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Birth control within reach: a national survey on women's attitudes toward and interest in pharmacy access to hormonal contraception☆

Sharon Cohen Landau*, Molly Parker Tapias, Belle Taylor McGhee

Pharmacy Access Partnership, Oakland, CA 94610, USA

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Abstract

Objective: This survey was conducted to better understand women's experiences with hormonal contraception and their interest in and attitudes toward gaining direct access to oral contraception (OC), patch, ring or emergency contraception (EC) in pharmacies.
Method: A nationally representative telephone survey of 811 women aged 18–44 years who were at risk for unintended pregnancy was conducted in the United States.
Results: It was found that 68% of women in the United States said they would use pharmacy access to OC, patch, ring and/or EC. Likely users include women not using contraception who would begin using hormonal contraceptives (41%) if they were available directly in pharmacies, and OC, patch or ring users who were interested in obtaining their method this way (66%). Over half of the women (55%) said they would be more likely to use EC if they were available directly in pharmacies. Interest in pharmacy access is higher among uninsured and low-income women. Support for pharmacy access hinges on pharmacist screening, with 63% of women agreeing that OC, patch and ring should be available without prescription if pharmacists screen women for medically safe use.
Conclusion: Most women in the United States believe that hormonal contraception should be available without prescription and would personally use pharmacy access. Seventeen to 22 million women constitute the potential market for pharmacy access to hormonal contraceptives in the United States. Women's enthusiasm for pharmacy access suggests that the pharmacy is an important site for the provision of sexual health education, screening and supplies.

Keywords: Pharmacy access; Hormonal contraception; Emergency contraception (EC)

1. Introduction

Many American women encounter barriers to access to hormonal contraception.[1] Appointment delay is a significant obstacle even for women who have access to care: a national survey found that a new patient waits for more than 2 weeks for an obstetrics–gynecology appointment. Nearly half of women who did not receive gynecological care in the past year attributed it to affordability, lack of insurance, lack of provider and inability to get time off work or to find time for the appointment [1].

While pelvic exam and Pap smear are important to a woman's health, research has shown that they are not medically necessary to assess appropriate candidacy for hormonal contraception [2–7]. Many clinicians in the United States still require patients to have these exams before obtaining hormonal contraceptives. For women who do not have a provider or insurance to cover a visit, this creates hardship. Physicians' offices and clinics are often closed at night and on weekends, making a visit inconvenient or impossible for many women. Without convenient access to hormonal contraception, women may risk having an unintended pregnancy because of gaps in obtaining contraceptive supplies, use of less effective nonprescription methods or nonuse of contraception.

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* Corresponding author. Tel.: +1 510 572 0150; fax: +1 510 272 0285.
E-mail address: slandau@phi.org (S.C. Landau).

[1] We define *hormonal contraception* in this survey as birth control pills, contraceptive patch (Ortho Evra), contraceptive ring (NuvaRing) and emergency contraceptive pills such as Plan B. Other hormonal contraceptives, such as injectables (Depo-Provera), implants (Norplant) and intrauterine device, were excluded from questions about pharmacy access because they require a clinician to insert or administer them.

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opportunities for new service delivery models that improve access to hormonal contraception [8–10]. One approach with a track record in improving access is offering hormonal contraception directly from pharmacists without first visiting a clinic or physician for a prescription. Referred to as pharmacy access, a collaboration between pharmacists and licensed prescribers makes it possible for pharmacists to assess the suitability of a drug for a customer and, if medically appropriate, to provide it directly to the customer without an advance prescription. With widespread geographic distribution and business hours that often include evenings, weekends and holidays, pharmacies are arguably the most accessible of all health care service points. Expanding services in pharmacies successfully support many community health care needs, including the clinical management of diabetes and asthma, anticoagulation therapy and smoking cessation therapy.

Increasingly more states are enacting laws and/or regulations to offer pharmacy access to emergency contraception (EC). In Washington State, a University of Washington study [11] took a step further to examine expanded pharmacy access to pills, patch and ring. Pharmacists issued hormonal contraception after women completed a self-administered questionnaire screening for contraindications. In addition, in California, women with a prescription for injectable contraception can receive reinjections at participating pharmacies through Pharmacy Access Partnership's Health Step Program.

