Pregnancy Ambivalence and Long-Acting Reversible Contraceptive (LARC) Use Among Young Adult Women: A Qualitative Study

CONTEXT: *Many young adults are unclear about how much they want to have, or prevent having, a baby. However, pregnancy ambivalence is an underexamined factor in the uptake of long-acting reversible contraceptive (LARC) methods—IUDs and implants—the most effective methods available.*

METHODS: *In 2014, investigators conducted six focus groups and 12 interviews with 50 women aged 18–29 in Dane County, Wisconsin; participants were either university students or community residents receiving public assistance. A modified grounded theory approach was used to analyze the data.*

RESULTS: *Four themes emerged. First, participants described a pregnancy desire spectrum: Those strongly motivated to avoid pregnancy were most receptive to LARC methods, while those with less clear or mixed desires worried that these methods would prevent "accidental" pregnancies that might not be unwelcome. Second, women within a few years of wanting children perceived LARC methods as too "permanent," despite awareness of their reversibility. Third, age and life stage were important factors: Younger women and those attending school or beginning careers were more likely than others to consider these methods because they had clearer motivations to avoid pregnancy. Finally, relationship stage influenced receptiveness to LARC methods: Women in newer relationships were more receptive than were those in longer term relationships who imagined having a baby with their partner someday.*

CONCLUSION: *Effectiveness is not the only factor in women's selection and use of contraceptive methods. Individual preferences will lead some women to choose non-LARC methods even when fully informed of their options.*

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One of the biggest changes to reproductive health care in the last decade is the increased recommendation and use of long-acting reversible contraceptive (LARC) methods—IUDs and implants.[1] For at least three reasons, these methods can be welcome options for those wishing to prevent pregnancy. First, users report comparatively high rates of satisfaction with these methods.[2] Second, IUDs and implants are much more effective than other methods.[3] Third, if used for at least a year, LARC methods are cost-effective.[4] Though IUDs in particular were long deemed inappropriate for young people, more recent research shows that the latest LARC methods are safe and increasingly acceptable for patients of all ages and parities.[5,6]

Despite these benefits, the overwhelming majority of contraceptive users still do not use IUDs or implants. In the United States, only 12% of current contraceptive users reported LARC use in 2011–2013.[7] Rates are particularly low among young adults,[8–10] who account for the lion's share of U.S. unintended pregnancies.[11,12] Obstacles to increased LARC use include high up-front costs,[4] lack of provider knowledge and skill,[13] and a dearth of patient awareness.[8,14] Both providers and patients possess misguided concerns about the potential dangers of IUDs to future fertility, and these misperceptions have contributed to especially low LARC prevalence among younger, nulliparous women.[1,13,15] Other client-side barriers are insertion fears,[16,17] worry about having a foreign object in the body[16] and concerns about side effects.[6,18]

A notable gap in our understanding of young adults' LARC use is the psychosocial and relational aspects of LARC use. With few exceptions,[19] researchers have not examined how receptiveness to these methods may be influenced by pregnancy ambivalence—that is, mixed desires about pregnancy—which can, in turn, be influenced by relationship stage and life stage.[20] In the demographic and reproductive health literature, pregnancy intention usually refers to a timing-based measure of childbearing—whether a pregnancy happens at the right time, too early or too late, or is not wanted at all.[21,22] A close conceptual cousin of pregnancy intention is the desire to become pregnant or avoid becoming pregnant.[21] While some people hold strong desires to achieve or avoid pregnancy, others can want and not want a pregnancy at the same time.[21,23] Those with uncertainty about their short-term childbearing prospects may be turned off by LARC methods' long-acting aspect, even though practitioners tout this as a merit, not a drawback.

Many young adults postpone marriage and childbearing as they attend school or begin careers. These life-building endeavors could greatly clarify their motivations to avoid pregnancy and could increase their willingness to consider long-term, highly effective contraception. Yet, because

young adults are no longer adolescents, but are not necessarily settled into long-term unions, they are more likely than other age-groups to experience pregnancy ambivalence—and greater levels of ambivalence are increasingly associated with less effective contraceptive practices.[24–27] For example, among U.S. women using short-acting methods, those who hold ambivalent pregnancy desires (i.e., who would not mind getting pregnant, would not mind avoiding pregnancy or are not sure) are less likely than those with clear pregnancy desires to be using hormonal or barrier contraceptives and are more likely to be using no method or withdrawal, or to be using condoms inconsistently.[25,28] Since implants and IUDs make an "accidental" pregnancy nearly impossible, they may not be a desirable choice among young adults who are ambivalent about pregnancy.

