

# Incorporating Black women's perspectives into long-acting reversible contraception implementation

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**Objective:** To study urban, predominantly Black women's expressed opinions and beliefs related to the use of contraceptives to better inform implementation strategies designed to increase the use of highly effective contraceptives among minoritized and low-income women.

**Design:** Focus group interviews with women, in conjunction with a community-based organization providing programs for underserved women with a mission of improved women and infant health.

**Setting:** Focus groups were conducted, and women were recruited from clinical sites in predominantly African American urban neighborhoods in a southeastern US city.

**Patient(s):** Self-identified 18–35-year-old women recruited from clinical sites in the urban core of the city with an 80% African American population.

**Intervention(s):** No interventions tested.

**Main Outcome Measure(s):** Black women's opinions and concerns about contraception.

**Results:** Key insights from the focus group results for healthcare providers include the following: the importance of framing discussions with patients within the context of the patients' goals; need to acknowledge and respect the support systems that women rely on for child birthing and childcare; recognition of the clinician's role as a trusted and respected source of information; and need to understand and be prepared to address much of the inaccurate and misleading information that can interfere with the patients' optimal choices for contraception.

**Conclusions:** A critical component for applying the implementation science theory to increase the use of evidence-based practices, such as implementation of highly effective contraceptives, requires understanding women's perspectives of the factors influencing their decisions to use highly effective contraceptives. This study provides important insights into the following: the potential barriers inherent in minoritized women's concerns about contraceptives and how these insights can inform implementation strategies such as patient-centered counseling and education to overcome those barriers. (*Fertil Steril Rep*® 2022;3:80–90. ©2022 by American Society for Reproductive Medicine.)

**Key Words:** Implementation science, long-acting reversible contraception, motivational interviewing, patient-centered, qualitative research

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**S**low adoption of evidence-based science by the practice community can challenge implementation of effective public health and healthcare interventions, as is the case with long-acting reversible contraception (LARC). Although LARC, including contraceptive implants and intrauterine devices (IUDs), is highly effective in preventing unintended pregnancies (1) and induced abortions (2), the prevalence of LARC use remains low among US women overall, particularly among women reflecting minoritized and low-income status (3,4). Despite the high contraceptive efficacy of IUDs and implants, recent research has shown parity in overall contraception use among marginalized groups reflecting race and income but with extremely low implant use (3%) by non-Hispanic Black populations and increases in the use of withdrawal as a means of contraception between 2008 and 2014 (5). This low use of highly effective contraceptives contributes to the sobering statistic that almost one half (45%) of all pregnancies in US women are unintended, with the proportion higher among women of low income and minoritized status (6).

Long-acting reversible contraception is a particularly appropriate challenge for implementation research, the science of closing the gap between research and practice, because of the disconnect between its high efficacy and low implementation by the practice community. We used the Consolidated Framework for Implementation Research (CFIR) for organizing and guiding development of implementation science theory (7,8), as a useful framework for an applied approach to implementation science (9). A recent change in Florida's reimbursement policy regarding the provision of immediate postpartum LARC placement at hospitals providing obstetric care to underserved women represents a major opportunity for improving access to LARC. The change in reimbursement policy is an important part of the implementation framework but only 1 component of the 5 domains (to be discussed later). Much less recognized with the implementation framework are the patient characteristics that influence use and the role of healthcare in adapting to patient issues and concerns.

Patient characteristics related to the general use of contraception have been explored in a number of populations, particularly women of low income minoritized status, in whom the prevalence of LARC use is low. For example, Potter et al. (10,11) conducted open-ended interviews with predominantly Hispanic populations. Other recent qualitative research regarding the perceptions of contraception use, specifically LARC use, focused on young/adolescent female populations (12–14). Hodgson et al. (15) used focus groups to better understand the general contraceptive decisionmaking among economically disadvantaged African American women. Hofler et al. (16) used qualitative interviewing with hospital staff to better understand the challenges to LARC use. Other research efforts to understand interest in contraception also recommend qualitative interviewing to assess the reasons for using LARC (17).

The need to better understand, through qualitative research, the barriers and issues that impede the use of LARC with potential patients appears to be well recognized. However, there remains a research gap regarding women

living in urban areas, who are economically disadvantaged, particularly Black women, concerning their use of highly effective contraceptives and their perceived barriers to use or access. Reports regarding the use of these contraceptives within the context of implementation research theory or applied science are scarce. In-depth interviews and focus group research would be inappropriate for women giving birth while in an urban hospital because of both the stresses of child birthing and newborn infant care and the short-term nature of the stay. Accordingly, settings for the qualitative research were selected to engage prospective women of childbearing age in convenient, familiar settings, without the immediate stressors associated with labor and delivery. Within the context of applied implementation science, this study examines beliefs and perceptions of a population served by an academic safety-net hospital, located in a southeastern US urban neighborhood in which Black people constitute 80% of the residents. The county served by this hospital has the largest proportionate population of Black people (29.5%) of Florida's 20 counties with the largest populations (range, 318,560–2,779,322). This county also has the highest rate (41.6%) of <18-month interpregnancy intervals among Florida's 20 largest counties in population (low of 4.7%).

