

Emergency Contraception: Study of Maryland Pharmacists' Knowledge & Dispensing Practices

INTRODUCTION

Emergency contraception (EC; sometimes called the “morning after pill”), can reduce the risk of pregnancy by 75 percent if taken within the first 72 hours after unprotected intercourse (Trussell,

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1999). Like other forms of contraception, EC prevents pregnancy in three different ways: by interrupting ovulation, fertilization or implantation (Grimes & Raymond, 2002). **Timely access to EC could be instrumental in preventing some of the 3.5 million unintended pregnancies that occur every year in the United States, half of which end in abortion** (Trussell, Vaughan, Stanford, 1999). However, women need to have knowledge about, as well as access to, this important medication.

Since there is a limited “window of opportunity” for women to use EC, many public health initiatives focus on facilitating timely access. One approach has been to allow pharmacists to provide EC. Since pharmacies are often conveniently located and have longer business hours, women can access EC on nights and weekends when physicians’ offices are closed. Nine states (Alaska, Hawaii, California, Washington, Massachusetts, Maine, New Mexico, New Hampshire, and Vermont) allow pharmacists to dispense EC to women (Guttmacher Institute, 2006). The U.S. Food and Drug Administration decided to allow Plan B (a dedicated EC product) to be sold over-the-counter nationwide for women over the age of 18 (U.S Food and Drug Administration, 2006).



Pharmacists can play a crucial role in improving women’s access to EC, and can help to increase women’s awareness and knowledge about the medication. They can help dispel misconceptions that might otherwise keep women from using EC to prevent unplanned pregnancy.

In 2003 the Maryland Pharmacists Association adopted a resolution supporting expanded access to EC through pharmacist/physician cooperative protocols, which would allow women to obtain EC without a prescription (Pharmacy Access Partnership, 2006). Over the last three years, the state legislature has debated such bills, including ones that would have allowed women over the age of 16 access to EC, but none passed. With the new FDA approval of Plan B for over-the-counter for those over age 18, there may not be a possibility for legislation to be passed to allow those under age 18 to receive EC with out a prescription. We undertook this study to better understand the knowledge of pharmacists about EC in Maryland.

METHODOLOGY

This cross-sectional study was designed to examine pharmacists' knowledge of EC and dispensing practices. A list of all 1274 licensed pharmacies was obtained from the Maryland Board of Pharmacies. These included community, chain, clinic, hospital, managed care and health maintenance organization (HMO) pharmacies. 170 pharmacies were excluded due to being long-term care pharmacies, only providing infusions, or being located out-of-state or primarily selling medical supplies. Among the 1104 pharmacies remaining, we used a random systematic sampling method to select 20 percent (220 pharmacies).

The 16-question survey instrument (Appendix A) was adapted from a NARAL Pro-Choice Missouri survey designed to measure rates of stocking, ordering and pharmacy refusal in Missouri (Kimball, 2005). This survey was created using a "mystery shopper" method where the caller poses as a potential client in need of information on EC, presumably to prevent pregnancy. With this method the caller does not identify herself or inform the pharmacists that he or she is participating in a study. This study was similarly developed to simulate a "real-life" call; however it was adapted to inform the pharmacist that he or she was participating in a survey at the end of the call. By doing this, we hoped to accurately capture information women may receive when asking their local pharmacist about EC.

Callers asked to speak to the pharmacist on duty to ensure that answers were provided by a pharmacist and not a pharmacy technician or aide. Pharmacists' knowledge of EC was assessed by four questions about the mechanism of EC and common misconceptions about the product.

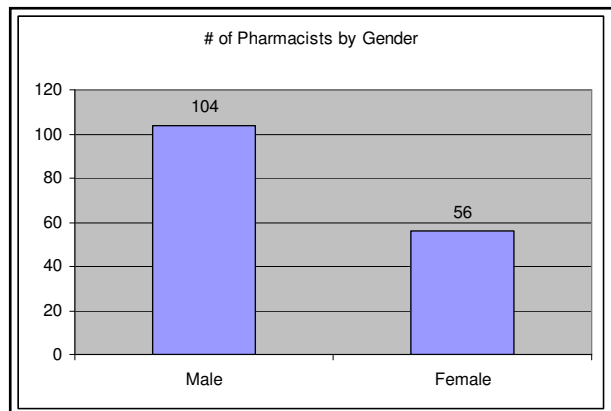
Pharmacists were asked: if EC was the same as the abortion pill, if it was dangerous to the caller's health with repeated use, and if taking EC could cause birth defects if the caller was pregnant. To assess the ability and timeliness of filling a prescription, pharmacists were asked if the pharmacy stocked EC. If the pharmacy did not stock EC, the pharmacist was asked whether he or she would order it, as well as how long that order would take. Finally pharmacists were asked if they were personally willing to dispense EC to the caller. If they were unwilling, they were asked if it was due to a moral objection. At the end of the call, pharmacists were informed that she or he had participated in a statewide survey, and that their answers would be kept confidential.