However, pregnancy ambivalence has been largely unexplored as a possible deterrent to LARC use.[19] Nor have researchers closely explored common complaints about use of LARC methods in relationship to mixed pregnancy desires. For example, in a qualitative study of LARC perceptions among staff, providers and patients at family planning clinics, some clients deemed the 5–10-year span of some LARC devices "too long for them to consider";[6(p. 90)] however, the degree to which this perceived disadvantage might be connected to pregnancy ambivalence was not examined. The current study addresses these gaps by examining how pregnancy ambivalence may undermine LARC use among 18–29-year-old women—and, in turn, what pregnancy desire profiles may most motivate young adult women to use LARC methods.

METHODS

Overview

Data derive from a larger qualitative study[29] of IUD and implant use among 18–29-year-old women in Dane County, Wisconsin, a semiurban area of approximately 500,000 inhabitants and home to the University of Wisconsin. Some 12% of residents live below the federal poverty level (compared with 14% nationally), and 18% are people of color (compared with 23% nationally).[30,31] Since the purpose of the larger study was to broadly assess LARC barriers and facilitators, pregnancy ambivalence was one of several factors explored.

The study employed a qualitative, modified grounded theory approach, given that qualitative research methods are essential for exploring understudied topics; generating hypotheses (rather than showing causation); and answering questions of why, how and under what circumstances (as opposed to how many).[32] Since qualitative study participants generate meanings in their own words, qualitative methods are also good for documenting personal and social meanings and individual and cultural practices[33]—which are vital in documenting how LARC use relates to pregnancy desires and ambivalence among both those who have used LARC methods (ever-users) and those who have not (never-users).

In phase 1 of the study, six focus groups were conducted with 40 women with any history of contraceptive use. Focus groups were designed to explore women's LARC-related knowledge and attitudes, as well as various factors associated with LARC acceptability—including pregnancy desires, intention and ambivalence. While focus groups are not intended to solicit individual-level data, some participants did share personal information about pregnancy desires or their experiences with IUDs or implants, and these disclosures often sparked conversations. However, it was also important to more deeply explore personal experiences of women who had ever used a LARC method. Therefore, in phase 2, the study team conducted 12 one-on-one interviews with current or former LARC users. These interviews helped document the lived relationship contexts, life stages and pregnancy desires of young adults who had chosen LARC methods.

A stratified sampling frame ensured socioeconomic diversity among participants: One-third of focus groups and interviews were with university students, and two-thirds were with women from the community currently receiving at least one form of public assistance (e.g., supplemental nutrition assistance; benefits through the Special Supplemental Nutrition Program for Women, Infants and Children, or WIC; or public health insurance). Lower income individuals constituted the majority of the sample because of their increased likelihood of unintended pregnancy.[11,12] Socioeconomic status, rather than race or ethnicity, served as the main sample stratifier because of its stronger associations with unintended pregnancy.[11] University students were of interest both because of a related project about LARC awareness on campus and so investigators could assess socioeconomic differences, if any, in LARC attitudes and decision making in the larger sample. Though race and ethnicity were not part of the sampling frame, a sampling goal was to strive for racial and ethnic diversity among both subsamples, along the way creating a group of respondents with greater diversity than the county population at large.

Prior to any data collection, the University of Wisconsin–Madison Health Sciences Institutional Review Board reviewed the study design and instruments. The board deemed the study exempt under federal common rule category 45 CFR 46.101(b)(2), but required that the investigators conduct the research in accordance with the highest ethical standards.