Our research question focused on the need to develop an understanding of the issues and concerns of women that could enhance access to and the use of highly effective reversible contraceptives. Our objective was to develop critical insights to facilitate a hospital-based implementation strategy, tailored to women that are served by the primary safety-net hospital that is located in the urban core.

## MATERIALS AND METHODS

We used qualitative methods, specifically focus group interviews, to better understand women's perceptions of LARC (IUDs and implants), barriers to their use, and general approaches to family planning. The underlying philosophical assumption of qualitative research that provided a foundation for this study was "pragmatism," which Creswell and Poth (18) summarize as research focused on the outcomes of research and the use of methods, techniques, and procedures that best meet the needs and purposes of the study. A "Consolidated Criteria for Reporting Qualitative Research" checklist was used as an editing guide to ensure that key qualitative research components were included in this report (19).

Since women who receive obstetric care at an urban safety-net hospital were the primary focus of this study, we used a purposeful sampling methodology to reflect the patients served by this safety-net hospital, without being intrusive to the actual child birthing process and newborn infant care. Adult women of childbearing age who were served by the various programs provided in the urban core by the regional Infant Mortality Coalition were recruited because they were likely potential users of immediate postpartum LARC and because of the ethical and logistic challenges of trying to capture women in the hospital in close proximity to childbirth. This study aimed to fill the void in available research to facilitate improved outcomes for the specific patient populations that the institution serves. All participants

were recruited through a local community-based, not-for-profit organization (Infant Mortality Coalition, primarily providing services to underserved women of childbearing age in predominantly African American neighborhoods that are served by the hospital). We held focus groups at 3 sites in the downtown/urban core of the city served by the hospital, where the community-based organization provides a wide range of women's health programs within urban neighborhoods for underserved women of childbearing age who are primarily African American.

Women were recruited to participate through Institutional Review Board (IRB)-approved flyers that were posted and distributed at each of the sites. The flyers solicited participation by women aged 18–35 years to better understand “women's perspectives regarding family planning goals, current perceptions of contraceptive methods, and barriers to family planning.” The recruitment process reflected the inclusion criteria of women between the ages of 18 and 35 years, receiving women's clinical services in the urban core, and the exclusion criteria included females aged < 18 or > 35 years and all males, although some nonparticipating people who fit the exclusion criteria did accompany the participating women, as noted by the recorder/observers. The flyer also stipulated a \$25 gift card as compensation for their time during the focus group. Before conducting the interviews, the participants were introduced to the study including their voluntary participation.

Focus group discussions were facilitated by 2 trained African American female focus group leaders, who were affiliated with the community-based not-for-profit organization. Both had previous experience leading focus groups and providing family planning services for similar populations. Focus group interview questions were developed through discussions with 1 faculty and several resident obstetrics/gynecology (OB/GYN) physicians and community-based focus group leaders. Focus group questions followed a specific format, designed to encourage the free flow of thoughts and perceptions in response to broad general questions while allowing probes that addressed key questions. Initial focus group questions were very general, related to the women's goals, and became increasingly specific to LARC if specific issues involving LARC did not emerge during early discussions.

Each focus group was documented with 2–4 notetakers who were trained to record both verbal and nonverbal communications. Audio recording was not used because of potential intimidation. All interviewers and notetakers were women to encourage free discussion of issues of concern to women. Focus groups lasted approximately 1 hour with an additional 30 minutes for food to be served before the focus group. Notes were converted into electronic file format (Microsoft Word documents) by each notetaker independently before any discussion about their content.

Five focus groups were conducted in May and June 2018 in the urban neighborhood where the women were recruited. A sixth focus group was canceled because the agreeing saturation (repetition of comments without additional information) of the researchers and facilitators had been reached. These groups included 44 adult female participants, some of whom were accompanied by infants and children. The groups

ranged in size from 4–17 (median, 8) people. The focus groups were primarily attended by women of childbearing age, although 2 grandmothers and 3 male partners accompanied the women, primarily in childcare support roles without participating in focus group discussions. Although self-report demographics of the participants were not collected to provide assurance of anonymity, participants were predominantly African-Americans who had been pregnant at least 1 time and who received community-based health services in the urban core of the city.

