

Long-Acting Reversible Contraceptives for Incarcerated Women: Feasibility and Safety of On-Site Provision

CONTEXT: Many incarcerated women have an unmet need for contraception. Providing access to long-acting reversible contraceptive (LARC) methods—IUDs and implants—before release is one strategy to meet this need and potentially prepare them for reentry to the community, but the safety and feasibility of providing these methods in this setting have not been described.

METHODS: A retrospective descriptive study of all LARC insertions at the San Francisco County Jail in 2009–2014 was conducted. Data from community clinic and jail clinic databases were assessed to examine baseline characteristics of LARC initiators, complications from insertion, method continuation, and pregnancy and reincarceration rates. Correlates of method discontinuation were assessed in multivariate logistic regression analyses.

RESULTS: Eighty-seven LARC devices were inserted during the study period—53 IUDs and 34 implants. There were no cases of pelvic inflammatory disease or other insertion complications in IUD users and no serious complications in implant users. Median duration of known use was 11.4 months for IUDs and 12.9 months for implants. Women who discontinued a LARC method most commonly cited a desire to get pregnant (32%). Black women were more likely than whites to discontinue use (odds ratio, 4.4).

CONCLUSIONS: It is safe and feasible to provide LARC methods to incarcerated women. Correctional facilities should consider increasing access to all available contraceptives, including LARC methods, in a noncoercive manner as a strategy to reduce reproductive health disparities among marginalized women at high risk of unplanned pregnancies.

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Each year in the United States, there are more than two million arrests of women that bring individuals into contact with correctional facilities.¹ Approximately 213,000 women are behind bars on any given day,² and women are the fastest growing segment of the incarcerated population.³ Before and after their incarceration, most of these women experience poverty, racial discrimination, sexual and physical violence, mental illness, drug addiction, unstable housing, unemployment or limited access to medical care;^{4,5} hence, they constitute one of the most vulnerable groups of women in the nation.

The majority of incarcerated women are of reproductive age; indeed, 75% of women in prison are aged 18–44.⁶ Because of difficulties accessing reproductive health care in their communities, these women enter jail or prison with significant reproductive health care needs, including the need for contraception. One study of women entering jail found that those who had wanted to initiate a contraceptive method prior to incarceration were unable to do so because of economic, transportation or clinic access barriers.⁷

Previous research has identified an unmet need for contraceptive services among incarcerated women. One study reported that 84% of women were heterosexually active in the three months before entering jail, and 85% planned to be so within six months of release.⁸ Only 28–32% of incarcerated women reported that they were using a regular

method when they went to jail,^{8,9} and 60% of women at risk for pregnancy said they would initiate a method if it were available in jail.⁷ Yet very few prisons or jails provide contraceptive services on-site: In a survey of 286 correctional health providers, 38% reported that birth control was available at their facilities.¹⁰

The 1976 Supreme Court case *Estelle v. Gamble* established that incarcerated individuals have a constitutional right to receive health care.¹¹ However, *Estelle* did not specify what services must be provided. Generally, prisons and jails have not considered contraception to be a priority for a variety of reasons, such as funding constraints, competing health care priorities and overall lack of attention to women's gender-specific health needs.¹² Optional recommended standards from the National Commission on Correctional Health Care, a national accrediting organization, state that women should be provided with contraceptive counseling and the ability to continue a method used prior to incarceration, but make no mention of offering women the opportunity to initiate a method while in custody.¹³

Alongside this constitutional mandate for correctional facilities to provide health care, there exists a public health perspective that recognizes the limited access to care and the poor health status of many people entering jails and prisons.¹⁴ Incarceration thus creates a unique opportunity to provide much-needed services to individuals who

already experience reproductive health disparities, and such services can improve their health prior to release.¹⁵ A similar perspective can be applied to contraception: Offering it to women before release can avoid some of the barriers to care once they return to their communities, and can thus help women avoid unwanted pregnancies as they reenter society.

