Original Articles

Knowledge and availability of the emergency contraceptive pills: an Italian women survey

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Summary

Aim: Assessing to what extent do Italian women actually know about the emergency contraceptive pills and about their availability. *Materials and Methods:* A 12-questions questionnaire was organized to investigate the knowledge about the emergency contraceptive pills in a sample of Italian women. The sample was built by sending the questionnaire online, by using the Computer Assisted Web Interviewing (CAWI). Both open and closed answers were collected. *Results:* 1,580 eligible women fully answered the questionnaire. It appears that women still face some difficulties to obtain emergency contraceptive pills and have poor knowledge about how the post-coital pills work, and how they can obtain them in Italy. The difficulties to obtain emergency contraceptive pills seems to be in relation to the pharmacologists' resistance to provide them. Women's perception of the pharmacologists' resistance to provide pills is unspecific. *Conclusion:* The pharmacologists' resistance to provide pills should be best investigated, as ethical goals and liability issues could be both involved.

Key words: Emergency contraceptive pills; Liability; Computer Assisted Web Interviewing (CAWI).

Introduction

Emergency contraception refers to methods of contraception that can be used to prevent pregnancy after sexual intercourse at risk for fertilization. These are recommended for use within five days, but are more effective the sooner they are used after the act of intercourse. Both pills and intrauterine copper devices are recommended for emergency contraception, and it is not acknowledged these provoke abortion [1].

Emergency contraceptive pills (post coital pills) prevent pregnancy by preventing or delaying ovulation. There are no absolute contraindications for using emergency contraceptive pills at any age of a fertile woman aiming to prevent an unintended pregnancy [1]. Two pills have been registered worldwide as emergency contraceptives. The first one is the levonorgestrel-based pill, while the second one is the ulipristal-acetate based pill (also called "five day-pill"). Both are effective in preventing the fertilization with similar pregnancy rate [2, 3]. Side effects of emergency contraceptive pills are not common, mild, and do not need further medications [1].

In Italy, both levonorgestrel-based and ulipristal-acetate pills are bought at the pharmacy. From 2011 to 2015, the ulipristal-acetate pill was available with some restrictions: it was mandatory a medical prescription and a negative pregnancy blood sample test. After 2015, the medical prescription for ulipristal-acetate pill is only mandatory for less than 18-year-old women (without pregnancy test), and, since 2016, same kind of prescription to younger women is needed for the levonorgestrel pill. In summary, the Italian law has been organized with the aim to facilitate availability to emergency contraception for preventing unwanted pregnancy. However, in the past, the suspicious that both emergency pills could provoke abortion (by interfering with the implant processes) still causes many religious concerns among physicians and pharmacologists, leading to hamper the availability of the emergency contraception.

The aim of the following investigation is to assess to what extent do Italian women know about the emergency contraceptive pills and about their availability.

Materials and Methods

A 12-question questionnaire was organized to investigate the knowledge about the emergency contraceptive pills in a sample of Italian women. The questions' scheme was adapted according to the questionnaire already administered to women and pharma-

Table 1. — *List of questions and rates of answers.*

Question 1. Do you think is right that the women plan the pregnancy?			
- Yes	1541 (97.5%)		
- No	39 (2.5%)		

Question 2. Are you in favour to the oral contraceptive use?		If no, why?	
		- Religious believing	14 (16.9%)
- Yes	1497 (94.7%)	- Harmful for the health	55 (66.3%)
- No	83 (5.3%)	- I do not know	7 (8.4%)
		- Others	7 (8.4%)

Question 3. Do you know the "post coital" pill?			
- Yes	1573 (99.6%)		
- No	7 (0.4%)		

Question 4. Which "post coital" pill do you know?		Detail of answers for "others":	
- Levonorgestrel pill (trade name)	372 (23.5%)	- Estroprogestinic pills	3 (75.0%)
- Ulipristal acetate (trade name)	224 (14.2%)	- RU486	1 (25.0%)
- Both levonorgestrel and ulipristal acetate pill	33 (2.1%)		
- I do not know	947 (59.9%)		
- Others	4 (0.3%)		