### Human Subject Protection and Consent

This study was reviewed and approved (IRB201801017) by the University of Florida, Human Subjects Research IRB. The University of Florida Human Subject Research IRB waived a signed written informed consent the basis of implied consent and minimum risk. All methods were performed in accordance with the relevant guidelines and regulations.

### Analysis

Notes from the focus groups were then reviewed and discussed by the researchers and notetakers using a content analysis approach to summarize and synthesize the results. Content analysis is a commonly used qualitative research tool for grouping words, thoughts, ideas, and concepts under themes. Additional analysis of the focus group processes was then conducted by the focus group facilitators in collaboration with the lead researchers to discuss and verify the analysis. The use of multiple and varied perspectives in the analysis provided triangulation, a qualitative analysis approach used to increase credibility and trustworthiness (20). Two senior resident physicians (SB) in OB/GYN training, 2 Master of Public Health graduate students (PJG and IM), 1 Master of Public Health experienced research/practitioner (KLB), and 2 community organization facilitators (VJ and LH) provided medical, public health, and community perspectives.

During our initial review of the focus groups, 10 themes emerged from the data. We then prepared the data for sorting, coding, and analysis using ATLAS.ti Software (21). Focus group notes were then coded using the 10 original themes with 6 additional themes added. The analysis group reconvened to further discuss the coded data and determine if any themes should be dropped, combined, or split into multiple categories.

The identified themes and related ideas were also reviewed and interpreted by the focus group facilitators and notetakers in relation to how the results could inform contraceptive service delivery. In addition to the themes that emerged from the content analysis of the focus group participant responses, the focus group process, including interactions with the facilitators and voids in the interview responses, provided important insights about the use of contraception. These included the discussion of the women's goals as a prelude to discussing contraception as well as themes that were anticipated but did not emerge during

discussions. These discussions regarding focus group processes led to “lessons learned” in addition to the content analysis.

The focus group results were then analyzed for their relationship to obstetric care. Themes that emerged from the content of the focus group discussions were merged with lessons learned from conducting the focus groups (the focus group process) and were synthesized into 6 overarching and cross-cutting themes that focused on improving service delivery for obstetric patients, hospitalized for delivery, a primary purpose of this implementation research.

## RESULTS

Initial issue identification and coding resulted in 16 themes from 5–57 different ideas or thoughts associated with these different themes. Many of the thoughts or ideas were associated with multiple themes. [Table 1](#) lists the themes and examples of the ideas or thoughts expressed for each of the themes related to the major overarching theme, “Need for Effective Contraception.” [Table 2](#) lists the themes and examples of the ideas or thoughts expressed for each of the themes related to the major overarching theme, “Concerns about and objections to birth control,” and [Table 3](#) lists the themes and examples of the ideas or thoughts expressed for each of the themes related to the major overarching theme, “Sources of Information and Life Contexts.” Notably, the themes are not mutually exclusive with some of the expressed thoughts listed under 1 theme but also overlapping with 1 or more other themes.

The identified themes and related ideas that were reviewed and interpreted by the focus group facilitators and notetakers for their relation to how the results could inform contraceptive service delivery were synthesized into 6 overarching and crosscutting themes:

- Asking women about their immediate and longer-term goals can provide a critical context for framing discussion about the impact of having children and the role of contraception. Therefore, discussions with patients are more likely to be effective when framed within the context of patients’ goals.
- While women’s support systems, which could include mothers, grandmothers, other relatives, and friends as well as neighbors, may sometimes provide inaccurate information regarding contraception, the critical role they provide in the lives of many of these women needs to be appreciated and respected. Therefore, clinicians should acknowledge and respect the support systems that women rely on for child birthing and childcare.
- Notwithstanding the critical role of support systems, clinicians caring for women represent a trusted and respected source of information. Providing accurate information on contraception options represents a critical role for clinicians.
- The women interviewed, and presumably many of the women giving birth at this safety-net hospital, have been exposed to and are concerned about information that is inaccurate and misleading and could interfere with optimal health life choices. In addition to support systems, participants also obtained information from the internet. Some of

the most important perceptions that could interfere with optimal health choices that need to be addressed in a positive way are the following:

- o Contraception is “not” effective. This was a frequently reported concern.
- o Contraception causes intolerable side effects that women fear.
- o Regular “cleansing” provided by menstruation is vital to women’s health.
- o A plan for abstinence is a reliable way to prevent pregnancy.
- Religious objections to contraception did not emerge during focus group discussion, although these have been reported from other staff and board members of concerned community organizations.
- Age of women did not appear (based on the subjective observations of the focus group notetakers and facilitators) to impact the need to address the contraceptive-related concerns detailed earlier. The insights obtained from the focus groups appear to apply to the range of age groups of the participating women whose perspectives were assessed in the focus groups.

