

Men who pay for sex in Spain and condom use: prevalence and correlates in a representative sample of the general population

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ABSTRACT

Objective: To estimate the percentage of men who have paid for heterosexual sex in Spain and the percentage who used condoms. To identify the main factors associated with these behaviours and to describe opinions about condoms.

Methods: Sexual behaviour probability sample survey in men aged 18–49 years resident in Spain in 2003 (n = 5153). Computer-assisted face to face and self interview was used. Bivariate and multivariate logistic regression analyses were performed.

Results: 25.4% (n = 1306) of the men had paid for heterosexual sex at some time in their lives; 13.3% (n = 687) in the last 5 years and 5.7% (n = 295) in the last 12 months. In the logistic analysis this behaviour was associated with older age, lower education, being unmarried, foreign birth, being a practicing member of a religious group, unsatisfactory communication with parents about sex, age under 16 years at first sexual intercourse and having been drunk in the last 30 days. Of the men who had paid for sex in the previous 5 years, 95% (n = 653) had used a condom in the most recent paid contact. In the multivariate analysis, not using a condom was associated with age over 30 years and first sexual intercourse before age 16 years. Men who did not use condoms in the last commercial intercourse had more negative opinions about condoms.

Conclusions: The prevalence of paying for heterosexual sex among Spanish men is the highest ever described in developed countries. The many variables associated with paying for sex and condom use permit the characterisation of male clients of prostitution and should facilitate targeting HIV prevention policies.

Most published studies of HIV and prostitution have focused on sex workers. A few have looked at the prevalence of paying for sex in the general male population.^{1,2} Probabilistic sample surveys are one of the most appropriate ways to study this. A recent review concluded that in the past 20 years, between 1 and 5% of men in developed countries had paid to have heterosexual relations in the preceding year, with a median value of 2.9%.³ However, due to the small proportion of men who admit to this behaviour, only two surveys have characterised these men, although neither of these studies provides information about the factors associated with lack of condom use.^{4,5} Thus, most studies that have attempted to describe profiles of clients of prostitution and their sexual behaviour are based on convenience samples.^{6–11}

Spain has the largest number of living HIV-infected persons in western Europe: 130 000 or 325.7/100 000 population,¹² and sexual contact is the primary route of HIV transmission.¹³ Thus, the probability of contracting HIV infection from sexual relations without using condoms is higher in Spain. Reliable information on this subject was not available in Spain until late 2003, when the first population survey was carried out on sexual behaviour, knowledge, attitudes and opinions on HIV infection; this survey included data on male use of prostitution.

The objectives of the present study were: 1) to estimate the proportion of men age 18–49 years resident in Spain who had paid to have sexual relations; 2) to describe the association between this behaviour and sociodemographic and lifestyle variables; 3) to determine the proportion of men who did not use a condom in the most recent commercial sexual relation and to identify the main associated factors; and 4) to compare opinions about condoms among men who did and did not use them in their most recent paid sexual encounter.

METHODS

A comprehensive report on the survey, providing details on the methods used, including sampling and weighting procedures, has been published by the Ministry of Health and the National Statistics Institute.¹⁴ This survey was included in the National Statistics Plan 2001–2004 (Health sector no. 3389) and granted ethical and legal approval.

Sample design

The Health and Sexual Behaviour Survey (HSBS) is a probabilistic survey of 10 980 people aged 18–49 years resident in households in Spain interviewed between October and December 2003. A two-stage sampling procedure was carried out with stratification in the first stage. The first-stage units were census sections, stratified by size of municipality. The second-stage units were people aged 18–49 years who were selected from the list of those registered in each census section.

Response rate

To obtain interviews with 10 980 people it was necessary to visit 30 887 households with someone aged 18–49 years. In 6464 cases the dwelling was not a family household, could not be located or was empty, or the person selected was outside the

age range or, more frequently (80% of such incidents), no longer lived in the household despite being registered in the census data. In addition, in 7037 households it was shown that all the residents or the person selected were going to be absent during the entire fieldwork. Considering the 17 386 households in which the selected person lived and it was possible to carry out the interview, the response rate was 63.2%. In the data cleaning phase, 142 questionnaires were found to be useless for the analysis; thus the final sample was reduced to 10 838 records: 5153 men and 5685 women.

