



Published in final edited form as:

Contraception. 2013 October ; 88(4): 544–552. doi:10.1016/j.contraception.2013.04.005.

Interest in over-the-counter access to oral contraceptives among women in the United States

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Abstract

Background—A growing body of evidence indicates that over-the-counter (OTC) access to oral contraceptive pills (OCPs) is safe and effective.

Study Design—We performed a nationally representative survey of adult women at risk of unintended pregnancy using a probability-based online panel. In November–December 2011, 2,046 eligible women completed the survey. Weighted proportions were calculated and logistic regression was used to identify covariates associated with support for and interest in using an OTC OCP.

Results—62.2% said they were strongly (31.4%) or somewhat (30.9%) in favor of OCPs being available OTC. 37.1% of participants reported being likely to use OCPs if available OTC, including 58.7% of current users, 28.0% using no method, and 32.7% using a less effective method. Covariates associated with a higher odds of reporting interest in using OTC OCPs were younger age; being divorced, separated or living with a partner (versus married); being uninsured or having private insurance (versus public insurance); living in the south (versus northeast); and current use of OCPs or less effective methods, or non-use of contraception (versus use of another hormonal method or IUD). Among respondents who said they were likely to use OTC OCPs, the highest amount they were willing to pay was on average \$20.

Conclusions—U.S. women are supportive of OTC access to OCPs, and many would obtain refills OTC or start using OCPs if they were available OTC.

Introduction

A growing body of evidence suggests that oral contraceptive pills (OCPs) may be appropriate for over-the-counter (OTC) sale. A cohort study in Texas, where women living

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near the border can obtain OCPs OTC in Mexico, found that OTC use was associated with significantly improved continuation compared to women obtaining pills by prescription [1]. Other research has found that women are accurately able to self-screen for contraindications to OCP use—especially contraindications to progestin-only pills [2, 3]. Recognizing this evidence, the American College of Obstetricians and Gynecologists (ACOG) recently issued a Committee Opinion supporting OTC access to OCPs [4].

Few studies in recent years have examined women's interest in OTC access to OCPs. In 1993 ACOG commissioned a national survey with 995 women age 18 years and older to measure women's attitudes toward OCPs. Results from this survey showed that women believed the pill was less effective and more dangerous than it truly was, and 86% said OCPs were not safe enough to buy OTC [5]. In 2004 a nationally representative telephone survey explored women's interest in obtaining hormonal contraception without a prescription after screening by a pharmacist, a model referred to as "pharmacy access" [6]. In this survey of 811 U.S. women at risk of unintended pregnancy, 68% reported being likely to use pharmacy access for hormonal contraceptives if it were available [6]. In a 2006 survey of 601 non-sterilized women in El Paso, Texas, who were not currently using hormonal contraception or an intrauterine device (IUD), 60.2% reported they would be more likely to use OCPs if they were available OTC in the United States [7].

The objective of this study was to estimate the current proportion of U.S. adult women at risk of unintended pregnancy who support OTC access to OCPs, as well as the proportion that would be likely to use an OTC OCP. We also assessed willingness to pay for an OTC OCP among women who said they were likely to use this option. In addition, we explored women's opinions of OTC access, including their perceived benefits of and concerns about this provision model.

Materials and Methods

From October to December 2011, we carried out a nationally representative survey of U.S. women of reproductive age at risk of unintended pregnancy exploring their interest in OTC access to OCPs. We conducted the survey with Knowledge Networks using their KnowledgePanel, a nationally representative, probability-based, non-volunteer online household panel [8]. This panel has been shown to give more accurate results than do telephone interviewing and Internet data collection from nonprobability samples [9–11].

Since 2009, KnowledgePanel has used an address-based sample frame for recruitment, which involves probability-based sampling of addresses from the U.S. Postal Service's Delivery Sequence File. Randomly sampled addresses are invited to join KnowledgePanel through a series of mailings (English and Spanish materials) and by telephone follow-up to non-responders when a telephone number could be matched to the sampled address. Prior to 2009, Knowledge Networks employed list-assisted random digit dialing sampling techniques based on a sample frame of the U.S. residential landline telephone universe. To include individuals who do not have internet access, Knowledge Networks provides a laptop computer and internet access to panelists who do not already have them. Nonspecific survey incentives are used to reduce attrition from the panel; panelists not receiving the free laptop and internet service receive participation checks for \$4–6 per month.

