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Religiosity, religious affiliation, and patterns of sexual activity and contraceptive use in France

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Abstract

Objective—To examine the association between religiosity and sexual and contraceptive behaviours in France.

Methods—Data were drawn from the 2005 Health Barometer survey, a random sample of 7,495 women and 5,634 men aged 15 to 44. We used logistic regression models to study the associations between religiosity and sexual and contraceptive behaviours, by gender and religious denomination.

Results—Three quarters of respondents (73%) reported no religious practice, 20% practised occasionally, and 7% regularly. Regular practice was associated with later sexual debut, regardless of religious denomination. Among participants less than 30 years old, religious respondents were less likely to have used a condom at first sexual intercourse (odds ratio [OR]=0.2 for women, OR=0.4 for men) or any form of contraception (OR=0.2 for women).

At the time of the survey, sexually experienced adolescents who reported regular religious practice were less likely to use contraception (84.7% vs. 98.1%, $p<0.001$). Regular practice was associated with a 50% decrease in the odds of using very effective methods for Catholics, but had no effect among Muslims.

Conclusion—This study, conducted in the French secularised context, shows a complex relationship between religiosity and sexual behaviours, which varies by gender, religious affiliation and during the life course.

Keywords

Contraception behaviour; Sexual initiation; Religion; Religiosity; Population-based survey; France

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INTRODUCTION

The influence of religion on sexual behaviour has long been recognised by social scientists. Empirical studies exploring the relationship between individuals' religious beliefs and their sexual behaviours consistently reveal an association in the form of later onset of sexual intercourse among religious adolescents¹⁻⁴. The strongest evidence to support a causal link between religion and sexual behaviour comes from prospective studies that control for timing of events (sexual initiation relative to religious beliefs). While such studies consistently indicate a 'gate keeping' effect of religion on sexual debut^{2,5,6}, the relationship between indicators of religious practice and a broader set of sexual and reproductive behaviours remains unclear. For instance, inconsistent results have been reported regarding the association between religiosity and contraceptive use at first intercourse^{5,7}. Furthermore, most quantitative research has focused on initiation of sexual activity among teenage respondents, resulting in a relative lack of information about other populations or other sexual and reproductive behaviours. In fact, more recent studies suggest a more complex relationship between religion and sexual and contraceptive behaviours, which may vary by type of religious affiliation, strength of religious involvement, and population group^{8,9}. In particular, the strength of the relationship between sex and religiosity may vary by gender, culture and religious denomination^{5,9,10}. Most research has been conducted in the United States, which stands as an outlier among western societies with regard to its relatively higher religiosity. This contrast is made evident by Frejka and Westoff, who report that only 14% of American women aged 18–44 declare having no religion, compared to 34% of women living in Western Europe¹¹. The gap is even wider when it comes to religiosity, measured through a variety of indicators including religious service attendance and the importance of religion in one's life. According to this latter indicator, 50% of Americans regard religion as being very important in their lives, as opposed to much smaller proportions observed in Western Europe (9%)¹¹.

In this study, we examine the association between religiosity (different levels of religious involvement) and a set of sexual and reproductive indicators among men and women living in France, in the context of a rapid decline of religious practice over the last several decades¹². We refer to religiosity in terms of individual practice rather than the institutional norms of particular religions. We explore possible differences of effect of religiosity among Catholics and Muslims, the two most common religious affiliations in France.

METHODS

Population

We report here an analysis using data from the 'Baromètre santé INPES' study (Health Barometer), a multi-thematic survey on health conducted in the general population in France between October 2004 and February 2005. The study received ethical and scientific approval of the relevant French government oversight agency (the Commission Nationale de l'Informatique et des Libertés). The method applied has been described in detail elsewhere¹³. Here, we present only the main features.

A two-stage stratified probability sampling method was used to identify 30,514 respondents between the ages of 12 and 75 (16,429 were aged 15 to 44). An initial sample of households was randomly selected from the telephone directory (including a subsample of mobile phones). One eligible respondent per household was then randomly selected to answer the questionnaire. The sample obtained was weighted to reflect the socio-demographic composition (age, marital status, professional activity, level of education) of the French population in the 1999 census. The percentages shown in the tables are weighted values while Ns are unweighted, *i.e.* the number of subjects actually interviewed.

