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Access to contraception in pharmacies during the COVID-19 pandemic

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ABSTRACT

Background: As a result of the coronavirus disease 2019 (COVID-19) pandemic, shifts in traditional contraception access points have presented new challenges, leading people to seek alternative sources of contraception care, including pharmacies. Pharmacists in one-fourth of U.S. states are able to prescribe hormonal contraception, a model known as pharmacy access. Pharmacy access became available in California in 2016 and in Colorado in 2017. Objective: To characterize how access to contraception products and services in pharmacies changed during the COVID-19 pandemic, including pharmacist prescribing practices and innovations in service delivery. Methods: We conducted a cross-sectional survey among California and Colorado pharmacists from September to October 2020. Survey questions included pharmacist and pharmacy practice site characteristics, prescribing practices, pharmacist perspectives, and pharmacy services in the context of the COVID-19 pandemic. Results: A total of 128 pharmacists participated in the study, with 38% (n = 49) from California and 62% (n = 79) from Colorado. Among participants, 41% (n = 53) prescribed contraception, of which 94% (n = 50) continued, 4% (n = 2) started, and 2% (n = 1) suspended during the pandemic. Most participants reported interest (79%) and effort (75%) in prescribing contraception to be about the same during the pandemic. Community need for contraceptive services was perceived to be slightly or much higher (45%) or about the same (47%). Patient interest in pharmacy access was perceived to be slightly or much higher by 26% and about the same by 57% of the participants. When distributing contraception prescriptions, pharmacies increased curbside (from 12% to 52%), home delivery (from 40% to 60%), and mailing options (from 41% to 71%) during the pandemic. Conclusions: Pharmacists prescribing hormonal contraception who participated in this study remained committed to providing this service during the pandemic. Some perceived increased community need for contraception and patient interest in direct pharmacy access. There was an increase in options for patients to receive contraception prescriptions with minimal contact. © 2021 American Pharmacists Association®. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Background

As a result of the coronavirus disease 2019 (COVID-19) pandemic, shifts in traditional contraception access points have led to new challenges in seeking contraception care.¹

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Objective

This is a prospective cross-sectional observational study to investigate the impact of COVID-19 on contraceptive services in pharmacies in 2 states with established pharmacist prescribing of contraception—California and Colorado.

Methods

Respondents and data collection

From September through October 2020, a cross-sectional Web-based survey was sent to pharmacists across California and Colorado. These 2 states were selected because both have established statewide protocols for pharmacist-prescribed hormonal contraception (California allowed pills, patch, ring, and injection since 2016, and Colorado allowed pills and patch since 2017) and are geographically diverse. Recruitment was conducted through the state pharmacist association e-mail lists of the California Pharmacists Association (CPhA) and Colorado Pharmacists Society (CPS), as well as the Birth Control Pharmacist (BCP) e-mail list subscribers in California and Colorado. Three e-mails were sent from each of the state associations, and 2 e-mails were sent from BCP. Each e-mail contained a link to the online Qualtrics (Provo, UT) survey.

Surveys were tailored to each state’s protocol and respondents’ practices. Pharmacists who prescribed hormonal contraception were presented with 35 closed-ended questions and 3 open-ended questions. Pharmacists who did not prescribe hormonal contraception were presented with 11 closed-ended and 3 open-ended questions. California pharmacists received additional questions related to telehealth services and prescribing emergency contraception, the contraceptive injection, and contraceptive ring. Average survey completion time was 10-15 minutes.

Informed consent was obtained at the beginning of each survey. Participants were entered into a drawing for one of 2 $100 electronic gift cards. This study was approved by the Human Research Protection Program Institutional Review Board at the University of California, San Diego.

Measures

The survey was designed to explore perspectives and characteristics of pharmacists and their pharmacy practice sites regarding contraceptive services, with focus on the impact of COVID-19. The survey included questions on pharmacy access to contraception at the respondent’s pharmacy in the first 6 months of the COVID-19 pandemic (defined as September 2019-February 2020) and the 6 months before that (defined as March-August 2020). Specifically, they were surveyed about the availability of pharmacy access to contraception, methods prescribed, number of visits completed, perceived patient interest, service delivery innovations (i.e., telehealth, supply quantities dispensed, distribution options, blood pressure measurements), and barriers to service delivery during COVID-19. Measures of pharmacists’ interest in prescribing contraception, perceived patient interest in pharmacy access to contraception, and community need for contraception services were assessed with Likert scales. The survey was pilot tested by 3 pharmacists to improve clarity of questions before distribution.