To better understand women's experiences with hormonal contraception and their interest in and attitudes toward gaining direct access to oral contraception (OC), patch, ring or EC in pharmacies, a national survey was conducted among women aged 18–44 years who were at risk for unintended pregnancy. The survey was not intended to test support for a particular model for offering hormonal contraception through pharmacies without prescription. Rather, the survey is a first look at women's readiness and comfort with obtaining hormonal contraception through pharmacies without first visiting a clinic or a physician. The survey also sought to understand women's current experiences with gaining access to hormonal contraception and the role that clinic visit or a physician plays in women's choice of contraception. Finally, the survey explored what role women would like pharmacists to play if hormonal contraception became available through pharmacy access.

2. Method

The survey on women's attitudes toward and interest in pharmacy access to hormonal contraception was designed by Pharmacy Access Partnership and Field Research, with funding from the David and Lucile Packard Foundation. Field Research conducted the survey between March 22 and May 15, 2004, through telephone interviews in English with a representative sample of 811 women aged 18–44 years who were at risk for unintended pregnancy and lived in households (with telephones) in the continental United States plus Alaska and Hawaii. Women were considered at risk for unintended pregnancy if they had sex with a man in the past 12 months, were not pregnant or trying to become pregnant and did not have a child in the past 2 months. Women were not considered at risk for unintended pregnancy if they or their partner were sterile for contraceptive or noncontraceptive reasons.

Random-digit dialing was used to assure a nationally representative group of women aged 18–44 years who were at risk for unintended pregnancy. A sampling list of 44,922 numbers was dialed by Field Research. The survey response rate, taking into account that some households could not be contacted, was 37%.[2] Interviews were conducted by women in English only and took an average of 24 min. Respondents were assured that their answers would remain confidential and that no personal information would be linked to them after survey completion.

For results based on the total sample, the maximum error attributed to sampling and other random effects was ±3.5% at the 95% confidence level. Statistical significance for differences among subgroups was calculated using the Pearson chi-square test. Multivariate logistic regression analyses were used to estimate the odds of method awareness, problems with obtaining hormonal contraceptives, support for pharmacy access and likely use of pharmacy access by several sociodemographic factors. Odds ratios (ORs) are presented with 95% confidence intervals (95% CIs).

3. Results

3.1. Awareness of hormonal contraception

For women to obtain hormonal contraceptives directly in pharmacies, they must first be aware that these methods are available. We examined women's current awareness levels and found that nearly all women had heard of birth control pills (99%) and the contraceptive patch (98%), although fewer had heard of the contraceptive ring (58%). Awareness of EC was consistently high across sociodemographic groups. However, the vast majority were familiar with the method only as the "morning-after pill" (87%). EC

[2] We determined that 45,000 numbers would need to be dialed to reach a target sample of 810 women aged 18–44 years who were at risk for unintended pregnancy. Field Research contacted 11,118 households successfully. Among the 2113 households with women aged 18–44 years, 4% were not available for screening. Among the women screened, 55% were not at risk for unintended pregnancy. Among the 912 women aged 18–44 years who were at risk for unintended pregnancy, 811 women completed the interview; 101 women (11%) terminated the interview before completion. Up to five attempts were made to reach a household and to speak to someone. If someone in the household responded, up to 10 additional attempts were made to screen the household for an eligible woman. If an eligible woman lived in the household, an additional 10 attempts were made to complete the interview.

awareness varied significantly by race/ethnicity and socioeconomic status (Table 1). Awareness of EC was also significantly lower among women who may need it most. Fifteen percent of women not using contraception were not aware of EC. In contrast, just 1 in 14 women using OC, patch, ring (7%) or another method of contraception (8%) did not know about EC. Experience with an unintended pregnancy or pregnancy scare was related to higher levels of awareness.[3] These women (94%) were 2.6 times as likely (adjusted OR=2.57; 95% CI=1.52–4.35) to have heard of EC than women who have not had an unintended pregnancy or pregnancy scare (87%).[4]

3.2. Choosing a contraceptive and difficulty obtaining prescription contraception

Women said convenience, simplicity and affordability were their highest considerations when choosing their current contraceptive. Fifty-four percent of women also chose their method because it did not require a prescription. African-Americans (65%) were more likely to choose a method because it did not need a prescription, compared to Caucasians (51%) and Latinas (54%). Importantly, 20% of women said the cost of a visit to the doctor was an obstacle in obtaining a prescription contraceptive.