Data collection

The questionnaire included items on sociodemographic characteristics; lifestyles; sources of information and satisfaction about communication with parents on sexual matters; sexual behaviour; HIV testing; and knowledge, opinions and attitudes about HIV infection and preventive measures. Data collection was carried out using a combination of face to face (for sociodemographic data while learning to use the programme) and computer-assisted self interview (CASI) for the rest of the questionnaire.

In the subsection on heterosexual relations men were asked: "Have you ever paid to have sexual relations with a woman?" If the answer was yes, they went on to two more questions: "When was the last time you paid to have sexual relations with a woman?" and "Did you use a condom the last time you paid to have sexual relations with a woman?" Men who had sex with men (MSM) were asked the same questions, replacing the word "woman" with "man". The section of the questionnaire on knowledge, opinions and attitudes included questions designed to assess the level of agreement with a number of statements reflecting different opinions about condoms.

Statistical analysis

The data were weighted to adjust for unequal selection probabilities. Differences in gender, age group and region between the sample obtained and population estimates were corrected, and non-response was taken into account with re-weighting. All the analyses were made using the complex survey commands (SVY) of Stata (version 8.2), which incorporated the weighting, clustering, and stratification of the data.

Most men reporting paying for sex stated that they had had commercial sexual relations with women (99.3%) and therefore the analysis was restricted to heterosexual contacts. We estimated the prevalence of men paying women for sex at some time in their lives, in the last 5 years and in the last 12 months. The analysis of the factors associated with commercial sexual relations was restricted to the last 12 months.

We estimated the prevalence of not using condoms in the most recent sexual commercial relation. Because the number of men who did not use a condom in this type of relation in the last 12 months was very low, and in order to make a more robust analysis of the factors associated with this risk behaviour, we extended the study period to 5 years.

To evaluate the magnitude of the association of the different sociodemographic and lifestyle variables with paying for sex and failure to use condoms we calculated the Mantel-Haenzel odds ratio (OR) and the 95% confidence interval (CI). To identify the independent effect of each variable we performed a multiple logistic regression analysis. Adjusted ORs and CIs are presented.

For the group of men who reported paying for sex in the last 5 years, the χ^2 test was used to evaluate whether there were statistically significant differences in opinions about condoms

among those who did and did not use a condom in their most recent commercial sexual relation.

RESULTS

Prevalence of payment for sex and associated factors

About 25.4% of men reported having paid for sexual relations with women at some time in their lives; 13.3% had had these relations in the last 5 years and 5.7% in the last 12 months.

The adjusted model (table 1) shows that the likelihood of having paid for sex in the last 12 months increased with older age (OR 2.6, 95% CI 1.6 to 4.1 for men aged 40–49 years as compared to those aged 18–24 years). This behaviour varied by marital status: it was more probable among those who cohabited without being married than among married men (OR 2.1, 95% CI 1.2 to 3.6), was even more likely among those who had previously been married (OR 4.2, 95% CI 2.4 to 7.4) and more likely yet in those who had never been married (OR 4.8, 95% CI 3.2 to 7.2). Paying for sex increased with lower educational level (OR 1.8, 95% CI 1.2 to 2.7 in those with less than a secondary education as compared to those who had university education), and was higher in men born outside of Spain (OR 1.6, 95% CI 1.0 to 2.5) and those who were practicing members of a religious group (OR 1.6, 95% CI 1.0 to 2.6). It was also higher in men who had unsatisfactory (OR 1.6, 95% CI 1.1 to 2.3) or no communication with parents about sex (OR 1.7, 95% CI 1.3 to 2.4), or who had initiated sexual activity at an early age (OR 1.9, 95% CI 1.4 to 2.6), among those who went out at night more than once a month (OR 1.5, 95% CI 1.0 to 2.1), and those who had been drunk more than once in the last 30 days (OR 1.9, 95% CI 1.3 to 2.6).

Factors associated with lack of condom use in last paid sexual encounter

Only 5% of the men who had paid for heterosexual sex in the last 5 years did not use a condom the last time they had this type of relation. In the multivariate analysis (table 2), the only two factors significantly associated were age over 30 years (OR 3.4, 95% CI 1.2 to 9.6) and early first sexual relations (OR 2.6, 95% CI 1.1 to 6.4). Being a practicing member of a religious group was strongly associated, but was on the limit of statistical significance (OR 2.6, 95% CI 0.9 to 7.5).

