# Contraceptive history in women who undergo voluntary termination of pregnancy

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## **ABSTRACT**

This study is a sample survey in order to evaluate the contraceptive history of women undergoing voluntary termination of pregnancy (VTP). The study was carried out through the administration of an anonymous questionnaire to 182 women, in the years 2017-2018, at the "Pugliese-Ciaccio" hospital in Catanzaro; for each question posed in the questionnaire, we calculated the percentage of the answers and this statistical evaluation of the data was carried out with the SPSS program version 24.0.0.0 of 2016. The objective was the knowledge of the gaps regarding contraceptive information, which often led to a re-admission of the same woman again to the VTP clinic. Despite the small number of women, our study demonstrates the existence of misinformation among women who require VTP, who, in a high percentage said that they have never used any contraceptive method. In conclusion, the study shows that, to reduce the number of VTP in Italy, a better contraceptive education is needed, addressed to all women.

**Keywords:** abortion; contraception; family planning; voluntary termination of pregnancy.

## **SOMMARIO**

Questo studio è un'indagine campionaria per valutare la storia contraccettiva delle donne sottoposte ad interruzione volontaria di gravidanza (IVG). Lo studio è stato portato avanti attraverso la somministrazione di un questionario anonimo a 182 donne, negli anni 2017-2018, presso l'ospedale "Pugliese-Ciaccio" di Catanzaro; per ogni domanda posta nel questionario è stato effettuato il calcolo percentile delle risposte date e tale valutazione statistica dei dati è stata effettuata con il programma SPSS versione 24.0.0.0 del 2016. Obiettivo era la conoscenza delle lacune riguardo l'informazione contraccettiva, che portavano spesso ad una riammissione della stessa donna nuovamente al servizio di IVG. Il nostro studio, nonostante l'esiguo numero di donne, dimostra l'esistenza di disinformazione tra le donne che richiedono IVG, che, in un'elevata percentuale hanno dichiarato di non aver mai usato alcun metodo contraccettivo. In conclusione, lo studio mostra che, per ridurre il numero di IVG in Italia, è necessaria una migliore educazione contraccettiva, rivolta a tutte le donne.

#### INTRODUCTION

We carried out a sample survey in order to evaluate contraception history of women who underwent voluntary termination of pregnancy (VTP) at the "Pugliese-Ciaccio" Hospital in Catanzaro, in 2017-2018.

These same issues, shown in this work, have been already taken into account over the years, by Italian and foreign academics. The aim of these studies was to find the gaps in health services, if they really existed, which often led to a re-admission of the same woman to the VTP's operative unit. For example, according to a study published by "AOGOI" (Italian Association of Obstetricians and Gynecologists working in hospitals) in 2016: "the reason of VTP surgery recurrence may be linked to the bad contraception counselling received on the first admission or the adoption of an inappropriate contraception method" (1).

Apparent inconsistency is represented by the fact that "declaring to use a contraceptive, maybe in a wrong way is completely different from using it properly, so that it really controls your fertility. A good counselor has to make sure that the theoretical effectiveness translates into concrete one. However, if it is true that the statistics, provided by the surveillance system, could relieve us that the Italian situation is "better" than other countries, this does not mean that we cannot do even more" (2).

Also the Italian Health Minister with the 2017 Report, concerning the 2016 data, seems to underline the importance of controlling the VTP rate and, in particular, stated that: "In 2016 the number of VTP, reported by the regions, had a decrease of 3.1% compared to 2015, when the reduction in the VTP compared to the previous year was significantly higher (-9.3%). Since 1982, this reduction has decreased by 74.7%. All indicators confirm this decreasing trend: Italian data remains among the lowest values at international level. Since 1983 the induced abortion has been in continuous and progressive decrease in Italy; currently the abortion rate of our country is the lowest among those of the western countries; despite this, interventions to reduce unwanted pregnancies would be desirable in any case"(3).

In this regard, the same Minister also expressed this concept in the 2015 report, stating that: "Post—abortion counselling is a good opportunity to promote responsible procreation, so it would be important to promote it and implement it further"<sup>(4)</sup>.

In their study on this subject, Ohannessian A., Jamin C., Et al. concluded that: "After an abortion, if the woman wishes to use a contraception, it should be started as soon as possible because of the very early ovulation resumption. The contraception choice must be done in accordance with the woman's expectations and lifestyle" (5).

In a randomised trial of 420 Icelandic women comparing pre-abortion contraceptive counselling with post-abortion counselling demonstrated no significant effect on contraceptive use 4–6 months after the abortion (86% and 85%, respectively)<sup>(6)</sup>.

By contrast, a retrospective case note review of 272 US women undergoing abortion found an increase in the number attending for follow-up and a decrease in the number of women without a contraceptive plan among those counselled about contraception before the abortion<sup>(7)</sup>.

