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Understanding Factors Associated with Postpartum Visit Attendance and Contraception Choices: Listening to Low-Income Postpartum Women and Health Care Providers

Vida Henderson[1] · Katrina Stumbras[2] · Rachel Caskey[3] · Sadia Haider[4] · Kristin Rankin[5] · Arden Handler[1]

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Abstract *Background* While there is considerable variability with respect to attendance at the postpartum visit, not much is known about women's preferences with respect to postpartum care. Likewise, there is also limited information on providers' practices regarding the postpartum visit and care including the delivery of contraception. To understand and address deficits in the delivery and utilization of postpartum care, we examined the perceptions of low-income postpartum women with respect to barriers to and preferences for the timing and location of the postpartum visit and receipt of contraception. We also examined providers' current prenatal and postnatal care practices for promoting the use of postpartum care and their attitudes toward alternative approaches for delivering contraceptive services in the postpartum period. *Methods* Qualitative face-to-face interviews were completed with 20 postpartum women and in-depth qualitative phone interviews were completed with 12 health care providers who had regular contact with postpartum women. Interviews were coded using Atlas.ti software and themes were identified. *Results* Women believed that receiving care during the postpartum period was an important resource for monitoring physical and mental health and also strongly supported the provision of contraception earlier than the 6-week postpartum visit. Providers reported barriers to women's use of postpartum care on the patient, provider, and system levels. However, providers were receptive to exploring new clinical practices that may widen the reach of postpartum care and increase access to postpartum contraception. *Conclusion* Approaches that increase the flexibility and convenience of postpartum care and the delivery of postpartum contraception may increase the likelihood that women will take advantage of essential postpartum services.

Keywords Postpartum visits · Contraceptive services · Low-income women · Postpartum providers

✉ Vida Henderson
vhende5@uic.edu

Katrina Stumbras
stumbra1@uic.edu

Rachel Caskey
rcaskey@uic.edu

Sadia Haider
sadiah@uic.edu

Kristin Rankin
krankin@uic.edu

Arden Handler
handler@uic.edu

[1] Community Health Sciences, UIC School of Public Health, 1603 W Taylor, Chicago, IL 60612, USA

[2] UIC College of Medicine, 808 S Wood, Chicago, IL 60612, USA

[3] Department of Pediatrics, UIC College of Medicine, 840 S Wood St, Clinical Science North 440, MC 718, Chicago, IL 60612, USA

[4] Department of Obstetrics and Gynecology, UIC College of Medicine, 840 South Wood Street, Clinical Science North 440, MC 718, Chicago, IL 60612, USA

[5] Epidemiology and Biostatistics, UIC School of Public Health, 1603 W Taylor, Chicago, IL 60612, USA

Significance

Postpartum visits remain under-utilized nationwide, which increases women's risk for unintended pregnancy. Suggested timing of the postpartum visit in the U.S. is not based on evidence of women's sexual activity after pregnancy or contraceptive needs. Further, delivery of postpartum services is fragmented and inconsistent among providers and health care delivery systems. Understanding low-income women's preferences and barriers associated with utilization of postpartum care and the provision of postpartum contraception, as well as providers' current postpartum practices and attitudes toward alternative approaches, may inform changes in practice and policy in the delivery of postpartum services to more adequately meet women's needs and improve women's and infant health.

Introduction

The postpartum period is a unique time in a woman's reproductive life as it provides her with the opportunity to transition from a focus on prenatal to preventive care and time to consider her own health and reproductive goals. It is also a time when significant efforts can be made by providers to help women recognize and establish their reproductive goals and assist women in choosing a contraceptive method appropriate for them, with the ultimate aim of increasing birth spacing and decreasing unintended pregnancies. Unfortunately, the timing of the recommended four to six-week postpartum visit in the U.S. is not based on current evidence about women's sexual activity after pregnancy or the need for timely postpartum contraception; thus, over half of women are at risk for a rapid repeat pregnancy [11]. Few studies examine women's preferences for postpartum care [9, 21, 22, 31, 43]; however, there is ample evidence that the postpartum visit is underutilized [4, 5, 7, 17, 27, 30, 41, 42, 44]. For example, among women in Illinois who are Medicaid recipients, fewer than 60 % receive a postpartum visit according to the Healthcare Effectiveness Data and Information Set [HEDIS] measure for postpartum care [19].

