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Original Research Article

Abortion service availability during the COVID-19 pandemic: Results from a national census of abortion facilities in the U.S. *,**



Contraception:

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ABSTRACT

Objective: This study assessed the impact of COVID-19 on abortion services in all 50 United States states and the District of Columbia.

Study design: ANSIRH's Abortion Facility Database is a systematic collection of data on all publiclyadvertising abortion facilities in the United States, updated annually through online searches and mystery shopper phone calls. Research staff updated the database in May-August 2020, assessing the number of facilities that closed, limited or stopped providing abortions, and provided telehealth options in summer 2020 due to COVID-19. We describe these changes using frequencies and highlighting themes and examples from coded qualitative data.

Results: Located primarily in the South and Midwest, 24 of 751 facilities that were open in 2019 temporarily closed due to the pandemic, with 9 still closed by August 2020. Other facilities described suspending abortions, referring abortion patients to other facilities, or limiting services to medication abortion. While most facilities required in-person visits for reasons like state abortion restrictions, 22% (n = 150) offered phone or telehealth consultations, no-test visits, or medication abortion by mail to reduce or eliminate patient time in the clinic. Some facilities used creative strategies to reduce COVID-19 risk like allowing patients to wait for visits in their cars or offering drive-through medication pick-up.

Conclusions: The COVID-19 pandemic caused several disruptions to abortion service availability, including closures. To reduce in-person visit time, some clinics shifted to offering medication abortion (versus procedural) or telehealth. While the pandemic and abortion restrictions increased barriers to abortion provision, facilities were resilient and adapted to provide safe care for their patients.

Implications: Barriers to abortion access were exacerbated during the COVID-19 pandemic, particularly in areas of the country with more restrictive policies toward abortion. Telehealth care protocols offered by many abortion facilities provide an option to reduce or eliminate in-person visits.

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1. Introduction

The COVID-19 pandemic has exacerbated barriers to abortion access in the United States (U.S.), forcing abortion facilities to close or modify services and shift to models of abortion care that do not require in-person visits for ultrasounds, pelvic exams, or laboratory

* Corresponding author. E-mail address: shelly.kaller@ucsf.edu (S. Kaller). tests. In response to the pandemic, 11 U.S. states enacted policies categorizing abortions as non-essential procedures by May 2020, decreasing access and types of abortion care available [1,2]. These restrictions, as well as other pandemic-related challenges, have disrupted abortion clinics' staffing, financial stability, and service de-livery [1,3,4]. A survey of 66 family planning clinics in the U.S. showed that during the beginning of the pandemic, from February to March 2020, 16% of clinics at least temporarily stopped providing medication abortion or first or second-trimester procedural abortion [5]. Despite these shifts in provided care, current pro-

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jections estimate that 71,000 women will seek abortion care each month during the pandemic nationwide [1].

Telehealth care protocols which eliminate or limit in-person requirements, reduce both barriers to abortion access and risk of COVID-19 transmission. Currently in the U.S., medication abortion has been almost exclusively administered through in-person visits due to (1) a mandate released by the Food and Drug Administration (FDA), which requires mifepristone, one of the 2 drugs in a medication abortion regimen, to be directly dispensed by a provider to the patient in a clinical setting, making the drug unavailable in pharmacies, including by mail order pharmacy [6]; (2) clinical guidelines that require an ultrasound or laboratory testing to confirm the pregnancy [7]; and (3) state laws that require a clinician be physically present with the patient for administration of medication abortion, effectively banning telehealth [8].

Early in the pandemic, in April 2020, clinicians and researchers developed a "no-test" protocol for administering medication abortion in a safe manner without pretreatment or follow-up ultrasounds, exams or laboratory tests such as hCG test, Rh typing, or hemoglobin and/or hematocrit test [9]. A study done in April-May 2020 assessing changes in medication abortion protocols due to COVID-19 among independent abortion facilities found that several facilities no longer required in-clinic preabortion tests [10]. Then in July 2020, a federal court temporarily blocked enforcement of the FDA's in-person dispensing requirement for medication abortion [11].

This study aims to build from these early data by investigating national abortion service availability in the first 6 months of the COVID-19 pandemic in the U.S., when the pandemic and statelevel restrictions disrupted abortion care. We assessed how the pandemic affected abortion facilities' ability to remain open and provide abortions, types of abortion provided, and telehealth options currently offered to reduce person-to-person contact. As we hypothesized that abortion services shifted to increased medication abortion provision during the COVID-19 pandemic, we also explored whether the information and services offered to patients could limit patient choice and potentially push them toward that method.