According to the guidelines of the Royal College of Obstetricians and Gynaecologists, advising women about contraception at every opportunity during the abortion process seems sensible<sup>(8)</sup>.

Similarly, according to WHO's guidelines (World Health Organization) it has been shown how immediate initiation of contraception following abortion improves adherence and reduce the risk of unintended pregnancy. The primary goal is to provide information and offer counselling: "Inform all women that ovulation can return within 2 weeks following abortion, putting them at risk of pregnancy unless an effective contraceptive method is used; if the woman is interested in contraception, she requires accurate information to assist her in choosing the most appropriate contraceptive method to meet her need". It is also important to understand that some women prefer to discuss options for contraception after the abortion is completed; and if a woman is seeking an abortion, following what she considers to be a contraceptive failure, discuss whether the method may have been used incorrectly and how to use it in the correct way. Finally, the most appropriate contraception method and its way of use is only a woman's personal choice<sup>(9)</sup>.

On these basis, it seemed useful to make an assessment of the situation at the VTP's operative unit of our structure.

# **MATERIALS AND METHODS**

The study consists of a sample survey carried out at the VTP clinic at the Gynecology and Obstetrics unit of the "Pugliese-Ciaccio" Hospital,

in Catanzaro, where women requesting the VTP service are admitted every day, in complete anonymity.

We analysed 182 women who, after a serological and ultrasound diagnosis of pregnancy, underwent surgery for voluntary interruption of pregnancy within the first ninety days, according to their will and personal request, complying with the Italian Law 194 of 22 May 1978, regulating VTP in Italy. The study began on the 15th of May 2017 and ended on March 19th 2018.

On the other hand, we excluded from the study the women who requested VTP for fetal or maternal health problems.

Before the surgery, but after admission to day hospital, the questionnaire was administered to all women, who were asked to fill it out, reassuring them about the complete anonymity.

At the end of the questionnaire, the women were questioned about their will to undergo an afterwards post-abortion outpatient counselling.

Finally, a personal opinion was requested concerning the need for free courses, public consultancies and projects, in order to promote greater sexual information and knowledge about various devices, which have the ability to significantly reduce the incidence of unwanted pregnancies.

For each question in the questionnaire, we calculated the percentage of answers. We also carried out a comparison of some data sets (as "known contraceptives" and "contraceptives used"). The statistical evaluation of the data was performed with SPSS, version 24.0.0.0 of 2016.

#### **RESULTS**

Of the 191 women who went to the VTP clinic, during the observation period, 182 agreed to participate in the study while 9 declined. Among the 182 women, 160 were Italian (87.9% of the total) and 22 foreigners (12.1%); of the latter group of women, 72.7% belonged to Eastern European while 27.3% belonged to North African countries. Furthermore, out of the total number of women interviewed, 3.8% were minors, 51.1% were aged between 18 and 30, and the remaining 45.1% were over 30.

Moreover, 81.3% of the women were at their very first admission to the VTP unit, it means that they had never made voluntary interruptions of pregnancy before; on the other hand, 18.7% of them had already undergone this surgery at least once.

Finally, 63.7% of women had used a contraceptive

at least once; instead, the remaining 36.3% had never used contraception of any kind (**Table 1**). Among the various contraceptive methods, condom was known by 74.2% (C.I. 95% 67,8-80,5), contraceptive pill by 82.4% (C.I. 95% 76,8-88), transdermal patch by 9.9% (C.I. 95%5,5-14,2), vaginal ring by 0.5% (C.I. 95% 0,5-1,5), "morning-after pill" by 32.4% (C.I. 95% 25,6-39), withdrawal by 47.8% (C.I. 95% 40,5-55), diaphragm by 10.4% (C.I. 95% 5,9-14,8), intra uterine device by 1.1% (C.I. 95% 0,4-2,6). Furthermore, 20.9% of women considered withdrawal an effective contraceptive method and 8.8% claimed to know no contraceptive method (**Table 1**).

Regarding the use, condom had been used by 33.5% of women (C.I. 95% 26,6-40,3), contraceptive pill by 25.3% (C.I. 95% 19-31,6), withdrawal by 23.6% (C.I. 95% 17,4-29,7), "morning-after pill" by 14.8% (C.I. 95% 9,6-20), diaphragm by 1.1% (C.I. 95% 0,4-2,6), transdermal patch by 1.1% (C.I. 95% 0,4-2,6), intra uterine device by 0.5% and vaginal ring by 0.5% (C.I. 95% 0,5-1,5). Furthermore, 1.6% of women said that they had used other unspecified methods of birth control (C.I. 95% 0,2-3,4), and 35.2% said they never had used any (C.I. 95% 28,2-42) (**Table 1**).

