

Assessing Delaware Parents' Knowledge, Attitudes and Preferences About Long Acting Reversible Contraceptives for Teens Using Participatory Action Research

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Abstract

OBJECTIVE: To decrease barriers to long-acting reversible contraception (LARC) for teens, this study aimed to reveal knowledge, attitudes, and beliefs that parents have about LARC.

METHODS: A participatory action research approach was used. We recruited a diverse group of community researchers who participated in all phases of our study. Four focus groups were recruited using snowball sampling. Two researchers used a values coding process to code data independently. The team met to identify emerging themes. **RESULTS:** The 46 parents were predominately female and ethnically diverse. Preventing teen pregnancy was salient although a double standard between parents of boys and girls became apparent. A key theme that emerged was the importance of prevention of sexually transmitted infections (STIs). There were some reservations about LARC provision in school-based health centers. Another theme was the need for access to confidential birth control for other teens but not for their own teens. Lastly, the advantages of LARC mentioned were effectiveness and ease of use. The disadvantages were increased STIs, risky behavior, hormonal changes, and side effects. **CONCLUSION:** Most of the parents in our study had limited knowledge of LARC. They were aware of its benefits but were uneasy about actual and perceived side effects.

Introduction

Teen pregnancy continues to be a significant public health and socioeconomic issue in the United States and in Delaware.¹ This is despite the significant decreases in teen pregnancy, birth, abortion, and sexual activity rates over the past two decades in our state and country.^{1,2} Delaware has a teen (15-19) pregnancy rate higher than the national average (46 vs 43/1000 girls) and has

the 3rd highest pre-teen (10-14) birth rates.² Delaware Latinas ages 15-19 have the highest Hispanic teen pregnancy rate in the country (95/1000 girls) and girls in Delaware have the 5th highest black teen pregnancy rate (76/1000).² The consequences of teen pregnancy affect teen fathers, teen mothers, their offspring, and society as a whole. These include reduced academic and career achievement, infant mortality, behavioral health problems, and increase taxpayer expenditures on public services.³ Delaware teens also have the 4th highest teen abortion rate in the US.²

Despite the marked decrease in teen pregnancy rates, sexually transmitted infection (STI) rates amongst teens and young adults are at record highs.⁴ In 2017, 2.3 million STI cases were reported.⁴ That is 200,000 more cases than 2016.⁴ Delaware's chlamydia and gonorrhea rates are amongst the top 15 in the United States.⁵

Nearly a quarter of Delaware 9th graders and nearly two-thirds of Delaware 12th graders have had sex.⁶ 69% of Delaware's sexually active teens did not use any form of hormonal birth control the last time they had sex.⁶ Oral contraceptive pills and condoms are the most commonly used form of contraception for teens.^{6,7} Long acting reversible contraception (LARC) has been shown to be the most effective form of birth control for women of all ages.⁷⁻⁹ In 2014, the American Academy of Pediatrics recommended that LARC be considered the first line contraceptive choice for adolescents.⁸ There is some concern that with teens who use LARC methods will decrease use of condoms and that could lead to increased STI risk in this population.¹⁰ More recently, the American College of Obstetrics and Gynecology emphasized that dual method use-condoms paired with more effective contraceptive methods is the ideal contraceptive practice for teens.⁹

Nevertheless many places where Delaware teens received reproductive health care (school-based health centers, walk-in teen clinics, detention centers, Job Corps, pediatricians' offices, etc.) did not provide LARC for teens at the start of this study. Practitioners at these sites were concerned about the administration of LARC in teens without parental knowledge or consent, although teens can legally consent to these services in Delaware. Because traditionally these services were provided to older women and by gynecologists it was unclear if the community would be accepting of these new guidelines and of non-gynecologic providers providing this care.

At the same time that we received funding for this project the Delaware Contraceptive Access Now (CAN) started.¹¹ This effort by the state in partnership with the nonprofit Upstream USA is a transformative project to reduce unintended pregnancy. Delaware CAN's goal is to increase access to contraception for all women of reproductive age so they are empowered to become pregnant only if and when they want to.¹¹ The concept inspired by the CHOICE Project which decreased unintended pregnancy by increasing access to any method a women wanted including LARC.^{11,12} While Delaware CAN is not particularly a teen pregnancy prevention intervention, 77% of teen pregnancy is unplanned.^{1,2}

From a public health standpoint, it makes sense to increase access to contraceptive services. However, access is just one of the barriers to community uptake of a public health intervention. Reproductive coercion is defined as threats or behaviors that influence reproductive decision to pressure an individual into initiating, keeping, or terminating a pregnancy.¹³ Historically partners, health care professionals, governments, and courts have coerced women into using contraception with both well-meaning and nefarious intentions.^{9,13,14} Vulnerable communities such as minorities, low income, disabilities, at risk youth, immigrants, and those involved with

the justice system have been targets of reproductive coercion in the past and may be more hesitant to participate in clinical trials or public health efforts due to these prior abuses.^{9,14} Thus our team sought to explore how accepting these communities would be for LARC for their teens.