Question 5. How many time did you take the "post coital" pill?			
- Never	1000 (63.3%)		
- 1	366 (23.2%)		
- 2	144 (9.1%)		
- 3 or more	70 (4.4%)		

Question 6. Do you think that the "post coital" pill is:		Detail of answers for "others":	
- Useful	1146 (72.5%)	- Useful but harmful	55 (37.4%)
- Useless	287 (18.2%)	- I do not know	18 (12.2%)
- Others	147 (9.3%)	- To be used cautiously	56 (38.1%)
		- Unnecessary	9 (6.1%)
		- To be banned	8 (5.4%)
		- It causes abortions	1 (0.7%)

Question 7. In your opinion, is the "post coital" pill easily available?		If you answered hardly or very hardly, why?*	
		- Pharmacologists resistance	192 (25.5%)
- Very easily	197 (12.5%)	- It's hard to obtain the prescription within 24 hours	224 (29.7%)
- Quite easily	629 (39.8%)	- Pharmacologists want the prescription	185 (24.6%)
- Hardly	421 (26.6%)	- A pregnancy test is needed	8 (1.1%)
- Very hardly	122 (7.7%)	- I do not know	111 (14.7%)
- I do not know	211 (13.4%)	- Conscience objection of the physicians or pharmacologists	25 (3.3%)
		- Others	8 (1.1%)

Question 8. In your opinion, how does the "post coital" pill work?		Detail for "others"	
		- I do not know	315 (79.4%)
- Causing abortion	545 (34.5%)	- Blocking the onset of the pregnancy	30 (7.6%)
- Interfering with ovulation	638 (40.4%)	- Causing menstruation	7 (1.8%)
- Others	397 (25.1%)	- Killing or blocking the spermatozoa	3 (0.08%)
		- Blocking the pregnancy implant	42 (10.6%)

Question 9. Do you know that, if the pregnancy is implanted on the uterine wall, the "post coital" pill could not work?			
- Yes	974 (61.6%)		
- No	606 (38.4%)		

Question 10. The last available "post coital" pill name is "trade name" (ulipristal acetate). It is also called 5-days pill. From your knowledge, do you know if the medical doctor prescription is needed to buy it?			
- Yes	277 (17.5%)		
- No	568 (35.9%)		
- I do not know	735 (46.5%)		

Question 11. In your opinion, do women face resistance by pharmacologists for obtaining the "5-days pill", despite the medical doctor prescription is not needed?			
- A lot of resistance	110 (7.0%)		
- Quite resistance	513 (32.5%)		
- Little resistance	233 (14.7%)		
- No resistance	102 (6.5%)		
- I do not know	622 (39.4%)		

Question 12. In your opinion, why the pharmacologists make resistance to provide the 5-days pill?		Detail for "others"	
		- They would that a physician ascertain the health wellness	2 (9.1%)
- They are against abortion/conscience objection	572 (36.2%)		
- It is harmful	404 (25.6%)	- Defensive policy	2 (9.1%)
- They want prescription	176 (11.1%)	- They do not want to exceed in the assumption	11 (50.0%)
- Religious believing	23 (1.5%)	- Because the prescription is mandatory	2 (9.1%)
- I do not know	383 (24.2%)	- To empower in using the drug	4 (18.2%)
- Others	22 (1.4%)	- Because it is expensive	1 (4.5%)

*More than the patients who answered "hardly" and "very hardly" have provided answers to Question 6.

cists in 2015 [4]. The 2015 questionnaire aimed to assess the ulipristal-acetate pill availability in Italy after the Italian governmental change in the prescription of emergency contraceptive ulipristal-acetate pill.

