

**Increase of Repeat Abortion in France: The Mirror Effect of Social Changes?
Results from the 2007 National Survey of Abortion Patients**
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Abstract

Introduction

This paper explores the factors associated with the increase of repeated abortions and draws particular attention to the socio-demographic and contraceptive characteristics of women undertaking more than one abortion.

Methods

The data are drawn from national abortion statistics and from a nationally representative survey of 8,245 abortion patients in France in 2007.

Results

The proportion of women having a repeated abortion increased from 12% in 1980 to 35% in 2007. Women over 25, not living in a couple, with no private assurance, born in Sub-Saharan Africa, were more likely to report an abortion in the past. Women who had a repeated abortion were as likely to use a method of contraception than others.

Conclusion

The increase of repeated abortions over time seems to relate to the difficulty of managing contraception throughout a more diversified sexual life rather than difficulties of access to contraception, .

Introduction

As in most industrialized countries where hormonal contraception is widely used (Rowland 2007), the proportion of repeated abortions has increased in France since the 1980's from 12% in 1980 to 35% of all abortions in 2007.

These trends may reflect the fact that it is easier today to report such an event that is less socially stigmatized. It may also result from a growing population of women with specific characteristics who are more likely to have repeated abortions or from a higher propensity to use abortion as a form of contraception. Finally, such a trend may reflect changes in women's sexual biographies resulting in more frequent unwanted pregnancies within unstable sexual relationships.

Using national abortion statistics provided by hospital records and the first large nationally representative survey of abortion patients conducted in 2007, this paper explores trends in repeated abortion since the 1980's. We also examine the socio-demographic profile and contraceptive patterns of use of women who undergo a repeated abortion in France in 2007.

Methods

The data for this study are based on the national abortion statistics provided by hospital records since 1980 and on a nationally representative survey of 8,245 women undergoing an elective abortion in Metropolitan France between April and September 2007. The sample was selected using a multi-step procedure. First, a random sample of 184 public or private hospitals was selected after stratification by region and by caseload based on the 2006 national hospital statistics. All women who underwent an abortion in the selected facilities or in a physician's private practice affiliated with the selected facilities during the study period (one or two months depending on women's age and study region) were invited to participate in the study. An estimated 66% of the hospital-based abortions performed during the study period are represented in the dataset.

This study was designed to explore the socio-demographic characteristics of women undergoing an abortion, the number of previous abortions and the date of the last one, their use of contraception before and after the procedure. Data were collected by means of two questionnaires at the time of the abortion. The physician or midwife who performed the abortion collected medical information on women's medical and reproductive histories (including the number of prior abortions, the date and technique of the last intervention), on gestational age at the time of the abortion and the type of procedure. Women completed a self-administered questionnaire providing information on their socio-demographic background, their contraceptive use at the time of conception and the patterns of access to the abortion facility. A common anonymous identifier for each woman related the medical and the patient questionnaires.

Each woman was assigned a sampling weight that was inversely proportional to the probability of the facility being selected in the sample and to the duration of the study period. A further adjustment was introduced to reflect the characteristics of women undergoing an abortion in France (age, abortion technique and type of facility) based on national abortion statistics provided by hospital records. All analyses are weighted to take the complex sampling design into account.

After excluding women for whom the medical questionnaire was not available (n=1178), those who did not report the number of previous abortions (n=463) and those who reported that their pregnancy was terminated for medical reasons (n=48), the study population comprised 6,412 women.

We first report the socio-demographic trends of repeated abortions since 1980. We then explore the sociodemographic and contraceptive characteristics of women according to the number of abortions they had in the past .

Results

In 1980, the vast majority (88%) of women having an abortion reported never having had one before. Over time, the proportion of first abortions declined. In 2007, 65% were first abortion patients while 25% of women reported a previous abortion and 10% at least two. The average age at first abortion has decreased by almost 1.5 years since the late 1980s: from 27.9 years in 1980 to 26.5 years in 2007. The decline in the average age of women having a second or third abortion is more recent, but clearly apparent between 1997 and 2002. The average age of women undergoing their second abortion was

28.8 years, while the mean age of women who had had more than two abortions in the past was 30.3 years.