## DISCUSSION

Birth spacing and family planning remain a major public health issue, considered 1 of the 10 greatest public health accomplishments of the 20th century (22,23), and providing women the option to choose whether and when to be pregnant enhances maternal and child health (24–26). Focusing on increasing the use of highly effective reversible contraception (the term, LARC, was not typically used by the focus group facilitators), the findings from this study revealed issues and concerns of a sample population served by the safety-net hospital in a major southeastern city, including the following: the role of patients’ goals in their decisionmaking; the importance of women’s support systems; trust and respect for clinicians providing obstetric care; inaccurate and misleading information these women are exposed to; and the absence of religious concerns about contraceptive choices.

Although a number of published studies have examined barriers to the adolescent use of contraception including LARC, we identified a notable void for studies that addressed issues and concerns of adult urban women, particularly African American women (12,13,27). While institutional barriers impede the use of LARC, other studies have concluded that addressing misconceptions can reduce disparities in the use of LARC (28–30). For some populations, immediate postpartum LARC placement also appears to have advantages over other strategies to access LARC (31). This study focused on adult women and identified factors, specific to urban adult women, that can influence decisions to use LARC. Although findings about contraceptive use and concerns were similar to other studies, the immediate postpartum use of LARC did not emerge as an issue. Our results complement those of other studies with other populations such as adolescents (32). Other studies have also documented high interest in LARC by women who

TABLE 1

**Major overarching theme: need for effective contraception.**

Theme (no. of times related ideas appeared)	Examples of participant comments	Inferences
Birth control (46)	<p>"Best way to not get pregnant, sleep on the sofa."            "I have an implant because with work and kids, I don't have time for other options. I like knowing it's covered for 2–3 years and I don't need another appointment. Sometimes I get nervous about it working and tap it for good luck and make sure it is still there."            An older woman, accompanying a participant, who is a grandmother, shared, "when I gave birth a long time ago, they said we had to wait 6 months to get birth control. Out of my class, at least half were pregnant again by 6 months. But that was 32 years ago."            "I had a really complicated pregnancy and the birth was traumatic. I don't want to go through that again so I got on birth control right after the birth of my last child."</p>	Although the preferred method of birth control varied widely and the discussions regarding risks and benefits of each form of contraception also varied, most women expressed that family planning is an important part of a women's life and birth control is a significant part of the family planning process.
Education needed (25)	<p>"Didn't do any research before choosing a birth control, just went on the pill because it is most common."            "I would want to talk to my OB/GYN about birth control."            A participant discussing importance of sexual education for children/teens, "Not everyone has mothers to teach them about these topics."</p>	Several participants state that they received most of their information from friends and family; however, a prevalent opinion was that a healthcare provider or OB/GYN would be the best person to provide education about contraception.
Trust (23)	<p>"I am pregnant with my eighth baby. I had my first at 18 and dropped out of school. Every time I wanted to go back I got pregnant again. Birth control is not for me, I am too fertile. I'm going to get my tubes tied after this one."            "I took the pill for a while. Any birth control has risks, I am scared of the pharmaceutical industry." This participant later states she does not want more kids and will "get my tubes cut"</p>	There was an underlying distrust for the medical field, including its healthcare providers and pharmaceuticals. Women were not sure which information that they have heard about birth control options via friends/family/television/social media/physicians was accurate. Much of this distrust seemed to stem from fear of side effects or being harmed by their contraception.
Got pregnant on birth control (11)	<p>"I used to use the pill, and I got pregnant on it."            "I got pregnant on the pill. But my cousin had the implant, and it made her arm swell. So, now, I am not using anything [for contraception]."            "I think that is how I got pregnant," said a participant discussing her birth control pills.</p>	The participants who cited pregnancy while on contraception also discussed the inappropriate use of their form of contraception at the time of pregnancy, that is, they forgot to take their oral contraceptive pills or were late in receiving a follow-up contraceptive injection.
Lack of control (12)	<p>"Some people don't want to take any medication. But natural doesn't work."            "[A hospital in town] told me that I can either get my tubes tied after delivery or wait 6 weeks to get birth control."</p>	Women have to rely on the contraceptive options available within their healthcare system.

Note: OB/GYN = obstetrician/gynecologist.