Data Collection

Study team members posted and distributed recruitment flyers in university buildings, public libraries, Planned Parenthood centers, health clinics, bus shelters and job corps offices. They also circulated recruitment e-mails to university groups, public health departments, WIC representatives, and other pertinent health and social services organizations. Information about the study also appeared in the community volunteer and "etc." jobs sections of Craigslist and in a free local weekly newspaper. Some

participants referred friends and sisters. To establish eligibility, the project director conducted screening calls with all community respondents and sent screening e-mails to university respondents.

Data collection took place between January and June of 2014. University focus groups met in a campus conference room; community focus groups, in a conference room of a university health clinic located in a bus-accessible, less prosperous area of the city. Focus groups contained 3–10 participants each and lasted 1.5–2.5 hours. Interviews took place at a campus office and lasted 25–55 minutes. The author facilitated all focus groups, and the project director (who was trained in qualitative methods and certified in the protection of human subjects) conducted all interviews.

The study team developed a semistructured guide for both focus groups and interviews. The sections on pregnancy ambivalence and LARC methods began as follows: "Some people are really clear they want to avoid pregnancy, some people are really clear they want to become pregnant, and some people are somewhere in between." Focus group probes included these: "How might one's relationship status affect her pregnancy intention or desire for a pregnancy?" and "How might someone's pregnancy intention affect a woman's decision to use an IUD or implant?" Interviewees were asked to reflect on their feelings about getting pregnant and, if applicable, their partner's feelings about pregnancy at the time they got their LARC method.

At the conclusion of the focus group or interview, each participant received a gift card and, if desired, a bus fare card to cover transportation costs. University students received $20, and community residents received $30. All focus groups and interviews were audio-recorded and then transcribed by either a team member or an independent transcription service.

Analysis

A modified grounded theory approach informed data analysis:[34] The research team allowed themes to arise inductively from the data, but these themes were deductively shaped by preexisting research questions and the larger literature. About halfway through data collection, the author generated a coding report of dozens of possible codes based on both the research questions of interest (including a code titled "pregnancy desires, pregnancy ambivalence and LARC") and themes that arose during data collection. Study team consultation helped winnow the list down to 20 codes. Four trained team members, certified by the institutional review board, applied codes to relevant blocks of text in each transcript. Two people independently coded each transcript, then met to discuss each code until reaching 100% agreement. Then one coder per transcript entered all codes into Atlas.ti, a software package for managing and analyzing qualitative data. For this analysis, all team members read over the pregnancy desires and ambivalence coding report, noted preliminary subthemes, and met to compare and confirm a list of subthemes. Those subthemes became the basis of the results presented here.

After identifying subthemes, the author and another study team member trained in qualitative methods used descriptive and analytic cross-case analysis[35] to document thematic differences, with mindfulness toward distinguishing between focus group data and interview data, and between ever-users and never-users of LARC methods. Quotations from focus groups are not fully comparable units of analysis to quotations from interviews, given the different dynamics of these data collection strategies. However, because this study was exploratory in nature, and focus group participants told both personal and anecdotal stories (rather than merely discussing attitudes and larger social norms), interview and focus group data are reported.

RESULTS

Of the 40 focus group participants, 19 were university students, and 21 were community residents. Among the 12 interviewees, four were students, and eight were community residents. Participants represented a range of racial, ethnic and educational backgrounds (Table 1).

Four salient themes emerged: spectrum of pregnancy desire, which corresponded with a spectrum of receptiveness to LARC methods; perception of LARC methods as too permanent; life stage and age influences on pregnancy ambivalence and LARC use; and relationship stage influences on pregnancy ambivalence and LARC use. Some themes overlap. For example, both life stage and relationship stage could influence pregnancy desires and, thus, LARC attitudes. Such overlap highlights saturation and reliability in the data.

TABLE 1. Selected characteristics of participants in a qualitative study of pregnancy ambivalence and long-acting reversible contraceptive use, by study arm, Dane County, Wisconsin, 2014

Characteristic	All* (N=50)	Focus groups (N=40)	Interviews (N=12)
Participant type			
University student	23	19	4
Community resident†	27	21	8
Race/ethnicity‡			
White	32	22	10
Black	5	5	1
Latina	6	6	0
Asian	3	3	0
Native American	2	2	0
Biracial	3	3	1
Highest level of education			
High school	2	2	0
Some college	29	24	6
≥college	15	12	4
Missing	4	2	2
Ever used an IUD or implant			
Yes	18	9	12
No	32	31	0

*Total N is less than the sum of the subgroup Ns because two focus group participants also participated in interviews. †To be eligible to participate, community residents had to be receiving at least one form of public assistance. ‡Two participants selected more than one race.