2. Material and methods

2.1. Data collection

We used 2019 and 2020 data from ANSIRH's abortion facility database. The database includes abortion-providing facilities in the U.S. and the District of Columbia, updated each summer over approximately 3 months through online searches and mystery shopper phone calls to simulate information a patient would have access to about available abortion services. The methods were described previously [12]. We assessed and updated information for all facilities in our database from previous years which were systematically collected since 2017. We used web-searches to cross-reference and identify any new facilities. For any facilities that were assessed to be closed between 2019 and 2020 updates, we conducted a second update in August 2020 to confirm whether the facilities remained closed.

After conducting web searches, we called facilities using a mystery shopper approach, to confirm data obtained online and to ask about items unavailable on their websites. When prompted to give out personal information, mystery callers either stated that they were 20 years old and in their first trimester of pregnancy, or that they were calling on behalf of a friend in order to avoid giving personal information. The mystery callers did not make an appointment. The study was approved by the Institutional Review Board at University of California San Francisco.

2.2. Measures

During the annual update, we coded the status of each facility as open, open but not providing abortions anymore, temporarily closed, or closed. When available, we documented dates of facility closures and reasons for closing. We gathered data on facilities' locations including their city and state and whether facilities provided procedural and/or medication abortion.

In response to growing trends, in 2020, we documented any telehealth options facilities offered, reducing facility staff and patients' potential exposure to COVID-19. During mystery calls, we collected information on facilities' COVID-19 protocol by asking the following: "I am worried about my risk for COVID-19. Are you offering any options for care, like phone or video appointments or pick up options, in order to reduce my risk to COVID-19?"

In 2020, we also documented websites or calls that encouraged medication abortion over procedural abortion for facilities that provided both by reviewing information about each service on websites and asking staff which type of abortion they would recommend. We coded encouragement of medication abortion if no or little information was available about procedural abortion (when both types were offered), if language used on the website or by phone was more positive about medication abortion, or if the staff person by phone directly recommended medication abortion.

2.3. Data analysis

For quantitative variables, we present frequencies of the number of facilities closed, temporarily closed, or not providing abortions in each region, based on U.S. Census categories. We also present frequencies of the number of facilities that limited services to only medication or procedural abortion because of the COVID-19 pandemic. We conducted these analyses using Stata 15. COVID-19 telehealth options and encouragement of medication abortion were documented as free text which we coded into discrete categories by having 2 authors review an initial random subset of facilities' data to create a codebook which was reviewed and revised with a third author, then applied to the full set of facilities. We only included telehealth options for abortion provision (e.g., any required pre-abortion counseling and dispensing of medication abortion pills) in our analysis, excluding telehealth options for follow-up such as telephone follow-up after an abortion or for contraception.

3. Results

The 2020 update of ANSIRH's Abortion Facility Database identified several impacts due to COVID-19. We observed facility closings, temporary or permanent interruption of abortion services, changes to the types of abortion services offered, and an increase in the use of telehealth. Below we describe these changes in more detail.

3.1. Abortion facility closings due to COVID-19 pandemic

Among the 751 abortion facilities open and providing services in 2019, 22 had website information or telephone staff noting that the facility had permanently or temporarily closed due to the COVID-19 pandemic by summer 2020. They were primarily in the South (n = 8) and Midwest (n = 8). At the end of the database update in August 2020, when we repeated online searches and calls for any closed facilities, nine of the 22 remained closed, primarily in the South. In mystery calls, staff from 3 clinics described having recently reopened after closings due to state legal restrictions. Nine of the facilities that closed during the pandemic had other clinic locations that remained open. Staff were referring patients to these locations, 3 of which were an hour or more away from the closed location.

3.2. Interruptions in abortion services due to COVID-19 pandemic

In addition to facility closings, we identified 2 facilities that remained open but stopped providing abortions specifically due to the COVID-19 pandemic. Three additional facilities that were technically open and providing abortions referred patients elsewhere when possible. For example, a staff person from a facility that is part of a hospital system stated that while they could provide medication and procedural abortion if needed, they were referring patients to a local Planned Parenthood during the pandemic so patients did not have to visit the hospital. From March to June 2020, 15 Planned Parenthood facilities within one affiliate in the Midwest consolidated abortion services temporarily to 6 of its centers.

3.3. Changes to types of abortion services offered

Fifteen facilities limited their services during the pandemic by not offering either medication or procedural abortion when they previously had, or by only offering them in a limited capacity. We identified 6 facilities, all in the West, that mentioned limiting their services to medication abortion only because of the COVID-19 pandemic. Two, in the West, still offered both types of abortions but said they preferred to provide medication abortion for earlier gestation pregnancies because of its lower perceived COVID-19 risk or greater ability for facilities to provide it compared to procedural abortion during the pandemic. Three facilities (2 in the Northeast and 1 in the South) noted that they were only offering procedural abortion due to the pandemic, with one clinic in the Northeast explaining that they "do not have the staff for it [medication abortion] due to social distancing." Similarly, 4 facilities (2 in the West and 2 in the Midwest) were not providing first trimester abortions, only offering second trimester procedural abortions.