Variability in national and international guidelines may contribute to inconsistency in provider practices in relation to postpartum care. A 2014 systematic review of current postpartum care guidelines reviewed six guidelines from Australia, the United Kingdom, and the U.S., and found great variability in their characteristics and scope [15]. Likewise, the literature on provider practices in relation to the delivery of postpartum contraceptive care and counseling, particularly timing and type, is limited [11], although it has recently begun to receive more attention [28, 45]. In the 2012 Cochrane review of education for contraception for postpartum women the authors state, "we know more about contraceptive methods appropriate for postpartum women than we do about how to help postpartum women choose and use a contraceptive" [25, p. 3]. An updated systematic review of randomized control trials which examined postpartum education about contraceptive use found two-thirds of postpartum women have unmet needs for contraception and that the timing, location, and intensity of contraceptive counseling varied greatly among the trials included in the review [24]. As a result of the lack in evidence and understanding of effective counseling for postpartum contraception, current practices vary with regard to where and when most women are actually receiving contraceptive counseling. With an increased focus on the use of LARC methods [12, 16, 35, 37, 39, 46] and the potential for the provision of LARC methods at the time of delivery, understanding women's preferences for postpartum contraceptive counseling and delivery is essential.

Recently, as part of efforts to standardize the delivery of preventive reproductive health care including contraceptive counseling and services across the reproductive lifecourse, approaches that focus on making reproductive life plan counseling routine in all aspects of women's health care have been gaining momentum. Tools such as the CDC's *Reproductive Life Plan Tool* (RLPT) [34] for Health Professionals or the Oregon Foundation for Reproductive Health's *One Key Question* (OKQ) [32], are designed to provide a simple and quick way for providers to initiate a discussion on contraception with their patients, and can be useful particularly for providers not typically involved in contraceptive care. It is also possible that use of these or similar RLP tools in the postpartum period in settings other than the postpartum visit might help address inconsistencies and gaps in the delivery of counseling for postpartum contraception and aid in improving postpartum care. One such setting is the Well-Baby Visit, which is receiving increased attention as a venue for the delivery or "co-location" defined as either counseling and referral, or direct provision of some maternal services and screenings including: depression, smoking, the Social Determinants of Health (SDOH), and family planning [10, 22, 36, 40].

In order to understand how women's preferences and provider practices contribute to current use of postpartum services, this study explored postpartum women's perceptions of, barriers to, and preferences for the timing and location of the postpartum visit and the receipt of postpartum contraceptive services. This study also aimed to determine providers' current prenatal/postpartum practices with respect to postpartum care and discussions of

pregnancy planning and contraception including the use of long-acting reversible contraception (LARC) methods. In addition, the study explored providers' willingness to introduce a modification of CDC's Reproductive Life Plan Tool into their practice with postpartum women as well as their current attitudes with respect to alternative approaches to the provision of postpartum contraceptive counseling and services, including the potential to introduce or include such care for the mother at the Well-Baby Visit (WBV).

Methods

A qualitative study of postpartum women and providers involved in the care of women and/or infants in the postpartum period was conducted in summer and Fall 2014. In-person recorded interviews were completed with twenty postpartum women. Women were eligible to participate if they were English-speaking, over 18 years old, and 8 weeks or less postpartum. Nine women were recruited and interviewed on the mother-baby unit (MBU) of the University of Illinois at Chicago (UIC) Hospital and eleven were recruited and interviewed at the UIC Chicago outpatient pediatric clinic both of which serve a predominantly low-income population. The interview guide focused on women's postpartum care experiences and expectations, their preferences for contraception counseling and care, and general demographic information. Informed consent was obtained orally and the average length of interviews was 22 min. All women were given a $20.00 Target gift card to thank them for their participation.

In-depth phone interviews were also completed with twelve health care providers. Individuals were eligible to participate if they were associated with one of five Chicago-area university hospital systems and had regular contact with postpartum women in their practice. All participants were recruited via email. Eighty total recruitment emails were sent by two study researchers. Eighteen providers indicated interest in participating; twelve completed a recorded interview. The average length of interviews was 25 min. Of the provider participants, three (25 %) were pediatricians (one of whom specialized in adolescent medicine and another in internal medicine), two (16.7 %) were certified nurse-midwives, two (16.7 %) were family medicine providers, and five (41.7 %) were obstetrician-gynecologists (two of whom specialized in family planning).

The interview guide focused on: background medical practice information; current practices and knowledge about the postpartum visit; current contraception counseling practices; perceived barriers to providing contraception counseling and services; opinions on alternative approaches to the provision of postpartum services for women, including at delivery and at the WBV; and, views regarding use of a modification of CDC's RLPT, which participants were asked to review prior to the interview. Informed consent was obtained orally. All providers were offered a $15 Starbucks gift card for their participation.