Spectrum of Pregnancy Desires

As in other research,[20,36–39] respondents portrayed pregnancy desires as a continuum, with strong desire for pregnancy at one end of the spectrum and strong desire to avoid pregnancy on the other. Overwhelmingly, both LARC ever-users and never-users reported that the clearer someone was about her desire to avoid pregnancy, the more likely she would be to use a LARC method.

LARC ever-users typically described a strong desire to avoid pregnancy as a critical precursor to their consideration of an IUD or implant. For example, one student reported in her interview, "Back when I decided to get my IUD, I was like, I'm not getting pregnant for the way foreseeable future. It was a totally off-limits." Another student said in an interview, "I looked into the IUD, and it looks really effective … and [there's] no user error because you can't really mess it up. And it's good for five years, and I definitely don't want to have kids for five years."

Similarly, strong desires to not get pregnant could influence LARC never-users' willingness to see themselves as potential users. One never-user in a community focus group said, "I'm in my mid-20s, and I don't want to have kids ever, ever. So long-term birth control is really appealing to me." And another reported, "Right now, I would like the safest, best method that works. I'm 21. I can't say I don't want any more kids ever, but for right now, I'm saying I really, really don't."

However, a number of respondents were far more ambivalent about their current pregnancy desires. These young women were relatively unlikely to perceive themselves as LARC users, particularly if they did not want to plan exactly when to become pregnant—but perhaps wanted a pregnancy to "just happen." For example, a community focus group participant who had never used a LARC method said: "One of the reasons that I haven't gotten an IUD yet is … the IUD takes the element of surprise out of when we would have our next kid, which I kind of want. I don't want to put too much thought and planning into it." Another never-user in a community focus group said, "I don't know if I'd want these methods since they're so … effective. I know it's an unhealthy thinking pattern, but sometimes … I'm like, 'Well maybe if I had a baby, my life would be okay.' But I don't ever want to plan it, because I don't really want a baby, and I can't really afford a baby. … That's just so illogical, but it happens to me."

Few respondents who were ambivalent about pregnancy talked about discontinuing contraceptive use. However, they preferred using methods that were less effective, more subject to user error or easier to discontinue than IUDs and implants. For example, participants described how oral contraceptives could be a better option for people who are not trying to get pregnant but are not doing everything they possibly can to prevent a pregnancy. One university focus group participant and never-user said, "If someone was leaning toward wanting to be pregnant, it would decrease their likeliness to use an IUD just because it seems like so permanent and more effective than other things. Whereas like the pill … it's still pretty effective, but if you vary in time, maybe that could change it, like if you forget one day. … There are the slight possibilities." Similarly, a community focus group participant and never-user remarked: "The IUD is definitely not for the ones who are like, 'Yeah, I want to get pregnant.' It's [not] like the pill that you can just stop whenever you want … [or] miss a lot of pills." Finally, a never-user participating in a community focus group said, "A person might not want the most effective method available. … Because like when people do get pregnant, it's not the worst thing in the world."

Even ever-users who had relatively clear motivations to avoid pregnancy could understand and sympathize with how complex pregnancy desires could undermine the most effective contraceptive use. An ever-user in a community focus group described the nuanced relationship between pregnancy desires and LARC use in these words:

"Whether or not you're going to use an IUD depends on where exactly you are on the 'don't want to have babies' spectrum. There are people who plan and say, 'We don't want a kid now, so we're going to use contraception, but if it happened by accident, it wouldn't be the worst thing in the world.' And then there are people who say, 'I do not want a baby, and if I get pregnant, I'm having an abortion.' If you're in a couple, the IUD takes away the element of surprise of having babies, which some people want and some people really, really don't want. You can accidentally forget the pill and get pregnant. But an IUD's not going to pop out and take a jog around the block."