For this survey, a nationally representative sample of women aged 18 to 44 living in the United States was selected. Selected panel members who met the primary inclusion criteria (females aged 18–44 years who spoke English or Spanish) were invited by e-mail to participate in the survey. This e-mail did not give information about the survey topic. Respondents were screened and eligibility was limited to those women who were considered

at risk for unintended pregnancy: if they had sex with a man at least once in the last 12 months, were not pregnant or trying to become pregnant, did not deliver a baby in the past two months, and neither they nor their partner was sterilized [6].

The target sample size for the survey was 2,000. The maximum margin of error in the estimation of proportions at a 95% confidence level for a sample of 2,000 with a design effect of 1.8 was estimated to be $\pm 2.9\%$. The design effect is the ratio of actual variance due to weighting to the variance that would be computed under the assumption of simple random sampling with no post-stratification weighting. In order to reach this sample size, we estimated that 6,838 panel members would need to be contacted, assuming 45% of the panel members would satisfy the inclusion/exclusion criteria [6] and a response rate of 65% [12]. The response rate was lower than this estimate, and a total of 7,989 panel members were invited to participate in the survey.

The survey was pretested in October 2011 with 31 participants to ensure the questions were understood; it was also translated into Spanish. The final survey was fielded in November–December 2011. Participants gave informed consent prior to completing the online survey in English or Spanish. The study was approved by the Allendale Investigational Review Board.

Knowledge Networks provided a data file with weighting variables that incorporated design-based weights accounting for panel recruitment and study-specific post-stratification weights benchmarked against the demographic and geographic distributions for non-institutionalized women aged 18–44 from the most recent Current Population Survey [13]. The weights were also benchmarked against the Spanish language distributions from the most currently available Pew Hispanic Center Survey [14].

The survey included questions about past and current contraceptive use and participants' support for and interest in using OCPs obtained OTC or by pharmacy access. Over-the-counter access was described to participants as: "birth control pills would be available on a shelf at a drug store or grocery store just like cough medicine or some allergy pills. If you had a question, you could talk to a pharmacist. You would not need a prescription from a doctor or nurse. If you have insurance, your insurance may or may not cover 'over-the-counter' birth control pills." Pharmacy access was described to participants as: "birth control pills would be available at the pharmacy, but you would have to answer some health screening questions by the pharmacist and possibly get your blood pressure checked before you could get the pills. You would not need a prescription from a doctor or nurse. If you have insurance, your insurance may or may not cover 'pharmacy access' birth control pills."

In addition to asking about whether they would use an OTC OCP, participants were asked the following question to gauge their support for OTC availability: "What is your opinion of birth control pills being available over the counter in pharmacies or grocery stores? Even if you are not interested in using over-the-counter pills yourself, are you in favor of over-the-counter birth control pills being available for other women? It's important to remember that even if pills were available over the counter, a woman could still talk to a pharmacist if she had questions about the pills, or she could go to a clinic to talk to a doctor or nurse if she wanted to." Participants were also asked the highest price they would be willing and able to pay for each month's supply of pills if they were available without prescription, as well as whether they would be willing to pay an additional amount to speak with a pharmacist.

We compared current contraceptive use reported in our survey with that reported in the 2006–2010 cycle of the National Survey of Family Growth, which surveyed 12,279 U.S. women between ages 15–44 years. For this analysis, we excluded women in the National Survey of Family Growth who were younger than age 18 ($n=1,304$). We also excluded women who were not considered to be at risk of unintended pregnancy: women who were

pregnant or who delivered a live born infant within two months of the survey (n=667), were trying to become pregnant (n=445), were sterilized or relied on their partner's vasectomy for contraception (n=2,362), or had not had sexual intercourse with a male partner in the 12 months prior to the survey (n=1,547). This resulted in a final sample of 5,954 women age 18–44 years. In the National Survey of Family Growth, women could report using up to four methods of contraception in the month of the survey; in the Knowledge Networks survey, women could report all methods they were using. We categorized women's current contraceptive method use in both surveys according to the most effective method reported [15]. For example, women using both OCPs and condoms were considered current OCP users. We calculated frequencies and weighted proportions of current contraceptive method use for women in both samples who were at risk of unintended pregnancy.

