



Emergency Contraception Access in a Historic Southern City: Mystery Caller Study in Birmingham, Alabama

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Introduction

EC pills are used to prevent pregnancy after unprotected sex or contraceptive failure by preventing or delaying ovulation. Two types of EC pills are approved by the Food and Drug Administration (FDA): levonorgestrel (LNG) (e.g., Plan B One-Step[®], Take Action[™], My Way[®]) and ulipristal acetate (UPA) (ella[®]). Although LNG EC pills are available over-the-counter (OTC), accessibility barriers exist including cost, request for ID upon purchase, and placement behind pharmacy counters [1]. UPA (prescription-only) is often not readily available in pharmacies and provider knowledge is lacking [1,2]. EC access in Alabama remains unstudied. A compelling need to evaluate EC access barriers in Alabama arose when the Human Life Protection Act (the Act) was signed in 2019 [4]. Injunctive relief was initially granted for the Act but expired when the Supreme Court's 2022 *Dobbs v. Jackson Women's Health Organization* decision allowed states to criminalize abortions [5]. The Act makes abortion provision in Alabama a felony offense with limited exceptions [4]. There is no exception for pregnancy resulting from rape or incest. The Act applies to all ages, defining *woman* as "a female human being, whether or not she has reached the age of majority" [4]. It is therefore important to ensure people in Alabama have easy, reliable access to EC. This study's objective was to assess EC accessibility in retail pharmacies in Birmingham, Alabama.

Methods

In February 2020, two callers posing as EC seekers used an institutional review board (IRB)-approved telephone script (Appendix A) to call publicly accessible chain and independent pharmacies in Birmingham, AL to ask about same-day availability of EC pills and other aspects of accessibility (Figure 1). Pharmacies that disconnected after the initial question without any response and therefore did not provide data were also excluded. Included pharmacies were classified as chain, independent, and 24-hour. Birmingham was selected because its population statistics are representative of the state [5]. Callers documented comments made by pharmacy staff to improve contextual understanding regarding EC accessibility. Student's T-Test and Chi-Square Test were used for univariate comparisons.

