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Original article

Evaluating Community Pharmacy Responses About Levonorgestrel Emergency Contraception by Mystery Caller Characteristics

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A B S T R A C T

Purpose: Since restrictions on nonprescription sales were removed in 2013, levonorgestrel emergency contraception (EC) should be available without a prescription at pharmacies for consumers of all genders and ages. Using mystery callers, we assessed variations in availability of and access to EC.
Methods: In 2015–2016, three sets of mystery callers (two female physicians, two adolescent females, and two adolescent males) each called all licensed retail pharmacies in five U.S. cities using standardized call scripts. Scripts assessed same-day availability and subsequent access to EC for 17-year-olds. Data on various characteristics of calls were collected and compared by caller type.
Results: Among the 993 pharmacies called, same-day availability for EC was approximately 80%, with no differences by caller types ($p = .34$). However, 10.7% of calls made by the adolescent male caller and 8.3% made by the adolescent female caller resulted in incorrectly being told they could not obtain EC based on age, compared to only 1.6% of calls made by the physician ($p < .01$). Pharmacy staff stated correctly that EC was available over-the-counter more often to adolescent male callers (62.0%) than adolescent females (51.6%) or female physicians (57%) ($p < .01$). Physicians were more likely to be placed on hold, talk to a pharmacist, or be transferred to a pharmacist ($p < .01$) than adolescents.
Conclusions: Persistent barriers to accessing EC exist for adolescents despite regulatory changes to make EC available over-the-counter, especially for females. Additional work to remove these barriers is needed to assure timely access for those who require effective pregnancy prevention.

IMPLICATION AND CONTRIBUTIONS STATEMENT

While emergency contraception (EC) should be available over-the-counter to persons of all ages, this study highlights persistent barriers to access. Adolescent females inquiring about EC availability are less likely to receive accurate information compared to adolescent males or physicians.

Conflicts of Interest: The authors have no conflicts of interest to disclose.

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Access to levonorgestrel emergency contraception (EC) has had a tumultuous history in the United States. Despite its efficacy and safety, regulations have been slow to change to guarantee that those in need of EC can indeed obtain it. EC was first approved by the FDA in 1999 and permitted to be over-the-counter for those 18 years and older in 2006, and in 2009 that was lowered to 17 years and older. Following a federal court case in 2013, the U.S. Food and Drug Administration removed all prescription and age restrictions for the name-brand formulation (Plan B One-Step) and enabled EC to become an over-the-counter medication; this extended to generic one-pill formulations in 2014 [1,2]. This means that anyone—regardless of age or gender—should be able to access one-pill EC formulations at a pharmacy without additional requirements. Prior to this ruling, EC was only available over the-counter to consumers aged 17 years and older.

These recent regulatory changes were intended to increase access to EC, but barriers persist, such as unnecessary age verification requirements for certain brands, out of pocket expenses paid by the patient, and in-pharmacy stocking practices. In addition to these point-of-sale barriers, misinformation has been shown to restrict access for many adolescents, especially in low-income neighborhood [3–8]. Over-the-counter (i.e., no prescription needed) access for this medication is important because efficacy decreases with time. Any barriers that could delay taking EC after unprotected or underprotected sex increase the likelihood of an unplanned pregnancy [9–12]. Given the inconsistent use or nonuse of contraception by adolescents, access to EC for this group in particular is important [13,14].

Our recent (2017) study examined same-day availability and access for female adolescents in comparison to 2012 and found no significant changes over time based on neighborhood income [8]. However, that analysis did not examine outcomes by the type of mystery caller. We sought to replicate our 2012 study to determine if access barriers to EC still existed and to evaluate variations in information offered by pharmacies utilizing three types of mystery callers: an adolescent female, an adolescent male, and a female physician [3].

Our primary outcomes were same-day availability and access to EC for the caller, as well as whether correct information regarding EC was communicated. Secondary outcomes included various characteristics of the calls and options when EC was not available the day the call was made.

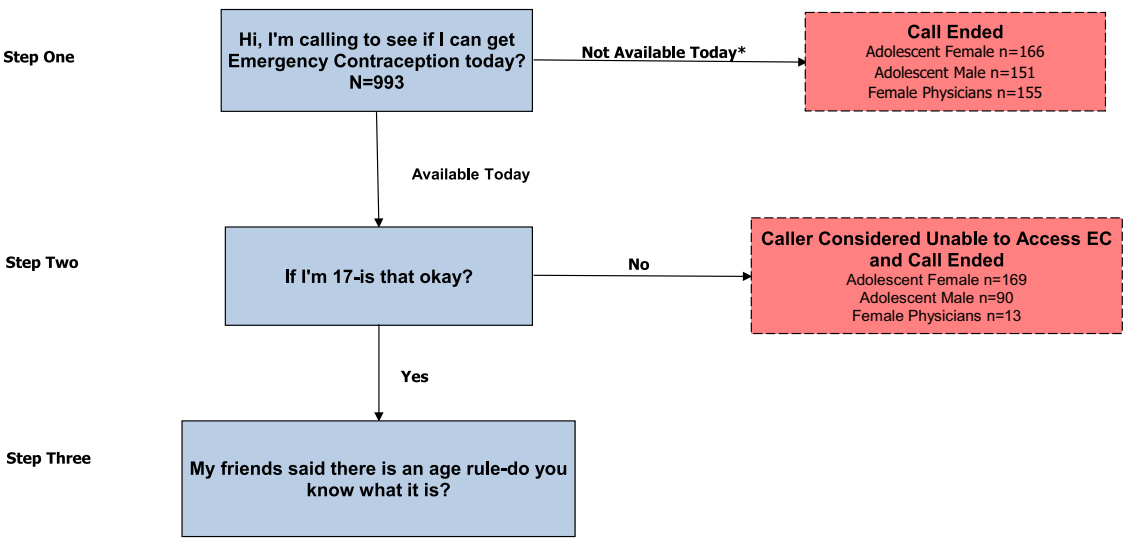
Methods

Sampling frame

Lists of licensed pharmacies located in five cities were obtained from the Board of Pharmacy in five different states (Philadelphia, PA; Nashville, TN; Cleveland, OH; Austin, TX; and Portland, OR). We utilized the main county of the city as the sampling frame and eliminated nonretail pharmacies (e.g., home health or institutional pharmacies) from the list. We chose the same five cities in our previous study for this study. These cities were originally chosen to reflect geographic diversity in states that did not have pharmacy access laws in place that permitted broader access to EC than FDA regulations.

Call script

The call script contained only minor modifications between caller groups to adapt for their different identities, and was unchanged from our previous study (Figure 1). Callers would select the prompt (if available) that most suited their identity until they reached a person to ask the script questions. Adolescent mystery callers were all within 5 years of the age of 17 years, and physician mystery callers had prior experience with speaking with pharmacies and clinician offices on the phone. All callers were trained and completed practice calls to pharmacies not in our study sample before starting data collection. The first question



a) When EC was not available, a follow-up question "Are you able to order it?" was asked to pharmacies that did not spontaneously offer to order EC.
b) If, in Step Two, the caller was told that they were unable to access EC based on age, we considered that answer to be misinformation regarding OTC access.
c) Step Three was only utilized if the age to obtain EC over-the-counter was not obtained through prior questions in the script.

Figure 1. Schematic representation of study phone calls.