Unintended pregnancy remains a major public health problem in the United States. Over the past 20 years, the overall rate of unintended pregnancy has not changed and remains unacceptably high, accounting for approximately 50% of all pregnancies [1]. The economic burden of unintended pregnancy has been recently estimated to cost taxpayers $11.1 billion dollars each year [2]. According to the Institute of Medicine, women with unintended pregnancy are more likely to smoke or drink alcohol during pregnancy, have depression, experience domestic violence, and are less likely to obtain prenatal care or breastfeed. Short interpregnancy intervals have been associated with adverse neonatal outcomes, including low birth weight and prematurity, which increase the chances of children’s health and developmental problems [3].

Many factors contribute to the high rate of unintended pregnancy. Access and cost issues are common reasons why women either do not use contraception or have gaps in use [4]. Although oral contraceptives (OCs) are the most widely used reversible method of family planning in the United States [5], OC use is subject to problems with adherence and continuation, often due to logistics or practical issues [6, 7]. A potential way to improve contraceptive access and use, and possibly decrease unintended pregnancy rates, is to allow over-the-counter access to oral contraceptives (OCs). Screening for cervical cancer or sexually transmitted infections is not medically required to provide hormonal contraception. Concerns include payment for pharmacist services, payment for over-the-counter OCs by insurers, and the possibility of pharmacists inappropriately refusing to provide OCs. Weighing the risks versus the benefits based on currently available data, OCs should be available over-the-counter. Women should self-screen for most contraindications to OCs using checklists.

### Safety of Over-the-Counter Medications

No drug or intervention is completely without risk of harm. For example, common nonsteroidal antiinflammatory drugs, such as aspirin, have documented adverse effects, including gastrointestinal bleeding. These effects may occur even at doses used for prophylaxis of cardiovascular disease [11]. Additionally, over-the-counter use of acetaminophen is linked to serious liver damage [12]. Safety concerns about OCs frequently focus on the increased risk of venous thromboembolism. However, it is important to understand that the rate of venous thromboembolism for OC users is extremely low (3–10.22/10,000 women-years) [13, 14] and to put this risk in context by recognizing the much greater
risk of venous thromboembolism during pregnancy (5–20/10,000 women-years) or in the postpartum period (40–65/10,000 women-years) (14). Overall, the consensus is that OC use is safe (15–17).

**Ability of Nonphysicians to Screen for Contraindications**

Despite the safety of OC use, one frequently cited concern regarding over-the-counter provision of OCs is the potential harm that could result if women with contraindications use them. However, several studies have shown that women can self-screen for contraindications. In one study that compared current family planning clients’ self-assessment of contraindications with clinical assessment, 392 of the 399 participant (females aged 15–45 years) and health care provider pairs obtained agreement on medical eligibility criteria (greater than 90%) (18). Similar findings were seen in general populations of women, although in one study approximately 6% of the 1,271 women aged 18–49 years had unrecognized hypertension (19).

Both studies showed that in cases of discrepancy, women were more likely to report contraindications than were health care providers. A study conducted in the United Kingdom replicated the findings that women take a more conservative approach compared with clinicians and also demonstrated that none of the 328 women studied would have incorrectly used OCs based on self-screening (20). Another study found that women obtaining OCs from pharmacies were no more likely to have contraindications than those who got OCs from a clinic (21). A study of women seeking to buy OCs online through a special program for patients of a clinic found that online participants (n=243) were as knowledgeable about contraindications and adverse events as women seen in the clinic (n=161) (22). It is acknowledged that the women with Internet access may not be comparable to the general population.

In contrast to the aforementioned studies, one U.S.-based cohort study found that women who obtained OCs over-the-counter in Mexican pharmacies were more likely to have relative contraindications rather than absolute contraindications (23) (see Box 1). At least one relative contraindication to OC use was found in 13% of the over-the-counter group versus 9% of the prescribed group (P=.006) but with similar frequencies of absolute contraindications (7% versus 5%, P=.162). However, women who purchased OCs over-the-counter in this study were not self-screened using any standardized process, and the demographics of patients (obese or lacking access to health maintenance services) may have affected the outcome.

Pharmacist provision (behind-the-counter access) of hormonal contraceptive methods also has been evaluated. In the Direct Access Study in Washington State, several pharmacists received specialized education in the provision of hormonal contraceptive methods and were authorized to provide hormonal contraception including, OCs, the contraceptive patch, and the contraceptive vaginal ring (24). Pharmacists successfully used checklists to identify women without contraindications to OCs according to the World Health Organization’s Medical Eligibility Criteria for Contraceptive Use; blood pressure and body mass index also were measured (24). Continuation of use through 12 months was fairly high (70% of 127 women), although most women were continuing users (either currently using OCs or had used hormonal contraceptives in the past), and only 65% (127 of 195 women) completed the 12-month interview. Acceptability also was high, although most women had to pay out-of-pocket for the pharmacist evaluation because most insurance providers did not cover that service (24).

**Contraceptive Adherence and Continuation**

Other concerns about over-the-counter access include that women who choose to purchase OCs over-the-counter might be less adherent, less likely to continue their method, or less likely to choose more effective long-acting methods of contraception. However, efforts to improve use of long-acting methods of contraception should not preclude efforts to increase access to other methods. In one study, 68% of the women who might avail themselves to over-the-counter OCs reported not currently using any contraceptive method (8). Furthermore, continuation may be increased with better access. In a U.S. cohort study of approximately 1,000 women over 9 months, those who obtained OCs over-the-counter in Mexican pharmacies had slightly higher continuation rates (79.2%, P=.12) compared with those who obtained OCs in U.S. public clinics (74.9%, P=.12), although the increase was statistically insignificant (25).