The questions of the current questionnaire are listed in Table 1 and were administered from the first to the last one. Responders did not known the succeeding question before answering the previous one, thereby avoiding conditioning. The answers are both closed and open, providing the chance to give comments or to answer with open statements to the questions. For questions 2 and 7, an additional question was queried in case of the answer "no" (Question 2) or "hardly" and "very hardly" (Question 7). The concepts expressed in the open answers were summarized and aggregated, when appropriate. The questionnaire was administered in Italian language between April 2018 and August 2018.

Women enrolled were between 18- and 40-years-old and they could not be neither physicians nor pharmacists. The sample was built by sending the questionnaire online, by using the Computer Assisted Web Interviewing (CAWI). The questionnaire was build by using "Google moduli". The link of the questionnaire form was sent by e-mails or by Facebook and WhatsApp contacts of one of the Author (Anna Clara Castigliego) of this paper. People contacted were invited to share the questionnaire by using the same social-network way. An additional way of administration of the questionnaire was through direct interview, in crowded places, drawn by Anna Clara Castigliego. Women were invited to communicate some information (age, education, place of Italy where they were from, parity, previous pregnancy interruption), along with the answers to the questionnaire. All data were treated anonymously according to Italian law. Incomplete questionnaires or information and questionnaires with nonsense open answers were rejected. The answers and the general information of women were crossed in order to find relationships in a univariate way. Chi-square test was used for comparisons, with a *p*-value set at ≤ 0.01 for significance.

Results

1,490 questionnaires were sent by the CAWI technique, while 182 were collected by direct interview. Among them, 1,580 eligible women fully answered to the questionnaire (1,419 online and 161 direct interview).

Table 1 reports rates of each answer for each question, along with details of open answers. Tables 2 and 3 report crude numbers and rates of age, education, place of Italy where the women were from, parity and previous pregnancy interruption in the first lines. The Tables also report answering rate according to general information provided by women (age, education, place of Italy where the women were from, parity, and previous pregnancy interruption) along with univariate comparisons. Significant results indicated that age and/or education and/or place of Italy where the women were from and/or parity and/or previous pregnancy interruption conditioned the answers rates.

As it appears in Tables 2 and 3, the majority of interviewed were young (between 18- and 24-years old) and 79.7% were under 30 years. Therefore, the majority of interviewed were students, with middle or secondary school bachelor and they did have not had previous pregnancies (higher proportion of nulliparas and with no previous preg-

nancy interruption). Concerning the place of Italy were the women were from, the sampling was overall homogeneous, with a higher prevalence of respondents from the center of Italy. A smallest quote of respondents were not Italian, but lived in Italy and participated to the Italian health system. It was chosen to provide data even for this small proportion of patients.

The wide majority of interviewed feel it is appropriate to plan a pregnancy (Question 1). Education and parity significantly condition the rates of answers. Additionally, the wide majority of interviewed are in favour of oral contraceptive use (Question 2). The wide majority of women know the "post-coital pill" (Question 3), despite many respondents do not know both pills (Question 4), and someone mistakes the abortive pill (RU486) or the common contraceptive pill with the emergency contraceptive pill (Table 1). Less than an half of women disclosed they have taken the emergency contraception pill (Question 5). Age, place of Italy, education, and previous pregnancy interruption condition the rates of answers. Assessing answers of Question 6, it appears that a consistent proportion of respondents (18.2%) think that the "post-coital pill" is useless, and 9.3% provided other answers, suggesting poor knowledge of the "post-coital pills" or own religious beliefs (Table 1). Place of Italy where women were from conditioned the rates of answers. A quite large proportion of women found it difficult to obtain the "post-coital pill" (Question 7). Reasons seems linked with the need of the prescription (Table 1).

More than an half of the interviewed did not know how the emergency contraceptive pills works (Question 8). Age, place of Italy where the women were from, and parity affected the rate of answers. The answers given to the Question 9 confirm that women poorly know how the emergency contraceptive pills work. The Questions from 10 to 12 investigate how difficult is to obtain the five-day pill and why. It seems that the need of prescription is sometimes advocated to create resistance to give the pill, while the resistance of the pharmacologists to provide the pill seems unspecific. Age, place of Italy where the women were from, and parity affected the rate of answers for Questions 10, 11, and 12.

