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Legal termination of pregnancy as an opportunity for expanding postabortion contraception: Experience at the Pereira Rossell Hospital, Montevideo, Uruguay



Fernanda Nozar*, Diego Greif, Francisco Coppola, Verónica Fiol, Leonel Briozzo

Gynecology and Obstetrics Clinic A, Pereira Rossell Hospital, School of Medicine, University of the Republic, Montevideo, Uruguay

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ABSTRACT

Objective: To determine to what extent women adopted highly effective contraceptive methods after a legal abortion. **Methods:** The data available during a period before and another period after liberalization of the abortion law were reviewed. The data gathering was incomplete and reliable only during certain periods, which were used in the study. **Results:** There was an increase in the proportion of women who returned for contraception and in the proportion who used any method and long-acting methods; however, no contraception was administered immediately after abortion and only 16% of all women treated started to use a long-acting method during the period after the law was liberalized. **Conclusion:** The proposed objective was not being achieved, the recommended guidelines were not being followed, and data gathering was incomplete. Good intentions are not enough and it is always necessary to evaluate the performance of a program. The results indicate that immediate reforms are necessary in postabortion contraception services.

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1. Introduction

More than a decade ago, Uruguay developed the Health Initiatives against Unsafe Abortion program. Its underlying goal was to include women with an unwanted pregnancy in the health system by applying the risk and harm reduction policy. This model's theoretical development, and its initial deployment, took place in the university services operating in the Pereira Rossell Hospital, Montevideo, Uruguay. This hospital is the leading tertiary center for women's health care in Uruguay and the leading center for training in human health resources associated with sexual and reproductive health.

The prestige of this hospital and the influence of their leaders among the medical community and governmental authorities enabled the model to be rolled out to the entire country, giving rise to one of the greatest advances in public policies addressing sexual and reproductive health, which led to a rapid decrease in abortion-related maternal mortality in Uruguay [1].

The dissemination of the model, with its rapid positive effect on women's health, smoothed the way for the debate that led to the approval of an important legal reform that liberalized voluntary abortion in Uruguay, embodied in the Voluntary Termination of Pregnancy (VTP) Law 18.987, which was approved in October 2012 [2].

As expected, there was a lengthy, far-ranging debate prior to the approval of this law, with strong opposition from groups that argued that if abortion was decriminalized, women would neglect use of contraceptive methods and engage in high-risk sexual behaviors because, if they were to become pregnant, they could easily terminate it. This argument assumes that women take abortion lightly and abort without hesitation, while what has been observed in practice is actually very different [3].

Accordingly, it is very important to disseminate the current evidence, which shows that abortion rates are lower in countries with liberal laws than in countries with restrictive laws. Indeed, when one looks at what happened to the abortion rates in countries that liberalized these laws, it is seen that the rates tend to fall rather than rise [4,5]. There is no doubt that the abortion rate basically depends on the population having information and access to modern, effective methods for avoiding an unintended pregnancy [6].

One possible explanation for this reduction in the abortion rate after legalization is that by making abortion legal and part of official health services, these services seek to avoid a repetition of the abortion, providing complete, accessible information about how to prevent another pregnancy and immediately providing the woman with the contraceptive method she has chosen. By reducing the number of repeat abortions, total abortions also fall.

The Uruguayan Ministry of Public Health has published a procedural manual for the health management of voluntary termination of pregnancy, which defines the actions to be performed in a total of

* Corresponding author at: PO Box 11600, Montevideo, Uruguay. Tel.: +598 27099122.
 E-mail address: Fernandanozar@gmail.com (F. Nozar).

four visits that a woman should attend along the process of a voluntary termination. The fourth visit is when the woman receives postabortion care [7].

This last visit is very important—not only to assure the procedure's efficacy and safety, but also to put into effect measures to avoid another unwanted pregnancy. The recommended actions include guidance and counseling on future pregnancies, contraception, and access to sexual and reproductive health services.

Evidence has shown that postabortion contraception must meet two conditions to achieve maximum efficacy in preventing recurrence of an unwanted pregnancy and, possibly, a repeat abortion [8]. First, it must be offered before the patient leaves the health facility where abortion care was provided. Experience has shown that if the woman is not given her contraceptive method before discharge, but instead she is referred to another service to obtain her method at a later time, the risks of a further unplanned pregnancy and another abortion are significantly higher [9,10].

