

Male controlled contraception in France: from implication to contraceptive options

Mireille Le Guen MSc^{a, d}, Nathalie Bajos PhD^{a, b}, Cécile Ventola, Aline Bohet MSc^a, Henri Panjo MSc^a, Caroline Moreau PhD^{a, b, c}, Fecond group*

a: Gender, sexual and reproductive health, CESP Centre for research in Epidemiology and Population Health, U1018, Inserm, F-94807, Le Kremlin-Bicêtre, France.

b: Institut National d'Etudes Démographiques, F-75020, Paris, France.

c: Department of Population, Family and Reproductive Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD 21205, USA

d: Institut de Démographie – IDUP, Université Paris 1 Panthéon-Sorbonne, 90 rue de Tolbiac, 75013 Paris France

Demographer - Student in Master 2 Research Demography

Gender, Sexual and Reproductive Health

Inserm CESP U1018 - Ined

82 rue du Général Leclerc

94276 Le Kremlin-Bicêtre

France

Tel: +33 1 45 21 23 35

mireille.le-guen@inserm.fr

*The FECOND group, includes N. Bajos^{a, b, c} and C. Moreau^{a, b, d} (PIs), A. Bohet^a (coordinator), A. Andro^b, J. Bouyer^a, G. Charrance^b, D. Dinova^a, D. Hassoun^a, M. Le Guen^a, S. Legleye^b, E. Marsicano^a, M. Mazuy^b, H. Panjo^a, N. Razafindratsima^a, A. Régnier-Loilier^b, V. Ringa^a, E. de la Rochebrochard^{a, b}, V. Rozée^b, M. Teboul^a, L. Toulemon^b, C. Ventola^a.

Abstract

The highly medicalized context of hormonal contraception in France raises the question of male involvement in the choice of contraception. In this study we aim to investigate the factors associated with men's contraceptive practices in France. Data are drawn from the FECOND study, a national probability survey conducted in France in 2010. The survey included a random sample of 3373 men aged 15 to 49 years. In France, only a small minority of men in need of contraception does not use any method of contraception with their partner. Most men rely on their female partner's use of contraception, in particular the pill and the IUD. Male controlled contraception only refers to condoms and withdrawal since vasectomy is not used at all. Our results on male contraceptive in France suggest potential important implications of men in contraception, which however seems restricted due to limited male contraceptive options

Introduction

The French contraceptive landscape is dominated by the use of medical contraception (hormonal and intra-uterine devices). Population based studies among women of reproductive age indicate that half of women aged 15 to 49 who have heterosexual intercourse and do not wish to become pregnant are on the pill, 21% have an IUD, and 4% use other hormonal methods. Sterilization in France is rare with only 4.2% of tubal ligation in 2010 and virtually no vasectomy (0.2%). Barrier or natural methods represent 18% of the contraceptive mix. Male condom constitutes the primary non-medical form of contraception (used by 12% of individuals overall), especially at sexual debut (used by 45 % of young women aged 15-17 years). The pill rapidly replaces them when individuals settle in longer relationships (Bajos et al., 2012).

This highly medicalized context of contraceptive contraception raises the question of male involvement in the choice of contraception. While men have contraceptive needs to regulate their fertility, their perspectives and experiences related to contraceptive use are rarely addressed (Heinemann et al. 2005; Nieschlag 2011). In this study we aim to investigate the factors associated with men's contraceptive practices in France.

Methods

Data are drawn from the FECOND study, a national probability survey conducted in France in 2010. The survey included a random sample of 3373 men aged 15 to 49 years. Participants responded to a 41 minutes phone questionnaire after given oral consent. The study was approved of the relevant French government oversight agency (CNIL).

We restricted this analysis to the 1740 men who had a female sexual partner of less than 50 years, had heterosexual intercourse in the last 12 months, were non sterile (themselves or their partner), were not trying to conceive or whose partners were not pregnant.

The outcome measure of contraceptive practice at the time of the survey was defined as a 3 category variable, distinguishing non use of contraception, use of male “controlled” methods (condom, withdrawal, vasectomy) and use of female “controlled” methods (pill, implants, patch, vaginal ring, hormonal injection hormonal, tubal ligation, local methods (diaphragm, sponges, spermicides). In case of multiple methods reported, male controlled methods took precedence overall female controlled methods.