Respondents answered a multi-thematic questionnaire, which lasted an average of 30 minutes and included a series of questions exploring sexual and reproductive health (SRH). The data were collected anonymously via computer-assisted telephone interviewing. The present analysis is based on 7,495 women and 5,634 men aged 15 to 44 who responded to the set of questions on sexual and reproductive health (exclusive mobile phone users [n=3,484], who were not asked this set of questions).

Data

The SRH module of the questionnaire collected information on (i) the circumstances of first sexual intercourse (age, condom use, and any contraceptive use at first intercourse), (ii) sexual activity in the last 12 months (number of sexual partners), and (iii) current contraceptive use (type of methods used, and reasons for non-use). Using this information, we examined seven indicators of sexual and contraceptive behaviours. Three were related to the time of first sexual intercourse: 'has had penetrative sex at a given age', 'use of condoms at first intercourse', and 'use of contraception at first intercourse'. The other indicators examined sexual and contraceptive behaviours at the time of the survey: 'proportion of respondents at potential risk of unintended pregnancy', 'any contraceptive use among respondents who were at potential risk', 'use of very effective methods among contraceptive users', and 'number of sex partners in the last year'. Very effective methods of contraception included the use of hormonal methods or the intrauterine device (IUD). Being at potential risk of unintended pregnancy was defined as being sexually active in the last 12 months, with a current partner, non-sterile, and not pregnant or trying to become pregnant at the time of the survey.

Religious affiliation and religiosity entail multidimensional components, difficult to tackle with a limited number of questions. In the Barometer multi-thematic survey, we had limited information to assess these dimensions. The following questions were used to describe religious involvement: 'Do you have a religion?' In the case of a positive response, the participants were asked 'Which one?' and whether they considered themselves as 'never practising/practising occasionally/or practising their religion on a regular basis'. Two dimensions were considered in our analysis: 'religious affiliation' in four categories (Catholic/Muslim/Protestant/other religion) and 'religiosity/religious involvement' in three categories (no religion or never practises/practises occasionally/practises on a regular basis).

Analysis

After having recorded the socio-demographic characteristics and religious affiliation of women and men according to their level of religiosity, we examined bivariate relationships between religiosity and sexual and reproductive behaviours by sex and age group. We also tested for differences in the effect of religiosity on sexual and reproductive indicators between men and women less than 30 years of age.

We then examined these associations (use of condom or use of contraception at first sex and use of very effective methods — hormonal methods or IUD — at the time of the survey) among respondents who declared they had a religion (Catholic/Muslim/Protestant/other religion). We conducted logistic regression models to study these associations, controlling for social and demographic characteristics of the respondents. The analysis of condom or any contraceptive use at first sex was performed among respondents less than 30 years of age. The models included age and level of education. Analysis of use of very effective methods at the time of the survey was conducted among all respondents (15–44 years of age) and among younger respondents (less than 30 years of age), and included a larger set of social demographic controls (age, marital status, children, level of education, professional situation, area of residence, and number of partners in the last 12 months). We finally tested

for differences in the effect of religiosity on condom use at first intercourse, contraception use at first intercourse, and on the use of very effective methods at the time of the survey by type of religious affiliation (for Catholic and Muslim respondents). The analysis was conducted using Stata software version 10 SE.

RESULTS

Social and demographic characteristics by religiosity

Of the 13,129 respondents aged 15 to 44, 51% had no religion, 39% stated they were Catholics, 7% Muslims, 2% Protestants, and 2% mentioned other religious affiliations. In all, 73% respondents declared no religious practice, 20% reported occasional religious practice, and 7% practised a religion on a regular basis. Women were more likely to have a regular religious practice than men (8.7% vs. 6.6%, $p=0.001$). Religious involvement greatly differed by religious affiliation for all respondents. While only 8% of Catholics practised their religion on a regular basis, this proportion rose to 33% for Protestants and 46% for Muslims. Religious involvement also varied along social and demographic characteristics (Table 1). In both women and men, religious respondents were younger, less likely to cohabitate, and less likely to work than their non-religious counterparts. They were also more likely to state a low level of income and to live in the Parisian area.

Patterns of sexual and contraceptive behaviours by religiosity at first intercourse

Reporting occasional or regular religious practice was significantly associated with a delayed onset of sexual activity for men and women (Table 2). This effect was greater for women than for men among respondents less than 30 years of age (test of interaction, $p=0.05$).