For each set of interviews, after the transcription of the recordings, members of the research team independently read and annotated the transcripts noting potential codes. These annotations were integrated into a codebook, which consisted of code names and definitions. Two team members then performed detailed coding of the interviews using Atlas.ti software, using two transcripts to determine inter-rater reliability. The remaining transcripts were then divided between the same two research staff members for final coding. From this first cycle of coding, code recurrence, data patterns, and relationships were analyzed to identify themes. Once these themes were identified, one team member performed second cycle coding, in which quotes for each code were coded again into more detailed categories. Representative quotes that best describe themes and sub-themes were then extracted to support and describe findings for both sets of interviews. Institutional Review Board approval for this study was received in July 2014 under UIC-IRB protocol number 2014-0682.

Results

Women's Interviews

Demographic information on the women and their infants is provided in Table 1. Of note, although recruited from a hospital and outpatient setting which serves a mainly urban Medicaid population, most women in this sample had attended some college or were currently enrolled in college, although few were college graduates. The analysis of the women's interviews revealed that women in this sample: (1) support and value care in the postpartum period including the postpartum visit; (2) know what to expect with regard to the content of the postpartum visit and view it as a resource for mental as well as physical health; (3) support the idea of access to contraception as early as possible after delivery if this is what the woman desires; and, (4) hold varying views about discussion and provision of contraception at the Well-Baby Visit. Each theme will be discussed in turn. Representative quotes associated with each theme are found in Table 2.

Theme 1 *Women support and value care in the postpartum period including the postpartum visit, but require flexibility in timing and location of visits in order for the postpartum visit to meet their physical, emotional, and social needs.*

Women viewed receiving postpartum care as important both for the assessment of their physical and mental health as well as for enabling them to receive emotional support. While all women perceived the importance of receiving care during this period, there was variability in their preferences with respect to the best time for that care. Although a few women saw no barriers to having their first postpartum visit at 6 weeks, most mentioned that they preferred it to be earlier. In fact, some stated that waiting until 6 weeks postpartum was too long as complications could arise with both a woman's physical and mental health before then. A few mentioned that having the first postpartum visit within 2–4 weeks after birth would be ideal.

Although most women acknowledged the importance of the postpartum visit, many had not yet scheduled a postpartum visit and expressed some challenges with respect to receiving postpartum care. The main barriers to postpartum visit attendance were the difficulties of managing a new schedule and changes in lifestyle due to the presence of a new baby, as well as not always having childcare available for their other children. Other barriers mentioned were work and school schedules, transportation, and their own procrastination.

Women mentioned a number of different factors that would facilitate postpartum visit attendance including: provision of provider home visits, receiving reminders, feeling comfortable with providers and staff, and having childcare and/or being able to schedule appointments when their other children are in school. Some women also suggested that conducting appointments via telephone, when appropriate, would facilitate the receipt of postpartum care.

Theme 2 *Women know what to expect at the postpartum visit with respect to the content of the visit and view it as a resource for mental health as well as physical health.*

When asked what type of information and care women expected to receive at the postpartum visit, respondents appeared well-informed about the content and focus of the visit. Almost all women mentioned that postpartum visits were important to ensure their bodies were healing properly after giving birth. Moreover, women with chronic conditions were aware of the impact that those conditions (e.g., diabetes, hypertension) might have on their health. They clearly viewed the postpartum visit as essential to monitoring their health and as an intervention to prevent further complications. Women also expected to talk about issues related to emotional and social support, as well as postpartum depression, and sometimes equated postpartum care with care for postpartum depression. Some women viewed their providers as a source of emotional support during this often-challenging time. Most women also believed that a major component of the postpartum visit is a discussion of contraceptive options.

Theme 3 *Women support the idea of access to birth control as early as possible after delivery if a woman desires it, including at delivery or discharge from the hospital.*

Many women preferred obtaining a method of birth control earlier than the 6-week postpartum visit and many mentioned that receipt of a birth control method before being discharged from the delivery hospital was optimal. Women with this preference felt this was the easiest way to obtain a method of birth control due to having immediate access to providers; they recognized that leaving the hospital with a method of birth control minimizes the risk of unintentional pregnancy. Some women appeared to view getting LARC at delivery not much differently than getting a tubal ligation at delivery (a process with which many were familiar), in that in both situations, women's contraceptive needs are taken care of before leaving the hospital.

Theme 4 *Women have varying views about discussion and provision of contraception at the Well-Baby Visit.*

An alternative approach to postpartum contraception provision was posed to women, which involves discussing or obtaining contraception at the same location and time as the WBV. Women had varying views regarding this approach although more women seemed in favor of receiving some sort of contraceptive services at the WBV than not. Women stated that receiving counseling/referral or actual contraceptive services at the same time and site of the WBV (co-location) might have the advantage of giving women access to a health care provider before the 6-week postpartum visit and enable them to avoid having to see different doctors. Others stated that women are more likely to go the doctor or keep appointments for their child as opposed to themselves, so this would especially be beneficial for women who do not follow up with their own providers.