Given that long-acting reversible contraceptive (LARC) methods—IUDs and implants—require little ongoing maintenance, they are excellent methods for women who want to avoid pregnancy and who face health care system barriers. Providing LARC methods on-site would be a significant benefit to incarcerated women, since these “forgettable methods” do not require follow-up by the user (unless problems arise). However, the availability of these methods in jails and prisons is limited: In a national survey of correctional health providers, only 2% indicated that IUDs were available.¹⁰

Since 2009, the Women’s Health Specialty Clinic at the San Francisco County Jail has been offering LARC methods, in addition to non-LARC hormonal contraceptives (i.e., the pill, injectable, patch and vaginal ring), to women who are interested. To date, no published literature that we are aware of has described the use of LARC methods in this population. We undertook this study to describe the first five years of experience in providing these methods to women in jail.

STUDY SETTING

The San Francisco County Jail houses approximately 140 women per day.¹⁶ According to Sheriff’s Department statistics, 58% of these women identify themselves as black, 33% as white, 8% as Asian or Pacific Islander, and 1% as being of other racial background; 9% say they are Hispanic.¹⁷ Seventy-six percent have been arrested for nonviolent crimes. Recidivism is high—77% of women in the jail have been there before. The median length of stay for women is 82 days; stays range from 24 hours to several years.*¹⁷ The jail has an on-site clinic where routine, preventive and urgent medical evaluations are conducted. Within several days of being incarcerated, women are placed on the schedule to visit the clinic for an optional, routine women’s health exam; if a woman chooses to have this evaluation or initiates care herself through written request, she is typically seen within a few days, and generally within two weeks.

San Francisco Jail Health Services is a branch of the city’s Department of Public Health. Health information systems are shared between the jail and many of the city’s community clinics, where most incarcerated women obtain care

outside of jail. The women’s health clinic staff includes two women’s health nurse practitioners, who provide general women’s health care on a daily basis, and an obstetrician-gynecologist, who sees patients once a week with an obstetrics-gynecology resident in a referral-based Women’s Health Specialty Clinic. In 2009–2010, there were 199 patient visits in this specialty clinic; the most common reasons for referral were for birth control, complex prenatal care and abnormal uterine bleeding.¹⁸ All patient encounters in the jail clinics are documented in an electronic medical record system; the specialty clinic also records patient visits in a paper log.

Women at the San Francisco jail may elect to receive counseling about and to initiate a range of reversible contraceptives on-site, including the pill, injectable, levonorgestrel and copper IUDs, and implant. Those who desire the vaginal ring or the patch receive a prescription, which they can fill upon release from jail; women who choose the pill are given a pack to take with them, as well as a prescription for refills, and women on the injectable are given referrals to community clinics for their next dose after release. Sterilization is not available to women while incarcerated.

Access to on-site contraceptive services was accomplished incrementally over several years, first with the pill, then with the injectable. Subsequently, with the approval of the medical director, the jail’s clinic began making LARC methods available on a regular basis in 2009. Because Jail Health Services is a branch of the public health department, it is oriented toward developing programs with public health implications and increasing access to health care services for people who have difficulties obtaining care in the community; this perspective facilitated building a program that offers LARC and other methods. IUDs were provided through a grant to expand evidence-based training for clinicians in LARC provision and to increase access for vulnerable populations. This support removed financial barriers to providing LARC methods. All methods offered at the San Francisco County Jail are available at no cost to the patient. When women return to the community, many are eligible for contraceptive coverage through Medicaid or Family PACT, California’s contraceptive coverage program for those without insurance. Yet women may be unaware of these coverage options and may face other barriers to access,⁷ making LARC provision in jail a convenient option.

Counseling on reproductive life planning, including discussions of birth control when indicated, is offered to all women who see a women’s health nurse practitioner or obstetrician-gynecologist for any reason. Women are also made aware through flyers in their housing units of the women’s health services, including contraceptive services, available to them in the jail. At a clinic visit when contraception is discussed, women who express interest in a LARC method after hearing about all of their options receive detailed LARC counseling. If a woman is still interested in such a method, she is scheduled to see the obstetrician-gynecologist 1–2 weeks later for additional counseling and LARC insertion if she elects to proceed.