Data analysis was conducted using the survey function within Stata 12.0 (Stata, StataCorp, College Station, TX) to account for complex sampling design. Statistical tests assumed significance at P value<0.05. Univariable and multivariable logistic regression analyses were performed to estimate the odds of personal interest in obtaining OCPs OTC (1=likely to use OTC access, 0=not likely to use OTC access, not sure, or not interested in OCPs), and general support for OTC availability (1=supports OTC access, 0=does not support OTC access or not sure) by demographic and reproductive background characteristics. All variables were used as binary or categorical predictors, with one category selected as the reference group based on large sample size and/or meaningful comparison. Missing data were excluded from these analyses. All independent variables were included in an initial regression model for each outcome. Sequentially, extraneous variables with a P value>0.2 were removed from the model. The following covariates were of particular interest and were forced into the model *a priori*: age, education, income, race and ethnicity, insurance status, and current contraception use. To calculate the income variable, we used the 2011 Health and Human Services poverty guidelines [16] to convert respondents' income levels and number of people in the household into a dichotomous variable (<200% federal poverty guidelines versus >200% federal poverty guidelines).

Results

Of the 7,989 women invited to participate in the survey, 4,487 completed the initial screening (completion rate of 56.2%). Of those who completed screening, 2,120 (47.2%) met the inclusion criteria for the survey. Of those who were eligible, 2,046 (96.5%) consented and provided data. Table 1 shows the demographic data and information on sexual behavior and experience seeking a prescription for contraception for the study population according to whether they supported OTC access to OCPs and whether they reported being likely to use an OTC OCP product.

Eighty-two percent of participants reported using OCPs at some point in the past, and 32.7% reported current use. The proportion of women in our survey currently using each contraceptive method was similar to those reported in the 2006–2010 National Survey of Family Growth for most methods, including for OCPs (32.3% versus 31.9% in the National Survey of Family Growth). However, a higher proportion of survey respondents reported using the IUD (11.8% versus 7.4% in the National Survey of Family Growth), and a lower proportion reported using condoms (16.6% versus 20.7% in the National Survey of Family Growth) and withdrawal (0.6% versus 6.5% in the National Survey of Family Growth). A higher proportion of survey respondents reported using no method (28.3% versus 21.5% in the National Survey of Family Growth). Based on the weighted responses from the National Survey of Family Growth, we calculated the population of women age 18–44 at risk of unintended pregnancy to be 28.9 million in 2006–2010 (95% confidence interval (CI) 27.1–30.8 million).

The proportion of respondents supporting OCPs being available OTC for each subject characteristic is presented in Table 1. Among all respondents, 62.2% (95% CI 59.5–65.0%) (n=1,246) said they were strongly (31.4%) or somewhat (30.9%) in favor of OCPs being available OTC. In multivariable analysis (Table 2), never married women and women living with a partner (versus married women) and women who had had unprotected sex in the past three months had significantly higher odds of supporting OTC availability of OCPs. Women with incomes less than or equal to 200% of the federal poverty guidelines had a significantly lower odds of supporting OTC availability compared to women with incomes that were greater than 200% of the federal poverty guidelines.

The proportion of respondents who said they were likely to use over-the-counter OCPs for each subject characteristic is presented in Table 1. Among all respondents, 37.1% (95% CI 34.3–39.8%) (n=728) said they were likely to use OCPs if they were available OTC (see Table 1). This includes 58.7% of current OCP users who said they were very or somewhat likely to get refills for OCPs over the counter, and 32.7% of women using a less effective method and 28.0% using no method who said they were very or somewhat likely to start using OCPs if they were available OTC. Among non-users of OCPs, 52.1% said they were not interested in using OCPs at all, regardless of whether they were available OTC or not. Results for the questions about pharmacy access use were similar to OTC use, with 37.7% of respondents saying they would be likely to use OCPs if they were available through a pharmacy access model. Given the similarities of the responses, we do not present any further results about interest in pharmacy access here, and we focus on the multivariable analysis for predictors of using an over-the-counter OCP.