Results

ECP Availability

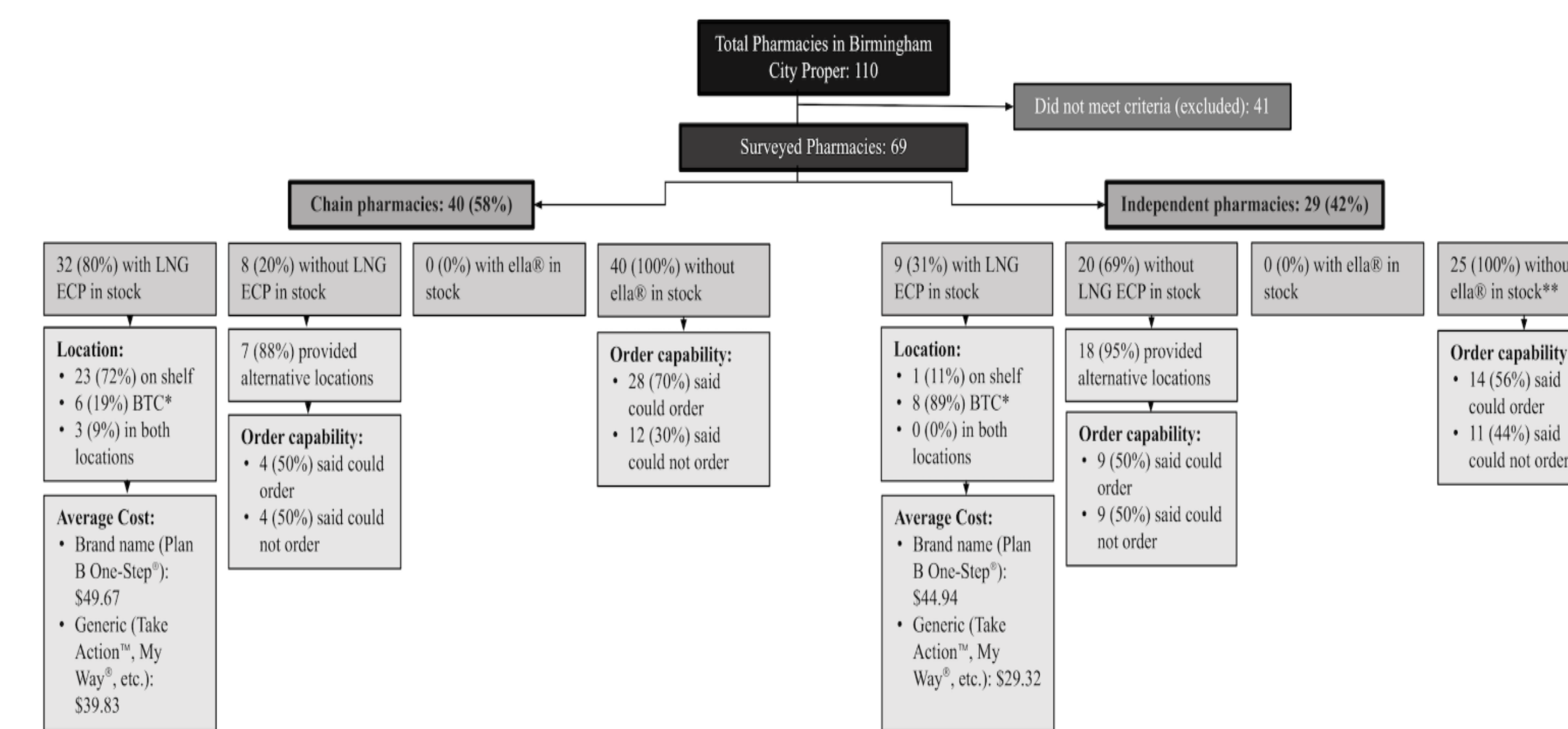


Figure 1. Distribution of access of EC pills in surveyed Birmingham pharmacies (n=69) in 2020. *BTC: behind the pharmacy counter. **Only 25 independent pharmacy employees answered questions regarding ella[®]. (Four participants disconnected call before this portion of survey). Zip codes were not encoded, and neighborhood associations could not be made.

Statistical Outcomes

Variable	Chain N (%)	Independent N (%)	OR
EC in-stock	32 (80.0)	9 (31.0)	8.9 (2.9-26.8)
Shelf pickup only	23 (71.9)	1 (11.1)	30.7 (3.2-295.3)
Shelf pickup and BTC*	3 (9.4)	0 (0)	
ID needed	5 (15.6)	4 (44.4)	4.3 (0.9-21.9)

Table 1. Statistical outcomes comparing EC availability and accessibility of chain and independent pharmacies of Birmingham in 2020. *BTC: behind the pharmacy counter

LNG Type Available	Chain N (%)	Chain Mean cost (SD), min-max	Independent N (%)	Independent Mean cost (SD), min-max	P-value
Brand name	31 (77.5)	49.7 (3.2), 40.0-59.0	9 (31.0)	44.9 (6.2), 36.3-55.0	0.05
Generic	24 (60.0)	39.9 (3.5), 30.0-49.0	4 (13.8)	26.7 (10.3), 13.0-36.3	0.08

Table 2. LNG EC cost in chain and independent pharmacies of Birmingham in 2020.

Age Restrictions

16% of chain pharmacy employees said that ID is required for LNG ECP purchase

44% of independent pharmacy employees said that ID is required for LNG ECP purchase

Qualitative Comments

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| Lack of ECP Support from Pharmacies | <ul style="list-style-type: none"> "We don't promote it [LNG pill]" Pharmacist "does not want to order it [LNG pill]" Pharmacy is part of a "Catholic hospital" |
| Low Awareness and Knowledge of ella[®] | <ul style="list-style-type: none"> "I've never heard of ella[®]" Confused ella[®] with "the implant" Unsure of ella[®] price because "we've never sold it before" |
| Low Demand for ECP | <ul style="list-style-type: none"> "No one requests for it [LNG pill]" Mystery caller was "the second person in eight years to ask" for LNG pill Will not order LNG pill for just "one person. It's not in demand" |

Conclusion

- Of the 69 surveyed pharmacies, 41 (59%) pharmacies had LNG ECP and 0 (0%) had UPA ECP in stock.
- Chain pharmacies had 8.9 times greater odds of having EC in stock and 30 times greater odds of having LNG EC on the shelf versus behind the counter compared to independent pharmacies.
- Despite federal removal of age restrictions in 2014, independent pharmacies were more likely to require identification for purchase, but this finding was not statistically significant.
- Lack of ECP requests from consumers and ECP support from pharmacists were sometimes cited as reasons for unavailability.
- Pharmacy unavailability and unfamiliarity of ella[®] seemed to be linked in a manner that may impact consumer access to the product.
- Access to ECPs and other contraception is critically important, especially when access to abortion is restricted.

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