Access to multiple pill packs at one time results in higher rates of continuation. In a 2011 randomized trial, investigators compared 6-month contraceptive continu-
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regarding women’s preventive services will require new Department of Health and Human Services guidelines access should address issues of cost. The recent U.S. moving toward behind-the-counter or over-the-counter Regardless, any plans to improve access to OCs by on the number of pill packs they could receive (average of $16 per pill pack, and many reported limits particularly young women and the uninsured, paid an for many women. In a recent national survey, women, method. However, OCs are already a significant expense lost insurance coverage for their preferred contraceptive affecting by changing to over-the-counter OCs if they It is possible that some women might be adversely effects of her chosen method and alternatives.

In a 2012 study, researchers compared the screening habits of U.S. women who had obtained their OCs from U.S. clinics with those who had obtained their OCs from Mexican pharmacies (31). Both groups reported high screening rates of Pap tests within the past 3 years (greater than 88%), ever having received STI testing (greater than 71%), and ever having had a clinical breast examination (greater than 88%), all higher than national screening proportions. Rates were slightly higher among those receiving OCs from clinics. Among those receiving OCs over-the-counter, the reasons given for no Pap testing included inconvenience, cost, and not knowing where to go to get screened (31). Currently, there are no long-term data of adverse health consequences for over-the-counter OC users.

Cost It is possible that some women might be adversely affected by changing to over-the-counter OCs if they lose insurance coverage for their preferred contraceptive method. However, OCs are already a significant expense for many women. In a recent national survey, women, particularly young women and the uninsured, paid an average of $16 per pill pack, and many reported limits on the number of pill packs they could receive (32). Regardless, any plans to improve access to OCs by moving toward behind-the-counter or over-the-counter access should address issues of cost. The recent U.S. Department of Health and Human Services guidelines regarding women’s preventive services will require new private health plans to cover without cost sharing all U.S. Food and Drug Administration-approved contraceptive methods, sterilization procedures, and patient education and counseling for women with reproductive capacity (33). It remains to be seen how these guidelines will be implemented, and it should be noted that they do not apply to Medicaid. Pharmacy consultative services may incur additional costs.

Data From Developing Countries Although the results of studies from developing countries may not be generalizable to a U.S. population, this information allows health care providers to examine the potential benefits and challenges of over-the-counter access to OCs in the United States. Some obstacles found in these studies include pharmacist refusal and a lack of counseling of patients on the proper use of OCs. (See Table 1 for additional data from developing countries.)

Conclusions and Recommendations In the interest of increasing access to contraception, and based on the available data, the American College of Obstetricians and Gynecologists’ Committee on Gynecologic Practice makes the following conclusions and recommendations:

- Weighing the risks versus the benefits based on currently available data, OCs should be available over-the-counter.
- Women should self-screen for most contraindications to OCs using checklists.
- There are concerns about payment for pharmacist services, payment for over-the-counter OCs by insurers, and the possibility of pharmacists inappropriately refusing to provide OCs.
- Screening for cervical cancer or STIs is not medically required to provide hormonal contraception.
- Continuation rates of OCs are higher in women who are provided with multiple pill packs at one time.

References


<table>
<thead>
<tr>
<th>Country</th>
<th>Study</th>
<th>Conclusions</th>
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<tbody>
<tr>
<td>Jamaica</td>
<td>Chin-Quee DS, Cuthbertson C, Janowitz B. Over-the-counter pill provision: evidence from Jamaica. Stud Fam Plann 2006;37:99–110. [PubMed]</td>
<td>• Low-dose OCs have been available behind-the-counter since 1998. • Primary source of information of OCs was a doctor, nurse, or member of the clinic staff, not a pharmacist. • Access was restricted because of contraindications or younger age.</td>
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<td>Kuwait</td>
<td>Shah MA, Shah NM, Al-Rahmani E, Behbehani J, Radovanovic Z. Over-the-counter use of oral contraceptives in Kuwait. Int J Gynaecol Obstet 2001;73:243–51. [PubMed] [Full Text]</td>
<td>• OCs were sold through pharmacies without prescription. • Few women were counseled about how to use OCs and few were counseled regarding side effects.</td>
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<td>Mexico</td>
<td>Bailey J, Jimenez RA, Warren CW. Effect of supply source on oral contraceptive use in Mexico. Stud Fam Plann 1982;13:343–9. [PubMed]</td>
<td>• OCs are available over-the-counter in many pharmacies. • Pharmacy users had slightly higher continuation rates compared with other women but statistical significance is not reported.</td>
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<tr>
<td>Thailand</td>
<td>Ratanajamit C, Chongsuvivatwong V. Survey of knowledge and practice on oral contraceptive and emergency contraceptive pills of drugstore personnel in Hat Yai, Thailand. Pharmacoepidemiol Drug Saf 2001;10:149–56. [PubMed]</td>
<td>• Knowledge of how to obtain a proper medical history and counseling on the proper use and side effects of OCs was fair to good among both pharmacists and nonpharmacists. • Pharmacists were likely to have better knowledge overall than nonpharmacist staff members. • Secret shopper data reported that OCs were usually dispensed with little or no medical history or counseling.</td>
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Abbreviation: OC, oral contraceptive.

8. Landau SC, Tapia MP, McGhee BT. Birth control within reach: a national survey on women’s attitudes toward and interest in pharmacy access to hormonal contraception. Contraception 2006;74:463–70. [PubMed] [Full Text]  
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