In multivariable analysis (Table 2), younger women, those divorced, widowed, or separated or living with a partner (versus married), women with private insurance or no insurance (versus public insurance), and women living in the south (versus northeast) had significantly higher odds of reporting being likely to use OCPs if they were available OTC. Women currently using OCPs had a six-fold higher odds of reporting being likely to use OTC OCPs compared to users of the IUD or other hormonal methods; women reporting using a less effective contraceptive method or no method also had significantly higher odds for this outcome (see Table 2).

Participants reported both advantages and disadvantages associated with OTC availability of OCPs (see Table 3). Among the advantages, the majority thought OTC availability would be more convenient, would make it easier to get birth control, would save time, would save money, and would be easier to stay on birth control and prevent unintended pregnancy. Among the disadvantages, the majority were concerned that women might not get recommended cervical cancer screening, that women might use the wrong pill for them, or that insurance might not cover an OTC OCP.

Table 4 shows data on current monthly out-of-pocket expenditures for contraception. Among current contraceptive users (excluding IUD and implant users), the mean monthly out-of-pocket expenditure was \$15.29, and the median was \$10.00. Among respondents who said they were likely to use OTC OCPs, the highest amount they were willing to pay was on average \$20 (mean \$20.75, median \$20.00). Only 34.2% said they were willing to pay more than \$20. About three-quarters of those who said they were likely to use OTC OCPs said they were not willing to pay an additional amount to speak with a pharmacist to help them decide if the pill is right for them and answer their questions; among those who would pay something, the average they were willing to pay was \$10.

Discussion

In this nationally representative survey of women at risk of unintended pregnancy, we found more than 60% supported OTC access to OCPs, and the majority saw important advantages to this provision model—especially in terms of convenience. In addition, over one-third of respondents said they were likely to use an OTC pill if one were available, representing a potential market of approximately 11 million adult women. Women of all racial and ethnic groups and at every educational level had similar interest in using an OTC pill, and most who were not interested in using an OTC pill were simply not interested in this method, rather than having a specific aversion to OTC provision. Interest in using an OTC pill was significantly higher among younger women and those living with a partner, both of which are populations that have higher rates of unintended pregnancy [17]. In addition, almost one-third of women using no contraceptive method or a contraceptive method that is less effective than OCPs said they were likely to start using the pill if it were available OTC. These findings, together with the observation that continuation of OCPs is significantly higher among OTC users compared to those who obtain the pill by prescription [1], suggest that OTC availability might reduce unintended pregnancy, although this remains to be proven.

The strongest predictor of likelihood to use an OTC pill was current use of OCPs, which is understandable since this population is already comfortable with the method. In addition, current users have a lower prevalence of contraindications to combined oral contraceptives (COCs) since they have already been screened by a clinician [7]. We found that younger women, who are also less likely to have contraindications to COCs compared to older women [2], were more likely to say they would use an OTC OCP. These findings suggest that the population most likely to use an OTC OCP would have a low prevalence of COC contraindications and would therefore be at low risk of serious medical complications associated with OCPs. Another study found that users of an online program providing hormonal contraception had equivalent knowledge scores regarding contraindications and dangerous side effects compared to clinic patients, suggesting that the health literacy of the population interested in accessing these methods outside of a clinic is reasonably high [18].

We also found that uninsured women were significantly more likely to report they would use an OTC pill, which is not surprising given the higher out-of-pocket expenditures for uninsured women using the pill [19]. At the very least, the out-of-pocket costs associated with a clinician visit would be reduced for this population. In contrast, women with public insurance, who usually have no co-pay for prescription contraception, reported less interest in using an OTC pill. Concerns about the possible cost of an OTC OCP were also prevalent in our survey, a finding that was also noted in focus groups with low-income women in Boston [20]. These results highlight the importance of maintaining insurance coverage for OCPs—especially for women with public insurance—if one or more formulations go OTC.