Since 1990, the proportion of repeated abortions has increased among all women, especially between 1997 and 2007, regardless of their socio-demographic characteristics (table 1). Over time, single women have become a more important group experiencing more than one abortion, as well as women under 30 years old and students. In the same time, the proportion of women who are unemployed has decreased, and the proportions of those who are more likely to have a repeated abortion (women over 30 years old, those having 3 children, women born abroad) have remained stable over time or even decreased.

Table 1: Characteristics of women undertaking a repeated abortion in France in 1990, 1997, 2007

Characteristics	Proportion of women who had had a previous abortion			Repartition of women who had had a previous abortion		
	1990	1997	2007	1990	1997	2007
<i>Age</i>						
<20	4,7	5,3	13,1	2,2	2,5	5,9
20-24	16,1	18,4	31,5	16,7	17,6	23,6
25-29	26,0	27,7	41,5	27,2	25,0	25,7
30-34	29,1	31,7	42,7	26,3	25,4	20,8
35-39	29,1	33,1	41,7	18,7	20,0	15,7
40 +	27,0	31,7	41,9	8,3	8,9	7,6
<i>Living in a couple</i>						
no	21,3	23,5	34,6	37,0	45,3	57,2
yes	24,5	27,3	32,7	52,3	48,8	42,1
<i>Nationality</i>						
French	21,7	23,7	32,8	83,0	83,9	85,6
other	28,8	33,7	41,7	16,0	13,0	14,0
<i>Activity status</i>						
employed	23,5	25,8	36,6	51,4	45,0	47,8
unemployed	27,1	31,1	42,8	12,2	15,5	9,1
at home	27,6	33,0	46,2	22,2	20,9	12,9
student	9,3	9,4	15,8	6,0	7,4	18,8
<i>Previous births</i>						
0	15,3	16,2	22,4	29,6	30,0	30,0
1	27,9	30,9	43,1	23,8	24,4	25,4
2	25,7	29,5	42,1	22,9	23,2	22,0
3 +	30,2	35,4	48,1	22,2	21,4	18,7
TOTAL	22,6	24,8	34,6	100,0	100,0	100,0

Characteristics of women undergoing a repeated abortion in 2007

In 2007, 25% of women who undertook an abortion had had one in the past, 8% had had at least two. The frequency of repeated abortions increases logically with the length of sexual life and therefore with women's age. If 18% of women under age 20 experienced an abortion in the past, this proportion rose to 34% among those aged 20-24 years, 45% among those aged 25-29 years and 47% among women 35 years and older (Table 2). Parity was also strongly associated with having had an abortion in the past, regardless of age. Thus, 48% of women with children reported an abortion in the past versus 27% of those without children. Women who had completed at least 2 years of higher education were less likely to report an abortion in the past than those with lower educational attainment. Finally, women from sub-Saharan Africa were more likely to report an abortion in the past (57%), as well as women with no private insurance

Table 2 : Characteristics of women undertaking a repeated abortion

	1st	2nd	> 2	2+ abortion vs 1 (adjusted OR)	95% CI	p
<i>Total</i>	66.8	24.8	8.4			
<i>Age</i>						
<20	87.1	11.8	1.1	1		<0.001
20-24	70.7	24.1	5.2	3.0	2.2-4.1	
25-29	59.6	28.9	11.5	4.8	3.3-6.8	
30-34	59.8	28.1	12.1			
35 +	58.8	29.1	12.0	4.4	3.0-6.6	
<i>Living in a couple</i>						
no	66.3	24.6	9.2	1.7	1.4-2.1	0.0001
yes	67.5	25.2	7.4	1		
<i>Number of children</i>						
0	78.3	17.9	3.7			<0.001
1	58.2	30.7	11.1	1.9	1.5-2.4	
2	59.1	29.1	11.8	1.8	1.3-2.5	
>2	50.9	33.0	16.1	2.7	1.9-3.8	
<i>Country of birth</i>						
France	68.7	23.9	7.4	1		0.06
Subsaharan Africa	48.1	35.2	16.7	1.5	1.1-2.1	
Other	63.3	24.8	11.9	1.0	0.7-1.3	
<i>Level of education</i>						
<high school	64.7	24.9	10.4	1		0.22
Professional high school graduation	72.1	21.9	6.0	0.7	0.5-0.9	
Highschool graduation	67.1	25.1	7.8	0.9	0.7-1.2	
2 years after high school)	66.2	27.8	6.1	0.9	0.7-1.1	
> 2 years after high school	73.5	21.8	4.7	0.6	0.4-0.9	
<i>Private insurance</i>						
yes	68.6	24.1	7.3	1		
no	62.5	27.0	10.5	1.4	1.2-1.7	0.007
<i>Unemployed</i>						
yes	60.0	27.7	12.4	1.1	0.8-1.4	0.48
no	68.1	24.3	7.6	1		