Overall, 28% of women have had problems with obtaining a prescription for contraception, filling the prescription or getting to their supplies when they needed them. Women who had fewer resources to manage an unintended pregnancy (uninsured women, single women and younger women) were more likely to have experienced problems with obtaining prescription for contraception. Uninsured women were twice as likely (OR=2.05; 95% CI=1.21–3.47) to have had a time when they wanted to use a prescription-only method like the OC but were unable to get a prescription. Race/ethnicity was not a predictor, with Caucasian women (27%) as likely as African-American (26%) and Latina (32%) women to face barriers when trying to obtain prescription contraception.

3.3. Support for pharmacy access to OC, patch or ring

Women stated many advantages for directly accessing hormonal contraception in pharmacies. Seventy-six percent stated that they would personally benefit from not needing to pay for a clinician visit with pharmacy access, and 58% stated that this would be a "big personal advantage." A majority of women said the convenient hours (85%) and locations of pharmacies (84%) would personally benefit them. Nearly as many believed that pharmacy access would benefit them because of saved time (82%) and the absence of the need for an appointment with a clinician (74%). African-American and Latina women were significantly more likely than Caucasian women to believe that access to hormonal contraception would personally benefit them.

Although most women believed that pharmacy access had advantages, women who faced barriers to using hormonal contraception were particularly likely to believe so. Not having to pay for a visit to the doctor was a "big personal advantage" to 78% of uninsured women, compared

Table 1
EC: Method awareness and attitudes toward pharmacy access (n=811)

	Heard of EC[a] (%) (n=90)	Supports pharmacy access to EC with screening[b] (%) (n=57)	More likely to use EC with pharmacy access[c] (%) (n=55)	n
Race/ethnicity				
African-American	84	65	73	101
Latina	85	60	59	73
Caucasian	93	54	51	602
Asian or other ethnicity	80	65	65	60
FPL				
Below 200% FPL	79	61	64	233
200% FPL or higher	95	55	52	551
Insurance status				
Uninsured	86	67	63	125
Insured	91	55	54	686
Age (years)				
18–25	92	63	62	205
26–35	90	55	52	371
36–44	88	56	53	230
Current contraceptive use				
Pills, patch or ring	93	60	54	314
Other method(s)	92	58	55	229
No contraception	85	53	57	268
Obtaining prescription contraception				
Had problem	89	66	66	189
No problem	91	55	53	485
Unwanted pregnancy scare				
Has had scare	94	64	64	353
No scare	87	50	49	458
Religion				
Has religious affiliation	89	53	51	657
No religious affiliation	93	73	73	154

[a] Respondents were considered to have not heard of EC if they said they were not familiar with the term "morning-after pill" or "emergency contraception."

[b] The question referred to support for making EC available without prescription at a pharmacy if a pharmacist could tell a woman whether the method was medically safe for her to use.

[c] The question asked if she would be more likely to use EC if it were available.

[3] Women were asked if they had experienced an unintended pregnancy or pregnancy "scare" with the question: "Have you ever been pregnant or thought you might be pregnant when you did not want to be?"

[4] Multivariate logistic regression analyses were conducted to estimate the odds of awareness of hormonal contraceptives by sociodemographic factors (ORs are presented with 95% CIs). Method awareness was coded dichotomously as 1=*aware of the method* or 0=*not aware*. Respondents' "don't know" responses were coded as *not aware*, and refusals were not included in the analysis.

Table 2
Support for and interest in using pharmacy access to hormonal contraception ($n=811$)

	Supports pharmacy access to pills, patch or ring[a] (%) ($n=63$)	Have/could get information on the use of method without prescription[b] (%) ($n=87$)	Likely to use pharmacy access to pills, patch, ring or EC[c] (%) ($n=68$)	n
Race/ethnicity				
African-American	67	90	75	101
Latina	63	82	77	73
Caucasian	63	88	66	602
Asian or other ethnicity	53	88	70	60
FPL				
Below 200% FPL	66	86	75	233
200% FPL or higher	63	88	66	551
Insurance status				
Uninsured	73	85	82	125
Insured	61	88	66	686
Age (years)				
18–25	73	89	74	205
26–35	61	86	68	371
36–44	58	89	63	230
Current contraceptive use				
Pills, patch or ring	64	88	70	314
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Had problem	74	87	82	189
No problem	60	88	63	485
Unwanted pregnancy scare				
Has had scare	68	88	75	353
No scare	60	87	63	458
Religion				
Has religious affiliation	63	87	66	657
No religious affiliation	72	90	77	154

[a] The question referred to support for making birth control pills, patch or ring available without prescription at a pharmacy if a pharmacist could tell a woman whether the method was medically safe for her to use.