Among those who had initiated sex, religious respondents were less likely than others to have used a condom at first sexual intercourse (Table 2). This association was stronger for women than men in the 15–29 age group (test of interaction, $p=0.02$). In addition, women less than 30 years of age who reported occasional religious practice were less likely to have used a condom at first intercourse than their non-religious counterparts (odds ratio [OR]=0.5 [0.4–0.7]). Women practising their religion on a regular basis were less likely than others to have used any form of contraception at first intercourse.

Differentials in condom and any contraceptive use at first intercourse by religiosity remained after controlling for age and level of education among respondents less than 30 years of age (Table 3). In a further analysis looking at possible differences of effect of religiosity by type of religion, we first restricted the analysis to respondents less than 30 years of age who declared themselves as having a religion (Catholic, Muslim, Protestant or other) and found the same associations as described above (Table 3). We then added an interaction term between religiosity and the type of religion, and found that the effects of religiosity did not vary according to young women's type of religion: regular religious practice was associated with a 70% decrease in the odds of using a condom at first intercourse among young Catholic women (OR=0.3 [0.2–0.6]) as well as young Muslim women (OR=0.3 [0.1–0.8]). In contrast, religious affiliation greatly influenced the association between religiosity and condom use among young men (test for interaction, $p=0.007$): regular religious practice was associated with a 70% decrease in the odds of using a condom at first coitus among young Catholic men (OR=0.3 [0.2–0.6]) but was not significantly associated with condom use among young Muslim men (OR=1.3 [0.5–3.6]). In all cases, the type of religious affiliation had an independent effect on condom use at first intercourse, even after controlling for age, level of education and the level of religiosity: in particular, young Muslim respondents were less likely than young Catholics to report using

a condom at their first sexual act (OR=0.3 [0.2–0.6] for women, OR=0.4 [0.2–0.8] for men). Results for any contraceptive use at first coitus among women less than 30 years of age were very similar to those observed for condom use. Religious involvement was associated with an 80% decrease in the odds of using any form of contraception at first intercourse among young women with no difference of effect by type of religious affiliation.

Patterns of sexual and contraceptive practices by religiosity at the time of the survey

At the time of the survey, the proportion of women sexually active in the last 12 months (among those who had ever had sex) was lower among women practising their religion on a regular basis than among their non-religious counterparts (Table 2). Conversely, women who reported practising their religion occasionally were more likely to be sexually active in the year preceding the survey than non-religious women. No differences were seen among men. The proportion of respondents who reported more than one sexual partner in the last year varied by religious involvement for women 15–44 years old but not for men (Table 2). However, the association was no longer significant for younger women and, conversely, we found a greater proportion of regular or occasionally practising religious men who reported more than one partner compared with their non-religious counterparts (Table 2).

Differentials in sexual activity in the last year accounted for much of the variation observed in the proportion of women at potential risk of unintended pregnancy (sexually active in the last 12 months, with a current partner, non-sterile, not pregnant or trying to get pregnant) by religiosity (Table 2). In addition, we also found that religious women aged between 25 and 29 were more likely than their non-religious counterparts to be pregnant or attempting to get pregnant, and thus were less exposed to the risk of an unintended pregnancy.

Turning to contraceptive behaviours among those who were at potential risk of unintended pregnancy at the time of the survey, we found that the youngest respondents (aged 15–19), women and men alike, were less likely to report using any form of contraception than others (84.7% of religious respondents were using contraception versus 98.1% of non-religious participants, $p<0.001$). The same was true for men under the age of 30 (Table 2). Among contraceptive users, respondents who practised their religion on a regular basis were less likely to use very effective methods (hormonal methods or IUDs) than their non-religious counterparts (Table 2), even after controlling for a large set of social and demographic characteristics (Table 4). Among Catholic respondents, regular religious practice was associated with a 50% decrease in the odds of using very effective methods (OR=0.5 [0.3–0.9] both for women and men). The same was not true for Muslim respondents (OR=0.9 [0.4–2.5] for women and OR=0.9 [0.3–2.8] for men). The difference in effect of religiosity by type of religious affiliation was nonetheless not significant. Finally, results indicate that the use of very effective methods did not vary by type of religious affiliation after controlling for social and demographic characteristics.

