign-born status (Table 4). However, women who were married at the time of birth were more likely than unmarried women to want to become pregnant again within one year (17.1% vs. 7.7%). Those women who had no previous live births were more likely than those who did to want to become pregnant again within one year (14.0% vs. 6.2%). In addition, the tendency was for older women to report being more likely to want to become pregnant again within a year. For example, 15.8% of those age 30 or older reported the intention to become pregnant again within a year, compared to 6.6% for those age 20 to 24, and 9% for those younger than age 20 at the time of birth. However, the most pronounced differences were evident comparing women on the basis of the infant status at 6-months postpartum. Specifically, 42.6% of those women whose infant died reported wanting to become pregnant again within one year, compared to only 5.2% of those whose infant survived.

The results of the logistic regression analysis indicated that mother's age, parity, and infant survival status, but not marital status were independently related to pregnancy intention. Adjusting for all other factors appearing in Table 4, women age 30 and older were 3 times more likely to report wanting a pregnancy within the next year compared to women age 20 to 24 (95% CI [1.07, 8.16]). Women with previous live births were 70% less likely (95% CI [0.14, 0.62]) to report wanting to become pregnant soon again. Moreover, adjusted for other factors, and consistent with the marked differences noted above, mothers of PTB infants who died were 18.2 times more likely than mothers of surviving PTB infants to want to become pregnant again within the year (95% CI [8.9, 37.0]).

Sociodemographic and other factors associated with contraceptive effectiveness among women who stated their desire to delay another pregnancy for at least one year are explored

in Table 5. Level of education was significantly related to contraceptive use effectiveness. Women who did not complete high school, for example, were more likely than those who had some post-high school education to use methods that were low in terms of effectiveness (49.4 vs. 30.6%) and less likely to use methods that were highly effective (34.5 vs. 45.5%). Associations between contraceptive effectiveness and other variables examined were fairly weak and not statistically significant.

Discussion

Only about one of every 10 women in our sample, all of whom were approximately 6-months post-partum following a preterm delivery, reported any intention of becoming pregnant again within the year. That proportion increased slightly for married as opposed to unmarried women, women who had no previous live birth, and women who had at least some post high school education, compared to those who did not. The most salient factor influencing pregnancy intention, however, was whether the preterm infant was still alive at the 6-month postpartum visit. In fact, more than two of every five women whose infants had died reported a desire to become pregnant again within the next year.

Not surprisingly, we found that contraceptive effectiveness was related to stated desire to delay pregnancy. However, more than one third (37.9%) of the women who reported wanting to delay pregnancy had contraceptive practices that we classified as having relatively low effectiveness, that is, involved inconsistent use of reliable methods or methods that are widely regarded to be unreliable in terms of preventing unwanted or mistimed pregnancies (regardless of consistent use). Our analysis of the factors associated with contraceptive effectiveness among women who wish to delay pregnancy revealed that adult women with less education were more likely to report less effective practices, a finding that is consistent with a large body of research literature linking contraceptive practices to various measures of SES (Ahluwalia, Whitehead, & Bensyl, 2007; Melvin et al., 2000). In general this literature confirms the notion that lack of access to health services related to geographic location, costs, un- or underinsurance, and lack of knowledge lead to relatively poor contraceptive practices among low-income and other disadvantaged populations (Bednash, Worthington, & Wysocki, 2009; Landry, Wei, & Frost, 2008; Melvin et al.; Shields, 2009).

Finally, although the available data did not allow us to address the reasons for wanting or not wanting to delay pregnancy, it is clear that women who lost their preterm infants were particularly inclined to want to become pregnant again relatively soon. Unclear are the broader maternal emotional implications and physical health risks associated with another high risk pregnancy occurring in a short period of time. At the very least, providers should be aware of this particular situation and how the loss of an infant may influence women's family planning needs and decisions.

Study Limitations

The generalizability of our findings is limited to mothers of preterm birth infants at 6-months postpartum instead of all mothers at 6-months postpartum. However, for this select high-risk group of mothers, this study is representative because it was a population-based study. Another limitation was that the data were self-reported and not confirmable beyond the in-person interviews by the trained research staff. Postpartum contraception was not the main focus of the parent study, so data are limited to help further explain the discordance between pregnancy intentions and contraception practices. The majority of the women who expressed intent to delay pregnancy reported contraception practices inconsistent with their pregnancy intentions. Understanding the reasons for this observed discordance warrants further inquiry.