Women were also asked about who they would consult first in case of a "risky" unprotected sexual intercourse: parents were the first choice of 21.4%, general practitioner of 11%, a gynecologist of 52.7%, emergency room of 6.6%, the VTP clinic of 5.5% and the family counseling center of 13.2% (some women selected more than one option). Regarding the family counselling centers, 82.4% of women claimed to know them and, of the latter, 49.3% said that they never went to this structure.

Subsequently, to the question: "Do you consider the VTP a contraceptive method?" 26.9% answered "yes" (**Table 1**).

Finally, 84.6% of women reported that a more accurate sexual education on the territory is needed (**Table 1**). When asked about the wish to undergo a post-VTP outpatient counselling, 78% of women expressed a positive opinion (**Table 1**).

#### **DISCUSSION**

As previously specified, the sample does not include all eligible women observed in the recruitment period, in fact only 9 of those out of 191 refused to participate in the study for personal reasons; this demonstrates the existence of a good representation with respect to the total eligible population.

In spite of the main limit related to the small

**Table 1.** *Percentage data obtained from the study with Confidence Intervals (C.I.).* 

	Known Contraceptive Methods	Confidence Interval (C.I. 95%)	Contraceptive Methods Used	Confidence Interval (C.I. 95%)
Other	0,5%	0,5 to 1,5	1,6%	0,2 to 3,4
IUD	1,1%	0,4 to 2,6	0,5%	0,5 to 1,5
Vaginal ring	0,5%	0,5 to 1,5	0,5%	0,5 to 1,5
"Morning-after" pill	32,4%	25,6 to 39	14,8%	9,6 to 20
VTP	9,3%	5 to 13,5	1,1%	0,4 to 2,6
Withdrawal	47,8%	40,5 to 55	23,6%	17,4 to 29,7
Transdermal patch	9,9%	5,5 to 14,2	1,1%	0,4 to 2,6
Diaphragm	10,4%	5,9 to 14,8	1,1%	0,4 to 2,6
Contraceptive pill	82,4%	76,8 to 88	25,3%	19 to 31,6
Condom	74,2%	67,8 to 80,5	33,5%	26,6 to 40,3
No one	8,8%	4,6 to 12,9	35,2%	28,2 to 42

	YES	NO
Do you consider the VTP surgery a contraceptive method?	26,9%	73,1%
Need for courses on sexual education	84,6%	15,4%
Would you be interested in more information about the safer contraceptive methods?	78,0%	22,0%

	FIRST VTP	SECOND OR MORE VTP
Women	81,3%	18,7%

number of women, our study shows the existence of disinformation, among women seeking VTP, who, in a high percentage (35%) reported that they had never used any contraceptive method. In fact, although in our work there was a good knowledge among women about condom and contraceptive pill (respectively 74.2% and 82.4%), very few women have actually chosen to use it at their sexual intercourses (respectively 33.5% and 25.3%), opting, in a large percentage of cases, not to use any (35.2%). Moreover, against all general expectations, only 1.1% of women said they knew the intrauterine device and only 0.5% said they actually have used it.

This result is consistent with the hypothesis according to which, the lack of sexual education has led over the years to the growth of the number of women unable to preserve themselves in front of unwanted pregnancies.

It is indeed surprising that while 84.6% believe that a better education in contraceptive matters would be important, 49.3% of women have never attended a family counselling centre for advice on contraceptive options, and in case of unprotected sexual intercourse, this percentage of women corresponds only to 13.2%. Instead, the gynecologist turned out to be the first choice for a good part of the women, whose percentage corresponds to 52.7%, which is immediately followed by the parents, who, surprisingly, were the first choice for 21.4% of women.

However, despite 84.6% of women feel the need to implement the contraceptive education properly in the society, a lower percentage of them (78%) is willing to undergo post-VTP contraceptive counselling. This shows how, even today, some women have insecurities about these matters, which they probably live as a taboo; they are reluctant to overcome these obstacles by participating in various initiatives aimed at encouraging contraceptive information. Furthermore, 26.9% of women have a wrong perception of VTP, considering it as a contraceptive method.

In conclusion, our study shows that, to reduce the number of women who require VTP in Italy, a better contraceptive education is needed, targeted to all women. For this type of intervention the post-abortion contraceptive counselling services in public health facilities should also be improved, also in agreement with the Italian and foreign studies that have been carried out during the last decade and which were briefly explained in the introduction of this work.

#### **DECLARATION OF INTEREST**

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper. No specific funding was obtained.

#### **STANDARDS**

The procedures followed were in accordance with the ethical standards of the Committee on human experimentation and with the Helsinky Declaration of 1975, as revised in 1983. The authors apply the standards on patient informed consent.

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