Perception of LARC Methods As Too Permanent

Although all participants recognized that IUDs and implants are reversible, some described a "mental barrier" regarding the idea that these devices can be removed. Discontinuing LARC use seemed more cumbersome than discontinuing other methods. And rather than feeling as if contraceptive agency is increased by the long-term effectiveness of LARC methods, respondents seemed to feel that agency is diminished by the "permanent" aspect of these methods.

A never-user in a community focus group remarked:

"Even though I know that … you can pull out the IUD yourself or you can go to the doctor and it's a super simple procedure, there's still that mental barrier. It can last 10 years. Even though I know you can stop whenever you want … since it's so long-term, it's hard to wrap your mind around [that] you can end it quicker than that."

A community resident reported in an interview:

"When I got my IUD, a couple of friends were like, 'That seems very drastic.' There seems to be this perception that it's very permanent—and it's not. But … it's arguably a lot more permanent than taking a pill, because you can just stop taking a pill or stop using condoms or whatever."

Along similar lines, a never-user in a community focus group said, "If I'm going to go through the trouble of getting an IUD, I'm not going to want get it out in a year when I think I want to have a kid. So it's just too permanent."

However, some respondents liked the perceived permanence of LARC methods. For them, an IUD or implant provided an opportunity to "outsource" their ambivalence or indecision: The device could, in essence, make a default fertility decision until the woman decided to have a baby and have the device removed. For example, a current LARC user in a community focus group said:

"For me, the fact that the IUD was easily removable helped my indecisiveness [about pregnancy]. Because I do like kids, and they are cute, and they work for me. And you know, I love having children. But maybe not right at this moment, or maybe next year, or maybe in two years. … An IUD could still have that safety in case I went back to not knowing at all. You know, I had more control of my indecisiveness."

And for other participants, especially those really clear about wanting to avoid pregnancy for the foreseeable future, LARC methods' comparative "permanence" made them especially appealing. A university interviewee remarked, "One thing I like about my IUD is just the fact that it lasts so long. … It lasts for five years, and you don't have to do anything. … It's pretty much equivalent to having your tubes tied."

Age and Life Stage Influences

Despite participants' fairly narrow age range, they varied considerably in terms of how their age and life stage influenced their desire for pregnancy in the near future. Age and life stage associations with pregnancy intention could, in turn, affect whether young adults consider themselves potential LARC users.

Participants described LARC methods as more appropriate for younger women than for women in their late 20s, who are more likely to want children soon. The perceived costs of an unintended pregnancy were higher for younger women, who thus wanted additional contraceptive protection. A community resident, and current LARC user, said during an interview, "When I decided to go on contraception for the first time, I decided I'd like an IUD. And at first [my provider] said, 'Maybe you'd want to consider the pill.' And I said, 'I'm too young to accidentally have a baby. I don't want to forget a pill and have a baby at age 20. That would be very bad for my life.'" Expressing a similar sentiment, a community member with no LARC history reported in a focus group, "I'm in my early 20s, so I don't think I want to have kids for a while. So [the IUD] seems like a more viable of an option for me. But if I were seven, 10 years older, I'd be a lot more hesitant even if I wasn't like planning on having a kid."

Some women in their late 20s were more likely than younger women to think of themselves as being open to pregnancy. A never-user said during a community focus group, "Yeah, I'm kind of in the ambivalent category. I'm in my late 20s, I think about pregnancy often, but I don't really want to get pregnant. But my body does, sort of, maybe? And so I'm a little bit apprehensive about IUDs, and … do I want to commit to several years? Probably not." Another never-user from the same focus group concurred: "I'm with [her]. Yeah. I'm in my late 20s, so I feel like an IUD's not a good option for me at this stage in my life."

Life stage, which was often (but not always) connected to age, could also strongly shape young women's pregnancy desires and receptiveness to LARC use. Those engaged in educational endeavors or early career building were often motivated to avoid a pregnancy in the immediate future. As one community resident related in an interview, "When I got the implant, I knew I was going to be in the military for four more years, and on top of that, I want to go for my degree in psychology. Having a baby would really screw all of that up. … My future would be ruined."