The specific aims of our project were to reveal current knowledge, attitudes and beliefs that Delaware parents of teens have about LARC, to understand parental preferences about administration of LARC, and to disseminate results to the public to help decrease barriers to LARC for teens.

Methods

In order to address potential community concerns around LARC use in teens, a participatory action research approach was chosen. Participatory Action Research (PAR) is research approach that emphasizes participation of community members with a focus on actionable data.¹⁵ This project was led by an academic principal investigator (PI) and community co-investigator (CI). We recruited a diverse group of community researchers who were parents of teens and they participated in all phases of our project (study design, data collection, data analysis, and dissemination).

Focus group participants were recruited using snowball sampling via social networks, affinity resource groups of a hospital, and a workforce development program. In order to be sensitive to racial/ethnic concerns and differences regarding contraception, we chose to cluster focus group participants by their race/ethnicity. We held four two hour long focus groups (2 White, 1 Black, 1 Latina) led by 1-2 community researchers who matched the ethnicity of participants. Group discussions were led by community researchers and the PI using a 36-question semi-structured discussion guide that was developed by the entire research team using the integrative behavioral model. Participants were compensated for their time and opinions by receiving dinner and a \$55 gift card.

Two researchers used a values coding process to code data independently (manually and with NVivo 8). The researchers then met with the research team to identify emerging themes and resolved discrepancies by consensus.

Results

The 46 focus group participants were predominately mothers of youth ages 9-20 and ethnically diverse. The majority thought their teens were (24%) or possibly (28%) sexually active. 17% of the parents in our focus groups have used a LARC method (see Table 1). There were a few themes that emerged as the result of our focus group discussions.

Table 1. LARC PAR Focus Group Demographics

Gender	90% Female	10% Male		
Parenting status	95% mother of father of teen	1 Grandparent	1 stepparent	
Education	27% Advanced Degree	22% College	20% High School and some College	
Race/Ethnicity	50% White	30% African American	20% Hispanic	

Religion	74% Christian	24% No preference		
Residence	70% Suburban	26% City	100% New Castle County, DE	
Income	33% >\$100,000	20% \$50-99,000	26% \$25-49,000	17% <\$25,000
Insurance	78% Private	22% Medicaid		
Works In Healthcare	72% No	18% Yes		
Sexually Active Teen	24% Yes	28% Unsure		
Use of LARC	17%	7 IUDs	1 implant	

Importance of Teen Pregnancy Prevention: Girls>Boys

Preventing teen pregnancy was salient although a double standard between parents of boys and girls became apparent.

I have a son and a daughter. My views and concerns are very different because I have to worry about the possibility of her getting pregnant but with him, I have to show up at somebody else and say, "Oh! Sorry about that." (Latina Participant)