Discussion

Information from the current questionnaire should be retained for improving the knowledge on the availability of the emergency contraceptive pills in Italy. As reported below, in 2015 [4], a similar online interview of Italian women and pharmacists had highlighted that the availability of ulipristal acetate pill and of the post-coital pills overall was difficult due to resistance of pharmacists to provide them. Results from the current questionnaire, drawn in 2018, confirm that the behavior of the Italian pharmacists remain unchanged from the women's point of view, despite

Table 2. — *Descriptive and inferential statistics. Sub-groups analyses for each question.*

	Age				Place of Italy				Education			Parity		Previous pregnancy interruption	
	18-24	25-30	31-35	35-40	North	Middle	South	Foreigner	Middle school	Secondary school	University degree	Nulliparity	Multiparity	Yes	No
	771 48.8%	489 30.9%	168 10.6%	152 9.6%	463 29.3%	618 39.1%	483 30.6%	16 1.0%	88 5.6%	770 48.7%	722 46.0%	1272 80.5%	308 19.5%	98 6.2%	1482 93.8%
Question 1															
Yes	756 98.1%	475 97.1%	162 96.4%	148 97.4%	454 98.1%	603 97.6%	469 97.1%	15 93.8%	78 88.6%	754 97.9%	709 98.2%	1250 98.3%	291 94.5%	92 93.9%	1449 97.8%
No	15 1.9%	14 2.9%	6 3.6%	4 2.6%	9 1.9%	15 2.4%	14 2.9%	1 6.3%	10 11.4%	16 2.1%	13 1.8%	22 1.7%	17 5.5%	6 6.1%	33 2.2%
	P=0.267				P=0.825				**P<0.001**			**P<0.001**		P=0.038	
Question 2															
Favored	735 95.3%	458 93.7%	163 97.0%	141 92.8%	450 95.5%	586 94.8%	446 92.3%	15 93.8%	81 92.0%	731 94.9%	685 94.9%	1208 95%	289 93.8%	92 93.9%	1405 94.8%
Unfavored	36 4.7%	31 6.8%	5 3.0%	11 7.2%	13 2.8%	32 5.2%	37 7.7%	1 6.3%	7 8.0%	39 5.1%	37 5.1%	64 5.0%	19 6.2%	6 6.1%	77 5.2%
	P=0.267				**P=0.013**				P=0.504			P=0.509		P=0.869	
Question 3															
Yes	768 99.6%	487 99.6%	166 98.8%	151 99.3%	463 100%	614 99.4%	480 99.4%	16 100%	87 98.9%	767 99.6%	719 99.6%	1269 99.8%	304 98.7%	98 100%	1475 99.5%
No	3 0.4%	2 0.4%	2 1.2%	1 0.7%		4 0.6%	3 0.6%		1 1.1%	3 0.4%	3 0.4%	3 0.2%	4 1.3%		7 0.5%
	P=0.803				P=0.518				P=0.600			**P=0.041**		P=0.918	
Question 4															
Levonorgestrel	153 19.8%	144 29.4%	44 26.2%	31 20.4%	96 20.7%	134 21.7%	139 28.8%	3 18.8%	10 11.4%	169 21.9%	193 26.7%	313 24.6%	59 19.2%	31 31.6%	341 23.0%
Ulipristal	137 17.8%	64 13.1%	16 9.5%	7 4.6%	79 17.1%	90 14.6%	51 10.6%	4 25.0%	15 17.0%	116 15.1%	93 12.9%	195 15.3%	29 9.4%	12 12.2%	212 14.3%