[b] The question referred to getting information on using birth control pills, patch or ring without prescription at a pharmacy.

[c] Women were considered likely to use pharmacy access if they would be "very likely" to get their pills, patch, ring or injectable contraception through pharmacy access (among women currently using the methods); be "very likely" to begin using the pills, patch or ring (among women not currently using the methods); be "likely" to obtain EC through a pharmacy, rather than through a doctor, if it were available without prescription; or see many personal advantages to pharmacy access. Likely users are women who responded "very likely" or "somewhat likely" to the question.

with 54% of insured women. A total of 69% of low-income and 68% of women who had problems with obtaining prescription contraception agreed that not paying was a "big" personal advantage. Even more important to these women was the convenience of pharmacy locations or hours, which was cited as a "big" advantage by 73% of low-income women and 77% of women who had problems with obtaining prescription contraception.

A majority of women also believed that potential public health advantages justified making hormonal contraceptives available without prescription. A total of 722 women believed that there would be fewer unintended pregnancies (72%) and that more low-income women would use hormonal contraception (72%) if pharmacy access were available.

Support for pharmacy access to OC, patch and ring was consistent across many sociodemographic factors, including race/ethnicity and income (Table 2).[5] Support was particularly strong among women who would personally benefit from pharmacy access. Seventy-three percent of uninsured women stated that OC, patch and ring should be available without a prescription with pharmacist screening. Uninsured women were nearly twice as likely (OR=1.70; 95% CI=1.11–2.62) as insured women to support pharmacy access to these methods. Younger women aged 18–25 years were nearly twice as likely (OR=1.78; 95% CI=1.18–2.68) as women 36 years and older to support pharmacy access to these methods. Women who had a pregnancy scare (68%) were 1.5 times as likely as women who have not had a scare (60%) to support pharmacy access (OR=1.47; 95% CI=1.09–1.97). Seventy-four percent of women who had problems with obtaining prescription contraception supported pharmacy access to these methods — nearly twice as many as women who have not experienced those problems (OR=1.83; 95% CI=1.26–2.67).

3.4. Support for pharmacy access to EC

Fifty-seven percent of women supported pharmacy access to EC when pharmacist screening was explicitly mentioned, as well as when screening was not mentioned (56%). As with pharmacy access to other hormonal contraceptives, support for making EC available without prescription was consistent across many sociodemographic groups, including age and religious affiliations (see Table 1).[6] Support for pharmacy access to EC was significantly higher among women who are likely to personally benefit from it (Table 1). Women who had problems with obtaining prescription contraception were 1.5 times more likely as women who had not experienced those problems (OR=1.46; 95% CI=1.03–2.09) to support pharmacy access to EC.

Living in a state that offers pharmacy access to EC (71%) was associated with higher support for making this access option available nationwide. Women in those states were

[5] We examined sociodemographic factors that predicted support for direct access to hormonal contraception through pharmacies by conducting logistic regression analyses. Support was coded dichotomously as agree (1=*strongly agree* or *somewhat agree*) or disagree (0=*strongly disagree* or *somewhat disagree*). "Don't know" responses and refusals were not included in the analyses.

[6] We examined sociodemographic factors that predicted support for EC pharmacy access by conducting logistic regression analyses in the same manner as described for analyses of support for the pills, patch and ring.