The second condition is that preference must be given to long-acting reversible contraceptives (LARCs), which have been clearly shown to be more effective than short-acting methods in preventing unintended pregnancies and further abortions [11,12].

This repeat abortion prevention policy through postabortion contraception was applied at the Pereira Rossell Hospital's Sexual and Reproductive Health Service. The purpose of the present study is to evaluate whether application of this strategy has had the expected success to determine whether it is necessary to make changes to the current procedures.

2. Materials and methods

This retrospective study used data from the contraceptive care services provided at the Pereira Rossell Hospital's Sexual and Reproductive Health Service during the period before (May 2007–July 2009) and after (August 2014–August 2015) decriminalization of abortion and implementation of VTP services.

During the first period, women were treated in accordance with the risk and harm reduction regulations in force at that time, receiving pre- and postabortion care. During the second period, women were treated in accordance with the decriminalized abortion regulations.

The data were collected using forms that had been designed to record the user's data during the VTP process. General information was obtained from the databases that were generated using the information recorded on the VTP forms. Unfortunately, the quality of the records during the transitional period from the risk and harm strategy to legal abortion was poor and therefore two periods that were more distant from the transitional phase were evaluated, taking into account the limitations that this implies.

The study population consisted of all users treated before, during, and after the VTP process at the Pereira Rossell Hospital during the defined periods.

The age of the women and the gestational age at the time of performing VTP, the contraceptive methods used before abortion, and the methods accepted at the postabortion visit were analyzed for each period. It was not possible to determine the statistical significance of the mean of the women's age or the gestational age because the information available did not include standard deviations; the database is held at the Ministry of Health and we were not given access to it to perform this analysis. The differences in the proportion of women who came back to the postabortion visit and in the contraceptive methods used in the periods before and after the legislation change were assessed using the Yates χ^2 test or Fisher exact test, as applicable.

As this is a secondary data analysis in which the women's identity is not known, informed consent was not required. The project was approved by the Department of Sexual and Reproductive Health of the Ministry of Public Health and by the Pereira Rossell Hospital Center.

3. Results

In the first period, before liberalization of the abortion law, risk reduction counseling was provided to 2511 women; 648 (25.8%) received care before and after abortion at that hospital. In the second period, a total of 1137 women underwent a VTP at the Pereira Rossell Hospital; 375 (33.0%) returned for postabortion care. Thus, the study population consisted of 648 women in the period before the legislative change and 375 women evaluated during the period with liberal abortion legislation. A further complication is that no information was recorded about the contraceptive method used before pregnancy in 3.2% (21 cases) in the first period and 13.6% (51 cases) in the second period. Likewise, this information was missing with respect to the contraceptive method used after abortion in 2.9% (19 cases) in the first period and 12.5% (47 cases) in the second period.

The percentage of women who were seen after abortion was significantly higher in the period after liberalization of the law than in the period before liberalization (33.0% vs 25.8%; $P < 0.001$).

The women's average age in the period after legalization of abortion was 5 years older than in the period before legalization. Although the mean gestational age was more than a week higher in the post legalization period, the upper limit for gestational age was 23 weeks in the earlier period compared with 14 weeks after liberalization of the law (Table 1).

The before and after legalization groups were very different in terms of their use of contraceptive methods before abortion. In the second period, 25% of the women did not use any method compared with just 3.5% in the first period. Likewise, the percentage of women who used short-acting methods was significantly greater in the first period than in the second period (94.1% vs 62.0%; $P < 0.001$); however, use of the intrauterine device (IUD) was significantly higher in the second period compared with the first (12.3 vs 2.4; $P < 0.001$), when more than 12% of the women became pregnant after using an IUD (Table 2).

All of the women who returned for the postabortion visit in the second period received a contraceptive method compared with 94.6% in the first period ($P < 0.001$) (Table 3). Furthermore, this method was long-acting in 57.3% of women in the second period compared with 40.5% in the first period ($P < 0.001$).

The only LARC used during the first period was the IUD. During the second period, subcutaneous implants were included among LARCs. While implants were not used as a contraceptive method before VTP, they represented 82% of LARCs used after abortion.

4. Discussion

Despite the limitations caused by the poor quality of the data and the lack of basic information for identifying statistically significant differences in the women's age and gestational age, the data suggest that these two groups have different characteristics. In the first period, the women were younger and had a higher proportion of pregnancies with a gestational age of less than 10 weeks. Unfortunately, no data were available on parity.