While there was support for the co-location of services at the WBV due to convenience, most women also expressed that the WBV should focus on the baby and not on the mother. Some women felt that co-location of services would detract from the care and attention of the baby's needs and that the mothers' and the providers' attention should be fully focused on the baby. Interestingly, multiparous women voiced more definitive opinions about colocation than primiparous women, regardless of whether they did or did not favor the option. Several women also stated that because a woman's doctor maintains her medical history, women's own providers are better informed to counsel them on contraception. Many felt strongly that a woman should see her own doctor after giving birth and some expressed that co-location of services may promote

Table 1 Demographic and other characteristics of women participating in key informant interviews related to postpartum care, Chicago, 2015 (N = 20)

Characteristics of women	n (%)	Mean (range)
Mom age (years) (n = 19)		27.3 (18–40)
Baby age (days) (n = 17)		12.5 (1–44)
Race/ethnicity (n = 19)		
African-American	11 (57.9)	
Biracial	3 (15.8)	
Mexican	1 (5.3)	
White	3 (15.8)	
Refused	1 (5.3)	
Highest level of education (n = 19)		
High school	5 (26.3)	
Vocational school	1 (5.3)	
Some college	8 (42.1)	
College graduate	3 (15.8)	
Refused	1 (5.3)	
First birth (n = 20)	Yes 9 (45)	
	No 11 (55)	
Co-reside with father (n = 18)	Yes 11 (61.1)	
	No 7 (38.9)	
Already scheduled postpartum visit at time of interview (n = 19)	Yes 8 (42.1)	
	No 11 (57.9)	

women's non-attendance at their own postpartum visits, thereby possibly causing a neglect of the woman's care.

Provider Interviews

The interviews with providers revealed five main themes. Providers interviewed: (1) understood that barriers to postpartum care reflect the intersection of the women's needs and contexts, insurance coverage, and the ability of the health care delivery system to respond; (2) believed that lack of continuity of care is a major systems issue; (3) endorsed LARC provision for women who desire these types of contraceptive methods; (4) supported using a Reproductive Life Plan Tool in a variety of care settings; and, (5) supported the WBV as a potential site for the delivery of contraceptive counseling and/or care, although there was not endorsement for a specific way for this to occur. Representative quotes associated with each theme are found in Table 3.

Theme 1 *Providers understand that barriers to postpartum care and contraception reflect the intersection of the women's needs and contexts, insurance coverage, and the ability of the health care delivery system to respond.*

Providers believe there are barriers for women receiving postpartum contraception at the patient, provider, and health care delivery system levels. At the patient level, women may see different providers during the prenatal and postpartum periods, have transportation and childcare limitations, as well as cultural and familial barriers (e.g., respond to the influence of peer, family, or community beliefs about the importance of obtaining contraception or other services). On the provider level, clinical settings vary greatly with respect to both the quality of care that women receive and the effort made to ensure that women are appropriately transitioned between care providers and clinical time periods (i.e., prenatal to delivery to postpartum). On a systems level, scheduling practices, hospital policies, and insurance coverage can also facilitate or hinder access to and the quality of postpartum care that women receive. Providers mentioned issues with clinic flow, the time patients must dedicate to attending a visit, and the inability of physicians to dedicate as much time and effort to services, such as the provision of contraception, as desired. The vast majority of providers interviewed cited insurance restrictions as the largest barrier for patients wishing to receive contraception, particularly LARC methods. Further, some of the system issues addressed by providers included policies that discourage LARC insertion immediately following delivery, and those that lead to difficulty in scheduling the 6-week postpartum follow-up visit.

Some providers offered ideas for systematic approaches to ensuring that women receive postpartum care and contraception in a flexible manner that meets women's varied needs. For example, one provider suggested that women should be directly referred to a postpartum visit at the time of delivery. Another provider suggested a model of delegating