Calls were made to pharmacies Monday through Friday during Spring 2006. Volunteer callers were recruited by NARAL Pro-Choice Maryland, and calls were made using a phone banks at NARAL Pro-Choice America in Washington, DC or from NARAL Pro-Choice Maryland in Silver Spring, MD. Callers were given five-minute training on the survey instrument before making phone calls. They were asked to record pharmacists' answers to each question in hard copy. Each caller was given a separate call sheet with contact information for ten pharmacies. Callers were asked to note wrong numbers, answering machines, or if there was no answer, along with time and date of attempted call. Call lists were updated so subsequent callers could attempt to contact these pharmacists a second and third time, if necessary.

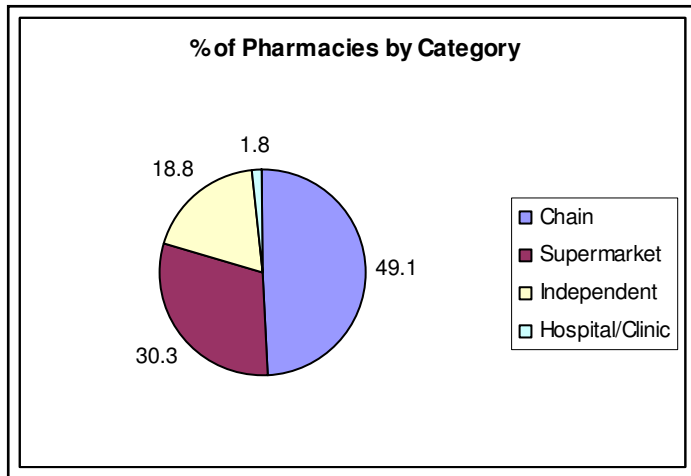
RESULTS

Sample Characteristics

We attempted to contact 220 pharmacies; 165 pharmacists participated, 37 pharmacists refused (by refusing to participate after being informed that the call was part of a study, by hanging up or putting callers on hold for extended periods, or by being unable to answer questions due to company policy), and 18 pharmacies were not appropriate settings



(psychiatric hospitals, cancer hospitals, retirement community pharmacies, or inappropriate respondents). Of participating pharmacists, 104 (65%) were men and 56 (36%) were women.



Half of the pharmacies (49%) in the sample were chain pharmacies (e.g., CVS, Walgreens, Target, Wal-Mart). Thirty percent were located in supermarkets, 19% were independently owned, and the remaining 2% were independent.

Knowledge

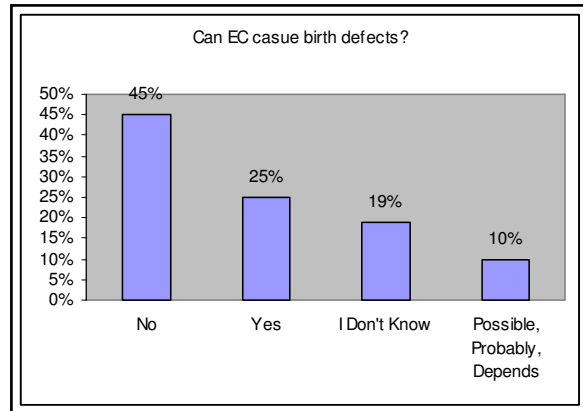
- **How does EC work?:** When asked how EC works, 63% of pharmacists correctly indicated one or all of the following: prevents ovulation, fertilization, or implantation.
- **EC vs. The Abortion Pill:** Two-thirds of pharmacists (67%) correctly indicated that EC was not the same as the abortion pill (RU-486)

- A striking 25% of pharmacists wrongly stated that emergency contraception was the same or similar to the abortion pill.
- 7% of pharmacists stated they did not know if EC was the same as the abortion pill.