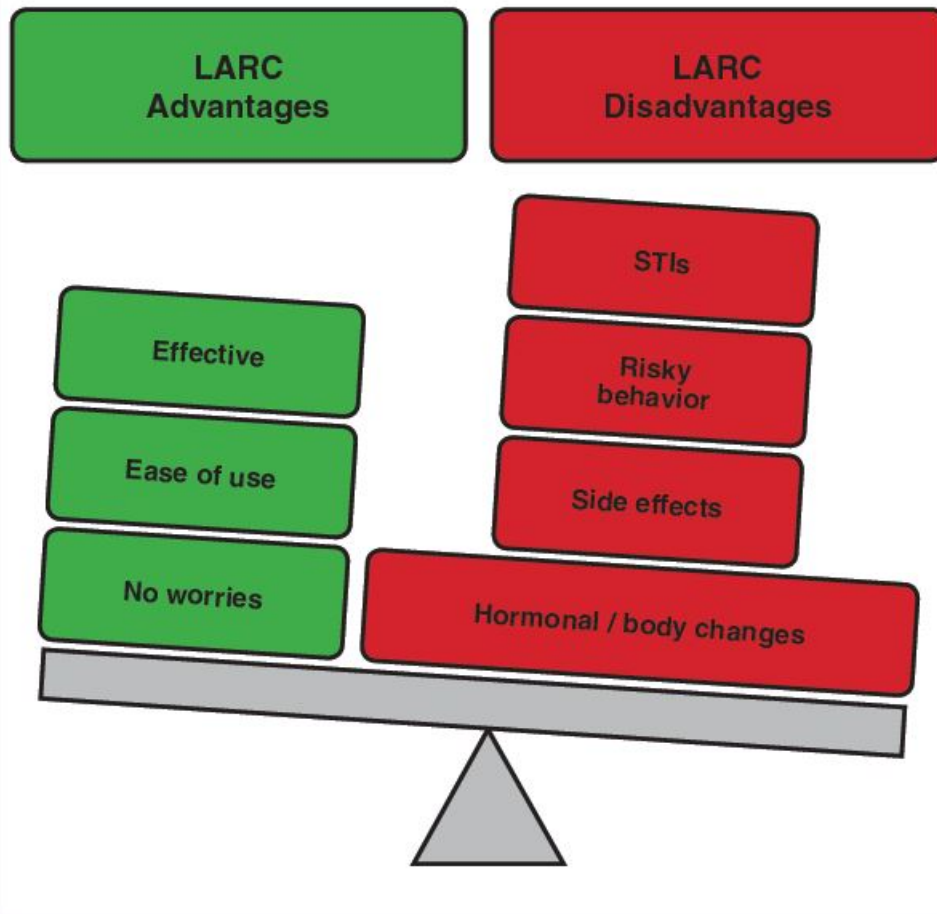
I don't think it should, but I think it does. I think unfortunately generally what happens when a teenage girl becomes pregnant, then that responsibility falls on her family. It's unfortunate but that is what happens. I do think it becomes more important for their family to make sure their daughter does not become pregnant. Where the parents of the boy are like, "Boys will be boys" and see what happens. (White participant)

Unfamiliarity with LARC methods for teens

Parents could list all methods of birth control including LARC but were not familiar with LARC methods. The advantages of LARC mentioned were effectiveness and ease of use. The disadvantages were increased STI risk, hormonal/body changes, and worries about infertility (see Figure 1).

You got just everything now so I'm not privy to all these birth controls. I tried Depo, I blew up, but I'm like, if it ain't natural and what should be stopping your cycle when that's a God-given thing and that should come naturally. They got pills, they got stuff to go on the arm, then you can see it and I don't know enough about it that I would want my child to try this. (Black Participant).

Figure 1. LARC Advantages and Disadvantages



Preventing sexually transmitted disease is as important as pregnancy prevention

Despite there being only one question in the focus group discussion guide about LARC and STIs, the importance of STIs was a key theme that emerged in all the focus groups. Parents were concerned both about risky behavior and decreased condom use in teens who used LARC methods. They also wanted to make sure STI prevention was being discussed by LARC providers. Condoms were thought of a method that had no side effects and had the benefit of protecting against pregnancy and STIs.

Condom I think is a better thing, because avoid pregnancy, avoid transmission of disease (Latina participant).

Sometimes I feel a great threat of diseases as a consequence rather than pregnancy should my teenager become sexually active (White participant).

Confidential Services are for those kids not my kids

Another theme was the need for access to confidential birth control services for teens of *other* parents but not necessarily for the teens of the focus group participants.

I'm okay with this, only because I think there's a lot of children don't have the parental support that we have in this room, and

there's a lot of teen pregnancies in homes where they don't have the traditional structure, or parents are working all the time, so I would rather they have access than not. (White participant)

So of course, you wouldn't want your child going in because you feel like you have a relationship but for those parents that don't or they aren't comfortable. Like for me, when I was growing up I had something like that, that I felt comfortable because my mom didn't talk to me. That's why I'm not against the idea of it because I think who that service is there to serve. (Black participant)

Reservations about LARC at SBHCs

While accepting of the provision of birth control in SBHCs, parents were concerned about LARC services in SBHCs due to concerns about lack of a sterile environment and lack of additional personnel available that would be available in a doctor's office or hospital. In addition there were concerns that there may not be as much privacy in a SBHC compared with a traditional health care provider setting. Lastly, there were concerns about younger teens accessing these services in a SBHC.

