



Original research article

Perspectives on pharmacy access to hormonal contraception among rural New Mexico women ^{☆,☆☆}



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ABSTRACT

Objective: In 2017, New Mexico approved an amendment allowing pharmacists to prescribe and dispense hormonal contraception. We interviewed rural New Mexico women to determine their perceptions of pharmacy access to hormonal contraception.

Study design: We conducted semi-structured telephone interviews with women recruited from rural New Mexico communities. The interview guide explained the amendment followed by questions about the advantages and disadvantages of pharmacy access to hormonal contraception within rural communities.

Results: Between November 2017 and May 2018, we recruited 32 women to participate. Participants were young (26/32 18–29 years old), gravid (27/31), employed (30/32), white (22/32) and Hispanic (26/31). The majority used Medicaid as their primary insurance (16/28). Most participants were supportive of pharmacy access to hormonal contraception. Participants saw their rural communities as facing health care barriers, some of which could be alleviated by pharmacy access. Perceived benefits of pharmacy access included convenience of pharmacy hours, shorter wait times, and no need for an appointment. Participants expressed concerns about lack of privacy in their pharmacies. Many expressed trust in their pharmacist to review side effects and explain usage of contraception— a role that was considered separate from that of a primary care provider who offers regular medical visits for routine screening and nuanced or complex discussions about contraception. Some participants expressed that pharmacy access could be especially beneficial for teens.

Conclusions: Rural New Mexico women were supportive of pharmacy access to contraception and accept pharmacists as trusted members of the health care team.

Implications: Rural New Mexico women find benefit in pharmacy access to hormonal contraception, citing improved access to contraceptives in their communities.

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1. Introduction

Nearly half of pregnancies in New Mexico are unintended; the rate of teen pregnancy is the highest in the nation. Better access to desired contraceptive methods could improve reproductive autonomy. Geographic access to contraceptive services is challenging in a state where 33% of the population lives rurally and where, as nationally, hormonal contraception requires a prescription [1]. In 2016, 11 of 33 New Mexico counties had no obstetrician-gynecologists (Ob/Gyns); two counties had no primary

care physicians. Additionally, over a fifth of rural New Mexicans live in poverty, compared to 18% living in urban areas, highlighting the need for creative solutions to improve reproductive health access [2].

Pharmacy access to contraception is defined as a patient directly consulting with a pharmacist who prescribes and dispenses hormonal contraception in a single visit. With appropriate infrastructure and training, pharmacy access is a pragmatic strategy to increase availability of contraceptives. Pharmacist prescription could reduce financial and logistical costs associated with travel and provider visits, particularly for patients without insurance and/or those unable to seek care except on nights or weekends. The American College of Obstetricians and Gynecologists (ACOG) and the World Health Organization (WHO) cite required provider visits and physical examination as unnecessary barriers to uncomplicated hormonal contraceptive access. New Mexico joined three other states in expanding contraceptive prescriptive authority to trained pharmacists in 2017, authorizing pharmacists to prescribe and dispense hormonal contraception including contraceptive pills, patch, ring, and depot medroxyprogesterone [3]. Under the New Mexico protocol, pharmacists receive training in contraceptive provision. A person seeking contraception presents to their local pharmacy and fills out a short health questionnaire. The pharmacist reviews the information and obtains a blood pressure. The pharmacist counsels on contraceptive options, then prescribes and dispenses contraception according to evidence-based guidance. Under separate legislation, the pharmacist can charge and bill for medical decision making; implementation of the pharmacist reimbursement legislation is currently underway [4]. The aim of our study was to examine rural women's perceptions of pharmacy access to contraception, as rural women may face unique barriers to care.

2. Materials and methods

2.1. Study objectives

This qualitative study utilized semi-structured telephone interviews. We created the interview guide with aims to: (1) explain the new pharmacy access protocol in New Mexico; (2) document current experiences obtaining contraception in rural communities; and (3) explore women's perceptions of the benefits and risks of this new service.