Patterns of contraceptive use

Repeated abortion does not seem to reflect difficulties of access to contraception. Women who had a repeated abortion were as likely to use a method of contraception at the time of conception than others (Table 3). At the same time, they were more likely to report that they were unsatisfied with their method.

Table 3 : Contraceptive use among women who undertook a repeated abortion

	First abortion	1st Abortion OR	IC95%	p
<i>Contraception juste avant</i>				

<i>l'IVG</i>					
médicale	25.7	34	1		<0.001
non médicale	36.4	31.7	0.7	0.6-0.9	
pas de contraception	37.9	34.3	0.6	0.5-0.8	
<i>La contraception ne convenait pas</i>					
trop contraignante	27.9	22.9			
oublis fréquents	33.8	46.8	1.9	1.4-2.5	<0.001
effets secondaires	12.1	13.0			
<i>ne convenait pas au partenaire</i>					
	14.8	8.9			
<i>A reçu une information sur la contraception lors de l'IVG</i>					
	80.3	81.9			
<i>Contraception prescrite après l'IVG</i>					
médicale	77.1	79.5	1		0.12
non médicale	0.4	0.8	1.9	0.6-5.4	
pas de contraception	22.4	19.7	0.8	0.7-1.0	

Women who experienced an abortion in the past were more likely to receive a prescription for highly effective and long acting methods : 24% were prescribed an IUD and 10% the implant (versus 14 % and 6.5% for first abortion, respectively). Conversely, the prescription of the pill was more frequent among first time abortion patients (55% versus 42%). These differences persisted after taking into account women's social and demographic characteristics (results not shown).

Discussion

If a greater ability to report having ever had an abortion in the past contributed to the increase in repeated abortions over time, our data also seem to confirm a real increase of the phenomenon in recent decades, also observed in other industrialized countries where access to contraception is easy (Jones 2006, Rowlands 2007, Millar 1997).

The decline in the average age of women having a first, and to a lesser extent a second or third abortion, occurred in a context where the number of sexual partners and unstable relationships for women has increased since the 1970s (Bajos and Bozon 2010) and where the average age at first birth has risen (Prioux 2010). Part of the increase of the total rate of repeated abortion over time is attributed to this trend since having a first abortion at a younger age increases the likelihood of having a subsequent one. Furthermore, single women, whose proportion has increased in the general population since the 1970's, are more likely to have repeated abortions, which also plays a role in the increase of the total rate of repeated abortion over time.

In France, abortion is not used as a form of contraception (Bajos et Ferrand 2002). Women undergoing a repeated abortion were as likely to use a method of contraception as the others. This result is similar to the situation in many industrialized countries where contraception prevalence is high (USA, Australia, Sweden) (Rowland 2007), except in the UK where a recent study shows that 50% of British women presenting for a second abortion used no contraceptive method (Das 2009). Nevertheless, the fact that women who had a previous abortion were less satisfied with their contraceptive method, stating they had forgotten their pill raises, questions about the adequacy of the method used to their expectations and lifestyle (Bajos and Ferrand 2002).

Finally, the increase of repeated abortions seems to relate more to the difficulty of managing contraception throughout a diversified affective and sexual life, in a social context where motherhood remains socially accepted only within a stable relationship, rather than difficulties of access to contraception. These difficulties are, however, particularly pronounced in some social groups and especially among women from sub-Saharan Africa, also strongly affected by the epidemic of HIV infection, whose lifestyles are characterized by greater social and economic precariousness.

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