We found that women who were likely to use an OTC pill were on average willing to pay about \$5–\$10 more per cycle for this option than their current out-of-pocket expenditures for contraception. This finding is interesting in that it assigns a dollar value to the added convenience women perceive with an OTC OCP. However, our results also indicate that there is a limit to how much women will pay for this option, and an OTC pill priced much above \$20 will likely have limited uptake. This is consistent with other research indicating that cost is a significant factor that motivates women in Texas to take advantage of OTC availability of OCPs in Mexican pharmacies [21].

The concerns women voiced in the survey about OTC availability of the pill will be important to address if a pharmaceutical company moves forward with an OTC switch for

OCPs in the United States. Some of these concerns—such as fears about cost and insurance coverage—are quite valid. Others can be addressed by existing research or will be answered as part of the studies required by the Food and Drug Administration for an OTC switch. For example, the evidence indicates that non-users of contraception, as well as OTC pill users, continue to get recommended screening for cervical cancer even if they are not forced to return to see a clinician for an OCP prescription [6, 22]. Other research found that liberal access to emergency contraception did not increase sexual risk-taking among adolescents [23]. Overall, the concerns identified by respondents highlight the importance of coupling an OTC switch for an OCP formulation with an extensive informational campaign about who can use the pill, the safety and potential health benefits of pill use (along with detailed information on signs or symptoms indicating a problem that requires medical attention), how to use the pill, and the importance of condom use and screening for sexually transmitted infections and cervical cancer, among other topics.

We found similar interest among women in using a pharmacy access model and in obtaining OCPs over the counter. This contrasts with a prior survey that found that women's support for the availability of hormonal contraception without prescription at a pharmacy decreased from 63% to 43% if the model did not include pharmacist screening [6]. We also found that most women in our study were not willing to pay out of pocket for the consultation with a pharmacist, suggesting that the pharmacy access model would only improve access if insurance reimbursed the pharmacist directly for her or his consultation. In a pilot pharmacy access model in Washington state, no third party insurer agreed to reimburse the pharmacist's time [24]. However, since then, pharmacists' scope of practice has broadened significantly, and insurance reimbursement for services such as vaccine administration has become more common [25].

This study has several limitations. The survey questions were hypothetical, and the actual uptake of a future OTC OCP may be more or less than the proportions we measured. For example, we did not specify in the survey whether the OTC pill would be a progestin-only or combined oral contraceptive. Since progestin-only pills currently make up about 4% of the OCP market [26], women's lack of familiarity may make them less likely to use an OTC progestin-only pill; alternatively, some women may be more interested in this formulation because it does not contain estrogen. Another limitation is that this sample excluded illiterate women since we used a self-administered questionnaire. A third potential limitation is the risk of nonparticipation bias, as only 56% of women initially contacted completed the screening questions. However, panel members were not informed of the survey topic until they completed screening, and this completion rate is similar to surveys on other topics using this panel [27–30]. A strength of the study is that it comes from a large, nationally representative sample of women at risk of unintended pregnancy. Our findings on contraceptive use indicate that the Knowledge Networks panel is quite similar to the National Survey of Family Growth and can be used to study reproductive behaviors.

In contrast to older data, we found a sizeable proportion of women at risk of unintended pregnancy are interested in using an OTC OCP. In addition to levonorgestrel emergency contraception, a number of other widely-used drugs such as certain proton pump inhibitors and non-sedating antihistamines have made well-publicized OTC switches in recent years. Given the accumulating evidence documenting the safety and effectiveness of OTC OCPs, as well as demand among women for this option, it will be interesting to see if a pharmaceutical company will pursue an OTC switch for an OCP in the near future.