DISCUSSION

We have shown in our study that in the French secularised context, where non-religious norms prevail, religious involvement nonetheless shapes an individual's sexual and contraceptive behaviour. Religiosity (which we assume here to have predated sexual initiation) was associated with a delayed onset of sexual debut among French respondents, regardless of their religious denomination. At the same time, religiosity is likely to prevent young people from adopting protective sexual behaviours, putting them at greater risk of negative sexual outcomes once they become sexually active. Indeed, we found that religious respondents were at greater risk of unprotected sex at first intercourse and less likely to use highly effective methods of contraception at the time of the survey. This latter association

holds true after controlling for a broad set of socio-demographic characteristics among Catholics but not among Muslim respondents.

The retrospective and cross-sectional nature of our data limits the interpretation of these findings, particularly in the case of retrospective accounts of first sexual intercourse. Information on religious affiliation, religiosity, and the socio-economic situation of respondents was only available at the time of the survey, rather than at the time of first coitus, and it is therefore possible that this study attributes behaviour at first sexual intercourse to religious factors, which may have evolved over time. In fact, some authors suggest the existence of a reciprocal causal interdependence between religion and sexual initiation¹⁴. Most longitudinal research conducted in the United States indicates that the link between religion and sexual debut is unidirectional^{2,5,6}; religious beliefs shape the way adolescents engage in sexual activity, but sexual initiation does not lead to changes in religiosity. However, a longitudinal survey among Italian university students concludes that the association is bidirectional¹⁴: religious practice was associated with a delayed onset of sexual activity, but, at the same time, sexual experience increased the likelihood of discontinuing church attendance. Only a prospective longitudinal survey may confirm the correlations observed in our study. A further limitation in using retrospective data is that little information about the circumstances in which respondents engage in first sex was available. Several studies examining the determinants of contraceptive use at first intercourse or within teenagers' first sexual relationship highlight the importance of the characteristics of the relationship as an explanatory factor¹⁵⁻¹⁷. However, such studies do not examine the association between these relationship features and religiosity. Socio-demographic factors have also been found to be associated with risky sexual behaviours among teens. In our study, women's level of education did not attenuate the relationship between religiosity and condom or contraceptive use at first coitus. However, religious and non-religious women differ in many ways as seen in the comparison of their social and demographic profile at the time of the survey. Thus it is possible that unobserved social factors present at the time of first intercourse may account for part of the disparity observed. Differences in contraceptive use at first intercourse between Muslims and Catholics respondents may reflect such unobserved socio-economic factors, a hypothesis supported by the fact that differentials in current contraceptive use between these two groups disappear after controlling for socio-economic factors. The importance of social factors in explaining the relationship between religiosity and contraceptive use at first intercourse was also reported by Jones and colleagues, who used the latest data from the National Survey of Family Growth³. The authors show that the crude association between religiosity and contraceptive use at first coitus disappears after controlling for social and demographic factors. However, in contrast with our results, the crude association among US women indicated an increase in contraceptive use among religious respondents compared to their non-religious peers, which speaks to the differences between the religious context in France and that in the United States.

While we acknowledge these limitations, we believe this study adds to the existing body of literature in several ways. First, we report on the independent roles of religious affiliation and religiosity on sexual and contraceptive behaviours, thus uncovering a complex process related to religious scripts and adherence to these scripts. This complexity is revealed in differential effects of religiosity on the use of highly effective methods among Catholics and Muslims, after controlling for socio-demographic factors, which may reflect the anti-contraception stance of the Catholic Church, while other religious denominations, including Islam, are less restrictive in this regard. The study is also among the few to explore the role of religiosity on sexual and contraceptive behaviour in the European secular context, underlying the need to consider religious influences relative to a specific time and place rather than as a consistent predictor of sexual and contraceptive behaviours. Thus, in

contrast with our findings, the crude association between religiosity and contraceptive use at first coitus among US women indicates an increase in contraceptive use among religious respondents compared to their non-religious peers, which speaks to the differences in religious contexts between France and the United States. Finally, by using a large national representative survey, this analysis provides an opportunity to reflect on gender and age differences in religious influences on sexual and contraceptive behaviours.