*An individual can be in jail for several years if a trial takes that long. Extended jail stays have become more common in California since passage of the 2011 Public Safety and Realignment Law, designed to decrease state prison populations. Under the law, responsibility for confining people convicted of nonviolent, nonserious, nonsexual crimes is shifted from state prisons to local jurisdictions, and there is no limit on the length of jail sentences.

Most of the initial counseling is done by a nurse practitioner. This two-visit protocol was designed to minimize the potential for women's perceiving coercion from providers to use a LARC method, given the inherently coercive environment of a jail. Another reason is the hope that this interval, along with counseling that focuses on goals for having or not having children, prevents vulnerable women from internalizing any message that clinic staff think they should be on birth control.

STD testing for women obtaining a LARC method is conducted in accordance with recommendations from the local health department. Specifically, all females up to the age of 30 are tested for gonorrhea and chlamydia when they present for care in the jail's clinic. If a woman getting an IUD at the jail, regardless of age, has not been tested during her current incarceration, testing is done on the same day as IUD insertion.¹⁹

METHODS

Sample and Procedures

Women who had had an IUD or implant inserted at the jail between March 2009 and June 2014 were considered for inclusion in this retrospective chart review. A list of eligible women was compiled from the Women's Health Specialty Clinic's comprehensive paper log of patient visits. This log indicated the timing of the insertion visit for women who were seen in the specialty clinic, and the electronic medical record system provided information on women's initial counseling visit, which took place in the general women's health clinic. There is no specific log of visits for this clinic, though notes from these visits are entered into the electronic system. Thus, we could determine when an initial counseling visit occurred for a woman who later had a LARC method inserted; however, we could not ascertain if women who were counseled on these methods in the general clinic either chose another method (or no method) or were referred for LARC insertion but were released from jail before being seen in the specialty clinic.

Once the sample was determined, we examined three main sources to collect information on women's demographic characteristics, complications from device insertion and long-term outcomes: the electronic medical record systems at the San Francisco jail and at two health department community-based medical centers. (Additionally, baseline information on race and ethnicity and on contraceptive method use was abstracted from the database of the program that provided the LARC devices to the jail.) A substantial proportion of formerly incarcerated people rely on the city's safety net hospital and community clinics for health care after their reintroduction to society; 12 health department clinics provide care to adults. Thus, these clinics' medical record systems contained information on whether women presented to various clinics with LARC-related issues after release from jail. We selected the two community clinics because records indicated that the women in our sample had follow-up visits at these sites (and not at the others),

likely because of their locations and the services offered. In addition, since a high proportion of released individuals get rearrested and return to the San Francisco County Jail,¹⁹ the jail's medical record system provided follow-up information on many of the women who had initiated LARC methods during a prior incarceration. We searched these data sources for outcome information on all women through August 2014.

Institutional review board approval was obtained from San Francisco Jail Health Services and the Committee on Human Research at the University of California, San Francisco.

Data

Baseline demographic and reproductive health data included age at LARC insertion; race or ethnicity; pregnancy history; history of induced abortion; most recently used contraceptive method prior to incarceration or at the time of device insertion; HIV status; whether gonorrhea and chlamydia testing had been done within the last year; and results of the most recent gonorrhea, chlamydia and syphilis tests before LARC insertion. We also collected information on reincarceration during the study period from the jail medical record system. STD information was included because of a common misperception that IUDs are associated with pelvic inflammatory disease,²⁰ and since many incarcerated women engage in high-risk sexual behaviors and are at increased risk for STDs,⁸ providers might be concerned about their use of IUDs. Information collected on the LARC insertion procedure included the type of device inserted, the date and the time elapsed between the counseling visit and insertion.

Outcome measures were complications from device insertion; LARC discontinuation, reason for discontinuation and IUD expulsions; and pregnancies resulting from device failure, discontinuation or expulsion. The complications evaluated for IUD insertion were uterine perforation and diagnosis and treatment of pelvic inflammatory disease within one month of insertion, both ascertained from medical record review of all women who received an IUD. Complications from implant insertion were cellulitis, hematoma and allergic reaction.