Implications for Clinical Practice

Obstetric and pediatric health care providers have many opportunities during the postpartum period to reinforce the importance of using effective contraception tailored to the needs of each individual woman. For mothers who just had a PTB, it is critical to reinforce how important effective contraception use is to prevent an unintended subsequent pregnancy, especially one with insufficient spacing that would increase her risk for another PTB infant. The immediate postpartum period is particularly an important time for discussions about family planning, especially when a PTB occurs. The unexpected outcome of a PTB, such as an infant that may be very sick, may change the mother's attitudes and beliefs about motherhood and desires for future pregnancies. Contraceptive counseling is complex and may be intense during this time for the mother who may have difficulty with her own feelings and conflicts with previous pregnancy intentions and contraceptive attitudes, beliefs, and practice. She may or may not have sufficient knowledge about which contraceptive method best suits her after just having a PTB.

It is important that a decision be made about pregnancy prevention before discharge from the hospital. The CDC released revised recommendations for postpartum contraception in July 2011 that will change decades of customary postpartum practices. There were two major revisions. The first is recommendation of insertion of intrauterine devices (IUDs) postpartum, including immediately after delivery. The second CDC revision is the postpartum restriction of using combined estrogen and progestin birth control pills for non-breastfeeding women. Due to the risk of venous thromboembolism (VTE), combined estrogen and progestin hormonal methods within 21 days after childbirth for all women is now medically contraindicated. Women with risk factors for VTE, including a recent cesarean delivery, should not use combined hormonal contraceptives up to 42 days postpartum (CDC, 2011).

Health care providers need to appreciate how challenging it may be for the mother recovering

It is not clear why postpartum mothers at high risk for preterm birth do not use the most effective contraceptive methods.

from childbirth and caring for a PTB infant in the beginning months after birth. The discordance between pregnancy intentions and contraceptive practices that we saw in this study may be explained by running out of contraceptive supplies because she could not access services to get the needed prescription refill—because her time is consumed by taking care of a PTB infant with intensive mothering caretaking demands.

In most states, Medicaid coverage during pregnancy extends to 60 days after birth. After that, public-funded prenatal clinics are often not able to care for women beyond the customary postpartum visit. Without private insurance, women may be limited to access contraceptive services only at public-funded family planning centers. Accessing family planning services may require changing providers, which may mean going to the designated family planning clinics in new geographic locations. Hospital postpartum units could serve their population well by providing written information that would be included in the postpartum discharge instructions with names, telephone numbers and locations of where women can access reproductive health care after her postpartum visit. Caring for a sick PTB infant may require full-time effort, so some mothers may not return to full-time employment, which may result in losing their private health insurance. Having this information in the NICU would also be useful.

Conclusions

One important strategy to decrease PTB is by increasing interpregnancy spacing and avoiding unintended pregnancies. More understanding is needed to explain why such a high risk group of mothers for PTB, most of whom express no intention to have a short-interval pregnancy, do not use the most effective contraceptives during the postpartum period. Highlighting the significance of our findings is the unfortunate reality that women in this study sample are at an extraordinarily high risk for repeat preterm delivery. Because of this elevated risk, the needs of these women should be of particular concern to health service providers, including those needs related to achieving optimal contraceptive practices and the prevention of unwanted or mistimed pregnancy.

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Table 1Description of the Study Sample ($N = 566$)

	<i>n</i> (%)
Race/ethnicity	
Black	414 (73.1)
White	58 (10.3)
Hispanic/Other	94 (16.6)
Mother's Age	
<19	145 (25.6)
20–24	167 (29.5)
25–29	121 (21.4)
30+	133 (23.5)
Marital Status	
Married	111 (19.6)
Not married	455 (80.4)
Education 20 yrs	
< High school	93 (22.1)
High School/General Equivalency Diploma	171 (40.6)
Some college or more	157 (37.3)
Nativity	
Foreign born	44 (7.8)
U.S. born	522 (92.2)
Pregnancy Intentions ^a	
Get pregnant now/within year	56 (9.9)
Delay for at least one year	509 (89.9)
Infant Status at 6 months postpartum	
Alive	497 (87.8)
Deceased	69 (12.2)
Parity before index birth	
0	258 (45.6)
1 or more	308 (54.4)

^aMissing data for one participant

Table 2Reported Contraceptive Methods Used by Mothers: 6-Month Postpartum Assessment ($N = 566$)^a

Mothers Using This Method	
	<i>n</i> (%)
IUD	13 (2.3)
Norplant	2 (0.4)
Sterilized (tubes tied)	3 (0.5)
Birth control pills	127 (22.4)
Patch	34 (6.0)
Depo Provera (injection)	171 (30.2)
Female condom (alone)	12 (2.1)
Female condom with foam	2 (0.4)
Rhythm method	2 (0.4)
Male condom with foam	9 (1.6)
Male condom (alone)	266 (47.0)
Diaphragm	1 (0.2)
Foam, jelly, cream (alone)	8 (1.4)
Withdrawal	92 (16.3)
Any other method	21 (3.7)

^aAbout one third of the participants reported using more than one method; 150 (26.5%) mothers reported using two methods, and 57 (10.1%) reported using three or more methods.