Our finding of a delayed sexual debut among religious respondents is consistent with the 'gate-keeping' role of religion in postponing the timing of sexual initiation commonly described in the literature^{3-6,16}. As this effect was greater for women than men, the data suggest that social control conveyed by religious beliefs plays a different role in determining sexual behaviours for young women than it does for young men. This finding may reflect the remaining influence of the 'sexual double standard', which is more likely to be followed by members of conservative religious groups. The results of a Scottish study looking at the relationship between religiosity, gender, and social judgments of sexual activity among Scottish teens partly support this view¹⁸. Thus, the authors conclude that although religiosity only moderately contributes to different standards of sexual behaviours for men and women, it has a significantly greater influence on judgments made by women than on judgments made by men.

While delaying sexual debut, the social control conveyed by religious beliefs on sexuality may also act as a barrier to the adoption of preventive behaviours should sexual intercourse occur, resulting in greater sexual risks among young religious individuals. This negative correlation has been described in earlier studies using the National Survey of Family Growth in the United States^{19,20}. However, other studies show no association³ or, alternatively, show greater use of contraception at sexual debut among religious respondents⁷, raising questions about the underlying mechanisms that contribute to these observed effects. Religious involvement shapes behaviour through mechanisms of social control and social support that interact at different levels. The fact that social norms about premarital sex within specific groups of the population contrast with the dominant culture, may result in risky sexual behaviours among teens, as observed in our study^{21,22}. Religious and traditional family values encourage abstinence from premarital sexual activity, whereas French secular values normalise sexual activity and promote contraceptive use. In that respect, the greater effect seen in women (Catholic and Muslim alike) may reflect the strong social pressure felt by religious women to avoid premarital sex rendering difficult their ability to plan for contraception when sexual intercourse occurs. Such mechanisms are well documented in the context of abstinence-only education in the United States, as research has repeatedly shown that such policies, based on moral prescriptions of teenage sexuality, are ineffective in preventing teen pregnancies in the aforementioned country^{23,24}.

While less marked, our results indicate a sustained effect of religiosity on sexual and contraceptive behaviours after sexual debut, reflected in the significant associations described at the time of the survey. Religious women were less likely to be exposed to the risk of an unintended pregnancy, mainly because they were less likely to be sexually active. However, consistent with the recent findings of Kramer *et al.* in the United States⁸, we found that among those who were potentially at risk, religious respondents in their teens were less likely to use contraception but that the same was not true for older respondents (over 20 years of age for women, and over 30 for men). Furthermore, religious involvement was associated with a significant decline in the odds of using a highly effective method. This association holds true after controlling for a broad set of socio-demographic characteristics among Catholics, but not among Muslim respondents. Such results may be due to the very restrictive attitude of the Catholic Church with regard to fertility control which we already

mentioned, Islam and other religious denominations imposing fewer constraints in this respect.

Drawing insights from these results, one should become aware of the importance of considering the relationship between religiosity and sexual and contraceptive behaviours as a complex phenomenon, which varies by gender, religious affiliation, and during the life course. It is also critical to consider religious practices within their socioeconomic and cultural contexts to fully understand the underlying mechanisms by which sexual and reproductive health outcomes differ by religiosity. As religious involvement seems to deter protective behaviours at the onset of sexual activity, regardless of the respondents' specific religious affiliation, we believe that sex education in the schools serves the important purpose of filling any gaps in information regarding sexual intercourse and contraception. This is crucial so that with the initiation of sexual activity, young people, regardless of religious practice, have the tools to prevent unwanted pregnancy. Such preventive actions are needed as these young people may not get information from their social network. The impact of comprehensive school sex education on young people's knowledge and sexuality development, and its long-lasting impact on preventive behaviours, particularly among those who receive no such education from their parents, has yet to be determined in the French context.