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have had recent unintended pregnancies and women who do not want to become pregnant within the next 2 years (33). In particular, the findings from this study are uniquely positioned to inform implementation strategies designed to overcome impediments to optimal patient decisionmaking concerning the use of contraception.

### Implications for Implementation Science

This strategy illustrates CFIR's usefulness in addressing the challenges of increasing the use of LARC by healthcare systems. The 5 domains of CFIR (intervention itself, external characteristics, internal characteristics, individual characteristics, and organization change process) are all relevant to LARC adoption. Although research supporting the effectiveness and use of LARC (the intervention itself) is well documented (1), the other domains involving both institutional and personal factors can constitute major barriers to the use of LARC for underserved women. These barriers may be

particularly formidable in the inpatient postpartum setting where women are attended by OB/GYN physicians. The external institutional level is complicated by third-party payer policies that can require modifications to permit LARC initiation during hospitalization for delivery (Table 4). Reimbursement can also be complicated by internal institutional factors related to billing, pharmacy stocking, and access as well as the clinical staff providing obstetric care (Table 4). Public payer systems, such as Medicaid, can further complicate institutional challenges (34), which may include policy issues or additional requirements for coding and billing, particularly for safety-net hospitals that rely extensively on Medicaid reimbursement. Table 4 details these challenges to implementation that researchers, physicians, and staff encountered as attempts were made to increase access to LARC within the urban safety-net hospital in Florida. Access to LARC within Florida is particularly important as Florida does not have expanded Medicaid and the state agency only recently approved LARC for Medicaid reimbursement.

TABLE 2

Major overarching theme: concerns about and objections to birth control.

Theme (no. of times related ideas appeared)	Examples of participant comments	Inferences
Got pregnant on birth control (11)	<p>"I used to use the pill, and I got pregnant on it."</p> <p>"I got pregnant on the pill. But my cousin had the implant, and it made her arm swell. So, now, I am not using anything [for contraception]."</p> <p>"I think that is how I got pregnant," said a participant discussing her birth control pills.</p>	The participants who cited pregnancy while on contraception also discussed the inappropriate use of their form of contraception at the time of pregnancy, that is, they forgot to take their oral contraceptive pills or were late in receiving a follow-up contraceptive injection.
Lack of control (12)	<p>"Some people don't want to take any medication. But natural doesn't work."</p> <p>"[A hospital in town] told me that I can either get my tubes tied after delivery or wait 6 weeks to get birth control."</p>	Women have to rely on the contraceptive options available within their healthcare system.
Problems with pill (14)	<p>"I am on the pill, but it is hard to remember to take them. I am thinking about getting an IUD."</p> <p>"I think that's how I got pregnant," said a participant who was taking birth control pills when she became pregnant</p> <p>"I don't have time to keep up with the pill. My memory is bad, and getting an appointment every 3 months for a Depo shot works for me."</p> <p>"I am not a good pill taker with my busy life style so I have a Nexplanon."</p>	These focus groups reaffirmed the disadvantage for some women taking contraceptive pills of having to remember to take them every day. There were a few women who successfully set alarms on their phones; however, several women cited inability to remember the pill as a major deterrent to appropriate use.
Side effects (45)	<p>"An IUD can get lost up there."</p> <p>"The shot makes you gain weight and messes with your mood."</p> <p>"My cousin had the implant, and her arm got swollen."</p>	Side effects and misinformation were strongly related during discussions of contraception, particularly with LARC. Nonetheless, in several cases, the actual side effects of OCs or injectable contraception were accurately perceived.
Not ashamed/take care of kids (4)	<p>"Some women feel blessed to have a child and wouldn't want to 'block their blessing.'"</p> <p>"Having my son was great because then I got financial aid. He was a blessing [in regard to finishing her bachelor's degree]."</p>	Although unplanned pregnancy may be viewed as a negative event to several researchers or healthcare providers, many women are proud of the children they have (planned or unplanned) and take great pride in caring for their children. Participants in the focus groups verbalized support for their fellow mothers.
IUD misinformation (29)	<p>"I have an IUD. I don't like it; it made my periods irregular. But I have to wait another year before I can have it removed."</p> <p>"My friend had an IUD and got cancer from it. I think the Norplant would be a good option."</p> <p>"The IUD can get lost 'up there' or come out. But there are lots more positives."</p> <p>"I was on an IUD for 2 years, took it out to have another baby. I heard a story that the IUD can kill you so I didn't get another one." [This participant is not currently using contraception.]</p>	Much of the misinformation about IUDs and implants feeds into the fears that deter women from choosing LARC as their form of contraception.
Cleanse (11)	<p>In regard to postpartum contraception, "Don't take it right away. Your body needs time."</p> <p>"You have to let your body heal and let it cleanse."</p> <p>"You aren't letting your body heal naturally if you are using medications too quickly after giving birth."</p>	There is a belief that a natural cleansing process takes place postpartum and each month during menstruation, which may deter some women from initiating a contraceptive immediately postpartum and may also limit the use of methods that suppress menses.