Table 3Contraceptive Effectiveness and Pregnancy Intentions among Woman with a Recent Preterm Birth ($N = 564$)^a

	<u>Pregnancy Intentions</u>		Total
	Intend to Delay	Intend Pregnancy Within 1 Year	
	<i>n</i> (%)	<i>n</i> (%)	
Contraceptive Effectiveness			
Low	193 (37.9)	31 (56.4)	224 (39.7)
Moderate	85 (16.7)	9 (16.4)	94 (16.7)
High	231 (45.4)	15 (27.3)	246 (43.6)
Total	509 (100.0)	55 (100)	564 (100)

^aOf the 566, one participant had missing data on pregnancy intentions, and another participant could not be classified on contraception effectiveness because data were missing on consistency of use.

Table 4

Characteristics Associated with Pregnancy Intentions of Study Sample

Intend to Delay			
	<i>n</i> (%)		
	Yes	No	<i>p</i> -value
All Women	510 (90.3)	55 (9.7)	
Race/ethnicity			
Black	378 (91.5)	35 (9.4)	0.10
White	48 (82.8)	10 (17.2)	
Hispanic/Other	84 (89.4)	10 (10.6)	
Mother's age			
19	132 (91.0)	13 (9.0)	0.05
20–24	155 (93.4)	11 (6.6)	
25–29	111 (91.7)	10 (8.3)	
30	112 (84.2)	21 (15.8)	
Marital status			
Married	92 (82.9)	19 (17.1)	0.00
Not married	418 (92.3)	36 (7.7)	
Education			
< High school	87 (93.5)	6 (6.5)	0.04
High school/General	157 (92.4)	13 (7.6)	
Equivalency Diploma			
Some college or more	134 (85.4)	23 (14.6)	
Nativity			
Foreign born	40 (90.9)	4 (9.1)	0.88
U.S. born	470 (90.0)	52 (10.0)	
Infant status at 6 months postpartum			
Alive	471 (94.8)	26 (5.2)	0.00
Deceased	39 (57.4)	29 (42.6)	
Parity before index birth			

Intend to Delay			
	<i>n</i> (%)		<i>p</i> -value
	Yes	No	
0	222 (86.0)	36 (14.0)	0.00
1 or more	288 (93.8)	19 (6.2)	

Table 5

Characteristics Associated with Contraceptive use Effectiveness among Women Intending to Delay Pregnancy ($N = 510$)

	Low	Moderate	High	<i>p</i> Value
All Women Intending to Delay				
Race/ethnicity				
Black	144 (38.2)	60 (15.9)	173 (45.9)	0.30
White	14 (29.2)	13 (27.1)	21 (43.8)	
Hispanic/Other	35 (41.7)	12 (14.3)	37 (44.1)	
Mother's age				
19	45 (34.3)	17 (13.0)	69 (52.7)	0.24
20–24	59 (38.1)	27 (17.4)	69 (44.5)	
25–29	41 (36.9)	17 (15.3)	53 (47.8)	
30	48 (42.9)	24 (21.4)	40 (35.7)	
Marital status				
Married	33 (35.9)	22 (23.9)	37 (40.2)	0.12
Not married	160 (38.5)	63 (15.2)	194 (46.6)	
Education (only 20y)				
< High school	43 (49.4)	14 (16.1)	30 (34.5)	0.05
High school/General Equivalency Diploma	64 (40.8)	22 (14.0)	71 (45.2)	
Some college or more	41 (30.6)	32 (23.9)	61 (45.5)	
Nativity				
Foreign born	17 (42.5)	6 (15.0)	17 (42.5)	0.68
U.S. born	176 (37.5)	80 (17.0)	214 (45.5)	
Infant status at 6 months postpartum				
Alive	175 (37.2)	78 (16.6)	217 (46.2)	0.44
Deceased	18 (46.1)	7 (18.0)	14 (36.9)	
Parity before index birth				
0	80 (36.2)	38 (17.2)	103 (46.6)	0.78
1 or more	113 (39.2)	47 (16.3)	128 (44.4)	