The follow-up time for each woman was defined as the length of time between the device insertion and the final recorded contact with Jail Health Services or one of the two community-based health centers. Continuation was determined by the last recorded visit in the jail system or community clinic at which the device was documented as present. Similarly, discontinuation was identified at follow-up visits when women requested removal of their LARC device or when evaluation revealed prior removal or expulsion, the initiation of a new birth control method or a pregnancy. Women who had a follow-up time of less than one month or who had no documented follow-up visit during the study period were excluded from the analysis of continuation and pregnancy. Duration of known method use was calculated as the time between insertion date and

TABLE 1. Selected characteristics of women who received a long-acting reversible contraceptive, by method, San Francisco County Jail, 2009–2014

Characteristic	All (N=87)	IUD (N=53)	Implant (N=34)
Mean age at insertion	29.5 (18–46)	29.7 (19–46)	29.1 (18–44)
Race/ethnicity			
White	29	34	21
Black	51	40	71
Hispanic	13	17	6
Asian/Pacific Islander	5	7	3
Native American	2	4	0
Pregnancy/abortion history			
Ever pregnant	90	87	94
Ever gave birth	70	68	71
Mean no. of births	2.7 (1–9)	2.7 (1–9)	2.8 (1–7)
Ever had abortion	54	57	50
Mean no. of abortions	2.4 (1–7)	2.4 (1–7)	2.4 (1–6)
Most recent contraceptive method			
IUD	17	21	12
Implant	5	2	9
Non-LARC hormonal	16	13	21
Condom	6	6	6
None	56	58	53
Tested for STDs in last year	100	100	100
Chlamydia diagnosis in last year	3	4	3
Gonorrhea diagnosis in last year	1	2	0
Median no. of days between initial counseling and insertion	9.5 (2–359)	9.5 (3–359)	10.0 (2–215)
Reincarcerated during study period	63	57	74

Notes: Figures are percentages unless noted otherwise; figures in parentheses are ranges. Percentage distributions may not total 100 because of rounding and, for race and ethnicity, because some women identified with multiple groups. LARC=long-acting reversible contraceptive.

documented removal date or most recent visit when the device was still in place.

Analysis

Data were analyzed using Stata version 13. We tabulated descriptive statistics of baseline demographic and reproductive characteristics, as well as insertion complications, among all women who received a LARC method. Bivariate regression analysis was used to identify characteristics associated with discontinuation. Multivariate logistic regression analysis was then performed using those covariates that were statistically significant in the bivariate analysis.

RESULTS

Baseline Characteristics

A total of 87 LARC devices were inserted in jail during the study period—53 IUDs (51 levonorgestrel and two copper) and 34 implants (Table 1). (Six women had two devices inserted during this period.) The average age of women at the time of insertion was 29.5 years (range, 18–46), and 71% were nonwhite. Ninety percent of women had ever

*Of the eight women with no follow-up information beyond a month, six had levonorgestrel IUDs, and two had implants. Their mean age was 34 (range, 22–40), and mean parity was three (range, 0–4); five had had an abortion. Equal numbers were white, black, Hispanic, and Asian or Pacific Islander. None had been rearrested in San Francisco during the study period.

been pregnant, and 70% had given birth; the average number of births was 2.7. More than half of women had had an abortion (mean, 2.4 abortions). Twenty-two percent were using a LARC method (mainly an IUD), 16% a non-LARC hormonal method and 6% condoms; 56% reported using no method prior to this incarceration. Twenty-three percent of women who received an IUD were already using a LARC method; for 11 of these 12 individuals, the full duration of their IUD had been reached, and the other one had been using an implant. Twenty-one percent of women who got an implant had been using a LARC method (four an IUD and three an implant) and had it replaced because of device expiration or exchanged it as a result of IUD side effects. Thirteen percent of women who got an IUD and 21% who got an implant switched from a non-LARC hormonal method.