Note: IUD = intrauterine device; LARC = long-acting reversible contraception; OCs = oral contraceptives.

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Overcoming institutional factors may require extensive organizational change and/or systematic processes to initiate and maintain increased LARC use. These processes include quality improvement (QI) efforts to overcome the challenges (16) that are reflected in the CFIR domains involving internal organizational characteristics and the adoption process. Nonetheless, informed patient decisionmaking also represents a critical factor in the increased use of effective interventions. Patient factors, particularly patient characteristics that pose barriers to client use, due to healthcare organization and system insensitivity to patient issues, may be extensive

and challenging to the implementation of effective interventions. This study demonstrated how these factors may represent critical considerations in developing effective institutional/organizational practices for increasing LARC use.

### Implications for Policy and Practice

In addition to the potential role of increased LARC use to reduce unintended pregnancies and induced abortions (1,2), shorter periods of birth spacing have increasingly been linked

TABLE 3

## Major overarching theme: sources of information and life context.

Theme (no. of times related ideas appeared)	Examples of participant comments	Inferences
Family and friends (13)	"I talk to my grandma, my friends, my auntie, and my pharmacy tech since my mom knows the pharmacist. I don't discredit my mom, but I want a professional to ask [questions to about contraception]."	Women's support system represents a key part of their lives. It is important to support their belief system while providing accurate and up-to-date information regarding contraceptive options.
Social media (9)	"I have read a lot of bad reviews about birth control online." "I had an IUD for 5 years, I was about to go to the doctor to get it replaced, but I saw a post on Facebook about a woman who had the same IUD but it traveled and got into her spine and then her toes turned black. I got my IUD taken out and didn't replace it."	Social media has the ability to be used to disseminate accurate health information; however, accurate and scientific evidence supporting much of the information disseminated is lacking. Unfortunately, much of the information on social media is anecdotal and not based on sound science.
Goals (13)	"Having an unplanned pregnancy would slow down the process [toward achieving personal goals]." "I was accepted to VCU but being pregnant now, I don't have much family support so I am going to push going back college a semester." "During college you are learning about yourself and get the full college exposure. Having a child would not be a setback but would bring a lot of additional pressure, but being pregnant does not mean you cannot graduate."	Most participants did not perceive an unplanned pregnancy as a barrier to achieving their personal or career goals; however, most agreed that a pregnancy and raising an additional child would delay the achievement of their goals or add additional challenges.

Note: IUD = intrauterine device; VCU = Virginia Commonwealth University.

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to infant (35–37) and maternal (38,39) morbidity and mortality. We conducted this study in the county that has the highest <18-month interpregnancy interval rate of Florida's 20 largest counties in population size in 2017. The <18-month interpregnancy interval rate for this county, with the largest proportionate African American population of Florida's larger counties, was also 19.5% higher than the state <18-month interpregnancy interval rate. Public policies that increase access to LARC by decreasing non-evidence-based concerns of women as well as reducing the financial barriers are in the public interest as well as the interest of the women who may receive these services.

While family planning, including contraception, may primarily reside within the purview of public health, primary care, and community-based organizations, particularly in their role in providing prenatal care, healthcare institutions play a key role in facilitating the use of LARC immediately after childbirth. At this critical opportunity for providing LARC, these institutions face challenges related not only to increasing access to LARC but also to effectively communicate with patients to enable informed patient decisionmaking. Concerns about the coercive use of LARC (40,41) appear far less relevant where access to LARC by urban marginalized women in Florida has been so limited.

Although organizational issues tend to be the focus of implementation research, the individual patient issues and concerns regarding contraception, in general, and effective reversible contraception, in particular, that were identified through this research can pose a substantial barrier to a patient's decision to use LARC during immediately after childbirth. Greater understanding of the issues and concerns of the patient population can enhance provider-patient health communication at this critical juncture. Dehlendorf et al.

(42–44) have extensively documented the need for improvements in patient counseling and education by providers. The results of this study may be especially useful for 2 major tools for provider-patient communication, tailoring and motivational interviewing (MI), both of which emphasize the uniqueness of each individual.

Tailoring the use of "feedback" refers to providing information about the client from information obtained during the patient-provider interaction (45,46). Recognizing that the provider-patient interaction is often brief, providers who are well informed about the diverse issues and concerns of patients should be those best prepared to effectively address patients' concerns by explicitly recognizing and communicating within the context of the patients' issues and concerns. Tailored interventions have also been reported to increase the use of other forms of contraception, including condoms (47).