3.4. Encouragement of medication abortion

The vast majority of facilities that offered both types of abortion at the time of the 2020 update gave balanced information on medication and procedural abortion and/or replied by telephone that they could not recommend one method over another. Only 7 of the 430 facilities that offered both services in 2020 encouraged medication abortion, although we were unable to confirm whether they did so due to the COVID-19 pandemic or for other reasons. Among these, 4 had telephone staff that favored medication abortion by using more positive language about medication abortion such as it being more "natural," while procedural was described as more "invasive." One facility was reluctant to share information about procedural abortion by telephone and said that more information could be shared after making an appointment or meeting with the clinician. Another 2 facilities primarily offered medication abortion under 10 weeks, for example, only providing procedural abortion early in pregnancy if medication abortion was unsuccessful, or because medication abortion involved less potential COVID-19 exposure.

3.5. Telehealth options for abortion services

Among the 693 facilities that were open in 2019 and providing abortions in summer 2020, most (n = 492) did not explicitly mention providing telehealth options for abortion services. Some explained that in-person visits were required by state law, such as required ultrasounds in Louisiana, Kansas, or Texas, or mandatory inperson counseling and consent procedures in Idaho. Staff at facilities from other states like Arkansas mentioned that their state has bans on telehealth for abortion. Some facilities (n = 23) noted that while they did not offer any telehealth options, they did streamline the clinic visit to reduce patients' time at the facility. For example, patients could wait in their cars for their appointments instead of in the waiting room, or they could pick up required pre-abortion pregnancy tests in a "drive through visit." Clinic flow protocols during the pandemic also aimed to shorten visits, streamline processes into one visit, or split a longer visit into 2 shorter visits.

A common telehealth service offered by 63 facilities was the option to have a phone or video consultation prior to the abortion as a strategy to reduce time in the clinic, although in-clinic testing such as ultrasounds and pregnancy tests still necessitated a visit to the clinic (Table 1). Similarly, another 40 facilities offered phone or video consultations for medication abortion but did not seem to require any testing for patients who did not want it, requiring only in-clinic pick up of the abortion pills. One facility noted the possibility of picking up the abortion pills curbside in the parking lot. Other facilities (n = 47, or 7% of the 660 facilities offering medication abortion in 2020) provided the option of mailing abortion pills to eligible patients after a telehealth consultation. Some of these did require a preabortion ultrasound, but patients had the option to get it done at another facility. These telehealth options were offered differentially across regions of the country. A greater proportion of the 150 facilities that offered phone/video visits or abortion pills by mail were in the Northeast (43%, n = 65) and West (40%, n = 60) than in the South (16%, n = 24) or Midwest (1%, n = 1).

4. Discussion

In this analysis of data from all publicly-advertising abortion facilities across the United States, we found that the COVID-19 pandemic caused several changes to abortion service availability. Consistent with a recent report [3], several clinics closed or stopped providing abortion due to COVID-19 and related abortion bans. Research showed that an abortion ban in Texas during the pandemic resulted in a decline in the number of abortions in Texas, and an increase in the number of abortions in surrounding states and at later gestations within Texas [2]. In our study, some clinics shifted to offering medication abortion only because it reduced risk of COVID-19. We found no evidence of a trend of encouragement of medication abortion versus procedural abortions.

We found evidence of shifts to increased reliance on telehealth care protocols in states that allowed telehealth or no-test abortions that did not require in-person visits. Some facilities offered telehealth for counseling but did not eliminate the clinic visit. These findings are consistent with previous research on smaller samples of independent providers [5,10,13]. Additionally, the data were collected June to August 2020, and the number of facilities offering telehealth options using a mail-order pharmacy may have increased after the ruling from the federal judge in July 2020 that patients should not be required to make an in-person visit during the COVID-19 pandemic [11]. More facilities may have begun offering medication abortion by telehealth with mail or mail-order pharmacies after having time to do legal analysis and set up protocols. The Supreme Court reversed the decision in January 2021 [14] but in April 2021, the FDA suspended enforcement of the inperson dispensing mandate during the COVID-19 pandemic [15]. In-person tests and visits are not necessary and also risk exposure to COVID-19, putting both providers and patients at risk [9,16].