Table 2 Key themes and representative quotes from interviews with women

Theme	Quote
Women support and value care in the postpartum period including the postpartum visit, but require flexibility in timing and location of visits in order for the postpartum visit to meet their physical, emotional, and social needs	*With my other son, they always told me six weeks. This doctor, he wanted to see me in two weeks. I didn't mind, I think it's better to go see him right away, especially if you don't feel as well. Actually, I feel more comfortable going to a two week appointment than waiting the whole six weeks to actually be seen. God knows what could go wrong.* [24 year old, multipara, 9 days postpartum]
	I guess if there was someone in a situation where they didn't have the support, it was just a single mom and their child, I guess if someone can come into their home or something, that would probably be really convenient. [30 year old, primipara, 4 weeks postpartum]
Women know what to expect at the postpartum visit with respect to the content of the visit and view it as a resource for mental health as well as physical health	*Well, I know the birth control for sure; that was my main concern. I'm pretty sure they're gonna check to make sure everything is going right. They survey to make sure that I'm not depressed or anything. Make sure that everything's okay with the baby and that I'm getting help.* [24 year old, multipara, 4 weeks postpartum]
	I feel like it's always—it's postpartum depression they talk about at the visit. I would hope that we could talk about stuff like that. I feel like from what I've seen, and heard, and even just the things we've talked about with my doctor right after the delivery, it's about depression. [29 year old, primipara, 4 days postpartum]
Women support the idea of access to birth control as early as possible after delivery if a woman desires it, including at delivery or discharge from the hospital	*It could be easier because I'm already here, and I got the people around that'd be able to do it, so yeah, it'd be easier here opposed to waiting a couple a weeks. Anything could happen in couple a weeks.* [27 year old, multipara, 2 days postpartum]
	It's good to get it as soon as you have the baby or at least know which one you gonna get before you walk out [of] this hospital. [40 year old, multipara, 2 days postpartum]
Women have varying views about discussion and the provision of contraception at the Well-Baby Visit	*I guess it would be okay, but I'm not really thinking—when I bring her in for her appointment I'm more so thinking about her health and what's going on with her. I'm not really thinking about what's going on with me at that time… It just seems like it—that would be something that you would get when you're going for your own appointment; not something that you would get necessarily when you're coming for your child's appointment. I mean, again, it's not a bad thing. I don't think that it's not helpful, but I just wouldn't expect it. Yeah. I think it'd just be better when you're coming for yourself.* [30 year old, primipara, 4 weeks postpartum]
	I think that would be excellent. I really do. It'd be way more easier. You wouldn't have to make so many different appointments with so many different people…I'd say it seems like a good idea because I'm more so gonna make sure I take my kids to the doctors rather than myself. I'm more concerned about them and I'll make sure that I go to their appointments…Then coming in and receiving the information will put it back in my head like, 'Okay, I gotta hurry up and get this done.' [24 year old, multipara, 4 weeks postpartum]

outpatient postpartum contraceptive care to a team of providers including a nurse or pharmacist who could spend more time discussing the women's contraceptive questions.

Theme 2 *Lack of care continuity is a major issue in women's receipt of postpartum care and postpartum contraception.*

As reported by the providers, for many women, the sites and providers where women obtain care may change between the prenatal, delivery, and postpartum periods, preventing a smooth transition in care. This also leads to a significant discontinuity in the flow of information, which in turn affects the quality of care women receive. The multiple factors mentioned in the interviews contributing to discontinuity of care include whether a woman is in the public versus private care system, the risk status of the woman, changes in Medicaid coverage, and appointment barriers.

Table 3 Key themes and representative quotes from interviews with providers

Theme	Quote
Providers understood that barriers to postpartum care and contraception reflect the intersection of the women's needs and contexts, insurance coverage, and the ability of the health care delivery system to respond	*I think the biggest challenge is insurance coverage of long-acting contraception. People that are on labor and delivery either have insurance that [isn't accepted] or if they have state health insurance, they're unable to get those devices placed before they leave the hospital.* [Obstetrics and Gynecology]
	Working in a clinic where our patients have socioeconomic and other social challenges, sometimes transportation is an issue. Sometimes childcare is an issue. They may not be able to get to the clinic or just may be so overwhelmed with whatever it is that's going on in their household to be able to get to the clinic. [Certified Nurse Midwife]
Lack of care continuity is a major issue in women's receipt of postpartum care and postpartum contraception	*I think in the resident clinic particularly, it's difficult to be able to follow the patients to make sure they come, because there's such a large volume of patients who deliver in the resident clinics and they need to come back for post-partum visits and nobody is really assigned to follow them.* [Obstetrics and Gynecology]
	By the time they deliver, I don't have any of their notes, so I don't even know what they've talked about with their [provider]. Sometimes I'll come on, the patient delivered two days ago, and she's going home today. She may or may not have had conversations with her previous provider at the place where she didn't deliver. I mean, most likely, these people on the floor who now knew nothing about her and just did her delivery probably haven't talked to her about contraception. Sometimes, by the time I come on, it's almost too late. [Obstetrics and Gynecology]
Long-acting reversible contraception has strong provider support, but providers are aware of the barriers associated with LARC use	*I haven't started doing IUDs 'cause I don't feel like I have enough experience. I like to do them when I have some backup…I think people are doing a lot of Depo Provera, and of course, the major problem with Depo is the people don't come back. If we could be putting Nexplanon instead, it would be great.* [Pediatrics]
	If we knew that we had insurance coverage for all LARC, and we knew that we could bill for LARC separately from the delivery encounter, then we probably would be more likely to place immediate postpartum LARC, and that would increase uptake by decreasing the number of visits that the patient has…I try my best to figure out ways, and talk to them about getting the LARC with me, but I can see where it's hard. I can see where there are many barriers. [Obstetrics and Gynecology]
There is provider support for the use of a *Reproductive Life Planning Tool* in a variety of care settings	*I think it gets the conversation going because I do think those can be uncomfortable conversations for some people. I think that it helps move the conversation in the right direction.* [Certified Nurse Midwife]
	In general, I think it's a great idea to have a reproductive life plan. I think it's a great idea. I think it's important because it helps women think about more than just the immediate and putting their current pregnancy in a more long-term context. I think it's important to talk about contraception in the context of either trying to avoid any future pregnancies or trying to help her plan the timing for her next pregnancy…It's [RLPT] not like that panacea. It's not the only thing, but I think it's a good starting point for discussion about long-term planning with regards to contraception. [Obstetrics and Gynecology]