Analysis

Descriptive statistics were calculated for all variables of interest. Fisher exact test was utilized to examine differences in pharmacist demographics. McNemar test was utilized to examine differences in methods of contraception prescribed, contraception prescription distribution options, and coordination of refills in the time periods before and during the pandemic. All analyses were performed using R Studio (RStudio Team (2020). RStudio: Integrated Development Environment for R. RStudio, PBC, Boston, MA; http://www.rstudio.com/).

Results

Respondents

The survey invitation was e-mailed to 5233 pharmacists (1640 CPhA, 2914 CPS, and 679 BCP) and opened by 1987 pharmacists (583 CPhA, 1088 CPS, and 316 BCP). There were 193 responses. The response rate was 3.7% of all who were sent the recruitment e-mail and 9.7% of those who opened the recruitment e-mail.

For analysis, we excluded 42 respondents for incomplete surveys, defined as not answering any question besides professional characteristics. In addition, we excluded 20 respondents for nonpharmacist roles and 3 respondents for practicing outside of California or Colorado, resulting in a final sample of 128 respondents. In addition, one pharmacist who could prescribe but did not offer the service at their current pharmacy was included in analysis as a nonprescribing pharmacist.

Respondents primarily practiced in chain pharmacies and urban areas. More respondents were from Colorado (62%, n = 79). There was a statistically significant difference
between practice settings between pharmacists who prescribed and those who did not prescribe contraception. More prescribing pharmacists (96%, n = 51) practiced in community pharmacies. See Table 1 for respondent characteristics.

Perceived community need and patient interest

Community need for contraceptive services was perceived to be slightly or much higher by 45% (n = 24) and about the same by 47% (n = 25) of respondents who prescribed contraception. Patient interest in pharmacist-prescribed contraception during the pandemic was perceived to be about the same as before by 57% (n = 30) and higher by 26% (n = 14) of respondents. Fifty percent (n = 26) of respondents who prescribed patient interest in emergency contraception to be about the same, whereas 46% (n = 24) perceived interest to be slightly higher or much higher since the start of the pandemic.

Prescribing practices before and during COVID-19 pandemic

Respondents were asked questions related to prescribing practices in the 6 months before the start of the COVID-19 pandemic and the 6 months since the start of the pandemic. Of the respondents who prescribed contraception (n = 53), 94% (n = 50) continued, 4% (n = 2) started, and 2% (n = 1) suspended this service during the pandemic. Of those who continued prescribing contraception, the majority (70%, n = 35) reported no change in patient volume before and during the pandemic. There was little change in the perceived proportion of visits with new patients (mean 63.9% prepandemic, 60.4% pandemic) and returning patients (mean 36.1% prepandemic, 39.6% pandemic).

There were no differences in the contraceptive methods offered to prescribe before and during the pandemic as reported in Table 2. Of the respondents, 94% (n = 50) did not observe a change in the contraceptive methods being requested by patients.

The majority of pharmacists most frequently prescribed a 12-month duration prescription both before (60%, n = 31) and during (60%, n = 30) the pandemic. Pharmacies most commonly dispensed 3 months of contraception before (64%, n = 34) and during (69%, n = 36) the pandemic. Respondents who selected that they either most frequently prescribed or dispensed less than a 12-month supply of contraception were directed to a multiple-choice question asking why they prescribed or dispensed less than a 12-month supply of contraception. Among those, the vast majority (83%, n = 40) selected “Insurance or Cost” as the reason.

Most reported their interest (79%, n = 42) and effort (75%, n = 40) in providing contraception to be about the same during the pandemic. A minority of respondents reported a higher (9%, n = 5) and lower (11%, n = 6) interest in providing contraception during the pandemic. Fifty-two percent (n = 67) were extremely or somewhat likely to authorize emergency refills of contraception in the pandemic. Almost all respondents prescribing contraception indicated that they would definitely (70%, n = 37) or probably (24%, n = 13) continue beyond the pandemic.