Table 3
Attitudes toward and interest in pharmacy access among women likely or unlikely to use pharmacy access for hormonal contraception

	Total (%)	Would use pharmacy access to hormonal contraception[a]			
		More likely ($n=258$)		Less likely ($n=553$)	
		%	OR	%	OR
Supports pharmacy access[b]	63	75	5.15*	38	Reference
Have/could get information on the use of method without prescription[c]	87	91	2.82*	80	Reference
"Big" personal advantage of pharmacy access					
Not paying for visit	58	74	9.58*	23	Reference
Time saved; no visit to the doctor	70	86	9.90*	38	Reference
Convenient hours or locations	78	88	6.08*	55	Reference
"Important reason" to create pharmacy access					
Fewer unintended pregnancies	72	64	3.87*	45	Reference
Low-income women would not need to pay for visit to the doctor	72	65	4.18*	44	Reference
Fewer women would miss a pill because of timely access	56	46	4.28*	23	Reference

[a] Women were considered likely to use pharmacy access if they would be "very likely" to get their pills, patch, ring or injectable contraception through pharmacy access (among women currently using the methods); be "very likely" to begin using the pills, patch or ring (among women not currently using the methods); be "likely" to obtain EC through a pharmacy, rather than through a doctor, if it were available without prescription; or see many personal advantages to pharmacy access. Likely users are women who responded "very likely" or "somewhat likely" to the question.

[b] The question referred to support for making birth control pills, patch or ring available without prescription at a pharmacy if a pharmacist could tell a woman whether the method was medically safe for her to use.

[c] The question referred to getting information on using birth control pills, patch or ring without prescription at a pharmacy.

* Significant at $p<.001$.

significantly more likely (OR=2.11; 95% CI=1.26–3.28; $p<.001$) as women living in other states (55%) to say that EC should be available without prescription.[7]

3.5. Use of pharmacy access to hormonal contraception

Sixty-eight percent of women surveyed were likely to use pharmacy access for hormonal contraceptives if it were available (Table 2). Women who had problems with obtaining prescription contraception were 2.6 times as likely as women who had not experienced these problems (OR=2.55; 95% CI=1.69–3.85) to be potential users. Uninsured women (82%) were more likely (OR=2.31; 95% CI=1.43–3.73) than insured women to be interested in using pharmacy access, and low-income women (75%) were significantly more likely than women with an income at or above 200% federal poverty level (FPL) (OR=1.53; 95% CI=1.08–2.15; $p<.05$) to be interested in using pharmacy access. Women who had an unintended pregnancy or pregnancy scare were nearly twice as likely (OR=1.82; 95% CI=1.34–2.47) as women who have not experienced one to report interest in using pharmacy access.

Race/ethnicity was a significant predictor of interest in using pharmacy access (see Table 2). African-American (OR=1.59; 95% CI=0.98–2.58) and Latina (OR=1.80; 95% CI=1.01–3.22) women were nearly twice as likely as Caucasian women to want to use pharmacy access.

Pharmacy access could expand the use of hormonal contraceptives. Forty-one percent of women who were not using any contraception said they would begin using a hormonal contraceptive if pharmacy access were available. Importantly, 47% of uninsured women and 40% of low-income women who were not using the pills, patch or ring said they would start using those methods if they were available from pharmacies without a prescription. Plus, many women who were currently using a hormonal contraceptive were likely to use pharmacy access. Sixty-six percent of women now using the pills, patch or ring said they would like to obtain their method through pharmacy access. Women interested in using pharmacy access saw significantly more personal benefits to using it than women less interested in using it (Table 3).

3.6. Use of pharmacy access to EC

While only 7% of women surveyed said that they had ever used EC, 55% said they would be "more likely" to use EC if it were available without prescription. Forty percent believed that they would buy EC to have it on hand at home. Among women who were currently unlikely to use EC, 24% stated that they would be "more likely" to use the method or to buy it to have it on hand at home (19%) with pharmacy access. Sixty-three percent of uninsured women and 65% of low-income women stated that they would be more likely to use EC if it were available without prescription (Table 1). Significantly more African-American women (73%) than Caucasian women (51%) believed that they would be "more likely" to use EC if were available without prescription.

3.7. Getting hormonal contraception at the pharmacy

When asked what role pharmacists should play in pharmacy access to hormonal methods, 75% said pharmacists should provide method instruction. Forty-six percent

[7] During the time that the survey was conducted, six states had approved legislation or regulation to allow EC pharmacy access (Alaska, California, Hawaii, Maine, New Mexico and Washington); however, only the four states (Alaska, California, New Mexico and Washington) that implemented their policy changes were considered in this analysis.

also wanted screening and counseling on whether the method is right for them. Twenty-four percent just wanted the pharmacist to be available to answer questions.

