Minimizing Barriers to IUC Use: Do Interventions that Have an Impact on Repeat Abortion?

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Background

- Of the 1.3 million abortions performed per year in the U.S., approximately half are repeat procedures (1).
- Women seeking repeat abortions are more likely than those undergoing a first abortion to report having used a contraceptive method at the time of conception (2,3), suggesting an opportunity for higher efficacy contraception.
- 83% of women ovulate during the first cycle after abortion (4). Contraception introduced immediately following the procedure may reduce the risk of unintended pregnancy.
- Both the copper-T380A IUD and the levonorgestrel-releasing IUS are safe and as effective as tubal sterilization (5), yet only 2% of U.S. women of reproductive age use intrauterine contraception (IUC) (6). Barriers to IUC insertion, including delayed rather than immediate post-abortion insertion, may be responsible for low utilization in the U.S.

Study Design

- The study population was summarised in Table 1. Women who received immediate post-abortion IUC had a lower rate of repeat abortions (i.e. survived longer) than controls (P < 0.001), as shown in the Kaplan-Meier curves depicting time to repeat abortion in Figure 1.
- Controls experienced a rate of repeat abortion that was 2.7 times higher than that of women who received immediate post-abortion IUC when adjusted for covariates, as shown in the Cox Proportional Hazards model presented in Table 2.

Results

- 673 women had an immediate post-abortion IUC insertion during the study period. 1,346 matched controls were selected for a total study population of 2,019.

Materials and Methods

Study Design

- A multi-site cohort study of three interventions designed to minimize barriers to IUC use was conducted at a Northern California Planned Parenthood agency from November 2002 - October 2005 (preliminary results were presented at ARHP 2006).
- In March 2004, agency protocols were changed to permit immediate post-abortion IUC insertion in the absence of known or suspected infection, contraindications, or special conditions as outlined in the national Planned Parenthood Standards and Guidelines (8).

Selection of Study Cohorts

- All women who received an immediate post-abortion IUC insertion in the agency during a 20 month study period from March 2004 - October 2005 were selected to comprise the IUC cohort.
- If a woman received more than one immediate post-abortion IUC insertion during the study, the first incidence was selected as the index insertion.

A 2:1 matched cohort of controls who received abortions without immediate post-abortion IUC insertion was selected according to the following algorithm:

- All women with abortions during the study period were stratified by clinic site and date of abortion.
- For each woman in the IUC cohort, two controls with abortions on the same day at the same site were selected using a stratified random sampling technique.
- If a woman was randomly selected as a control twice (due to multiple abortions during the study period), her second incidence of abortion was kept in the control cohort while the first incidence was discarded (to ensure that any bias in results would be directed toward the null). A replacement control was selected in the appropriate stratum/shutus using simple random sampling.
- If a clinic did not have enough patients on a specific date to ensure adequate controls, additional controls were randomly selected from all women with abortions on the target date regardless of clinic site, until the desired number of controls was obtained.

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Conclusions

- Women who had IUC inserted immediately following an abortion had lower rates of repeat abortions than those who did not. This effect was significant despite the inclusion of women who had their IUC removed at some point during the study.

- We conclude that immediate post-abortion IUC insertion is a safe, effective, practical, and underutilized intervention that has significant potential to reduce the occurrence of unintended pregnancy and abortion.

Bibliography