A first analysis using logistic regression model was performed to identify factors associated with any use of contraception. We then examined factors associated with male controlled contraception among contraceptive users. We also examined specific factors related to the use of withdrawal on the one hand and to the use of condoms on the other hand (data not shown). Only 1 man reported having had a vasectomy and was therefore excluded from this analysis. Condoms in France are mostly promoted to prevent STIs among young people who are not in a relationship rather than to prevent pregnancy among men who live in a couple. Therefore we conducted a separate analysis examining condom use among males who were in a cohabitant couple and those who were not.

Only variables significantly associated with the outcome (contraceptive use or male controlled method use) at the level of 5% in the bivariate analysis were considered in the multivariate models. We considered the possibility of multi-collinearity and found that level of education and financial situation were highly correlated. Therefore we included only the more significant of these 2 factors in the multivariate regression. Interactions were also systematically tested.

Weighted analyses were used to account for the complex survey design All analysis were carried out using Stata 12.

Results

Contraceptive use

A total of 3.4% of men in need of contraception (sexually active and not intending a pregnancy) reported not using any method at the time of the survey. Non contraceptive use was higher among respondents who had lower education (3.9% versus 2.3%; OR=0.49-95%CI: 0.23,1.02) and those who reported no history of abortion (3.8% versus 0.6%; OR=0.17-95%CI: 0.04,0.75) (Table 1).

Use of Male controlled contraception

Among contraceptive users, a minority of men uses male controlled contraceptives alone or in combination with female methods: 18,6% reported using condoms and 7.5% used withdrawal (6.1% only withdrawal and no condom).

Men were more likely to report a male controlled contraception if they were younger (36.5% among the 15-24 years, 29.9% among those aged 25-34 years and 20.0% among those aged 35-49 years ($p<0.0001$)) (Table 1), and if they were born abroad (36.9% versus 25.0%; OR=2.11-95%CI: 1.13,3.95). Likewise, men engaged in a recent relationship which started less than one year ago (45.3% versus 21.4%; OR=1.61-95%CI: 1.04,2.48), and those who

reported more than one sexual partner in the last twelve months (46.0% versus 22.6%; OR=1.63-95%CI: 1.03,2.57) were more likely to use a male “controlled” method. Conversely, men living in a couple were less likely to use a male controlled method (19.8% versus 41.0%; OR=0.54-95%CI: 0.37-0.78), as were those who had a past history of abortion (19.2% versus 26.5%; OR=0.58-95%CI: 0.35-0.89).

Data also show that men engaged in a relationship that lasted less than one year were more likely to use condoms than when the relationship started more than one year ago (41.5% versus 14.3%; OR=2.06-95%CI: 1.30-3.24). The same was true for those who had more than one sexual partner in the last twelve months (39.2% versus 16.4%; OR=1.55-95%CI: 0.95,2.51). Among non cohabitating men, those who had more than 10 of sexual acts per month were less likely to use condoms than those who had 1 to 4 sexual acts per month (24.1% versus 58.5 %; OR=4.58-95%CI: 2.59,8.08). Among cohabitating men, those who had higher education and never have had an abortion were more likely to use condoms than those who had not (18.6% versus 106%; OR=1.85 (95%CI: 1.27,2.71).

The use of the withdrawal method, reported by 7,8% of contraceptive users, was more common among men with foreign nationality relative to those born in France (15.6% versus 7.4%; OR=1.65-95%CI: 0.72,3.77). The same was true in the case of men who reported difficult financial situations (12.5% versus 5.0%; OR=2.53 (95%CI: 1.34,4.79).

Discussion

Only a small minority of men in need of contraception do not use any method of contraception with their partner. Those who report a history of abortion are more likely to use contraception, which probably reflects their personal experience of failure using contraception.

In France, most men rely on their female partner’s use of contraception, in particular the pill and the IUD. Male controlled contraception only refers to condoms and withdrawal since vasectomy is not used at all. This method was legalized very recently (july 2001) and is culturally not accepted in a country where access to contraception is almost exclusively organized through gynecologists, a female profession in France (Bessière 2005).

Condom use in France as in many countries has mainly been promoted to prevent HIV and STIs at the start of any relationship, through extensive media campaign since the mid 80’s (Bajos et al. 2010). The use of condoms serves different goals according to the respondents’ cohabitating status.