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Table 1

Social and demographic characteristics of women and men by level of religiosity

	Women			Men		
	No religion or not practising n=5,430	Practises occasionally n=1,525	Practises regularly n=540	No religion or not practising n=4,450	Practises occasionally n=895	Practises regularly n=289
All	70.4	20.9	8.7	76.5	16.9	6.6
						<i>p</i> -value
Age						0.02
15–19	15	13.5	17.5	16.2	19.5	21.2
20–24	14	11.6	16.1	15.6	16.9	21.2
25–29	14.6	16	14.9	15.3	12.8	16.3
30–34	20.6	17.8	19.7	19.3	19.1	14.3
35–39	17.5	19.8	15	16.9	14	13.8
40–44	18.2	21.3	16.9	16.7	17.6	13.2
Marital status						<0.001
Single	39.3	35.3	46.8	44.9	49.4	58.1
Cohabiting	23.1	14.4	6.3	22.7	11.8	7.7
Married	37.7	50.4	46.9	32.4	38.8	34.2
Has children						0.13
Yes	54.8	59.2	53.1	42.7	41.2	36.3
No	45.2	40.8	46.9	57.3	58.8	63.7
Level of education						0.67
<High school	42.7	40.1	40.5	46.5	43.3	42.7
High school graduation	20.9	19.8	22.6	19.1	20.9	22.4
Two years after high school	15.9	18.8	15.5	15.2	14.9	15.2
More than two years after high school	20.4	21.4	21.4	19.2	20.9	19.6
Professional situation						<0.001
Works	56.3	57.4	41.6	66.6	65.5	50.5
Student	23.7	21.3	28.9	23.6	27.6	34.4
Unemployed	10.1	9.4	11.6	8.7	6.5	14.7
Non active	9.8	11.7	17.9	1.1	0.4	0.4

	Women			Men		
	No religion or not practising n=5,430	Practises occasionally n=1,525	Practises regularly n=540	No religion or not practising n=4,450	Practises occasionally n=895	Practises regularly n=289
All	70.4	20.9	8.7	76.5	16.9	6.6
						<i>p</i> -value
Income *						<0.001
Low	28.1	29.2	35.9	23.1	24.3	36
Medium	28.9	25.4	21.7	28.9	26.1	21.8
High	24	24.9	14.2	31.2	30	18.5
Unknown	19	20.5	28.3	16	19.7	23.8
Area of residence						<0.001
< 20 000 habitants	40.3	41.9	24.1	40.7	35.5	19.7
20 000 a 200 000	19.7	17.1	17.6	17.6	16	15.7
200 000 or more	23.5	23.5	25.4	23.2	24.9	30.8
Parisian metropolitan area	16.5	17.5	32.9	18.5	23.6	33.8
Type of religion						
No religion	67	0	0	69.8	0	0
Catholic	29.9	83.5	40.3	26.9	75.7	38.5
Muslim	1.5	11.1	40.5	1.9	17	45
Protestant	0.9	2.7	7.3	0.7	3	6.3
Other	0.8	2.7	11.9	0.8	4.4	10.2

* Income was subdivided into three tertiles: *low* medium (< 900 euros/month/family unit); *medium* (900 to <1500 euros/month/family unit), and *high* (1500 euros/month/family unit or more).

Table 2

Sexual and contraceptive practices of women and men by age group, according to their level of religiosity