Table 3 continued

Theme	Quote
There is provider support for the Well-Baby Visit to be linked to contraceptive counseling and care although there was no endorsement for a specific way for this to occur	*I think it can definitely be done. I think it's probably a good idea for patients, but I think there are a number of things logistically that would have to be worked out.* [Obstetrics and Gynecology]
	I think it could be definitely beneficial. There's already so much that we have to do within our Well-Baby care. I just wonder if it will be very overwhelming, or if there'll even be time to really discuss those issues… I think there would be some pushback because of feasibility and time. I think that maybe a better way to do it would be to link up OB care and pediatric care better, so that we can directly refer someone, through OB/GYN, for that particular care. [Pediatrics]

Theme 3 *Long-acting reversible contraception (LARC) has strong provider support, but providers are aware of the barriers associated with LARC use.*

Overall, participating providers were supportive of increasing LARC use among their patients and in general, although they recognized significant barriers to its provision in the postpartum period. Most providers felt that lack of insurance coverage was a major barrier to providing LARC and that some hospital policies (most likely related to billing and stocking of devices) discourage providers from placing IUDs after delivery.

The majority of providers indicated that postpartum contraceptive choice should be based on what is most desired and beneficial to the patient. While some stated that more patients are recognizing the benefits of LARC, others mentioned they expect some patients to be hesitant to use LARC due to misconceptions about LARC perpetuated by their social networks or cultural influences. These providers discussed the significance of educating their patients about LARC, but recognized the importance of not minimizing the risks to the patient or convincing them to do anything outside their comfort level.

Theme 4 *Providers endorse the use of a Reproductive Life Planning Tool in a variety of care settings.*

Providers consistently agreed that utilizing a RLPT at a patient visit is a useful approach for addressing contraception and long-term pregnancy planning with their patients. Most of the providers who regularly work with postpartum women (i.e., OB/GYN, CNM) stated that using a RLPT is similar to what they already do or should be doing in their current practice; however, they suggested that it would be a particularly useful reminder for those who do not normally counsel on contraception or reproductive health or are less comfortable having a conversation about these issues. Providers who typically discuss contraception with their patients felt that the RLPT added to and re-affirmed the discussion by encouraging women to think more long-term about their contraceptive plans.

A few providers who did not typically provide care focused on postpartum women (i.e., pediatricians) felt that the RLPT might be better used as a tool that the woman could complete in the waiting room. They suggested that it could then be used as a reference for the physician during the visit (to save on time), or as a mechanism for providing the women with a referral to a family planning provider (if contraception is not offered by any provider within their practice site).

Theme 5 *Providers support the Well-Baby Visit as a potential site for the delivery of contraceptive counseling and/or care, although there was not endorsement for a specific approach.*

Most providers were supportive of the idea of linking the mother's contraceptive care to the WBV in some way, although with some reservations. In discussing this issue with providers, "co-location" of care was defined broadly to include both simple referral to family planning services after asking a few questions as well as having a family planning provider directly available to provide services at the same site and time as the WBV. Many providers felt that in general, a co-location approach would decrease the number of appointments women need to negotiate and would serve as an opportunity for women who do not schedule or keep postpartum visits to receive some contraceptive services. Providers offered a range of responses about the concept of co-location depending on how they envisioned it. In general, providers thought that co-location might be difficult to implement due to: (1) additional time requirements in visits that may already be time-constrained; (2) the challenges of having more than one type of provider concurrently available at appointment time and coordinating care; (3) lack of comfort in caring for or prescribing contraceptives for a woman who is not the provider's patient; and, (4) the difficulty women may face having to focus on her own needs as well as those of the baby at the same visit. Most agreed that providing women with increased access to care at the WBV is valuable to women's health; however, there was strong sentiment that

co-location of services should not be offered at the expense of sacrificing sufficient time to fully address both the women's and infants' individual needs. Additionally, all provider types expressed comfort in introducing the topic of contraception; however, only providers who cared for women directly (whether or not in addition to children) conveyed comfort with offering detailed contraceptive counseling to women or recommending a specific method. Although providers raised potential barriers, many expressed that regardless of the challenges, the WBV serves as an additional opportunity for women to be reminded about obtaining contraceptive care/postpartum care and provides an entrée for pediatricians to issue referrals to women for contraceptive care.