- **EC Timeline:** Slightly more than half of pharmacists provided appropriate timelines for taking EC: 55% of pharmacists correctly stated that emergency contraception can be taken within 72 hours of unprotected sex in order to prevent pregnancy.
 - 2% of pharmacists indicated that EC should be taken as soon as possible after unprotected sex, but did not also tell callers it could be take as long as 72 hours afterwards and still be effective.
 - 16% indicated is should be taken within 24 hours.
 - 14% stated it should be taken within 48 hours.

- 2% stated it should be taken within 120 hours.

- **Birth Defects?:** When asked if emergency contraception can cause birth defects if a woman is already pregnant, less than half (45%) of pharmacists correctly reported that EC posed no risk of birth defects if she were already pregnant.



- While a quarter (25%) of pharmacists said yes, EC could cause birth defects.
- 10% said it was possible, probable or “depends”.
- 19% answered I don’t know.

- **Repeated Use:** When asked if emergency contraception was dangerous to one’s health if used repeatedly, almost half (49%) of pharmacists told callers that yes it was dangerous or that it was not advisable or that birth defects were “possible”, even though repeated use of emergency contraception has never been found to be harmful to women’s health.

Only, 40% of pharmacists correctly answered that EC was not dangerous to one’s health.

- 3% told the volunteer to call her doctor.

Dispensing and Stocking

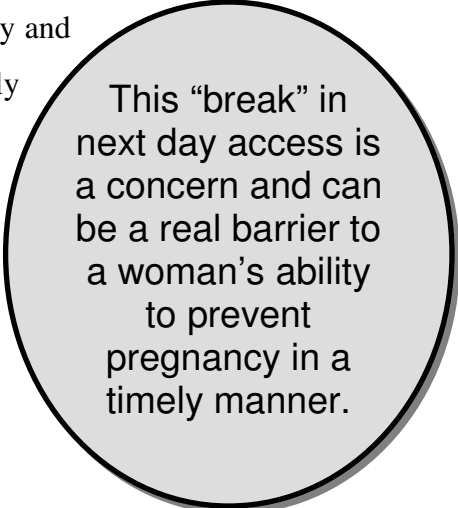
- Nearly three-quarters (74%) of pharmacists surveyed stated the pharmacy they worked in stocked emergency contraception.
- The majority, 81% of chain pharmacies and 80% of supermarket pharmacies stocked emergency contraception.
- However, less than half of independent pharmacies (45%) stocked emergency contraception.

- Most (81%) of pharmacists stated they could order EC for callers if the pharmacy was out of stock. A vast majority (93%) of pharmacists needing to order EC for customers stated it would arrive the next day (within 24 hours of ordering).

However, the majority of pharmacists who refused to dispense EC were employed at chain or supermarket pharmacies. All but one pharmacist in independent pharmacies indicated willingness to dispense EC. Very few pharmacists indicated unwillingness to dispense EC due to a moral objection.

All six Wal-Mart and Sam's Club pharmacists reported stocking EC. **Prior to March 20, 2006, corporate policy did not allow these pharmacies to stock and dispense EC**

However, depending on the day of need, it was not always possible to provide EC within 24 hours. Specifically, some pharmacists indicated that if a woman were to come in during the weekend, the order could not be placed until the following Monday and would not arrive until Tuesday. Given that EC demand is typically greater on weekends when contraception failure rates are highest, this "break" in next-day access is a concern and can be a real barrier to a woman's ability to prevent pregnancy in a timely manner. Costs for EC ranged from \$14.95 to \$49.00, with an average price of \$37.06.



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CONCLUSIONS

Overall, there were positive findings with regard to EC access in Maryland. At least half of pharmacists provided appropriate answers regarding how the medication works, whether it is different from the abortion pill, and appropriate timing in which to take EC. However, knowledge on whether repeated use is dangerous or whether EC can cause birth defects is still low. Clearly, EC education is still needed for pharmacists and their clients.

We are encouraged to see that major pharmacy chains have abided by legislation that requires them to stock and dispense EC. While the majority of all pharmacies stocked EC, access within independent pharmacies was low. In addition, we found that ordering EC on a weekend can take several days, which is important since EC demands are typically greater on weekends.

Increased access is not enough to increase rates of use by women. Incorrect knowledge of EC can be a major barrier to access. Outreach to pharmacists and their professional associations should be considered so that pharmacists can serve as knowledgeable and accurate resources for women in Maryland.

ACKNOWLEDGEMENTS

All of the Maryland pharmacists who agreed to participate in this survey.

Ariana Kelly, NARAL Pro-Choice Maryland Executive Director

Sarah Hund, NARAL Pro-Choice Maryland Organizer

Volunteers who spent days and evenings making calls to gather the data.

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