2.2. Study design

This qualitative study utilized semi-structured individual participant telephone interviews. We included women of reproductive age (15–45) living in rural New Mexico, defined by Census data as a population of <50,000 people. We excluded women not fluent in English or younger than 15 or older than 45. Multi-channel recruitment strategies were employed including flyers posted in local pharmacies and health clinics, online Facebook advertisements, and in-person study recruitment at local community organizations, town squares, and libraries. Recruitment efforts focused on communities from three rural counties to reflect geographic diversity (Southeast, Northeast and North). Interested participants were selected after eligibility was confirmed either in person or over the phone. We enrolled interested, eligible participants and scheduled telephone interviews for a later time. Ob/Gyn physicians (LT, EC, JW) and research staff (CB) with training in qualitative research methods conducted interviews. If unable to reach a participant, interviewers made two additional phone calls to reach or reschedule the participant. The phone interviewer orally reviewed the consent form and conducted the interview according to the interview guide (Appendix 1). Interviewers conducted phone interviews lasting an

average of 30 minutes; we recorded interviews digitally and professional transcriptionists provided the final transcripts. Transcriptionists de-identified all transcripts redacting all personal identifying information. In addition to the interview, the participant completed a brief oral demographic questionnaire. Upon interview completion, we mailed participants a \$25 merchandise card. Based on literature review and anticipated variability in responses, we planned up to 30 interviews to yield sufficient data to reach conceptual depth within each thematic category [5].

2.3. Data analysis

The primary investigator (LT) reviewed descriptive demographic data of participants using STATA 13 (StataCorp LP; College Station, TX). Two authors (LT and EC) analyzed the transcripts using NVivo software (NVivo qualitative data analysis software; QSR International Pty Ltd. Version 12, 2018) in three rounds, using an iterative thematic analysis approach [6]. First, we read through each transcript and together developed a codebook categorizing responses according to the main domains of inquiry: overall attitude towards pharmacist prescribed contraception, concerns about safety, barriers to care, privacy and special populations. We then defined emerging themes within each domain and refined our codes with a senior author and qualitative expert (AS). We then coded each transcript independently, using the codebook and adding additional codes that emerged from the texts. For example, the theme "barriers" was defined in terms of degree of trust in pharmacists, access to and preference for pharmacist vs. physician, insurance coverage, proximity of a pharmacy vs. a medical office, waiting time and privacy. Lastly, we discussed each code jointly and resolved any discrepancies through discussion. We maintained rigor by remaining responsive to the data throughout the iterative analysis process [7]. We present qualitative data using key quotes to illustrate major themes.

2.4. Ethical considerations

The Human Research Review Committee at the University of New Mexico Health Sciences Center approved the study protocol in July 2017.

3. Results

We conducted interviews with 32 participants from November 2017 to May 2018. Participants were young (26/32 18–30 years old), gravid (27/31), employed (30/32), white (22/32) and Hispanic (26/31). The majority used Medicaid as their primary insurance and reported between \$10,000 to \$49,999 annual household income (Table 1). A total of five communities were represented in the sample; the majority were from three rural counties.

All women interviewed identified benefits of pharmacy access to contraception for its role in promoting contraception access in their local communities. Participants described their rural communities as laden with barriers to accessing contraception including long distances to clinics and long wait times for provider appointments. Even after obtaining a prescription, participants voiced that their community pharmacies lacked privacy when picking up medications. Participants described trust in their pharmacists to provide information about medication usage and common side effects. The pharmacist role was not seen as competing with the role of primary health care providers but rather as complementary to it. Further illustrative quotes for each theme are outlined in Table 2.

3.1. Access barriers

Rural women discussed several ongoing barriers to contraception in their communities including: few women's health

Table 1
Characteristics of in-depth interview participants from rural New Mexico (N = 32) (2017–2018)

Characteristic	N (%)
Age	
18–29	18 (56%)
30–29	8 (25%)
40–49	6 (19%)
Gravidity ^a	
0	5 (16%)
1	4 (13%)
2	6 (19%)
3+	16 (52%)
Parity	
1+ term deliveries	22
1+ preterm deliveries	6
1+ abortions or miscarriages	14
Race	
White	22 (69%)
American Indian/Alaska Native	2 (6%)
Asian	2 (6%)
Other	8 (25%)
Ethnicity ^a	
Hispanic	26 (84%)
Non-Hispanic	5 (16%)
Relationship status	
Single- cohabitating	15 (47%)
Single- not cohabitating	10 (31%)
Married	5 (16%)
Divorced	2 (6%)
Employment	
Employed	30 (94%)
Education	
Some high school	4 (12%)
Some college	17 (53%)
College graduate	11 (34%)
Health insurance ^b	
None	3 (11%)
Medicaid	16 (57%)
Private	9 (32%)
Total Annual Household Income	
<\$10,000	1 (3%)
\$10,000–49,999	22 (69%)
\$50,000–149,000	9 (28%)

^a N = 31.^b N = 28.

providers, lack of affordability, and limited clinic office hours. They pointed out that doctors' office appointments were not "on demand" due to overburdened provider-to-patient ratios resulting in long wait times: "...there's not enough providers. It takes sometimes weeks to even get a call back." (18–29 years old, other/Hispanic, Northern region). They described health care in traditional doctors' offices as an unaffordable expense for women in their community and perceived pharmacy access as more financially feasible. "The cost to go see a doctor and then the cost to go to ... Birth control [contraception] might just be too overwhelming. We're a poor community. A lot of women may not have that money." (40–49 years old, other/Hispanic, Northeast region) Most reported that pharmacy hours (including nights and weekends) fit better into their lives. "And after work it'd be a lot more convenient just to pop over... and pick up a prescription on the way..." (30–39 years old, other/Hispanic, Northeast region).

