



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

Heami Yi (BS, MS1)¹, Carol A. Stamm (MD)^{2,3}, Laura Borgelt (PharmD, MBA)^{5,6}, Wei-San Mondie (DO)⁷, Leanne Rupp (LCSW)⁴

¹ University of Colorado School of Medicine; ² University of Colorado, Department of General Internal Medicine; ³ University of Colorado, Obstetrics & Gynecology; ⁴ Uptown Primary Care; ⁵ Associate Vice Chancellor of Strategic Initiatives and Professor; ⁶ Skaggs School of Pharmacy and Pharmaceutical Sciences; ⁷ University of Colorado, Department of Family Medicine



Division of General Internal Medicine
SCHOOL OF MEDICINE
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Introduction

Emergency contraceptive pills (ECPs) are used to prevent pregnancy after unprotected sex or contraceptive failure by primarily preventing or delaying ovulation. There are two types of federally approved ECPs: levonorgestrel (LNG) pills (i.e. Plan B One-Step®, Take Action™, My Way®, etc.) and ulipristal acetate (UPA), which is currently limited to the brand ella®.¹ UPA pills differ from LNG pills because they are more effective, work to prevent pregnancy for up to 120 hours (rather than 72 hours) after intercourse without diminishing effects²⁻³, and can only be obtained through prescription. Limited evidence also suggests that UPA is more effective for overweight people.⁴ Despite over-the-counter (OTC) status of LNG pills, barriers to access including cost, ID requirements upon purchase, and placement behind pharmacy counters still apply.⁵⁻⁹ As a more recently available product, it has been shown that ella® is not often readily available in pharmacies¹⁰ and that provider knowledge about it continues to remain low.¹¹ Our study aims to understand ECP access barriers in Alabama where House Bill 314 (HB314) was signed in 2019 to make abortions felony offenses. Although HB314 is temporarily blocked¹², its enactment would mean women will be completely dependent on OTC or prescribed birth control methods to prevent pregnancies in emergency situations. This includes the use of ECPs that are taken after intercourse, such as LNG pills and the more effective, prescription-only UPA pill (ella®). The city of Birmingham was chosen for the study as it is demographically representative of Alabama.

Methods

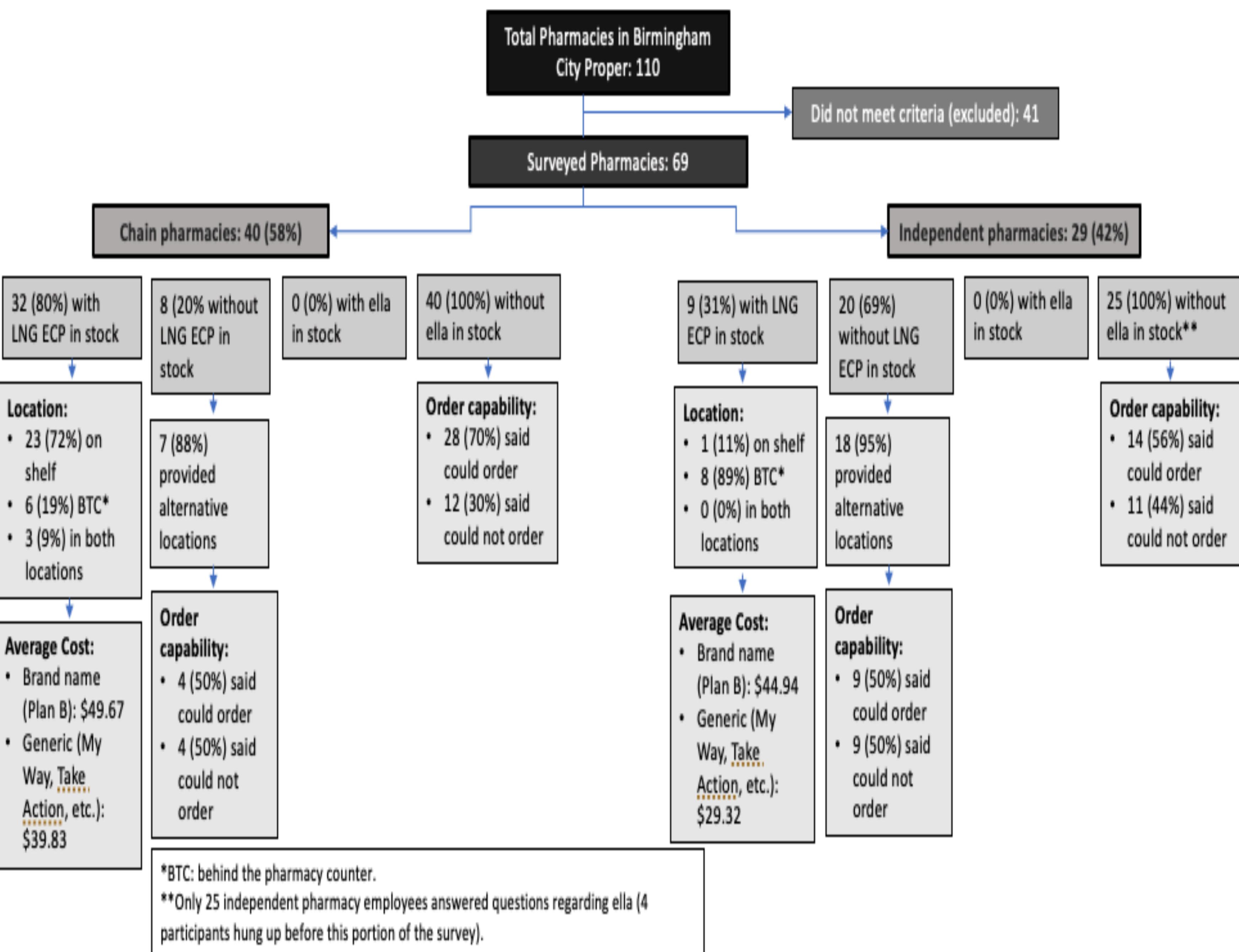
In February 2020, two mystery callers used an approved telephone script during normal business hours to call pharmacies in Birmingham, AL to ask about LNG and UPA pill availability. The pharmacy call list was generated by using a public database called ReferenceUSA, the Viva Medicare 2020 Pharmacy Directory, Viva Medicare Extra Value, and the 2019 Pharmacy Directory from Blue Advantage. Specialty pharmacies, compounding pharmacies, permanently closed pharmacies, and pharmacies that were inaccessible to the general public (i.e. hospital pharmacies that only filled prescriptions for patients within a hospital network) were excluded. 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. Qualitative comments were collected throughout the study to better understand the cultural context of Birmingham. IRB deemed this project as “non-human subjects.”