Opinions about condoms

Among those who had paid for sexual relations in the last 5 years, the percentage of those who "strongly or somewhat agreed" with negative opinions about condom use was always higher among those who had not used them in the most recent paid relation. The differences were statistically significant for statements such as: "They keep you from feeling the other person's body", "They create mistrust in the couple" and "They are complicated to use" (fig 1).

DISCUSSION

The results of this population-based study show that Spain is the developed country in which the highest prevalence of men paying women for sex has been reported, although condoms are almost always used in this type of sexual relation. Furthermore, our study questionnaire and sample size has made it possible to describe a number of variables that depict a somewhat distinct profile of male users of prostitution and of those at greatest risk—that is, men who fail to use condoms in these relations.

The percentage of men who declared they had paid to have heterosexual relations in the last 12 months (5.7%) was much

Table 1 Paying for heterosexual sex in the last 12 months by sociodemographic and other factors. Spain, 2003. Crude and logistic regression analysis

	Base		Payment for sex (%)	Crude OR (95% CI)	Adjusted OR* (95% CI)
	Unweighted	Weighted			
All men	5153	5499	5.7	–	–
Age group (years)					
18–24	1162	1078	5.8	1	1
25–39	2577	2847	6.3	1.1 (0.8 to 1.5)	2.1 (1.5 to 2.9)
40–49	1414	1574	4.6	0.8 (0.5 to 1.1)	2.6 (1.6 to 4.1)
Marital status (last 12 months)					
Married	2204	2470	2.5	1	1
Cohabiting	475	524	5.0	2.1 (1.2 to 3.5)	2.1 (1.2 to 3.6)
Previously married	203	216	12.0	5.3 (3.1 to 9.1)	4.2 (2.4 to 7.4)
Never married	2251	2261	8.8	3.8 (2.7 to 5.2)	4.8 (3.2 to 7.2)
Level of education					
University	940	1015	4.0	1	1
Secondary	2017	2119	5.8	1.5 (1.0 to 2.2)	1.6 (1.1 to 2.4)
< Secondary	2196	2365	6.4	1.6 (1.1 to 2.4)	1.8 (1.2 to 2.7)
Country of birth					
Spain	4801	5100	5.5	1	1
Other country	349	396	8.8	1.7 (1.1 to 2.6)	1.6 (1.0 to 2.5)
Size of municipality					
>10,000 inhabitants	4061	4242	5.3	1	1
≤10,000 inhabitants	1092	1257	7.2	1.4 (1.0 to 1.9)	1.3 (0.9 to 1.7)
Religion†					
No religion	1550	1702	5.6	1	1
Non-practicing member of religious group	2502	2638	5.9	1 (0.8 to 1.4)	1.2 (0.9 to 1.7)
Practicing member of religious group	499	499	6.9	1.3 (0.8 to 2.0)	1.6 (1.0 to 2.6)
No answer	493	538	4.3	0.8 (0.5 to 1.2)	0.7 (0.4 to 1.2)
Communication with parents about sex‡					
Satisfactory	2058	2165	4.7	1	1
Unsatisfactory	1071	1199	6.2	1.4 (1.0 to 1.9)	1.6 (1.1 to 2.3)
Lack of communication	1989	2091	6.6	1.4 (1.1 to 1.9)	1.7 (1.3 to 2.4)
Age at first sexual intercourse					
≥16 years	4484	4739	5.1	1	1
<16 years	669	759	9.4	1.9 (1.4 to 2.6)	1.9 (1.4 to 2.6)
Goes out at night (last 12 months)					
<1 night/month	1381	1530	3.4	1	1
≥1 night/month	3759	3950	6.6	2 (1.4 to 2.8)	1.5 (1.0–2.1)
Having been drunk (last 30 days)					
Never	3423	3748	4.3	1	1
Once	568	585	6.9	1.7 (1.1 to 2.5)	1.4 (0.9 to 2.2)
> Once	990	987	9.4	2.3 (1.7 to 3.1)	1.9 (1.3 to 2.6)

Factors associated with lack of condom use in last paid sexual encounter.