3.2. Lack of privacy

Women described lack of privacy when picking up prescriptions within their community pharmacies: "I have friends who will walk into [a pharmacy] and they know the employees and things like that so that can be a barrier...everyone knows each other." (18–29 years old, other/Hispanic, Northeast region) They described episodes of picking up non-hormonal over-the-counter contraception (condoms) and emergency contraception as often

embarrassing and uncomfortable. They expressed a desire for an exam room in order to have a private conversation with a pharmacist about their contraceptive options: "I wouldn't want to talk about the NuvaRing with grandma behind me." (30–39 years old, white/Hispanic, Northern region).

3.3. Role of pharmacists

Women often cited safety concerns about taking hormonal contraception, but these concerns were not considered severe. "I mean, I've never heard anybody say they overdosed from birth control [contraception] or anything like that..." (30–39 years old, other/Hispanic, Southeast region). When further questioned, women expressed concerns about side effects of medications and the desire to be guided through their individual risks and benefits. They expressed trust in their pharmacists to help review a medical history to determine a method that would be best for them: "I trust the pharmacist, and their you know, their decision and their medical experience." (30–39 years old, white/non-Hispanic, Southeast region). When asked to consider over-the-counter access to contraception, many women voiced concerns about their ability to determine safety issues on their own. "...I don't think I'd feel comfortable just taking birth control [pills] over-the-counter...I still need to speak to somebody in order to see what the drawbacks are... Allergies, ibuprofen, Tylenol, that kind of thing... I don't mind, just because it's one pill for a general cause or a symp-

Table 2

Sample quotations sorted by theme, rural New Mexico (N = 32) (2017–2018)

Access barriers	"...being in such a rural small town, we're very limited to doctors and the doctors are booked. So I'm looking at it from a small town perspective to where it is going to be easily accessible for those to go to a pharmacist compared to a doctor because there's doctors in town where you have to wait a month out to even get an appointment." (18–29 y old, other/Hispanic, Northeast region)
Lack of privacy	"I feel like in the pharmacy there isn't very much privacy. So you're going and you're getting a shot and I need this, I need that. You have other people that work there, other people that are around, if you're going to a retail pharmacy. I used to work in a retail pharmacy and people will come for their flu shot and everyone's around and they just do it right there in the chair so there's not very much privacy." (18–29 y old, white/Hispanic, Southeast region)
Role of pharmacists	"... ultimately whenever you see a doctor... the prescription for you ends up at the pharmacist, and the pharmacist is usually very knowledgeable about what that medication does. I would trust my pharmacist 100% in what they know. So I don't think that I would feel unsafe getting my prescription from a pharmacist who is already knowledgeable about the medication that they give us anyway." (40–49 y old, white/Hispanic, Southeast region)
Role of primary care providers	"I would still make sure and probably even if I was going to recommend going to the pharmacist, I would totally tell my friends, "But still go to your doctor. Still go there," because it doesn't necessarily take away the risks that may happen whenever you are taking birth control pills, or that sometimes because cancer is out there, we don't know who is going to have it, who is not, that's just for me a safety issue." (40–49 y old, white/Hispanic, Southeast region)
Special populations	I think with the pharmacist being readily accessible, that teenage girls may actually have more of a way to actually go to somebody that they feel they themselves are kind of over-the-counter in a sense, like there's not too much personal interaction with them. (40–49 y old, white/Hispanic, Southeast region)

tom, but when it comes to birth control [pill], it's a little bit more individualized and not everything that works for one person will work for another." (40–49 years old, white/Hispanic, Southeast region).

3.4. Role of primary care providers

Women reported continued value in seeing their regular women's health provider for screening examinations; most cited a frequency in line with current breast and cervical cancer screening guidelines. While women described pharmacists as part of their health care provider team, they saw pharmacists as skilled in providing focused discussions about hormonal contraception. Primary care providers, on the other hand, were described as having a broader role including addressing acute concerns, engaging in more nuanced discussions about contraception and providing routine health screening. "Yes, because obviously while the pharmacist has their job, too, to prescribe pills, but they can't actually give you a physical exam and let you know what's going on in your female parts. So, I would definitely continue going to my Ob/Gyn for other matters." (18–29 years old, white/Hispanic, Northeast region).