In a narrative strongly influenced by social class, college students in particular were at a life stage where they could hardly conceive of having and raising a baby. One never-user in a university focus group said, "The IUD makes more sense when I'm 20 and halfway through college. If I'm 25 and in a relationship for a year, then maybe it seems worth it to use something less effective. But right now, I cannot get pregnant." A community resident and current LARC user reported in an interview, "Women going into college are definitely good candidates for IUDs and implants. I know a lot of people who are like, 'I really just want to get my degree and everything. … I do really want to have kids, but I just don't want to have them right now.' I think a six- to seven-year window is enough time for someone to finish her college career and get a job. Then when the IUD comes out and her fertility returns, then she's ready to have kids." LARC use could virtually ensure a lack of unintended pregnancy until young adults have reached goals related to their education and professional development.

Relationship Stage Influences

Generally speaking, the perceived costs of an unintended pregnancy were highest in newer relationships; after intimacy had grown within a couple, women were more open to the idea of an "unintended" pregnancy. Thus, the women who were most receptive to LARC use were those who were in a fairly new relationship, were not in a relationship, were sexually active but not romantically entangled, or were in multiple sexual partnerships. A current LARC user in a community focus group remarked:

"I think especially out of a relationship, the IUD's great; it's really good having that peace of mind. If you're in a committed relationship and a baby happens, hopefully you can deal with it or have that discussion together. But if you're not, and you wind up pregnant, you have to figure out what you're gonna do all on your own."

Similar sentiments came from a never-user in a community focus group:

"If I were to get pregnant with my partner right now, I probably would feel extremely confused. I'm in a committed relationship, but I'm actually not ready for children. If I were to get pregnant in a less intense relationship, I know exactly what I would do: I would get an abortion. If you're with multiple partners, with the IUD it's hands-down easy

to know there's no chance of anything happening with anyone, anywhere, any time."

DISCUSSION

Given their unparalleled effectiveness and acceptability, IUDs and implants can improve women's lives, reduce levels of unwanted pregnancy and decrease public costs.[4] Yet, because of their relatively low uptake among young adults—particularly nulliparous young adults[7]—researchers and practitioners have been working feverishly to reduce both knowledge barriers and access barriers to LARC methods. However, the pregnancy ambivalence and "looser" pregnancy desires that can be especially prevalent among young adults[24] are an underexamined barrier. This analysis addressed this gap by documenting 50 young adult women's receptiveness to LARC use in light of their myriad pregnancy desires, all of which were influenced by their age, life stage and relationship profile. Findings consistently indicated that many young adults may opt out of LARC use not because of lack of knowledge or access, but because of shifting fertility desires, ambivalence or soft hopes to have a baby in the not-too-distant future. Pregnancy ambivalence appears to explain at least some degree of some young adults' resistance to these methods.

Findings from this study add support to the notion that knowledge about and access to contraceptives are necessary but not sufficient factors in contraceptive uptake. In order for people to initiate and continue using contraceptives, methods must align with their social, relational, sexual and fertility goals.[40] As this and other studies[19,20] suggest, people may receive important psychosocial benefits from not using contraceptives or from using methods that are less effective and that may allow pregnancies to "just happen." Along these lines, the findings presented here further challenge the notion that effectiveness is the only factor or the most important factor that matters to women when they are choosing to begin or continue a contraceptive method.[41] How contraceptive users evaluate the importance of a method's effectiveness appears to be fluid. Young adult women in this study articulated how they want extremely effective contraception when life stage, age or relationship stage demands strong motivation to avoid pregnancy. However, when women are more open to—but not certain about—the idea of a baby, they might want a method that helps prevent pregnancy but is not too effective.

Along these lines, findings augment the growing literature on the relationship between contraceptive behaviors and the array of orientations toward pregnancy, including happiness versus unhappiness, fatalism, acceptability and even sexiness.[20,21,38] These domains of pregnancy attitudes are linked to contraceptive selection and use in complex ways. For example, in a study of 578 Latina women, those who expressed happiness at the prospect of an unintended pregnancy were no less likely than those who expressed unhappiness to select an IUD or implant as their preferred method of contraception.[42] (Women in that study were not classified as ambivalent about avoiding pregnancy; rather, they reported incongruent intentions and feelings, but may still have held strong desires to avoid pregnancy.) In a qualitative study of 52 women aged 18–30, many participants described a kind of fatalism with regard to both pregnancy and contraceptive use.[38] Some articulated how contraceptives needed to be used to avoid pregnancy, but still allowed that fate played a role in whether and when pregnancies occur. The authors found links between these beliefs in fate and destiny and some women's inconsistent contraceptive use and contraceptive failures. In the current study, women were not asked about the role of fate or happiness in their desires to achieve or avoid pregnancies. However, they did consistently indicate that those who are strongly motivated to avoid pregnancy would be the most likely to seek out the most effective methods available.