Both	18 2.3%	12 2.4%	3 1.9%		12 2.6%	8 1.3%	13 2.7%		1 1.1%	15 1.9%	17 2.4%	30 2.4%	3 1.0%	3 3.1%	30 2.0%
I do not know	461 59.8%	268 54.8%	105 62.5%	113 74.3%	276 59.6%	383 62.0%	279 57.8%	9 56.3%	61 69.3%	469 60.9%	417 57.8%	730 57.4%	217 70.5%	51 52.0%	896 60.5%
Other	2 0.3%	1 0.2%		1 0.7%		3 0.5%	1 0.2%		1 1.1%	1 0.1%	2 0.3%	4 0.3%		1 1.0%	3 0.2%
	P<0.001				**P<0.001**				P=0.002			**P<0.001**		P=0.127	
Question 5															
Never	524 68.0%	267 54.6%	96 57.1%	113 74.3%	288 62.2%	395 63.9%	309 64.0%	8 50.0%	60 68.2%	516 67.0%	424 58.7%	792 62.3%	208 67.5%	40 40.8%	960 64.8%
1	155 20.1%	139 28.4%	42 25.0%	30 19.7%	119 25.7%	145 23.5%	99 20.5%	3 18.8%	21 23.9%	158 20.5%	187 25.9%	293 23.0%	73 23.7%	35 35.7%	331 22.3%
2	63 8.2%	51 10.4%	23 13.7%	7 4.6%	36 7.8%	56 9.1%	48 9.9%	4 25.0%	6 6.8%	62 8.1%	76 10.5%	124 9.7%	20 6.5%	14 14.3%	130 8.8%
3 or more	29 3.8%	32 6.5%	7 4.2%	2 1.3%	20 4.3%	22 3.6%	27 4.4%	1 6.3%	1 1.1%	34 4.4%	35 4.8%	63 5.0%	7 2.3%	9 9.2%	61 4.1%
	P<0.001				**P=0.010**				**P=0.006**			P=0.059		**P<0.001**	
Question 6															
Useful	559 72.5%	357 73.0%	126 75.0%	104 68.4%	363 78.4%	447 72.3%	324 67.1%	12 75.0%	59 67.0%	556 72.2%	531 73.5%	933 73.3%	213 69.2%	77 78.6%	1069 72.1%
Useless	141 18.3%	82 16.8%	27 16.1%	37 24.3%	62 13.4%	101 16.3%	122 25.3%	2 12.5%	21 23.9%	140 18.2%	126 17.5%	221 17.4%	66 21.4%	19 19.4%	268 18.1%
Other	71 9.2%	50 10.2%	15 8.9%	11 7.2%	38 8.2%	70 11.3%	37 7.7%	2 12.5%	8 9.1%	74 9.6%	65 9.0%	118 9.3%	29 9.4%	2 2.0%	145 9.8%
	P=0.213				**P<0.001**				P=0.661			P=0.240		P=0.038	
Question 7															
Very easy	110 14.3%	56 11.5%	18 10.7%	13 8.6%	66 14.3%	68 11.0%	58 12.0%	5 31.3%	12 13.6%	104 13.5%	81 11.2%	159 12.5%	38 12.3%	11 11.2%	186 12.6%
Quite easy	330 42.8%	204 41.7%	52 31.0%	43 28.3%	198 42.8%	236 38.2%	191 39.5%	4 25.0%	33 37.5%	321 41.7%	275 38.1%	526 41.4%	103 33.4%	30 30.6%	599 40.4%
Hard	195 25.3%	144 29.4%	53 31.5%	29 19.1%	115 24.8%	158 25.6%	142 29.4%	6 37.5%	15 17.0%	183 23.8%	223 30.9%	352 27.7%	69 22.4%	32 32.7%	389 26.2%
Very hard	48 6.2%	41 8.4%	10 6.0%	23 15.1%	32 6.9%	57 9.2%	32 6.6%	1 6.3%	4 4.5%	56 7.3%	62 8.6%	94 7.4%	28 9.1%	14 14.3%	108 7.3%
I do not know	88 11.4%	44 9.0%	35 20.8%	44 28.9%	52 11.2%	99 16.0%	60 12.4%		24 27.3%	106 13.8%	81 11.2%	141 11.1%	70 22.7%	11 11.2%	200 13.5%
	P<0.001				**P<0.001**				**P<0.001**			**P<0.001**		P=0.041	