*Adjusted for all the variables in the table and also by region. †No religion: no religious denomination or belief; non-practicing member of religious group: refers to belonging to a religious denomination (Catholic, Protestant, Muslim or other) but attends religious services less than once a week or never except for weddings, funerals and christenings; practicing member of religious group: refers to belonging to a religious denomination (Catholic, Protestant, Muslim or other) and attends religious services regularly, apart from weddings, funerals and christenings. ‡How satisfactory was communication with your parents regarding sexual matters? Satisfactory includes very, quite satisfactory or satisfactory; unsatisfactory includes hardly satisfactory or not at all satisfactory; lack of communication is no communication whatsoever.

higher than what has been reported in population surveys conducted in other high income countries. In Australia this proportion was 1.9%⁴ and in Britain it was 1.3%.⁵ A survey between 1997 and 1999 in other European countries, using a common protocol (NEM Project), found figures ranging from 0.0% in Germany to 5.3% in Greece.³ In Spain a 1990 study reported 9.9%, but this was based on a small sample of men (n = 409).¹⁵

The high use of condoms (95%) found in the HSBS agrees with the results of studies in sex workers in Spain.¹⁶ Non-population based studies have shown a similar situation in other developed countries. In Australia, 97.7% of men used condoms in vaginal intercourse and 100% in anal intercourse.⁴ In our survey, the use of condoms was clearly

lower in non-commercial sex encounters (last 12 months), with 59.1% having always used it with occasional partners and 73.6% in the first sexual intercourse with a new partner.

In our study, the factor that was by far most strongly associated with having paid for sexual relations was not living with a partner. This situation is similar to what has been described in the British and Australian studies.^{4–5} It is important to point out that the behaviour of those who cohabit may involve a greater risk of spreading HIV and other sexually transmitted infections as condom use with regular partners is generally rare.⁷

The progressive increase in the use of prostitution with older age and decreasing educational level, as well as the differences between persons born in Spain and those born in other

Behaviour

Table 2 Factors associated with not using condoms in most recent commercial intercourse during the last 5 years. Spain, 2003. Crude and logistic regression analysis

	Not using condom (%)	Crude OR (95% CI)	Adjusted OR (95% CI)
Age group (years)			
<30	1.8	1	
≥30	7.4	4.5 (1.7 to 11.7)	3.4 (1.2 to 9.6)
Marital status (last 12 months)			
Cohabiting and never married	3.3	1	
Married and previously married	8.2	2.7 (1.2 to 5.9)	1.4 (0.6 to 3.4)
Level of education			
University and secondary	3.5	1	
< Secondary	6.7	2.0 (0.9 to 4.6)	1.5 (0.6 to 3.5)
Country of birth			
Spain	4.5	1	
Other country	9.9	2.3 (0.8 to 7.0)	1.3 (0.5 to 3.7)
Size of municipality			
>50 000 inhabitants	4	1	
≤50 000 inhabitants	6.1	1.6 (0.7 to 3.5)	1.4 (0.6 to 3.2)
Religion			
Non-practicing member of a religious group, no religion and no answer	4.2	1	
Practicing member of a religious group	12.3	3.2 (1.1 to 8.9)	2.6 (0.9 to 7.5)
Communication with parents about sex			
Satisfactory	3.7	1	
Unsatisfactory and lack of communication	5.7	1.6 (0.7 to 3.8)	1.6 (0.6 to 4.1)
Age at first sexual intercourse			
≥16 years	4.3	1	
<16 years	7.7	1.9 (0.8 to 4.4)	2.6 (1.1 to 6.4)

Base: unweighted 687; weighted 733.

countries, has not been previously documented. In Britain, this behaviour was more frequent in those 25–34 years of age⁵ but, as in Australia, no association was found with social class or educational level.⁴ Age was also the factor most strongly associated in our study with failure to use condoms in commercial sex contacts. The gradient in the association of paying for sex with age and educational level in Spain may be related to the transition in sexual behaviour that is still in process—a transition that always begins in the more highly educated—whereas there is now more uniformity in other developed countries. The small number of foreign men who had been clients of prostitutes did not permit a breakdown by region of birth.