All women had been tested for gonorrhea and chlamydia in the year prior to LARC insertion; only 6% of women who received an IUD (three individuals) had had one of these infections in the last year, and all of these had been treated prior to insertion. There were no cases of syphilis in the past year, and one woman out of the 80 who had ever been tested for HIV in jail was HIV-positive (not shown). The median interval between the initial counseling visit and LARC insertion was 9.5 days (range, 2–359). Finally, 63% of women had been reincarcerated during the study period.

Continuation

Overall, 90% of women—47 with IUDs and 32 with implants—had follow-up information available beyond one month after LARC insertion; the mean follow-up time was 28.1 months (range, 1.1–61.7).^{*} Ninety-nine percent of these women were known to have continued a LARC method for at least one month, including six women who used an implant for the entirety of its recommended duration. Median duration of known LARC use was 11.4 months (range, 0.5–51.3) for women using IUDs (excluding those who had IUD expulsions) and 12.9 months (range, 1.6–37.0) for women using implants. Four women had levonorgestrel IUDs inserted five years before the end of the study and thus could have used the devices for their entire duration; however, follow-up time for these women ranged from 1.5 to 14 months, so we could not determine if they did so. Of the 36 women with IUDs and the 25 with implants who had at least six months of follow-up information, 10% discontinued their method before six months (8% and 12%, respectively); of the 32 IUD and 25 implant users with at least 12 months of follow-up, 16% discontinued their method before a year (13% and 20%, respectively).

Among women for whom follow-up information was available, 35% were known to have discontinued their method during the follow-up period (16 IUD users and 12 implant users); among those who discontinued, fertility desire was the most common reason (32%). Among IUD users who discontinued use, bleeding, pain and desire to conceive were equally common reasons (19% each); 13%

had their device removed because of vaginal symptoms they attributed to the IUD, and the reason was unknown for 30%. Fifty percent of women who discontinued the implant did so because of a desire to conceive, and bleeding (17%) and weight gain (8%) were the next most-cited reasons; the reason was unknown for 25%.

Twenty-eight percent of women aged 18–25 discontinued their LARC method, as did 40% of those aged 26–35 and 19% of those who were 36 or older (Table 2). While 13% of whites and 22% of Hispanics discontinued LARC use, 43% of blacks and 50% of Asians and Pacific Islanders did so. Thirty-four percent of women who had given birth discontinued their LARC method, as did 44% of those who had had an abortion. In addition, one-third of women who had been using only condoms prior to initiating LARC use discontinued it during the study period, as did 18% who had been using another LARC method and 14% who reported using a non-LARC hormonal one.

In the unadjusted bivariate regression analysis, blacks were more likely than whites to discontinue LARC use (odds ratio, 5.0), and women who had had an abortion were more likely than those who had not to discontinue use (3.3). In the multivariate regression analysis, a single association was found: Blacks were more likely than whites to have discontinued their method (4.4).

Of the 34 women who had a LARC device removed because they had reached the maximum duration of use or who requested discontinuation, 65% had the device removed during a subsequent incarceration, and the remainder at a community clinic. Six women who had received an implant had the device removed after reaching the three-year maximum recommended duration of use. Three women experienced IUD expulsion. One expulsion occurred 20–23 months after insertion; expulsion was presumed at the time a pregnancy was diagnosed and the IUD was not visualized on ultrasound. Another expulsion was documented five months after insertion, and the third occurred two months after insertion when the woman removed a tampon.

Safety and Pregnancies

No women who had an IUD inserted had complications from insertion or developed pelvic inflammatory disease within a month of the procedure. Two women with implants experienced faint rashes at the insertion site within a few days of insertion, and these spontaneously resolved; provider notes indicate that the reaction may have been caused by betadine. Two other women developed small hematomas after implant insertion, which also resolved spontaneously. No implants were removed because of immediate complications.

A total of 16 women (10 using an IUD, six an implant) became pregnant during the study period. Two pregnancies occurred after IUD expulsion. One woman who became pregnant appeared to have had an implant in place for 37 months, longer than the approved efficacy period. The remaining 13 pregnancies occurred after device removal.