Acknowledgments

This study was funded by grants from the Society of Family Planning and The William and Flora Hewlett Foundation. The views and opinions expressed are those of the authors and do not necessarily represent the views and opinions of the Society of Family Planning. This work was supported in part by the Eunice Kennedy Shriver National Institute of Child Health and Human Development grant for Infrastructure for Population Research at Princeton University, Grant R24HD047879 (JT). The authors thank Sharon Cohen Landau for input on survey design and Kari White for assistance with analysis. This study was presented at the North American Forum on Family Planning, October 28, 2012, Denver, CO.

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Table 1

Weighted percentage distributions of U.S. women aged 18–44 years at risk of unintended pregnancy who support OTC access and are likely to use OTC access to OCPs, by demographic and reproductive characteristics^a

Characteristic	All women (N=2,046) ^b		Supports OTC access ^c (N=2,038)		Likely to use OTC access ^d (N=2,034)	
	n	Weighted %	Weighted %	Weighted %	Weighted %	Weighted %
All	2,046		62.2%		37.1%	
Age (y)						
18–24	559	28.0%	65.7%		47.3% ***	
25–34	789	40.4%	62.2%		37.8% ***	
35–44 (reference)	698	31.6%	59.1%		27.0%	
Education						
< High school	176	8.8 %	50.6%		32.2%	
High school graduate	429	21.2%	66.4%		37.9%	
Some college	714	36.1%	64.0%		38.2%	
College graduate (reference)	727	34.0%	60.7%		36.6%	
Race/ethnicity						
White, non-Hispanic (reference)	1325	62.8 %	61.8%		38.7%	
Black, non-Hispanic	185	11.7%	62.3%		31.2%	
Asian-Pacific Islander, non-Hispanic	73	5.3%	69.7%		41.0%	
Hispanic	376	17.6%	61.2%		36.2%	
Other, non-Hispanic (>1 race, other)	87	2.6%	63.5%		23.3% *	
Marital status						
Married (reference)	1045	48.7 %	56.8%		30.4%	
Divorced/widowed/separated	121	7.0%	64.9%		43.6% *	
Never married, living alone	539	27.3%	67.4% **		42.1% ***	
Never married, living with partner	341	17.0%	68.4% **		45.3% ***	
Survey language						
English (reference)	1859	91.3 %	62.4%		37.3%	

Characteristic	All women (N=2,046) ^b		Supports OTC access ^c (N=2,038)		Likely to use OTC access ^d (N=2,034)	
	n	Weighted %	Weighted%	Weighted%	Weighted%	Weighted%
Spanish	187	8.7%	60.2%		34.2%	
Ever given birth						
Yes	1232	58.2%	58.5% ^{**}		32.0% ^{***}	
No (<i>reference</i>)	814	41.8%	67.4%		44.1%	
Region						
Northeast (<i>reference</i>)	351	18.6%	61.1%		32.0%	
Midwest	475	20.4%	57.6%		35.5%	
South	664	35.5%	64.9%		42.2% [*]	
West	556	25.5%	63.1%		34.9%	
Poverty level						
200% federal poverty guidelines	883	45.0%	60.0%		35.5%	
>200% federal poverty guidelines (<i>reference</i>)	1163	55.0%	64.1%		38.4%	
Health insurance						
Public (<i>reference</i>)	343	17.3%	60.5%		23.7%	
Private	1352	65.1%	62.1%		38.4% ^{***}	
None	337	17.6%	65.9%		45.9% ^{***}	
Current birth control use						
Other hormonal method or IUD (<i>reference</i>)	437	20.5%	60.1%		18.9%	
OCPs	647	32.7%	64.5%		58.7% ^{***}	
Less effective method	392	18.6%	57.1%		32.7% ^{**}	
None	564	28.3%	64.1%		28.0% [*]	
Ever tried to get a prescription for a hormonal birth control method (OCPs, patch, ring)						
Yes	1389	67.7%	65.9% ^{***}		41.7% ^{***}	
No (<i>reference</i>)	643	32.3%	54.1%		26.5%	
Unprotected sex in past 3 months						
Yes	506	24.5%	70.2% ^{**}		38.3%	

Characteristic	All women (N=2,046) ^b		Supports OTC access ^c (N=2,038)		Likely to use OTC access ^d (N=2,034)	
	n	Weighted %	Weighted%	Weighted%	Weighted%	Weighted%
No (reference)	1530	75.5%		59.7%		36.7%

^aWeighted to reflect the U.S. female non-institutionalized population aged 18–44

^bn's vary due to missing values

^cWomen were considered to support OTC access if they reported being 'somewhat in favor' or 'strongly in favor' of OCPs being OTC. Women were considered not to support OTC access if they reported being 'somewhat opposed' or 'strongly opposed' or 'not sure.'