Service innovations and challenges

Table 2 depicts service delivery innovations before and during the pandemic. There was a statistically significant increase in options to obtain contraception since the start of the

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Table 1
Characteristics of pharmacists who responded to an online survey about providing contraception services during the COVID-19 pandemic

| Characteristics                  | Prescribed hormonal contraception n = 53 (%) | Did not prescribe hormonal contraception n = 75 (%) | All pharmacists N = 128 (%) | P value*
|----------------------------------|-----------------------------------------------|--------------------------------------------------|-----------------------------|--------
| State                            |                                               |                                                  |                             |        |
| Colorado                         | 31 (58)                                       | 48 (64)                                         | 79 (62)                     | 0.47   |
| California                       | 22 (42)                                       | 27 (36)                                         | 49 (38)                     |        |
| Location                         |                                               |                                                  |                             |        |
| Urban                            | 22 (41)                                       | 37 (49)                                         | 59 (46)                     | 0.3    |
| Suburban                         | 21 (40)                                       | 29 (39)                                         | 50 (39)                     |        |
| Rural                            | 10 (19)                                       | 9 (12)                                          | 19 (15)                     |        |
| Pharmacy type                    |                                               |                                                  |                             |        |
| Community—Chain                  | 35 (66)                                       | 16 (21)                                         | 51 (40)                     | 0.001  |
| Community—Independent            | 16 (30)                                       | 18 (24)                                         | 34 (26)                     |        |
| Hospital outpatient pharmacy     | 1 (2)                                         | 1 (2)                                           | 2 (2)                       |        |
| Student health                   | 0 (0)                                         | 2 (2)                                           | 2 (2)                       |        |
| Othera                          | 1 (2)                                         | 10 (13)                                         | 11 (8)                      |        |
| Job title                        |                                               |                                                  |                             |        |
| Staff pharmacist                 | 20 (49)                                       | 43 (57)                                         | 63 (49)                     | 0.03   |
| Pharmacy manager                | 22 (30)                                       | 17 (23)                                         | 39 (30)                     |        |
| Pharmacy owner                   | 8 (11)                                        | 6 (8)                                           | 14 (11)                     |        |
| Pharmacist, otherd               | 3 (9)                                         | 12 (15)                                         | 15 (12)                     |        |
| Length of prescribing contraception |                                              |                                                  |                             |        |
| <1 y                             | 9 (23)                                        | 2 (2)                                           | 11 (9)                      |        |
| 1–2 y                            | 13 (18)                                       | 23 (29)                                         | 36 (28)                     |        |
| >2 y                             | 31 (59)                                       | 36 (46)                                         | 67 (51)                     |        |

Abbreviation used: COVID-19, coronavirus disease 2019.

* P value calculated using Fisher exact test.

* Other responses included compounding, closed door, federally qualified health center, Veterans Affairs outpatient, and online.

* Other responses included resident, float, faculty, and ambulatory care pharmacist.
Table 2
Pharmacy contraception services and pharmacist prescribing practices before and during the COVID-19 pandemic reported by pharmacists who responded to an online survey

| Service                        | September 2019-February 2020 | March 2020-August 2020 | P valuea |
|--------------------------------|-------------------------------|------------------------|----------|
| Contraception distribution options | 41/100 (33)                  | 57/100 (43)            | 0.001b   |
| Curbside                       | 15 (12)                       | 65 (52)                | < 0.001b |
| Drive-through                   | 17 (13)                       | 23 (18)                | 0.11     |
| Delivery                        | 51 (40)                       | 75 (60)                | < 0.001b |
| Mailing                         | 52 (41)                       | 89 (71)                | < 0.001b |
| Other method of contactless pick-up | 3 (2)                     | 3 (2)                  | > 0.99   |
| Communication methods for prescription refills |                         |                        |          |
| E-mail                          | 61 (48)                       | 62 (49)                | > 0.99   |
| Text message                    | 75 (60)                       | 79 (63)                | 0.22     |
| Phone                           | 106 (84)                      | 106 (84)               | > 0.99   |
| Mobile application              | 76 (60)                       | 78 (62)                | 0.48     |
| Pharmacist prescribing of contraception | n = 53 (%)                 | n = 53 (%)            |          |
| Methods offered to prescribe    |                               |                        |          |
| Progestin only pill             | 27 (51)                       | 28 (53)                | > 0.99   |
| Combination pill                | 48 (91)                       | 48 (91)                | > 0.99   |
| Patch                           | 26 (49)                       | 25 (47)                | > 0.99   |
| Injection                       | 9 (41)                        | 8 (36)                 | > 0.99   |
| Emergency contraception tablet | 13 (59)                       | 12 (55)                | > 0.99   |
| Monthly volume of visits        |                               |                        |          |
| 0 visits                        | 9 (17)                        | 6 (11)                 | 0.76c    |
| 1–5 visits                      | 41 (77)                       | 41 (77)                |          |
| ≥6 visits                       | 3 (6)                         | 4 (8)                  |          |

Abbreviation used: COVID-19, coronavirus disease 2019.

a P value calculated using McNemar test.

b Statistically significant P value, significant defined as P < 0.05.

c Other methods of contactless pick up included in-person outside of pharmacy with table at door with 6 feet distance and mailbox style drop-off.