TABLE 2. Percentage of women receiving a long-acting reversible contraceptive who discontinued use, by selected characteristics; and odds ratios (and 95% confidence intervals) from logistic regression analysis assessing associations between characteristics and discontinuation

Characteristic	%	Unadjusted odds ratio	Adjusted odds ratio
Age at insertion			
18–25 (ref)	28	1.0	1.0
26–35	40	1.7 (0.6–5.3)	2.3 (0.6–9.2)
≥36	19	0.6 (0.1–2.8)	0.5 (0.1–2.9)
Race/ethnicity			
White (ref)	13	1.0	1.0
Black	43	5.0 (1.2–21.1)*	4.4 (1.1–27.4)*
Hispanic	22	1.9 (0.3–14.5)	5.2 (0.4–61.9)
Asian/Pacific Islander	50	6.7 (0.3–165.0)	18.5 (8.6–591.0)
Ever pregnant			
No (ref)	33	1.0	1.0
Yes	33	1.7 (0.3–9.1)	1.6 (0.1–17.1)
Ever gave birth			
No (ref)	33	1.0	1.0
Yes	34	1.5 (0.5–4.4)	0.9 (0.2–4.7)
Ever had abortion			
No (ref)	35	1.0	1.0
Yes	44	3.3 (1.1–9.8)*	3.6 (0.9–15.5)
Most recent contraceptive method			
IUD/implant (ref)	18	1.0	1.0
Non-LARC hormonal	14	0.8 (0.1–5.6)	2.3 (0.2–22.5)
Condom	33	2.3 (0.1–38.4)	3.9 (0.2–74.5)

* $p < .05$. Notes: Multivariate analysis adjusted for race and ethnicity and abortion history. Findings for Native American race and STD history were excluded because of low numbers. ref=reference group. LARC=long-acting reversible contraceptive.

At least three of these ended in abortion, and at least two occurred among women who had switched from a LARC method to another hormonal contraceptive. Eight of these 13 pregnancies were among women who requested IUD removal, two of whom had expressed a desire to get pregnant. Among the six implant users who requested removal, one who got pregnant said her reason for discontinuation was fertility desire.

DISCUSSION

Our findings demonstrate that it is safe and feasible to provide LARC methods to women in jail. The incarcerated women in our study were able to access highly effective contraceptives, which they might not have been able to do in their communities. We found no serious complications from LARC insertions. As in other studies of incarcerated women, most women in our sample had given birth, and more than half had had an abortion; however, nearly half were using contraceptives when they entered jail, a slightly higher proportion than reported elsewhere.^{8,9} The general consistency of these findings reinforces that incarcerated women are at risk of unplanned pregnancy when they are released from jail.

LARC Continuation and Access

Among women with at least 12 months of follow-up information available, 13% of IUD users and 20% of implant users discontinued their method within a year. These

findings are similar to 12-month discontinuation rates reported elsewhere: 20–22% for IUDs^{21,22} and 16–32% for implants.^{22–24} While the median duration of known LARC use was longer for implant users (12.9 months) than for IUD users (11.4 months), our study was not designed to explore differences between these groups. Other data on LARC continuation come from the CHOICE Project, which was designed to provide free contraceptives and specifically to promote LARC use.²⁵ At 12 months, 13% of women who had received a LARC method through the project had stopped using it. In addition, both our study and the CHOICE Project found that black women had an increased likelihood of discontinuing LARC use. Previous research has shown that women of color experience discrimination and report provider mistrust in family planning settings,²⁶ and it is possible that black women in jail might be reluctant to retain a provider-controlled method. However, further qualitative study is needed to explore this issue.