Table 3. — *Descriptive and inferential statistics. Sub-groups analyses for each question (following).*

	Age				Place of Italy				Education			Parity		Previous pregnancy interruption	
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Question 8															
Causing abortion	251 32.6%	157 32.1%	62 36.9%	75 49.3%	127 27.4%	252 40.8%	162 33.5%	4 25.0%	30 34.1%	271 35.2%	244 33.8%	414 32.5%	131 42.5%	42 42.9%	503 33.9%
Interf. with ovulation	347 45.0%	214 43.8%	51 30.4%	26 17.1%	234 50.5%	213 34.5%	185 38.3%	6 37.5%	25 28.4%	323 41.9%	290 40.2%	567 44.6%	71 23.1%	37 37.8%	601 40.6%
Other	173 22.4%	118 24.1%	55 32.7%	51 33.6%	102 22.0%	153 24.8%	136 28.2%	6 37.5%	33 37.5%	176 22.9%	188 26.0%	291 22.9%	106 34.4%	19 19.4%	378 25.5%
P	P<0.001				P<0.001				P=0.027			P<0.001		P=0.160	
Question 9															
Yes	502 65.1%	326 66.7%	78 46.4%	68 44.7%	311 67.2%	344 55.7%	305 63.1%	14 87.5%	45 51.1%	473 61.4%	456 63.2%	844 66.4%	130 42.2%	62 63.3%	912 61.5%
No	269 34.9%	163 33.3%	90 53.6%	84 55.3%	152 32.8%	274 44.3%	178 36.9%	2 12.5%	43 48.9%	297 38.6%	266 36.8%	428 33.6%	178 57.8%	36 36.7%	570 38.5%
P	P<0.001				P<0.001				P=0.090			P<0.001		0.816	
Question 10															
Yes	113 14.7%	88 18.0%	38 22.6%	38 25.0%	60 13.0%	126 20.4%	86 17.8%	5 31.3%	24 27.3%	121 15.7%	132 18.3%	215 16.9%	62 20.1%	27 27.6%	250 16.9%
No	319 41.4%	172 35.2%	43 25.6%	34 22.4%	215 46.4%	194 31.4%	153 31.7%	6 37.5%	23 26.1%	274 35.6%	271 37.5%	499 39.2%	69 22.4%	37 37.8%	531 35.8%
I do not know	339 44.0%	229 46.8%	87 51.8%	80 52.6%	188 40.6%	298 48.2%	244 50.5%	5 31.5%	41 46.6%	375 48.7%	319 44.2%	558 43.9%	177 57.5%	34 34.7%	701 47.3%
P	P<0.001				P<0.001				P=0.027			P<0.001		P=0.010	
Question 11															
A lot of resistance	48 6.2%	31 6.3%	15 8.9%	16 10.5%	35 7.6%	42 6.8%	33 6.8%	'	7 8.0%	43 5.6%	60 8.3%	87 6.8%	23 7.5%	14 14.3%	96 6.5%
Quite resistance	282 36.6%	165 33.7%	39 23.2%	27 17.8%	183 39.5%	181 29.3%	142 29.4%	7 43.8%	21 23.9%	235 30.5%	257 35.6%	455 35.8%	58 18.8%	27 27.6%	486 32.8%
Little resistance	147 19.1%	55 11.2%	17 10.1%	14 9.2%	72 15.5%	90 14.6%	71 14.7%	'	16 18.2%	132 17.1%	85 11.8%	200 15.7%	33 10.7%	16 16.3%	217 14.6%
No resistance	51 6.6%	32 6.5%	13 7.7%	6 3.9%	29 6.3%	36 5.8%	34 7.0%	3 18.8%	9 10.2%	59 7.7%	34 4.7%	81 6.4%	21 6.8%	7 7.1%	95 6.4%
I do not know	243 31.5%	206 42.1%	84 50.0%	89 58.6%	144 31.1%	269 43.5%	203 42.0%	6 37.5%	35 39.8%	301 39.1%	286 39.6%	449 35.3%	173 56.2%	34 34.7%	588 39.7%
P	P<0.001				P<0.001				P<0.001			P<0.001		P=0.047	
Question 12															
Against interruption	307 39.8%	181 37.0%	47 28.0%	37 24.3%	200 43.2%	206 33.3%	162 33.5%	4 25.0%	20 22.7%	265 34.4%	287 39.8%	502 39.5%	70 22.7%	40 40.8%	532 35.9%
It is dangerous	222 28.8%	116 23.7%	39 23.2%	27 17.8%	108 23.3%	146 23.6%	145 30.0%	5 31.3%	19 21.6%	215 27.9%	170 23.5%	341 26.8%	63 20.5%	22 22.4%	382 25.8%
Want prescription	65 8.4%	69 14.1%	13 7.7%	29 19.1%	42 9.1%	#) 12.3%	55 11.4%	3 18.8%	12 13.6%	71 9.2%	93 12.9%	134 10.5%	42 13.6%	17 17.3%	159 10.7%
Religious believing	12 1.6%	5 1.0%	4 2.4%	2 1.3%	7 1.5%	10 1.6%	6 1.2%	'	1 1.1%	10 1.3%	12 1.7%	18 1.4%	5 1.6%	'	23 1.6%
I do not know	156 20.2%	111 22.7%	61 36.3%	55 36.2%	90 19.4%	177 28.6%	112 23.2%	4 25.0%	34 38.6%	199 25.8%	150 20.8%	258 20.3%	125 40.6%	18 18.4%	365 24.6%
Others	9 1.2%	7 1.4%	4 2.4%	2 1.3%	16 3.5%	3 0.5%	3 0.6%	0	2 2.3%	10 1.3%	10 1.4%	19 1.5%	3 1.0%	1 1.0%	21 1.4%
P	P<0.001				P<0.001				P<0.001			P<0.001		P=0.067	