Our results confirm the impact of these public health messages indicating that condom is mainly used in the context of non cohabitating relationships or in case of multiple sex partners. Condom use decreases as the number of sex acts increases suggesting that in the context of regular relationships condom is replaced by female contraceptive methods felt to be less constringent and more effective in preventing a pregnancy. Analysis among cohabitating men for whom the prevention of STIs is much less of a concern, allows an exploration of male implication in family planning decisions. Cohabitating men with higher education are more likely to use male controlled contraceptives, regardless of intensity of sexual activity (number of acts of intercourse is no longer a factor). These results suggest that men with higher social capital are more likely to distance themselves from the dominant female

controlled contraceptive norm (Bajos et al. 1997). As opposed to condoms, withdrawal use is subject to another interpretation, suggesting this method is mostly used by default by men confronted with financial difficulties or who may have social barriers to access modern contraception.

In conclusion, these first results on male contraceptive in France suggest potential important implications of men in contraception, which however seems restricted due to limited male contraceptive options (Darroch 2008).

Table 1 : Factors associated with contraceptive practices among men aged 15-49 years

	No use of contraception			Male controlled method (condom+withdrawal) <i>versus</i> other method		
	% (univariate)	OR	95 %CI	%(univariate)	OR	95 %CI
Total	3.4			25.6		
Age						
<25 years	2.5	0.63	[0.17,2.31]	36.5	1.13	[0.77,1.66]
25-34 years	3.2	0.78	[0.36,1.68]	29.9	1.46*	[1.07,1.98]
>=35 years	3.8	1.00		20.0	1.00	
Nationality						
Non French	6.5			36.9	2.11*	[1.13,3.95]
French	3.3			25.0	1.00	
Level of education						
<=High school	3.9	1.00		25.2	1.00	
> High school	2.3	0.49+	[0.23,1.02]	26.7	1.12	[0.86,1.45]
Relationship situation						
Not living in a couple	2.0	1.00		41.0	1.00	
Living in a couple	4.0	2.41+	[0.85,6.86]	19.8	0.54**	[0.37,0.78]
Perceived Financial situation						
No problem	2.9			25.4		
Tight	4.2			25.7		
Very difficult	2.2			26.0		
Length of the relationship						
<=1 year	2.6			45.3	1.61*	[1.04,2.48]
>1 year	3.6			21.4	1.00	
Number of female partners in the last 12 months						
1	3.8			22.6	1.00	
2 and +	0.8			46.0	1.63*	[1.03,2.57]
History of abortion						
No	3.8	1.00		26.5	1.00	
Yes	0.6	0.17*	[0.04,0.75]	19.2	0.58*	[0.37,0.89]
<i>N</i>		1740			1653	
<i>Goodness of fit test</i> ⁶		p = 0.99			p = 0.99	

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Men who have a female Partner <50 years, who were sexually active in the last 12 months, non sterile, not trying to conceive and not pregnant (partner pregnant).

⁶ The test assesses model fit after fitting a logistic regression model taking survey design into account. p-value greater than 0.05 indicates good fit for the data

References

Bajos, Nathalie, Michel Bozon, Nathalie Beltzer, Caroline Laborde, Armelle Andro, Michele Ferrand, Veronique Goulet, Anne Laporte, Charlotte Le Van, et Henri Leridon. 2010. "Changes in sexual behaviours: from secular trends to public health policies." *Aids* 24(8):1185-1191.

Bajos, Nathalie, Béatrice Ducot, Brenda Spencer, et Alfred Spira. 1997. "Sexual risk-taking, socio-sexual biographies and sexual interaction: elements of the French national survey on sexual behaviour." *Social Science & Medicine* 44(1):25-40.

Bessière, Sabine. 2005. "La féminisation des professions de santé en France: données de cadrage." *Revue française des affaires sociales*(1):17-33.

Darroch, Jacqueline E. 2008. "Male fertility control—where are the men?" *Contraception* 78(4):S7-S17.

Heinemann, Klaas, Farid Saad, Martin Wiesemes, Steven White, et Lothar Heinemann. 2005. "Attitudes toward male fertility control: results of a multinational survey on four continents." *Human Reproduction* 20(2):549-556.

Nieschlag, Eberhard. 2011. "The struggle for male hormonal contraception." *Best Practice & Research Clinical Endocrinology & Metabolism* 25(2):369-375.