Discussion

Our study of women's and providers' perspectives on the delivery of health care in the postpartum period generally revealed the need for health care system and institutional policies to support tailoring, flexibility, and alternative approaches to ensure women's complex needs are adequately met. Our findings corroborate and shed some light on previous findings in the literature. Although women acknowledged the importance of postpartum care, a number of women had not yet scheduled a postpartum visit at the time of the interview. This may be due to the fact that for nine of the twenty women, the time of the interview was close to the time of the birth of the child and women did not have sufficient time to schedule the appointment. However, when asked why postpartum visits were not yet scheduled, women gave other reasons such as difficulties in scheduling due to work and school, lack of childcare, and dealing with the overall challenges related to having a new baby. A study of Palestinian women [7] also found that although most women thought postpartum care was necessary, the majority did not obtain services primarily because they did not believe they were sick or because they were not told by their doctor that they needed to come back for care. Our findings, as well as those of Dhaher and colleagues, suggest there are gaps between the belief in the importance of the postpartum visit and actual attendance and that this occurs for a variety of reasons.

The interviews with women revealed that they depend on providers not only for physical health issues, but for emotional support as well. This is particularly interesting in light of the institutionalization of postpartum depression screening for the Illinois Medicaid population since [18]. This effort may have enhanced women's awareness of the importance of mental health and emotional support in the postpartum period. We found that women valued providers as knowledgeable resources for mental health care, particularly when the woman's personal resources for emotional support were lacking. This highlights the complex needs of women and the roles that the postpartum visit and providers can and do play in addressing women's needs during this vulnerable period.

Women had variable preferences for the location of postpartum visits. Some mentioned that traveling to doctors' offices and clinics with a new baby is often difficult and that home visits or telephone calls would ease some of the burden that they face in attending visits. According to Cheng et al. [3], home visits by health care professionals for postpartum women and their infants are currently provided in all northern and western European countries. For example, in the Netherlands, insurance covers a continuous one-week home care program that includes a professional who provides postpartum care in addition to child care and housework services [3]. In the United Kingdom, women have access to home care through their midwife for up to a month postpartum as well as home health visitors throughout the remainder of the postpartum period [15]. Community-based postpartum care programs in the UK and nurse-managed home visiting programs in the U.S. have been associated with improved mental status, fewer subsequent pregnancies, greater pregnancy spacing, and shorter duration of reliance on welfare and food stamp programs [3, 8, 23, 29]. As such, alternative methods of providing postpartum visits including home visits, telephone call check-ins, or multi-media approaches (e.g., telemedicine, video conferencing) may be viable strategies to facilitate and increase women's ability to interact with and receive care during the postpartum period.

Providers were aware of the personal contexts of women's lives and systems level factors that prevent women from seeking or accessing postpartum care. It is evident that barriers and facilitating factors to women's receipt of comprehensive postpartum care exist on multiple levels and as such, approaches to improvement must be multi-faceted and flexible. This is in line with some previous studies and suggested guidelines [6, 26], which recommend that the timing of postpartum visits be tailored to best fit each woman's needs. In particular, prior arguments for earlier and more frequent postpartum visits are based on increased maternal satisfaction, decreased risk of postpartum depression, increased adherence to breastfeeding, and an earlier connection to services for contraception [1, 2, 14, 20, 26, 33, 38].

In our study, many women expressed a desire to obtain or discuss contraception earlier than the standard 6-week visit in order to prevent unintended pregnancies and to facilitate birth spacing. Providers also recognized this need and many women and providers viewed the delivery hospital as a promising location to offer contraceptive services at an earlier time. The concept of offering postpartum

contraception earlier than the traditional 6-week visit is supported in the literature. Speroff and Mishell [38] reviewed a number of studies showing that the majority of postpartum women resume sexual activity prior to 6 weeks, making the 6-week postpartum visit potentially too late for interventions relating to contraception. A recent study in the UK found that although most general practitioners interviewed felt provision of contraception at 6-weeks postpartum was adequate for the majority of women, it was often too late for young women or under-resourced women and the provision of IUD contraception often required subsequent scheduling or referral, which resulted in delayed IUD placement thereby increasing risk for unintended pregnancy [28]. Likewise, in a study by Zerden et al. [46], 65 % of women sampled who desired LARC did not receive it in the postpartum period due to requirements for additional visits, missed appointments, not having the LARC method of choice available, and financial constraints. These studies support the need for revisions to the timing and location of contraceptive provision during the postpartum period that more closely aligns with women's needs.