The role of the pharmacist was critical to women's support for pharmacy access. Sixty-three percent agreed that pills, patch and ring should be available without a prescription if a pharmacist screens a woman first. Support declined to 43% when pharmacist screening was not mentioned. Among those not supporting pharmacy access, many voiced concerns around a potential lack of screening or information, such as women needing screening for health risks (33%), a physical exam (14%), information about dosage or brand (14%) or usage instructions (14%). Women were not asked to describe the screening they were suggesting.

3.8. Concerns about obtaining hormonal contraception directly in pharmacies

Women's most common concern about using hormonal contraception without a prescription was assurance that the method used is safe. Eighty-three percent of women believed that if they were to access a method directly at the pharmacy, a "big" personal concern would be knowing whether a method is medically safe for them. Sixty-five percent of women said that potential health risks would be a reason to not make hormonal contraception available without prescription. Just as many women (72%) believed that, with direct access to pharmacies, more women would use a method that poses health risks to them.

Among women who do not support pharmacy access to hormonal contraception, 74% cited concerns about the safe use of the method. Women not supporting pharmacy access were primarily concerned that women would not be screened or monitored for risks, side effects or misuse (e.g., "overdose") (45%). Some women not supporting pharmacy access believed that the methods cannot be used safely without a physical exam (14%) and/or doctor's supervision (39%).

Some women's concerns about safety stemmed from a belief that "the nonprescription version" of hormonal methods "may not be as good as the prescription version," suggesting that they perceived differences in dosage strength or quality between products available over-the-counter and prescription drugs. This was a "big" personal concern for 70% of women if they were to use pharmacy access. Current users of OC, patch or ring (75%) were significantly more likely than women using no contraception (69%) to have this concern.

Women were also concerned that gynecological care will be abandoned. More than half of the women were concerned that pharmacy access to hormonal methods will lead to fewer women getting Pap smears (77%) or testing for sexually transmitted infections (67%). This concern appears overstated. Even though they did not need to return to their physician or clinic to get a prescription for birth control, 93% of women using a contraceptive other than the pills, patch or ring and 88% of women not using any birth control reported having a Pap smear in the past 24 months, with most visits in the past 12 months.

While cost was an important consideration for women in choosing their contraceptive, costs were not a concern that impacted support for pharmacy access to hormonal contraception. Sixty-seven percent of women felt that potential loss of insurance coverage or possible cost increases (69%) were not reasons to keep hormonal contraception as prescription-only drugs. Women currently using the pills, patch or ring were no more likely than nonusers to be concerned about cost increases, and insured women were no more concerned than uninsured women.

3.9. Pregnancies averted by pharmacy access

Between 25 and 32 million women in the United States aged 18–44 years are at risk for unintended pregnancy.[8] Thus, approximately 17–22 million women were estimated to be in the potential market for using pharmacy access to hormonal contraceptives when our results were extrapolated to the US population of women who were at risk for unintended pregnancy.[9]

The benefits of pharmacy access to hormonal contraception extended beyond making it easier for women to access safe and highly effective methods of birth control. We estimated that half a million unintended pregnancies could be avoided annually with pharmacy access to pills, patch and ring. Women not using contraception account for 47% of the 3 million unintended pregnancies each year in the United States [12]. Currently, 2.9 million women aged 15–44 years who are at risk for unintended pregnancy (who do not wish to become pregnant) are not using contraception [12]. If a quarter of those women started using the pills, research indicates that half a million (545,200) unintended pregnancies would be avoided annually (based on a 5% typical-use failure rate for the pills) [13]. Furthermore, managed care settings could save US$661,737,000, and

[8] Of 11,118 households contacted for this survey, about 45% of the women were at risk for unintended pregnancy. Based on US census population projections, there were about 56 million women aged 18–44 years in the United States at the time of the survey (US Census Bureau, Population Division, Population Projections Branch web site: http://www.census.gov/, accessed May 18, 2004). Thus, we estimated that about 25 million women aged 18–44 in the United States are at risk for unintended pregnancy. Our second estimate is adapted from The Alan Guttmacher Institute, which estimated that, in 2002, 39 million women aged 15–44 years in the United States were at risk for unintended pregnancy (The Alan Guttmacher Institute. Contraceptive needs and services, 2001–2002. New York: The Alan Guttmacher Institute, 2004).