Motivational interviewing, another person-/patient-centered approach to counseling, education, and provider-patient communication, has grown extensively in the last 2 decades as an evidence-based approach for a number of health issues that require patient involvement to achieve optimal health outcomes. Key skills for providers to conduct MI include the following: expressing empathy; assisting patients to discern behavior in light of values/goals; respecting patient resistance; and supporting patient self-efficacy (48). Motivational interviewing has also been demonstrated to increase the uptake of postpartum LARC with adolescents (aged 13–17 years) (49), and it has also demonstrated utility for postabortion counseling (50). The importance of patient decisionmaking in increasing the use of LARC would appear to make the use of MI relevant for postpartum counseling and education.

TABLE 4

**Implementation context: issues experienced in relation to making LARC accessible.**

Implementation construct	Other implementation activity
External organization: Medicaid approval	The state administrative agency for Medicaid did approve LARC as a Medicaid service, and this was a stimulus for the community's implementation efforts. The lack of state agency approval for Medicaid reimbursement was a major impediment to LARC use by economically disadvantaged women.
External organization: Safety-net hospital role	The local safety-net hospital was established as the local lead site for LARC implementation because of its role in providing service to local Medicaid clients.
External organization: Managed care organizations	Since Florida uses managed care organizations to administer Medicaid services, the safety-net hospital needed to contract with the managed care organizations. After several years, just when we were completing our focus groups, the hospital obtained a contract from the major managed care organization in our area. Unfortunately, that managed care organization discontinued their service in our area.
Internal organization: Hospital contract office	The hospital contract office required signed contracts to enable hospital billing for LARC services.
Internal organization: Hospital billing office	The billing office cannot begin billing until there is a contract.
Internal organization: Hospital billing office	The hospital pharmacy would not stock LARC until contracts and billing were completed.
Internal organization: OB/GYN department	The OB/GYN department could not administer LARC until pharmacy made LARC available.
External organization: Other hospitals	Other hospitals in the area have indicated a reluctance to provide LARC since the safety-net hospital (major Medicaid serving hospital) was having a number of problems.

Note: LARC = long-acting reversible contraception; OB/GYN = obstetrics/gynecology.

Livingood. [Black women's perspectives of LARC]. *Fertil Steril Rep* 2022.

We believe that these focus group conclusions provide important information that reinforces the basic principles of patient-centered implementation strategies, such as tailoring- and MI-based approaches, for optimal provider-patient communication related to using LARC. In addition, they can provide clinicians, including those in training, as well as the other healthcare providers, such as nurses, medical assistants, and counselors, with insights regarding issues important to their patients and facilitate their engaging in effective, empathetic interactions with them. Consistent with a QI effort, the full range of staff such as physicians, nurses, medical assistants, and other support staff who provide services for these women would compose the quality team working to implement patient-centered contraception strategies.

We found that the issues of reproductive coercion associated with contraception did not emerge during these focus group discussions, although these issues have been raised by others, such as religious leaders in the community. The context that LARC is readily accessible by more economically privileged women and that economically disadvantaged women may have only very limited access to LARC, resulting in denial of effective contraception and a greater risk of unintended pregnancy, may represent the most relevant social equity issue related to LARC in this population.

The institutional adaptation process represents another key domain of the CFIR. Although the provider-patient interaction is only 1 component of institutional QI, it can be critical to achieving optimal evidence-based outcomes, in this case initiating LARC postpartum, before hospital discharge. Key performance metrics for education/counseling can be built into an electronic health record (EHR)-based, simple checklist with key points during service delivery (prepostpartum and postpartum). In addition to measurement, data collection, and monitoring of key elements of communication, the EHR-based checklist can serve as decision support

for providers. Key elements such as discussion of patient goals and their relation to having children, eliciting and acknowledging support mechanisms, and addressing common issues and concerns could be programmed into the EHR, thereby institutionalizing effective LARC communication as well as providing a mechanism to monitor and track progress related to the primary outcome of the patient use of LARC.