Beyond changes in timing to address the barriers that women face in attending their postpartum visit, innovative delivery approaches may be necessary to increase both postpartum care and uptake of postpartum contraception. One such approach is the co-location (broadly defined) of postpartum contraceptive services with the Well-Baby-Visit. A study by Fagan et al. [9] found that 75 % of women reported they would be very/somewhat likely to use a contraceptive prescription provided by their infants' physician. Additionally, a study conducted at UIC Hospital [22] found that 83 % of postpartum women surveyed at the WBV reported they were comfortable discussing contraception at the WBV, and 84 % stated they would accept contraceptive advice at the WBV. In fact in 2014, Zuckerman et al. called on pediatric providers to "increase timely access to information and (contraceptive) care at point of services for adolescents and for mothers of child patients" [47, p. 182]. The authors suggest a "call to action" for pediatricians to ask teen patients and mothers of younger patients about birth spacing plans and provide information about contraception and/or access to LARC methods.

In the current study, both women and providers had varying views regarding the co-location option. Both acknowledged the convenience and benefits of this approach, but providers also recognized possible logistical and coordination challenges and many women were hesitant to fully endorse the idea due to the potential for taking focus off the infant. It is likely that multiparous women were more definitive in their opinions about co-location than primiparous women due to prior experiences of multiparous women with WBVs, potentially enabling them to have greater insight into the potential implications of co-locating care.

Although offering contraceptive counseling or services at the WBV may not be supported by all women and providers as seen in our small sample, alternative approaches that increase convenience for both women and providers without impeding optimal care for mothers and infants, need further evaluation. Of note, while a similar model already exists for women who seek care from a family physician who might more easily be able to provide care to her and her infant jointly, for most families, adult care is separated from pediatric care. Family physicians provide 17 % of primary care visits for children ages 0-4, while pediatricians provide the remainder [13].

Importantly, providers were supportive of using tools such as the RLPT in the postpartum period to aid in initiating conversations about contraception and to empower women to initiate the conversation themselves. Initiatives such as the RLPT and the OKQ ("Would you like to become pregnant in the next year?") are aimed at helping clinicians initiate family planning conversations with women and men in an effort to decrease unplanned pregnancies and increase reproductive health. The providers in our study endorsed use of such initiatives as conversation starters not only by providers who are directly involved with women's reproductive care, but also by pediatricians, a concept which if ultimately adopted would extend the reach of opportunities to promote women's reproductive health.

This study had a number of limitations. It is possible that the women who participated in the interviews are more educated than the average woman attending this urban university medical center. However, out of the 33 women we approached, 20 eligible women (61 %) agreed to participate in the interview. We have no reason to believe that the women who responded were more likely to have been different than typical women seeking care at this hospital and its associated outpatient clinics. On the other hand, there was a low response rate (15 %) for those participating in the provider interviews and it is possible that those who chose to participate were more amenable or interested in the topic; nonetheless, these providers offered valuable information on women's and their own postpartum care experiences.

In some women's interviews, there seemed to be confusion with regard to use of the term 'postpartum care'; some women thought postpartum care meant care for postpartum depression as opposed to all care related to reproductive and pregnancy health, which may have limited or affected some of their responses. Finally, when discussing co-location of contraception services for women at the WBV, we did not describe the type of provider

offering the services or directly distinguish counseling and referral from direct provision of contraceptive services; as such, interpretations of this concept appeared to vary across the women interviewed. Although we recognize these as limitations in our data collection methods, this inquiry still yielded rich and informative data for moving forward with respect to improving the delivery of postpartum care.

Conclusion

Exploring the postpartum care experience from the perspectives of women and their providers offers substantive insight into the current variability in rates of postpartum visit attendance and women's uptake of postpartum contraception. Of note, a developmental objective of Healthy People 2020 is to *increase the proportion of women giving birth who attend a postpartum care visit with a health worker*. In order to meet this objective, the data from this study suggest that clinical guidelines supporting a 6-week postpartum visit as the standard of care may need to be revisited in order to allow for flexibility and tailoring of postpartum care to individual women's needs. In addition, another developmental objective of Healthy People 2020 is to *increase the proportion of women delivering a live birth who used contraception to plan pregnancy*. In order to meet this objective, consideration of alternative approaches to the delivery of postpartum care and postpartum contraception and the use of tools such as the RLPT to help facilitate conversations about contraception and family planning, even for those who do not regularly provide contraception, may be necessary to increase access and utilization.

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Compliance with Ethical Standards

Conflict of interest The authors declare they have no conflicts of interest.

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