^dWomen were considered likely to use OTC access if they reported being 'somewhat likely' or 'very likely' to get OCPs OTC among women already using the method, or 'somewhat likely' or 'very likely' to begin using OCPs if OTC among women not currently using the method. Current OCP users were considered not likely to use OTC access if they reported they 'prefer to get prescription refills' or were 'not sure'; women not currently using OCPs were considered not likely to use OTC access if they reported being 'not more likely' to begin using pills, 'not sure' or 'not interested' in OCPs.

* Significant at p<0.05 in univariable logistic regression analysis.

** Significant at p<0.01 in univariable logistic regression analysis.

*** Significant at p<0.001 in univariable logistic regression analysis.

OTC: over-the-counter
OCPs: oral contraceptive pills

Multivariable-adjusted odds ratios for support for OTC access and being likely to use OTC access for OCPs among U.S. women aged 18–44 years at risk of unintended pregnancy

Table 2

Characteristic	Supports OTC access to OCPs (N=2,013)		Likely to use OTC access to OCPs (N=2,014)	
	AOR	95% Confidence Interval Lower limit Upper limit	AOR	95% Confidence Interval Lower limit Upper limit
Age (years)				
18–24	1.04	0.71 1.50	2.07	1.37 3.14
25–34	1.01	0.77 1.33	1.43	1.05 1.95
35–44	1.00		1.00	
Education				
Less than high school	0.73	0.42 1.26	1.29	0.69 2.42
High school degree	1.36	0.92 2.01	1.24	0.80 1.93
Some college	1.13	0.83 1.52	1.13	0.82 1.57
Bachelors degree or higher	1.00		1.00	
Race/ethnicity				
White, non-Hispanic	1.00		1.00	
Black, non-Hispanic	0.95	0.60 1.53	0.86	0.52 1.44
Asian-Pacific Islander, non-Hispanic	1.52	0.82 2.80	1.30	0.67 2.53
Hispanic	1.08	0.75 1.56	1.02	0.68 1.54
Other, non-Hispanic	1.14	0.59 2.22	0.57	0.32 1.02
Marital status				
Married	1.00		1.00	
Divorced/widowed/separated	1.38	0.81 2.34	2.27	1.34 3.86
Never married	1.61	1.15 2.27	1.32	0.92 1.89
Living with partner	1.76	1.22 2.56	1.62	1.10 2.41
Poverty level				
>200% federal poverty guidelines	1.00		1.00	
200% federal poverty guidelines	0.71	0.52 0.97	0.84	0.60 1.19

Characteristic	Supports OTC access to OCPs (N=2,013)		Likely to use OTC access to OCPs (N=2,014)	
	AOR	95% Confidence Interval Lower limit Upper limit	AOR	95% Confidence Interval Lower limit Upper limit
Insurance				
Public	1.00		1.00	
Private	0.93	0.61 1.40	1.73	1.04 2.89
None	1.19	0.76 1.87	2.54	1.51 4.26
Region				
Northeast	1.00		1.00	
Midwest	0.96	0.66 1.39	1.12	0.74 1.71
South	1.28	0.89 1.85	1.61	1.08 2.40
West	1.17	0.80 1.71	1.19	0.77 1.82
Current contraceptive method use				
Other hormonal method or IUD	1.00		1.00	
OCs	1.13	0.80 1.61	6.22	4.08 9.48
Less effective method	0.84	0.57 1.22	2.21	1.38 3.54
None	0.99	0.68 1.44	1.68	1.06 2.66
Unprotected sex in past 3 months				
Yes	1.61	1.17 2.21	1.33	0.95 1.85
No	1.00		1.00	