3.5. Special populations

Many participants inquired about special considerations for adolescent minors; they expressed special concerns for this population including privacy and accessibility, both of which were felt to be enhanced in pharmacies compared to clinics. "We have a lot of young women... that are afraid to ask their mothers to take them to the doctor but they're sexually active and they can go to the pharmacy and take care of themselves." (40–49 years old, other/Hispanic, Northeast region).

4. Discussion

This qualitative study demonstrated that rural New Mexico women experienced unique challenges in obtaining contraception in their communities. They viewed pharmacists as playing an important role within the health care system both independent and complementary to that of their health care providers.

Women in the United States generally approve of pharmacy access to contraception. In a national telephone study of reproductive-aged women aged, 68% were in favor of pharmacy provision of contraception; 41% were not using contraception and

reported they would begin use if available at a pharmacy. The majority of uninsured women favored pharmacy access to eliminate an additional doctor's visit [8]. Adolescents see pharmacy access to contraception as accessible and convenient but worry about privacy concerns with respect to physical space and insurance disclosures [9]. Pharmacists also generally support pharmacist prescribed contraception [10,11] and national organizations note that pelvic exams are not necessary for prescription of oral contraception [12].

Oregon's pharmacist-prescribed hormonal contraception program has been extensively studied and has affirmed the positive impact of pharmacy access on contraceptive utilization. Oregon's Medicaid program uniquely reimburses both cost of the medication and pharmacist time spent counselling [13]. In a review of 2016–2017 Oregon Medicaid patients, 73.8% of pharmacist-written prescriptions were for first time contraceptive users. Urban residents benefited significantly from implementation of the program as 74% of pharmacist prescribed prescriptions filled in urban locations. Pharmacists were comparable to clinicians in safe prescribing practices for contraception; less than 1% of patients with contraindications to oral contraception received prescriptions [14]. If these findings generalized to New Mexico, we hope equivalent or greater benefits may be realized, particularly among our rural communities.

The main strength of our study was a unique focus on rural New Mexico women, as their perspectives may differ from those represented in prior research. Our geographic recruitment approach resulted in diverse perspectives from different communities. The individual demographic characteristics of our participants mirrored those of the state: the majority of New Mexicans are employed, white Hispanic with a median household income of \$48,059 [15]. Thirty-five percent of New Mexicans are covered by Medicaid, with higher percentages in rural communities including in those sampled [16]. We recruited only two Native American women who may have had different experiences of rural health care due to access through Indian Health Services. Other limitations of our study included our restriction to English speaking participants. Non-English speaking people may face layered barriers when interacting with a rural health care system. Future research would benefit from including Spanish speaking individuals and Native American women. Lastly, we acknowledge that the term "birth control" in the interview guide may have overtones of coercion and is non-specific; we used the term as participants might have more familiarity with it than with "contraception." Its use may have lim-

ited responses to specific contraceptive methods based on participants' interpretation of the term.

Our findings lead us to consider the following implementation strategies to improve contraceptive access in rural settings: First, we found that rural women value clinical decision support from the pharmacist and may have concerns about their ability to safely self-select an appropriate method or navigate side effects. ACOG supports both pharmacy and over-the-counter access to hormonal contraceptives, preferring over-the-counter access as the strategy that removes the most barriers [12]. We recommend both strategies account for this need to provide readily accessible clinical support. New Mexico's protocol requires pharmacists to discuss common side effects of hormonal contraception as well as precautions for seeking medical attention; emphasis on this routine counseling may help reassure women about the safety of contraception. Second, we found that rural communities have concerns about privacy. We recommend that rural pharmacists who plan to provide hormonal contraception should consider optimal utilization of clinical areas in their pharmacies to ensure privacy.

Rural women, facing unique challenges of provider shortages and long distances to clinics, may stand to gain the most from expanded access to hormonal contraception. Pharmacy access to contraception may also provide an important transitional step in the path to over-the-counter access to contraception. Future research should evaluate implementation of pharmacy access and its contribution to contraceptive use in New Mexico and innovative ways to provide clinical decision support for women seeking contraception. Health care providers, public health systems and policy makers could benefit from a better understanding of the experiences of rural communities as they implement pharmacy access.

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.conx.2021.100069.

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