Discussion

The goal of this study was to understand how contraception access and services in pharmacies changed during the COVID-19 pandemic, including both dispensing and pharmacist prescribing practices. The most notable finding of our study highlights the innovative techniques by which pharmacies are dispensing contraception through varied reduced contact means. The timely adoption of no or low contact services across the 2 states in varied geographic regions demonstrates the ability of pharmacies to adapt to the constraints of the pandemic to increase safe access to contraception.

Pharmacists in this study perceived increased community need for contraception services; however, this was not reflected in the patient visit volume during the pandemic. This finding suggests that while pharmacy access to contraception is expanding in geographies, additional community outreach may be helpful to increase the number of patients utilizing the service.

With regard to prescribing practices, the majority of pharmacists were consistent with best practices and prescribed a year-long supply of hormonal contraception. A multistate evaluation of pharmacist prescribing of contraception, including Colorado and California, among others, found that pharmacists were more likely to dispense 6 months or more of contraceptives compared with traditional clinicians, potentially improving contraceptive continuation. However, we found that pharmacists in both California and Colorado most
frequently dispensed a 3-month supply of hormonal contraception before and during the pandemic. Insurance or cost was the most commonly selected reason for prescribing or dispensing less than a 12-month supply of contraception, despite both states having policies requiring insurance coverage of a 12-month supply of hormonal contraception. This suggests that these extended supply policies, while intended to increase access, have not been fully implemented, and additional implementation efforts are needed.

The barriers to pharmacists prescribing contraception that have been previously characterized before the pandemic and found to persist during the pandemic are workflow and staffing concerns. The second most recognized barrier was the requirement for in-person blood pressure measurements for prescribing combined hormonal contraceptives. Despite this being endorsed as a barrier during the pandemic, methods that do not require blood pressure measurements were not being made available by all. Fifty-three percent (n = 28) of pharmacists in California and Colorado offered to prescribe progestin-only pills, and 40% (n = 8) of pharmacists in California offered to prescribe the injection. This may be a reflection of patient demand for combined hormonal contraception or that progestin-only methods are used less often when there is not a specific contraindication to a combined hormonal method. In addition, a multistate evaluation of pharmacist prescribing of contraception found that pharmacists were as likely as clinicians to prescribe progestin-only methods when a contraindication to a combined hormonal method exists. However, in the setting of prescribing contraception in the pandemic, additional education for pharmacists may be beneficial to ensure that progestin-only methods are offered to be prescribed, particularly if blood pressure measurements are perceived as a barrier. This also highlights the need for flexibility in the state protocols to allow for evolving national guidelines.

In March 2020 the Department of Health and Human Services waived certain requirements surrounding telehealth usage for health care providers, including pharmacists, in an effort to ease providing care during the COVID-19 public health emergency. Areas where restrictions were loosened included waiving the requirement on device and application type used for virtual visits, patient location (patients can now receive telehealth services at their home, rather than in a facility), and eligibility of new patients for telehealth visits. Few pharmacists in our study utilized telehealth to start or continue a contraception prescription. Workflow processes have been suggested on the basis of early pandemic pharmacist telehealth implementation in the ambulatory setting; however, more research in practice implementation could be beneficial for the community pharmacy.

The strengths of this study include the geographic diversity with representation amongst urban, suburban, and rural respondents, as well as practice settings. This survey was also distributed to pharmacists 6 months into the COVID-19 pandemic, minimizing potential recall bias. However, we acknowledge the limitations of this study, primarily that there was a low response rate and small sample size. The low response rate may be attributed to the lack of a guaranteed incentive and the time for survey completion in a particularly busy and stressful pandemic environment for pharmacists. Because state association lists were used for recruitment, e-mails may have been ignored or autofiltered; similar studies also have reported similar response rates. In addition, the time frame of this study may have been insufficient to capture a statistically significant number of interventions, given that patients may only seek care from a pharmacist once per year for a renewal of their prescription.

Although this was a multistate study of Colorado and California, these are 2 states with established policies for pharmacist prescribing and extended supply of contraception. We do not know the generalizability of our findings to states without the support of these policies. Expanding the scope of this study to states with less established policy or pharmacist prescribing infrastructure presents an area of future research.

**Conclusion**

Pharmacists prescribing hormonal contraception who participated in this study perceived increased community need and patient interest during the pandemic. They remain committed to providing this service during and beyond the pandemic. Pharmacies adapted to the constraints of providing contraception in a pandemic as there was a general increase in options for patients to receive dispensed contraception with minimal contact.

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