the diffusion of the knowledge that the post-coital pills are safe and easily available. The resistance of Italian pharmacists does not seem linked only to religious concern, or, in case of religious concern, it cannot be excluded that it is advocated to avoid providing emergency contraception. It is unclear if such a kind of resistance of the pharmacists could favor the misunderstanding of emergency contraception for women, who feel that the pharmacists are aware that the pills are dangerous. Poor knowledge of emergency contraceptive pills seems in relation to age, education, and place of Italy where respondents were from (rates of answers for Question 6, 7, and 8). It could be supposed that, if women were not well informed about the emergency contraceptive pills, they referred to pharmacists for counseling on the post-coital pills, and, for avoiding liability, the pharmacists delegate the counseling to physicians by querying the prescription of emergency contraception. As in Italy, the jurisprudence orientation has acknowledged that the pharmacist has not liability if he carefully follows the prescription of the physicians [5]; can the pharmacist pose resistance for the emergency contraception to be a "defensive pharmacology?" Recently, in United States, Lio *et al.* [6] have reported that the discomfort of pharmacists to provide contraception was linked to concern on liability, confirming similar behavior previously suggested by Hilverding *et al.* [7] and by Rodriguez *et al.* [8] in case of pharmacists' prescription of contraceptives. Moreover, since 2014, Italian pharmacists have also acknowledged that the prescription of some drugs is needed to avoid abuse, minimize risks, and educate patients on the correct use of medicines [9], thereby achievig their ethical goal of providing the best drugs administration. Therefore, it could be supposed that the current resistance of pharmacists to provide emergency contraception would involve at least ethic, religious, and liability issues in Italy.

Conclusion

The current study provides evidence that a proportion of women in Italy still have difficulties to obtain post-coital pills despite governmental dispositions for allowing an easier emergency contraception. Poor knowledge of both the emergency contraception and of how to obtain the drugs have been proved. Additionally, a pharmacists' resistance to provide pills is involved in the phenomenon. Pharmacists' concerns to provide emergency contraception should be best investigated from a juridical point of view.

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