Implications

One cannot assume that all women seeking contraceptive services have the same (strong) desire to avoid pregnancy or that all patients equally value contraceptive effectiveness. Women presenting at a clinic to select a new method will have a wide range of pregnancy desires and method preferences, and counselors and providers should take care to assess these profiles.[19] Motivational interviewing, a counseling approach that gives clients an opportunity to resolve ambivalence,[43] may help clients process competing desires to have and not to have a child. However, the degree to which counselors or providers can or should sway women's pregnancy desires is unclear and worth further debate. Fertility desires remain deeply personal; they also may shift from day to day and month to month.[44] On the other hand, at least some women in this study spoke positively about how LARC methods could help them manage their indecisiveness about pregnancy. For them, choosing a LARC method meant forgoing the "maybe" that young adults so commonly express. So for some, LARC methods may offer a way to manage ambivalence, not a suppression or subjugation of fertility desires.

Along those lines, findings also have implications for LARC promotion. In touting LARC methods, advocates should remain sensitive to women's varied motivations to prevent pregnancy. For example, campaigns may want to highlight these methods' benefits in addition to (or even in place of) their effectiveness and long-term action. Such benefits include LARC methods' forgettable nature, their potential to improve (or at least not worsen) women's sex lives, and the reduction or cessation of menstrual bleeding experienced by users of levonorgestrel IUDs. Contraceptive clients should also be reminded that they can have LARC methods removed whenever they wish—and then they must be supported in their efforts to do so. A number of LARC-promoting initiatives have covered the cost of the devices (and sometimes insertion), but not the cost of removal.[45] Without such guaranteed coverage, programs will only increase women's fears about the time frame or "permanence" of LARC methods.

Limitations

The study's findings should be considered in light of its limitations. Most centrally, this qualitative study did not have sufficient sample size or participant diversity to analyze how pregnancy ambivalence may have differed according to social inequality. Although the sample did contain socioeconomic diversity, the survey instruments and data collection techniques were not specifically designed to assess how race, class and other axes of inequality may have influenced people's orientations toward pregnancy and thus their receptiveness to LARC methods. People's perspectives on pregnancy intention and planning can be shaped significantly by their communities, social location and social opportunities.[21,37,46] Thus, while this analysis made an important step in documenting young adult women's orientations toward LARC methods in light of pregnancy ambivalence, future researchers are encouraged to conduct such analyses with a clearer eye toward social inequality.

Another limitation is that this study was restricted to a focus on IUDs and implants even though U.S. women and couples more frequently use other methods;[47] other work examines pregnancy ambivalence in relationship to a broader array of contraceptives.[19,20,31,43,44] Furthermore, since interviews took place only among women who had used an IUD or implant, only the focus groups allowed for exploration of whether pregnancy ambivalence had led women to choose non-LARC methods.

Conclusion

According to various measures and data sources, upward of half of U.S. adults at risk for unintended pregnancy may be ambivalent about whether they want a child (or another child).[24] Nevertheless, efforts to increase U.S. women's use of highly effective contraceptive methods have paid little attention to mixed or wavering pregnancy desires. Such efforts tend to assume that all contraceptive clients, or potential clients, are clear in their desire to prevent pregnancy and likely to value contraceptive effectiveness over all other criteria. However, this study suggests that pregnancy ambivalence may lead some (but certainly not all) young adult women to choose methods other than highly effective ones, even if they have LARC knowledge and access. Although it is important to continue breaking down barriers to make LARC methods available to all women who might wish to use them, it is also important to appreciate and respect the array of individual preferences and profiles that will lead some women to choose other methods even when fully informed of their options.

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