	15–19		20–24		25–29		30–34		35–39		40–44		15–44		Interaction by sex 15–44		15–29		Interaction by sex 15–29	
	Women n=920	Men n=784	Women n=848	Men n=678	Women n=1212	Men n=859	Women n=1627	Men n=1204	Women n=1527	Men n=1121	Women n=1343	Men n=978	Women n=7477	Men n=5624	OR (controlling for age category)	p	OR (controlling for age category)	Women n=2980	Men n=2321	p
Proportion sexually active		%	%	%	%	%	%	%	%	%	%	%	OR (controlling for age category)							
No religion or doesn't practise	53.6	56.9	92.7	92.1	97.3	98.4	99.0	98.9	98.6	98.9	98.6	99.6	1	1	1	0.09	1	1	1	0.05
Practises occasionally	34.6	46.3	79.1	88.9	98.6	95.2	99.9	96	99.3	99.1	98.9	99.1	0.5 [0.4–0.7]	0.6 [0.4–0.9]	0.4 [0.3–0.6]	***	0.4 [0.3–0.6]	0.6 [0.4–0.9]	*	
Practises regularly	14.7 ***	45.3	37.7 ***	60.5 ***	92.4 *	83.6 ***	92.6 ***	96.1 *	92.1 ***	98.8	98.8	96.0 *	0.1 [0.1–0.2]	0.3 [0.2–0.5]	0.1 [0.1–0.2]	***	0.1 [0.1–0.2]	0.3 [0.1–0.5]	***	
Proportion of condom use at first intercourse																				
No religion or doesn't practise	93.6	89.7	89.3	86.9	81.1	80.2	57.9	57.0	35.9	27.3	24.6	14.1	1	1	1	0.71	1	1	0.02	
Practises occasionally	83.9	85.6	75.6	80.6	74.5	77.1	63.9	59.2	40.6	34.1	28.8	19.9	1.0 [0.9–1.2]	1.0 [0.8–1.3]	0.5 [0.4–0.7]	***	0.5 [0.4–0.7]	0.7 [0.5–1.1]		
Practises regularly	85.3	81.4	53.6 ***	70.9	38.0 ***	60.8 *	52.6	29.6 ***	28.7	20.4	16.7	22.1	0.4 [0.3–0.6]	0.5 [0.3–0.7]	0.2 [0.1–0.2]	***	0.2 [0.1–0.2]	0.4 [0.2–0.7]	***	
Proportion of contraceptive use at first intercourse																				
No religion or doesn't practise	94.9		92.2		85.5		76.2		64.7		54.5		1				1			
Practises occasionally	86.8	naI	85.4	naI	83.0	naI	77.6	naI	67.7	naI	52.2	naI	0.9 [0.8–1.1]	naI	naI	0.6 [0.4–1.0]	naI	naI	naI	
Practises regularly	85.3		74.0 **		50.6 ***		63.1 *		45.4 ***		48.0		0.4 [0.3–0.6]	0.5 [0.3–0.7]	0.2 [0.1–0.3]	***	0.2 [0.1–0.3]	0.4 [0.2–0.7]	***	
Proportion sexually active in the last year among those who ever had sex																				
No religion or doesn't practise	89.4	82.8	92.0	87.7	96.4	94.2	95.7	96.1	95.7	97.4	91.7	95.0	1	1	1	0.05	1	1	0.18	
Practises occasionally	92.5	79.4	90.9	93.7	98.4	93.0	97.1	94.9	95.7	96.2	96.1	96.7	1.4 [1.1–2.0]	1.1 [0.7–1.5]	1.3 [0.7–2.2]		1.1 [0.7–1.9]			
Practises regularly	85.3	73.2	80.8	91.4	87.6 ***	93.9	89.1 *	96.1	88.2 **	93.2	90.7 *	95.3	0.4 [0.3–0.7]	0.8 [0.5–1.4]	0.3 [0.2–0.7]	**	0.9 [0.5–1.8]			
Proportion having more than 1 partner in the last year among those having sex in the last year																				
No religion or does not practise	26.4	42.8	17.0	36.9	8.6	20.0	4.5	10.9	5.2	9.6	3.4	10.6	1	1	1	0.007	1	1	0.015	
Practises occasionally	19.9	49.3	12.4	56.4	11.5	20.3	4.1	12.2	4.7	7.5	2.2	6.8	0.9 [0.7–1.2]	1.2 [1.0–1.6]	0.9 [0.6–1.4]		1.6 [1.1–2.2]	**		
Practises regularly	na2	32.9	5.8	63.5 **	1.8	36.0	1.7	4.1	1.8	7.6	1.3	5.2	0.4 [0.2–0.8]	1.3 [0.9–1.9]	0.5 [0.2–1.2]	*	1.9 [1.1–3.3]	**		
Proportion at potential risk of unintended																				