The second period had a high proportion of pregnancies among women who did not use any method of contraception, which was rare in the first period. It is surprising that 12.3% of women used an IUD in the second period. This could be explained by a higher proportion of

Table 1

Age and gestational age of the women at the time of termination of pregnancy during the period before and after legislative change.^a

	May 2007–July 2009 (before) (n = 648)	August 2014–August 2015 (after) (n = 375)
Age, y	26.5 (11–46)	31.3 (12–45)
Gestational age, wk	8.2 (5–23)	9.5 (5–14)

^a Values are given as mean (range).

Table 2Use of contraceptives before abortion during the period before and after legislative change.^a

	May 2007–July 2009 (before) (n = 627) ^b	August 2014–August 2015 (after) (n = 324) ^c	P value
Non-user	22 (3.5)	83 (25.6)	<0.001
Short-acting	590 (94.1)	201 (62.0)	<0.001
Intrauterine device	15 (2.4)	40 (12.3)	<0.001
Implants	0	0	
Tubal ligation	0	0	
Long-acting method	15 (2.4)	40 (12.3)	<0.001
Any method	605 (96.5)	241 (74.3)	<0.001

^a Values are given as number (percentage).^b Information missing for 21 cases (3.2%).^c Information missing for 51 cases (13.6%).

multiparous women in this period and a higher proportion of nulliparous women in the previous period, since it is known that many doctors are reluctant to insert IUDs in women who have not yet given birth. Unfortunately, the lack of data on parity does not allow us to verify whether this hypothesis is valid.

Although there was a significant increase in the proportion of women coming back for the postabortion visit in the second period (from 25% to 33%), the postabortion visit rate is still disappointing, as barely 1 out of every 3 women returned to receive a contraceptive method. Because of this, the high percentage of women who started using a long-acting method after the visit (57.3%) is misleading. If we consider all of the women who had a pregnancy termination, we can verify that only 188 of 1137 (16.5%) used long-acting methods, and it is unlikely that a proportion of those who did not return or for whom we have no data used such methods.

The main reason for this low rate of use is non-fulfillment of the principle that postabortion contraception is truly effective when the woman leaves the health facility where the VTP was carried out already using a modern method and that, ideally, it is a long-acting contraceptive.

One significant factor explaining this problem is that most of the VTPs are carried out using medication, which prevents immediate insertion of an IUD. It is known, however, that use of hormonal methods can be initiated at the time of administration of misoprostol [13,14]. The data show that this was not done and, after this study, the necessary changes must be made to ensure that this procedure becomes a routine part of postabortion care. The data showing that implants have been well accepted by this population reinforce the convenience of offering them at the time of VTP using medication. Moreover, in the case of those women who prefer an IUD, they can receive, for example, a monthly or three-monthly contraceptive injection before leaving the facility and an appointment to insert an IUD 15 days or more after the VTP.

The study's methodological limitations are obvious as discussed previously. However, despite these limitations the data evaluated have enabled us to verify that this part of VTP care has been neglected and is a long way from attaining the success expected from it. Despite these defects, we believe that it is very important not to hide our failure, which illustrates the need to evaluate everything that is planned, so that we can correct those aspects where we have not achieved the desired goal. In this case, the data show that we failed to protect most of these women from a further unintended pregnancy and a possible repeat abortion.

Faced with these results, it will be necessary to review all of the steps of the VTP process to correct each of the problems that limit access to postabortion contraception.

Table 3Use of contraceptives after abortion during the period before and after legislative change.^a

	May 2007–July 2009 (before) (n = 629) ^b	August 2014–August 2015 ^c (after) (n = 328) ^c	P value
Non-user	34 (5.4)	0	
Short-acting	340 (54.1)	140 (42.7)	<0.001
Intrauterine device	255 (40.5)	30 (9.1)	
Implants	0	154 (47.0)	
Tubal ligation	0	4 (1.2)	
Long-acting method	255 (40.5)	188 (57.3)	<0.001
Any method	595 (94.6)	328 (100)	<0.001

^a Values are given as number (percentage).^b Information missing for 19 cases (2.9%).^c Information missing for 47 cases (12.5%).

We hope that in a relatively short time, we will be able to show that we were able to correct the problems, both in service provision and in data collection, and that we have been able to provide most of these women with effective protection against an unplanned pregnancy, thereby contributing to preserve their sexual and reproductive health, which is our final purpose.

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Conflict of interest

The authors have no conflicts of interest.

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