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Immediate postabortion access to IUDs, implants and DMPA reduces repeat pregnancy within 1 year in a New York City practice☆,☆☆,★,★★

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Abstract

Objective: The objective was to evaluate whether having intrauterine devices (IUDs), contraceptive implants and injections immediately available to women undergoing abortion, compared to requiring an additional visit for these methods, leads to fewer pregnancies and fewer abortions in the following 12 months.

Methods: We conducted a historical cohort study using health records of Medicaid-insured women obtaining a first-trimester surgical abortion within a single practice in New York City. Women in Cohort 1 (2007–2008) needed an additional visit to initiate the IUD or injection. Women in Cohort 2 (2008–2009) were able to initiate these contraceptives and implants during the abortion visit. Women in both cohorts received these methods without additional cost, and all could receive a pill, patch or ring prescription. We compared the proportions of each cohort who experienced a pregnancy that began in the 12 months following the index abortion and also evaluated the outcomes of those pregnancies.

Results: Cohorts 1 and 2 consisted of 407 and 405 women, respectively. The proportions with pregnancy beginning over the following 12 months were substantially greater in Cohort 1 than Cohort 2 (27.3% versus 15.3%, p<.001). Women in Cohort 1 then underwent both more additional abortions (17.2% versus 9.9%, p=.003) and more births (7.9% versus 3.7%, p=.02). The proportion of women in Cohort 1 who initiated IUDs and implants within 12 months was smaller than in Cohort 2 (11% versus 46%, p<.001).

Conclusions: Among women insured by Medicaid, offering immediate comprehensive contraceptive access — including IUDs and implants — on the same day as an induced abortion, compared to requiring an additional visit, increased uptake of IUDs and implants and decreased repeat pregnancies in the next 12 months and abortions.

Keywords: Contraceptives; LARC; Repeat abortion

1. Introduction

In the United States, 1.2 million induced abortions took place in 2008 [1], and approximately half were repeat abortions [2–6]. The visit for an induced abortion provides an opportunity to prevent future unwanted pregnancies by immediate postabortion initiation of highly effective contraception. Intrauterine devices (IUDs) and implants are highly effective, long-acting reversible contraceptives, sometimes referred to as "LARC" [7–9]. These methods are acceptable to both adolescents and adults [10–12] and are safe for immediate initiation after an induced abortion [7,13–17], but underutilized partly due to financial barriers such as reimbursement policies that preclude billing for two procedures at a single visit [18–21]. Throughout the course of

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★★ Implications: Availability of intrauterine devices, implants and depot medroxyprogesterone acetate immediately postabortion during the same visit leads to fewer pregnancies in the next 12 months and fewer abortions.

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this study, New York State (NYS) Medicaid covered the cost of induced abortion and also covered contraceptive procedures, but not both on the same day.

Studies have shown reductions in subsequent pregnancy and abortion among women who chose an immediate postabortion IUD compared to those who chose other contraceptive methods [22–26]. One randomized trial showed increased IUD uptake among women offered immediate insertion compared to delayed insertion after abortion [27].

The donation of a supply of highly effective reversible contraceptives for Medicaid and uninsured patients undergoing an abortion procedure in our practice beginning in 2008 allowed us to provide these methods on the same day as the abortion, in contrast to our previous usual practice of referring women to our neighboring clinic for an additional visit to initiate these methods. The study question is whether immediate, same-day availability of IUDs, implants and depot medroxyprogesterone acetate (DMPA) injections is associated with fewer repeat pregnancies compared to our usual practice.

2. Materials and methods

We conducted a historical cohort study of women seen in a single academic practice in New York City from October 2007 through June 2009. The Columbia University Medical Center Institutional Review Board approved this study. The study population consisted of Medicaid-insured women who underwent an office-based first-trimester (up to 13 6/7 weeks) vacuum aspiration with local anesthetic for induced abortion.

Usual care — including history, physical exam, ultrasound, counseling and the abortion procedure done during a single visit (the index visit) — was the same for both cohorts. Access to condoms, pills, patch and ring did not differ by cohort. The exposure of interest was immediate access to LARC (copper IUD, levonorgestrel IUD and etonogestrel implant) and DMPA at this practice during the index visit. Women in the first cohort (2007–2008) needed to follow-up at an affiliated family planning clinic to initiate these methods. NYS Medicaid and NYS grants funded these methods, so there were no additional patient costs in this clinic. Women in the second cohort (2008–2009) could initiate these methods immediately postprocedure in the same exam room at no additional cost thanks to a donation of these supplies. In contrast, women in Cohort 1 required an extra visit to initiate these methods. The primary outcomes of the study were pregnancy and/or abortion within 12 months of the index visit. The secondary outcomes were birth control methods initiated by women in the two cohorts.

Cohort 1 included women who underwent an abortion procedure from October 2007 through June 2008 (historical controls). For women in Cohort 1, IUDs and DMPA were available by referral to the Family Planning Clinic, but implants were not available during this time. Other New York Presbyterian Hospital (NYPH) ambulatory care sites did not offer IUDs or implants during this time. Cohort 2 included women who underwent a procedure from October 2008 through June 2009 when IUDs and implants were always available, and DMPA was usually available for immediate postabortion initiation without requiring an additional visit. Due to popularity, DMPA was occasionally out of stock. Medical staff offered women in Cohort 2 immediate postabortion initiation of these methods unless medically contraindicated. This practice change did not require additional staff, changes in staff training or changes in contraceptive counseling beyond informing the patients in Cohort 2 that they could obtain the methods on the same day immediately after their abortion procedure. Cohort 2 enrollment began after the immediate contraception services were established in the office. We chose the same nine calendar months for enrolling each cohort to yield the desired sample size and to preclude possible effects from seasonal variation.

Cohort inclusion criteria were as follows: (a) age 18 years and older, (b) first-trimester vacuum aspiration for induced abortion completed at the index visit, and (c) NYS Medicaid coverage. Exclusion criteria were as follows: (a) commercial insurance, (b) spontaneous abortion, (b) ectopic pregnancy, (d) second-trimester pregnancy or (e) no procedure performed for any other reason. We excluded women with commercial insurance because their follow-up was less likely to be within the NYPH system, not because of differences in contraceptive need or pregnancy risk. A woman who had an eligible procedure during both cohort enrollment periods entered both cohorts; however, she could not enter the same cohort more than once.

We abstracted data from medical records using standardized forms and did not contact or interview any women for follow-up. Index visit data were abstracted from the templated paper records of the abortion practice. Follow-up data were abstracted from paper and electronic medical records of NYPH. Electronic medical records were implemented at NYPH outpatient clinics in stages during the years of this study; thus, some paper records, all using standardized templates, were still in use during the study period. Clinical information was deidentified [28] and coded at the time of data abstraction.

From the index visit record, we abstracted age, gravidity, parity, previous abortion, contraceptive method requested and contraceptive method provided, including referral for methods. To identify pregnancies and abortions during the next 12 months, we reviewed laboratory results, ultrasound reports, pathology reports and diagnostic coding, all of which were available in the NYPH electronic record. We also reviewed paper records from the NYPH-affiliated family planning clinic, which were in use until the full implementation of electronic records in April 2009. Follow-up continued for 12 months or until a repeat pregnancy, whichever occurred first. We counted the date of the last