	15–19		20–24		25–29		30–34		35–39		40–44		15–44		Interaction by sex 15–44		15–29		Interaction by sex 15–29	
	Women n=920	Men n=784	Women n=848	Men n=678	Women n=1212	Men n=859	Women n=1627	Men n=1204	Women n=1527	Men n=1121	Women n=1343	Men n=978	Women n=7477	Men n=5624		Women n=2980	Men n=2321			
Proportion sexually active	%		%		%		%		%		%		OR (controlling for age category)		<i>p</i>	OR (controlling for age category)		<i>p</i>		
Pregnancy among those who ever had sex																				
No religion or doesn't practise	83.5	72.2	81.9	78.1	76.1	74.2	77.8	75.1	81.4	80.9	77.7	80.2	1	1	0.72	1	1	0.17		
Practises occasionally	79.1	74.4	78.4	82.5	77.7	76.6	75.5	70.9	81.4	78.8	85.2	85.5	1.1 [0.9–1.2]	1.1 [0.9–1.3]		0.9 [0.7–1.3]	1.2 [0.8–1.7]			
Practises regularly	<i>na2</i>	64.9	66.1	77.9	54.5 ***	64.1	70.4	65.3	74.0	81.3	77.1 *	71.1	0.6 [0.5–0.8] ***	0.7 [0.5–1.0]		0.4 [0.3–0.7] ***	0.7 [0.4–1.3]			
Contraceptive coverage among couples at risk																				
No religion or does not practise	99.2	96.6	99.7	96.4	97.6	97.1	98.1	97.3	98.3	95.3	97.7	95.1	1	1	0.73	1	1	0.99		
Practises occasionally	98.2	100	100	97.6	98.1	92.6	98.5	95.4	98.1	96.8	98.5	95.1	1.2 [0.7–2.1]	0.9 [0.5–1.7]		1.1 [0.4–3.1]	0.9 [0.3–3.2]			
Practises regularly	<i>na2</i>	84.0 *	100	100	96.3	82.9 *	97.1	100	96.4	98.4	97.8	100	0.5 [0.2–1.2]	0.7 [0.3–1.7]		0.3 [0.1–1.4]	0.3 [0.1–0.8] *			
Proportion using highly effective methods among contraceptive users																				
No religion or doesn't practise	81.9	57.7	91.2	79.8	86.5	82.1	87.3	77.6	87.8	84.8	85.8	84.6	1	1	0.43	1	1	0.95		
Practises occasionally	73.2	49.8	82.2	78.0	86.3	64.2	84.8	75.2	89.8	78.4	88.4	80.9	0.9 [0.7–1.2]	0.7 [0.6–0.9] **		0.7 [0.4–1.1]	0.6 [0.4–1.0]			
Practises regularly	<i>na2</i>	63.6	92.7	50.0 *	71.3	62.4 **	74.8 *	87.9	86.4	70.9 *	83.5	79.2	0.6 [0.4–0.8] **	0.6 [0.4–0.9] *		0.4 [0.2–0.7] **	0.4 [0.2–0.9] *			

* p<0.05,
** p<0.01,
*** p<0.001

a. risk of unintended pregnancy was defined as being sexually active in the last 12 months with a current partner, non-sterile, not pregnant or trying to become pregnant

nal : contraceptive use at first intercourse was not asked for men

na2: less than 10 women ages 15–19 were sexually active in the last 12 months

Table 4

Odds ratios (ORs) and 95% confidence intervals (CIs) from logistic regression analyses examining the likelihood of very effective contraceptive use among contraceptive users (at the time of the survey), according to their level of religiosity (regularly practising religious respondents *versus* others)

<i>Religious practice</i>	All contraceptive users			Contraceptive users who reported a religious affiliation	
	Model 1 (controlling for age)	Model 2 (controlling for age + social demographics ^a)	Model 3 (controlling for age + social demographics ^a + number of partners last 12 months)	Model 4 (controlling for age + social demographics ^a + number of partners last 12 months) + religiosity + religious affiliation + interaction religious affiliation/religiosity	Interaction between religiosity and religious affiliation
Women		OR		OR	<i>p</i> value
15–44		<i>n</i> =5,064		<i>n</i> =2,589	
No or occasional practice	1	1	1	1	0.13
Practises regularly	0.6 [0.4–0.8] [*]	0.6 [0.4–0.8] [*]	0.6 [0.4–0.8] [*]	0.5 [0.3–0.9] [*]	
15–29		<i>n</i> =1,828		<i>n</i> =794	
No or occasional practice	1	1	1	1	0.51
Practises regularly	0.4 [0.2–0.8] [*]	0.5 [0.3–1.0] [*]	0.5 [0.3–1.0]	0.5 [0.2–1.4]	
Men		OR		OR	<i>p</i> value
15–44		<i>n</i> =3,564		<i>n</i> =1,612	
No or occasional practice	1	1	1	1	0.26
Practises regularly	0.6 [0.4–1.0] [*]	0.7 [0.4–1.0]	0.7 [0.4–1.1]	0.5 [0.3–0.9] [*]	
15–29		<i>n</i> =1,289		<i>n</i> =511	
No or occasional practice	1	1	1	1	0.24
Practises regularly	0.5 [0.2–0.9] [*]	0.5 [0.2–1.0] [*]	0.5 [0.2–1.1]	0.2 [0.1–0.7] [*]	

^{*} *p*<0.05,

^{**} *p*<0.01,

^{***} *p*<0.001

^a Social demographic controls include age of respondents at the time of the survey, marital status, number of children, area of residence, professional situation, and level of education