While other studies have documented unexpected bleeding or pelvic pain as the main reason for discontinuing IUD or implant use,^{27–29} the most common reason cited in our study was a desire for pregnancy. It is possible that getting released from jail, or getting rearrested, may influence a woman's thinking about her future reproduction and her wishes to avoid or pursue pregnancy. For example, some women after reentry into the community may decide they want to get pregnant because of the stability they believe a child will bring to their lives, while some women entering jail may be thinking about their eventual reentry and considering pregnancy in a similar light.^{30,31}

Notably, 22% of women in our sample had recent experience with LARC methods; six of them had two LARC devices inserted in jail during the study period. This high use of LARC methods is consistent with findings from a previous study of women at this site, in which 8% of newly arrested individuals were currently using an IUD and 2% were using an implant;⁹ these rates represent greater LARC use than has been reported among U.S. women aged 15–44 (6% and 0.7%, respectively).³² The prior experience with LARC methods among the incarcerated women in our study likely reflects the widespread availability of these methods in San Francisco's safety net clinic system, as well as through the state-sponsored Family PACT program, which provides free contraceptives to low-income women who have no other coverage for birth control. However, even with these opportunities, incarcerated women at high risk for unintended pregnancy have expanded access to LARC methods.

Safety of IUDs

In addition to being at high risk for unintended pregnancies, incarcerated women have high rates of STDs and are thus at risk for pelvic inflammatory disease: Thirteen percent test positive for chlamydia upon entering jail,³³ 32% report having had gonorrhea or chlamydia, and 9% report having had pelvic inflammatory disease.⁸ Furthermore, many women who cycle through the criminal justice

system—up to one-third in one study⁸—engage in transactional sex, which puts them at risk for STDs.³⁴ These various sexual risk factors might make providers hesitant to insert IUDs among these women, because of a misguided fear that IUDs are associated with pelvic inflammatory disease. Some providers may also be concerned that LARC use would discourage women from using condoms and thus put them at risk for other STDs, including HIV.

However, we found no cases of pelvic inflammatory disease following IUD insertion among these incarcerated women. Moreover, it is well established that IUDs, once in place, do not cause the disease. Rather, there is a transient increased risk within the first three weeks after insertion, which is related to the insertion procedure itself.^{20,35,36} Testing high-risk women for cervical infection and providing necessary treatment at the time of insertion is an appropriate strategy to mitigate this risk,³⁷ and in our study, all patients who received an IUD were tested for gonorrhea and chlamydia. The Centers for Disease Control and Prevention recommends that all incarcerated women 35 or younger be tested for gonorrhea and chlamydia.³⁸ Given the high-risk population, it would be reasonable to test all women receiving an IUD in a correctional setting, either at some point prior to insertion or on the day of the procedure.¹⁹

Access to Care

Consistent with national trends, women in our sample had high rates of reincarceration. While unfortunate, this recidivism gave them access to follow-up care in jail for LARC-related problems. Indeed, 65% of LARC removals occurred in jail. LARC follow-up care could be a concern for women with constrained access to health care. However, we ascertained the high continuation rate in our study by confirming a subsequent documented visit with a provider who also could have removed the device. This suggests that women who had an IUD or implant inserted in jail had access to follow-up care in which they could have LARC-related problems addressed, including removal.

Given high recidivism rates, providing highly effective contraceptives to women while in jail could potentially have implications when some women later return to the institution, in that they will not have to face an unwanted pregnancy while incarcerated. A study in a Rhode Island facility found that 43% of pregnant incarcerated women had become pregnant between periods of incarceration,³⁹ again indicating an opportunity for preventive reproductive health care in jail.

Need for Caution

Providing incarcerated women with LARC methods helps these marginalized individuals obtain standard reproductive health care that they often have difficulty accessing in their communities. However, this opportunistic view of incarceration is simultaneously problematic, for it reflects broader deficiencies in the health care system outside of prison and jail. Offering contraceptives—especially

provider-controlled LARC methods—to incarcerated women, who are disproportionately poor and women of color, must take into account the unique environment of an institution that is intended to confine and punish, as well as the racial dynamics of the criminal justice system. Jail and prison are inherently coercive settings in which individuals' autonomy is deliberately restricted. Furthermore, incarcerated persons may fear punishment for not following what they perceive to be instructions from an authority figure, such as a clinician. These issues are critical in understanding the potential limits of "reproductive choice" when it comes to contraception for incarcerated women.