Early initiation of sexual relations was the second most strongly associated factor of not using condoms and was also one of the strongest predictors of use of prostitution. In the Australian survey, it was also found that having the first sexual relation before 16 years of age was associated with ever having paid for sex.⁴ Other studies have also shown that age at first intercourse is a strong indicator of sexual and reproductive health in adulthood.^{17 18}

Our finding that practicing members of a religious group (94.4% of whom were Catholic) had a higher prevalence of commercial sex relations and were less likely to use condoms in these contacts is somewhat surprising. We are not aware of any studies that have specifically explored the association between religious beliefs and use of prostitution. Most of the studies that have analysed the role of religion in sexual behaviour have focused on teenagers and have found a protective effect of religious belief and practice: it reduces sexual activity, number

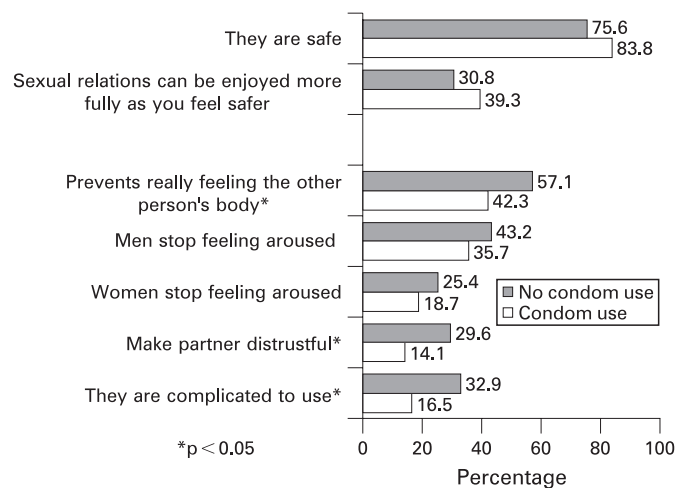


Figure 1 Opinions about condoms. Percentage of men who paid to have sexual relations in the last 5 years and who strongly/somewhat agreed with different statements about condoms, by use of condom in most recent commercial sexual relation.

of partners and use of contraceptive methods.^{19 20} The few studies that have investigated this relation in the adult population have also found similar results.^{21 22} The Australian study is the only one that has explored the association between sexual behaviour and religion in a probabilistic sample in the general population. This study found that Christians who attended church at least once a month had the most conservative attitudes and behaviour.²³

The lack of satisfactory communication with parents on sexual matters was associated with greater use of prostitution and less frequent condom use (although this was not statistically significant). Although no studies have described this factor as associated with paid sex and no condom, some studies have pointed to the role of good communication with parents about sexual issues in reducing sexual risk activities.^{24 25}

Men who did not use a condom in their last commercial sex relation had more negative opinions about condoms. Clients' refusal to use condoms, and their willingness to pay more for this, is the greatest obstacle to protected commercial sexual relations.²⁶ One of the reasons men most commonly allege for not using condoms is that "they feel more pleasure without it".²⁷

It is important to keep in mind the methodological limitations inherent to this type of survey. Among the most important factors are possible participation bias, recall bias and under reporting of behaviour considered socially reprehensible. The response rate in the HSBS is comparable to that obtained in similar population studies.^{28–30} Use of the CASI may have helped in obtaining more complete and sincere self reports of sexual behaviour, as some studies have shown. It is difficult to evaluate recall bias in sexual behaviour surveys. We tried to control for this information bias in our study by focusing on men who had paid to have relations with a prostitute during a relatively recent period (the last 12 months) and asking about condom use in the most recent commercial sexual contact. Still, information referring to condom use in the most recent commercial heterosexual contact may not adequately reflect frequency of condom use in this type of encounters.

We can conclude that Spain is the developed country in which the highest prevalence of male use of commercial heterosexual relations has been described, although only a small

Key messages

- ▶ The percentage of men who pay for heterosexual sex in Spain is higher than those described in developed countries.
- ▶ Some sociodemographic variables are clearly associated with use of prostitution.
- ▶ Condom use is widespread in heterosexual commercial sex.
- ▶ Men who do not use condoms in paid sexual relations have more negative opinions on condoms.

percentage of these men do not use condoms in such relations. We were also able to identify a large number of variables characterising both male users of prostitution and the subgroup of those who fail to use condoms. This information may facilitate the adaptation of HIV prevention policies to the special characteristics of the populations at risk.

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