Results

Demographics

Pharmacy Type	Count (%)
Chain	40 (58%)
Independent	29 (42%)
24-Hour	5 (7%)

ECP Availability



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

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 were more likely than independent pharmacies to have LNG ECP in stock (80% v. 31%).
- The average costs of brand name and generic LNG ECPs were higher in chain pharmacies than in independent pharmacies (Plan B: \$49.67 v. \$44.94; generic brands: \$39.83 v. \$29.32).
- Independent pharmacies were more likely than chain pharmacies to report having OTC LNG ECP behind the pharmacy counter (89% v. 19%).
- 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.

- References
- Emergency contraception. womenshealth.gov. <https://www.womenshealth.gov/a-z-topics/emergency-contraception>. Published April 23, 2019. Accessed December 27, 2019.
 - Fine P, Mathe H, Grinde S, Collins V, Morfesis J, Gainer E. Ulipristal acetate taken 48–120 hours after intercourse for emergency contraception. *Obstetrics & Gynecology*. 2010;115(2, Part 1):257-263.
 - Schwarz R. The Cost-Effectiveness of Emergency Hormonal Contraception With Ulipristal Acetate Versus Levonorgestrel for Minors in France. *Value in Health*. 2014;17(7):770-776.
 - Glasier A, Cameron ST, Blithe D, et al. Can we identify women at risk of pregnancy despite using emergency contraception? Data from randomized trials of ulipristal acetate and levonorgestrel. *Contraception*. 2011;84(4):363-367.
 - Parikh R. Access to Emergency Contraception in Arizona and Utah. Honors Defense Presentation. Aurora, CO, March 2018.
 - Gaffaney M, Secor-Turner M, Borgelt L, Chau VM, Topp D, Rupp L, Gilroy C. Outdated Counseling in the Pharmacy? Analysis of Emergency Contraception Access in Wyoming. North American Society for Pediatric and Adolescent Gynecology Annual Meeting, Toronto.
 - Chau VM, Stamm CA, Borgelt LZ, et al. Barriers to Single-Dose Levonorgestrel-Only Emergency Contraception Access in Retail Pharmacies. *Women's Health Issues*. 2017;27(5):518-522.
 - Wilkinson TA, Clark P, Rafie S, Carroll AE, Miller E. Access to Emergency Contraception After Removal of Age Restrictions. *Pediatrics*. 2017;140(1).
 - Wilkinson TA, Rafie S, Clark PD, Carroll AE, Miller E. Evaluating Community Pharmacy Responses About Levonorgestrel Emergency Contraception by Mystery Caller Characteristics. *Journal of Adolescent Health*. 2016;63(1):32-36.
 - Batur P, Cleland K, McNamee M, Wu J, Pickle S. Emergency contraception: A multispecialty survey of clinician knowledge and practices. *Contraception*. 2016;93(2):145-152.
 - Rojas R, Blinder A. Alabama Abortion Ban Is Temporarily Blocked by a Federal Judge. The New York Times. <https://www.nytimes.com/2019/10/29/us/alabama-abortion-ban.html>. Published October 29, 2019. Accessed December 31, 2019.