[9] Women were considered likely to use pharmacy access if they would be "very likely" to get their pill, patch, ring or injectable contraception through pharmacy access (among women currently using the methods); be "very likely" to begin using the pill, patch or ring (among women not currently using the methods); be "likely" to obtain EC through a pharmacy, rather than through a doctor, if it were available without prescription; or see many personal advantages to pharmacy access. Likely users are women who responded "very likely" or "somewhat likely" to the question.

publicly funded settings could save US$248,066,000 annually [14].

Greater access to EC alone could prevent almost half (1.3 million) of the 3 million unintended pregnancies that occur each year, at an estimated cost of US$13 billion in medical costs [15]. If 55% of women about to experience an unintended pregnancy used EC, research indicates that 1,285,000 pregnancies could be avoided annually (based on a 75% reduction in pregnancies with EC use) [16]. Furthermore, managed care settings could save US$243,232,000, or publicly funded settings could save US$92,496,000 annually [15].

4. Discussion

A majority of women supported and would use access to hormonal contraception in pharmacies. Women's top concern was that potential users receive appropriate screening and information before using the methods. The most frequent reason women gave for opposing pharmacy access to OC, patch, ring or EC was concern about the method being used safely. This finding is consistent with other research studies indicating that many women overestimate the incidence of risks and side effects with use of hormonal contraception [17–19]. Nationally representative surveys consistently show that half of women believe that birth control pills are "unsafe" for users [17,19,20].

Our survey respondents also expressed concerns about women "abusing" hormonal contraceptives and about more adolescent women having sex if the methods were available without prescription. With regards to EC, studies in the United States and Europe indicate that, when adolescents have easier access to EC, they do not increase their sexual activity, abuse the method by using it frequently or decrease condom use [21–25].

In contrast to women's views, many medical providers perceive hormonal contraceptives to be extremely safe, requiring minimal screening for contraindications and requiring no physical exam [2–4,6,7]. Providers' historical practice of requiring physical exams for hormonal contraceptives may have created a perception that the methods are unsafe. Women may have misinformation about the health risks of hormonal contraceptive use.

Women were also concerned that, if hormonal contraception were available directly at the pharmacy, other women will likely abandon routine gynecological care. Their concern appears overstated, since the survey found that a majority of women had a Pap smear within the past 2 years, even when the visit was not motivated by a need for prescription birth control. Pharmacy access is not intended to replace routine health services, but merely add the pharmacist to the health care team to provide women with greater access to birth control.

Women saw pharmacist screening as critical to using hormonal methods obtained at the pharmacy. In general, pharmacists currently help ensure that patients receive treatments that match their interpersonal characteristics and preferences, contraindications and financial circumstances. Pharmacists already contact physicians with recommendations for improving the selection of a particular contraceptive [26]. However, in many cases, prescription change is delayed or not enacted because the prescription was received at the pharmacy after the doctor's office or clinic had closed. By expanding prescribing authority, pharmacists could independently help women select the best method for them. In addition, pharmacists can boost women's acceptability of hormonal contraception and decrease their failure rates, adverse events and early discontinuation by being an easily accessible and trained source of information and support.

Cost increases and loss of insurance coverage are often surmised as potential negative outcomes of direct access to medications. Importantly, the majority of women believed that potential loss of insurance coverage or cost increases are not reasons to keep hormonal contraception as prescription-only drugs, regardless of their insurance status or current method. This was the case even though most women cited affordability and insurance coverage as important reasons for choosing their current contraceptive. As consumers play a greater role in managing their health care, providers can better serve their clients by adopting delivery models that support self-care practices and convenience.

In conclusion, there is strong indication that American women not only are ready for pharmacy access to hormonal contraception but would use it if it were available. Moreover, women who would benefit the most (poor women and women of color) report an even stronger interest, which presents important policy and program opportunities for improving access to health services for underserved populations. The most exciting opportunity for reducing unintended pregnancy may stem from attracting a new group of hormonal contraceptive users — women currently not using contraception who would start using the methods. Women's enthusiasm for pharmacy access suggests that the pharmacy is an important site to invest in for sexual health education, screening and supplies.

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