It's {school clinic} not a sterile environment. (White participant)

The kids in school, everybody know everybody's business. (Black participant)

Population Control

Although not a central theme, the two minority groups did discuss the use of LARC to control or limit their ethnic population. In the black group there was more of a concern that violence would limit the growth of their population than the increased use of LARC. Neither of the two white groups thought this was a concern.

I do want to make a statement. I've got nothing against you that you are facilitating this session. So I'm always suspicious at nature, so these questions that if {local health care system} is sponsoring it gives me the impression, that {local health care system} is trying to target the Hispanic community for LARC. Then what's the underlying agenda there? Is it that we're overpopulating and there are too many kids coming out of our community, so let's stop the population, so let's give them LARC? Seriously I get very suspicious at first. I have read a lot of stories. (Latina participant)*

If more Black men's keep getting killed, it's going to slow it {the population} down. (Black Participant)

*Name of local health system mentioned edited out to maintain confidentiality

Discussion

Prior studies have focused on patients and providers' contraceptive beliefs, usage/provision rates, and/or accessibility to contraception. A few have surveyed parents or the public's beliefs about

confidential care and access to contraception. Furthermore none have taken an in depth approach to the use of LARC specifically. This is important as LARC differs from other forms of contraception in that it requires invasive procedures that lead to implantable birth control methods that cannot be stopped without provider intervention.

This qualitative study of Delaware parents knowledge, attitudes, and preference about LARC use in teens is our group's first step to understanding what themes are salient to parents. Most of the parents in our study had limited knowledge of LARC. They were aware of its benefits but were uneasy about actual and perceived side effects. They were receptive to birth control for teens in all health care settings but had some concerns with LARC being provided in SBHCs. Many participants expressed a desire for communication and involvement with their teen's birth control decisions but understood the need for confidential services especially if those services were for other people's kids. Most importantly they want to be reassured that LARC providers will continue to emphasize STI prevention.

LARC use in women of reproductive age is a hot topic in our state and around the country. There are many studies that look at adult and adolescent patient acceptance of LARCs but not many that look at how the community views these services. Parents are still the primary influencers of their teens and their opinions about this form of birth control can be a barrier or a facilitator to their teen's access to services. Our study shows that parents are open to these methods but may have some reservations. STI rates are increasing locally and nationally amongst youth and young adults during the same time that LARC use is increasing in this population. While there are no studies that explicitly link the two phenomena, communities may perceive a cause and effect relationship that could lead to decreased uptake of these highly effective methods of contraception.

There were a few limitations to this study some of which are inherent to a qualitative study design. This was a small study of mostly highly educated, biological mothers of teens in New Castle, County and the results may not be generalized to other parents/guardians in the rest of the state or outside of the state. We used the themes that emerged in this study to create a quantitative survey which was distributed to a larger sample statewide. New Castle County, Delaware is a small part of a small state so participants may know each other and the subject matter was very personal. Focus group participants may have not wanted to share their true feelings on this subject due to concerns for confidentiality and due to social acceptance bias. The PI and CI were both providers of adolescent reproductive health services in the area and attended and/or co-facilitated each group which could have led to moderator acceptance bias. We tried to control for this by having the community researchers be the lead group facilitators and by having other research team members present and taking notes during the group in order to decrease bias. We also tried to decrease analysis bias by validating emergent themes with the multiple members of the research team.

Conclusions

Preventing teen pregnancy is still very important to parents of teens although it was more important for their daughters than for their sons. Parents had some but not always accurate or extensive knowledge about LARC methods. They had concerns about safety of LARC methods and that teen LARC use would lead to riskier behavior and increased STIs. Parents want communication and involvement with their own teen's contraceptive choices but were accepting of confidential services for kids of other parents.

Recommendations

- 1) Craft teen and parent of teen-specific messaging regarding LARC that addresses safety, future fertility, STI prevention, and why condoms alone is not sufficient to prevent pregnancy.
- 2) Ensure through evidence-based research that STI rates are not increasing due to increased use of LARC amongst teens (ex: tracking contraceptive method on STD reports, LARC registries, etc.)
- 3) Target boys and parents of boys as important parts of teen pregnancy prevention and LARC education efforts.
- 4) Be sensitive to concerns of reproductive coercion of vulnerable populations and make sure practice policies and procedures are vigilant to avoid real or perceived coercion.

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