We suggest that MI has the potential to counteract inaccuracies and myths in a nonjudgmental and respectful manner, particularly since our results indicate the clinicians are relied on to provide accurate information. Consequently, it may be important for providers to be prepared to address some of the common myths such as the following:

- Contraception is “not” effective. This common assumption can be addressed by explaining the tiered approach to contraceptive efficacy, detailing how some methods are highly effective (implants and IUDs) (51), whereas others are moderately effective (pills, patch, ring, and injections) and still others are less effective (condom, spermicide, and withdrawal).
- Contraception causes intolerable side effects that women fear. This concern is best addressed by candidly detailing side effects associated with different contraceptives and addressing fears. In particular, the bleeding changes associated with hormonal contraceptives and IUDs should be candidly reviewed with women considering initiation of these methods. Proactive counseling regarding bleeding changes associated with progestin-only contraceptives has been found to increase user continuation (49).
- Regular “cleansing” provided by menstruation is perceived by some women to be vital to women’s health. In several cases, explicit discussions with women regarding why regular bleeding is not necessary in women using hormonal contraception (51) can address this myth. In some circumstances, pointing out that breastfeeding and pregnant



women do not bleed regularly can be helpful (51). It may also be helpful to point out that changes in bleeding do not mean the contraceptive's efficacy is diminished. It may be helpful for women concerned about possible negative health effects of not bleeding regularly to have access to other women who can describe in a reassuring fashion their own experiences with menstrual changes associated with the use of hormonal contraception (52). Some women believe that if they do not have regular menstrual cycles, old and unhealthy blood accumulates in their uterus. Acknowledging this concern and pointing out that the lining of the womb becomes thin during the use of hormonal contraception or lactation can be helpful.

Our findings from this research have important implications for educational and counseling interventions that have been successfully used to enhance other healthcare services. However, research and evaluation studies will be required to confirm if these approaches are effective in increasing the use of LARC by urban adult population, particularly immediately after childbirth. This study also has important implications for implementation science, which tends to focus on organizational factors influencing adoption while ignoring the need to adapt to concerns of patients. A more patient-centered approach that focuses on patient factors may be critical for more effective adoption of evidence-based interventions, a primary purpose of implementation research.

### Strengths and Limitations

A limitation of this study was that it was conducted within a narrow geographic area, limiting socioeconomic and ethnic diversity. The urban focus that included predominantly African American women in a narrowly defined geographic area, primarily an urban Black population, prevents generalization beyond this population. However, developing better understanding of this specific population was a primary goal of the study.

Another limitation of this study was the lack of systematic collection of self-reported demographic information. Although most sources of demographic information (census data or medical records) primarily rely on self-report, the investigators of this study did not assess a need to verify key demographics through additional self-report since the location of the studies and the recruitment strategy were highly targeted to the study population, requiring self-identification by the participants of the key demographics. Additionally, the focus group recorders/observers noted some nonparticipating people outside of the key demographics that accompanied the participating women, including 2 self-identified grandmothers (1 who did offer some perceptions during a focus group) and 3 men who accompanied the participating women. Both groups were present to provide the participating women with childcare, and the notation of the presence of these excluded populations provides evidence that the intended demographic participated in the focus groups.

Although African American women were the primary population of concern, there were no exclusion criteria for

women who did not identify as Black. The location of the focus groups, involvement of Black women to facilitate the focus groups, and recruitment strategy in clinics serving primarily Black women within predominantly Black neighborhoods provided a high likelihood that the participating women would be Black. The postresponse discussion of the focus group results with the recorders/observers of the focus groups revealed that most women appeared to be of the Black race or a mixed race with Black heritage although there were up to 3 women whose race/ethnicity was not clear to the observers/recorders. The lack of participant self-identification of Black race or African American ethnicity in deference to the recruitment strategy in clinics serving high-density African American neighborhoods and confirmation of participant race by observers is a limitation of the study.

The primary strengths of this qualitative research were the valuable insights it provided. These insights can inform implementation strategies to enhance the use of highly effective reversible contraception after delivery at a safety-net hospital serving urban adult women.

### CONCLUSION

In conclusion, patient characteristics constitute a major factor in increasing the effectiveness of implementing evidence-based science in practice settings, in this case the use of LARC. This study did confirm that effective contraception with minimal side effects was desired by this population, a characteristic that suggests that LARC should be desirable. Moving beyond the internal and external organization characteristic associated with effective implementation, this study provided important insights into the following: potential barriers inherent in the issues and concerns about contraception among women who are served by an urban safety-net hospital and how patient-centered implementation strategies such as counseling and education can be developed to overcome those barriers. Using the results of this study to enhance clinician-patient interaction is especially important for overcoming patients' personal concerns and issues that can be barriers to the use of highly effective reversible contraception. The value of incorporating patient perspectives into the delivery of contraceptive healthcare complements other studies with other ethnic groups and other health services (53). Our findings can inform the development of implementation strategies such as cultural tailoring and MI intervention research or institutional QI projects that are intended to enhance the use of highly effective reversible contraception.

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