OTC: over-the-counter
 OCPs: oral contraceptive pills
 AOR: adjusted odds ratio

Table 3

Attitudes toward OTC access to OCPs among women at risk of unintended pregnancy (N=2,046)

Advantages of OTC access (multiple responses accepted)	n	Weighted^a % (95% CI)
It would be more convenient	1,394	69.5% (66.9–72.1%)
It would be easier to get birth control	1,242	61.2% (58.4–63.9%)
It would be easier to get a pack of pills whenever you run out	1,164	58.6% (55.8–61.4%)
It would save time to not have to visit a doctor or nurse	1,172	57.4% (54.6–60.2%)
It would save money to not have to pay for a visit to the doctor or nurse	1,040	51.4% (48.6–54.2%)
It would be easier to stay on birth control and prevent unwanted pregnancy	1,040	51.4% (48.5–54.2%)
The pills might cost less than getting pills with a prescription	820	41.2% (38.4–44.0%)
You could send someone else to get your birth control when you needed it	716	36.9% (34.1–39.7%)
It would feel more private	448	23.3% (20.8–25.8%)
You wouldn't need to get a physical or pelvic exam	425	21.5% (19.1–23.8%)
You wouldn't need to talk to a doctor or nurse about using birth control pills	371	19.7% (17.4–22.1%)
Pills would be seen as being safer to use if they were available without a prescription	259	13.1% (11.2–15.1%)
None	281	13.0% (11.1–14.9%)
Concerns about OTC access (multiple responses accepted)	n	Weighted^a %
Women might not get their Pap smears	1,267	62.3% (59.5–65.0%)
Women might use the wrong pill for them	1,264	62.1% (59.4–64.9%)
Insurance might not cover over-the-counter pills	983	49.1% (46.2–51.9%)
Teens might have sex earlier or more often if it's easy to get birth control	1,006	47.0% (44.1–49.8%)
It's important for a woman to see her doctor or nurse before getting the pill	967	46.1% (43.3–48.9%)
At the very least, a woman should have to speak with a pharmacist before getting the pill	827	41.6% (38.8–44.4%)
Women might not use the pill correctly and might get pregnant	825	40.9% (38.1–43.7%)
The cost of getting birth control pills might go up	595	29.6% (27.0–32.2%)
None	157	7.6% (6.1–9.1%)

^aWeighted to reflect the U.S. female non-institutionalized population aged 18–44

CI: Confidence interval

OTC: over-the-counter

OCPs: oral contraceptive pills

Table 4

Monthly out-of-pocket expenditures for contraception and willingness to pay for nonprescription access to OCPs

	Amount n	Weighted ^a % (95% CI)
Current monthly out-of-pocket expenditures for contraception, excluding women using IUDs or implants (N=1,126)		
Mean	\$15.29	—
Median	\$10.00	—
Highest amount willing and able to pay per month for an OTC OCP, among women likely to use OTC access (N=717)		
\$0	35	5.0% (2.9–7.1%)
\$1–\$10	201	27.2% (22.9–31.6%)
\$11–\$20	243	33.6% (29.1–38.1%)
\$21–\$30	159	21.8% (17.8–25.7%)
>\$30	79	12.4% (9.0–15.8%)
Mean	\$20.75	—
Median	\$20.00	—
Highest amount willing and able to pay to speak with pharmacist to help her decide if the pill is right for her and answer her questions, among women likely to use over-the-counter or behind-the-counter access to OCPs (N=851)		
\$0	653	75.7% (71.7–79.6%)
\$1–\$10	148	18.6% (15.0–22.2%)
\$11–\$20	36	4.6% (2.7–6.6%)
\$21–\$30	8	0.8% (0.2–1.4%)
>\$30	6	0.3% (0.0–0.6%)
Mean (among women willing to pay>\$0 only)	\$10.80	—
Median (among women willing to pay>\$0 only)	\$10.00	—

^aWeighted to reflect the U.S. female non-institutionalized population aged 18–44

CI: Confidence interval

OTC: over-the-counter

OCPs: oral contraceptive pills