Additionally, there have been recent cases of coercive sterilization of poor women of color and of institutionalized women;⁴⁰ for example, more than 100 unlawful sterilizations were performed on women in California prisons between 2006 and 2010.⁴¹ Programs that provide LARC methods in jail or prison must be sensitive to these legacies and should situate individual women's reproductive rights in broader context.^{42,43}

Several strategies may help to address such racial and power dynamics when LARC methods are offered to incarcerated women. One is to focus on women's reproductive life planning goals, rather than solely on which birth control method to choose. Indeed, some incarcerated women may desire a pregnancy upon release.³⁰ A reproductive life counseling approach would enable the clinician to talk to such women about planning for healthy pregnancies, including discussing treatment for drug and alcohol abuse, which is common among this population.

A second strategy is to require at least two visits for women to initiate a LARC method. The first visit is for counseling only, which can be done in an individual or group setting. If a woman is interested in receiving a LARC device, then an insertion visit, which includes additional counseling, is scheduled in the near future. Notably, a delay between counseling and insertion is not recommended for women in general, as insertion should occur once a woman is certain about using the method and if there is reasonable certainty she is not pregnant.⁴⁴ When women are living in the community, a multivisit LARC protocol prevents many from obtaining the method;⁴⁵ however, follow-up visits are often easier in jail or prison. In our study, the median time between initial counseling and insertion was 9.5 days. While some women could be released from jail before the second visit, and thus not obtain a desired LARC device, the waiting strategy errs on the side of caution in not pressuring women into using a provider-controlled method. Finally, to ensure that incarcerated women have a choice, prisons and jails must make available a range of reversible contraceptive options, and not just LARC methods.

Limitations

There are several limitations to our study. Because this was a retrospective study, we were unable to ascertain many potentially relevant variables from medical records—such as

consistency of condom use, experience with sex work and future pregnancy plans—as they were not routinely assessed. Given the nature of record-keeping in the clinic, we could not determine how many women were counseled on LARC methods and how many did not return for insertion, because they either were released from jail or chose another or no method. Regarding follow-up, we were limited to women who had accessed health care in the city's public health system or upon returning to jail. For the eight women with no documented health care visit in these systems, we could not ascertain continuation. Indeed, women in the study may have continued their method longer than we could confirm, because we could judge only by their last documented visit within the health department clinic system or in jail; to the extent that this was the case, our results underestimate duration of use. Likewise, women could have had the device removed at a nonstudy clinic after the last documented visit, in which case the discontinuation rate would be higher.

Another limitation is that we could not compare women who chose a LARC method with women who chose other reversible methods or no contraceptive. This descriptive study was not powered to detect differences between groups, such as those who continued their method and those who did not, or implant users and IUD users. In addition, recidivism is a complex, multifactorial process. It is possible that for some women, reducing the risk of an unintended pregnancy by using a LARC method may affect the risk of recidivism, because such use could help them focus on other aspects of their reentry. However, our study was not able to explore how LARC use may have influenced recidivism, and this could be a future area of study. Finally, we could not explore women's satisfaction with their method or their perception of coercion, outcomes that are better suited to qualitative research.

All of these limitations suggest a need for prospective studies on LARC provision in correctional facilities. Given the complexities of providing contraceptives in the unique environment of jails and prisons, future research should qualitatively explore incarcerated women's perspectives on LARC methods in this setting. The prospective study of continuation rates, reincarceration, pregnancy and comparison to incarcerated women choosing another or no method is also warranted.

Conclusions

Jails and prisons throughout the country can adapt the structure of this program to their individual settings, balancing commitments to expanding birth control services with the need for caution with a vulnerable population. While some facilities may encounter logistical and financial challenges in establishing such a program, recognition of the long-term benefits of family planning services underscores its value. Correctional facilities should consider increasing access to all available contraceptives, including LARC methods, as a strategy to reduce the reproductive health disparities among this group of marginalized women at high risk of unplanned pregnancies.

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