This study is the first to comprehensively look at changes in abortion services due to the COVID-19 pandemic among all publicly advertising abortion providers across the U.S., including independent, hospital-based, and Planned Parenthood facilities. Additionally, by relying on publicly available data, our data represent Table 1

Telehealth options offered by United States abortion facilities (n = 693) by geographic region, June-August 2020

Telehealth	Geographic region, n (%)				# of facilities,
option	Northeast	Midwest	South	West	n (%)
No telehealth, in-clinic visit required	94 (48%)	73 (90%)	125 (76%)	177 (71%)	469 (68%)
No telehealth, but reduced time in clinic	1 (1%)	4 (5%)	6 (4%)	12 (5%)	23 (3%)
Yes, phone/video consultation and in-clinic testing	26 (13%)	0 (0%)	18 (11%)	19 (8%)	63 (9%)
Yes, phone/video consultation and pick up pills in clinic	22 (11%)	0 (0%)	4 (2%)	14 (6%)	40 (6%)
Yes, option to send abortion pills by mail after telehealth consultation	17 (9%)	1 (1%)	2 (1%)	27 (11%)	47 (7%)
Missing data on telehealth options	37 (18%)	3 (4%)	9 (5%)	2 (1%)	51 (7%)
Total number of abortion facilities	197 (100%)	81 (100%)	164 (100%)	251 (100%)	693 (100%)

information patients could obtain, minimizing potential response bias that we might observe in a survey.

The study also had limitations. First, we collected data over the span of three months and changes may have occurred throughout that time period. To address this concern for any facilities that appeared to have closed, we conducted a second update at the end of our data collection period in August 2020. Second, information on the website or given over the phone may be inaccurate or outdated, although the potential for inaccuracies was reduced by triangulating some of the data with 2 sources – web searches and mystery calls. It is also possible that some clinics did not offer a telehealth option until patients got further along in the process, after scheduling an appointment or completing an intake form, thus it may be underreported in this study.

Even in nonpandemic times, individuals face many barriers to abortion, including distance and cost barriers [17,18]. Continued availability of abortion care is essential because abortion is a timesensitive service. This study found that the COVID-19 pandemic disrupted abortion services at some clinics which may have exacerbated barriers for patients, particularly in areas of the country with more restrictive policies toward abortion. We also found that while the pandemic and abortion restrictions disrupted abortion service availability, abortion facilities were resilient and adapted to provide safe care for their patients. Public policies are needed to facilitate access to abortion and other reproductive healthcare during the pandemic and beyond.

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References

- Jones RK, Lindberg L, Witwer E. COVID-19 abortion bans and their implications for public health. Perspect Sex Reprod Health 2020;52:65–8. doi:10.1363/psrh. 12139.
- [2] White K, Kumar B, Goyal V, Wallace R, Roberts SCM, Grossman D. Changes in abortion in Texas following an executive order ban during the coronavirus pandemic. JAMA 2021. doi:10.1001/jama.2020.24096.
- [3] Roberts SCM, Schroeder R, Joffe C. COVID-19 and independent abortion providers: findings from a rapid-response survey. Perspect Sex Reprod Health; 2020. doi:101363/psrh12163.

- [4] Frederiksen B, Sobel L, Ramaswamy A, Salganicoff A. State action to limit abortion access during the COVID-19 pandemic. Kais Fam Found; 2020. https: //www.kff.org/coronavirus-covid-19/issue-brief/state-action-to-limit-abortionaccess-during-the-covid-19-pandemic/(accessed. September 7, 2020.
- [5] Tschann M, Lange H, Ly E, Hilliard S. Family planning visits during the COVID-19 pandemic: phase 1 results. Society of Family Planning; 2020. doi:1046621/ ZYDR8499.
- [6] Risk evaluation and mitigation strategy (REMS) single shared system for mifepristone 200MG. Food and Drug Administration; 2019. https://www.accessdata.fda.gov/drugsatfda_docs/rems/Mifepristone_2019_ 04_11_REMS_Document.pdf. Accessed August 24, 2020.
- [7] Mifeprex REMS Study Group. Sixteen Years of OverregulationTime to Unburden Mifeprex. N Engl J Med 2017;376:790–4. doi:10.1056/NEJMsb1612526.
- [8] . Medication AbortionGuttmacher inst; 2021. https://www.guttmacher.org/ state-policy/explore/medication-abortion. Accessed April 15, 2021.
- [9] Raymond EG, Grossman D, Mark A, Upadhyay UD, Dean G, Creinin MD, et al. Commentary: no-test medication abortion: a sample protocol for increasing access during a pandemic and beyond. Contraception 2020;101:361–6. doi:10. 1016/j.contraception.2020.04.005.
- [10] Upadhyay UD, Schroeder R, Roberts SCM. Adoption of no-test and telehealth medication abortion care among independent abortion providers in response to COVID-19. Contracept X 2020;2:100049. doi:10.1016/j.conx.2020.100049.
- [11] American College of Obstetricians and Gynecologists vUnited States Food and Drug Administration Memorandum Opinion. United States District Court of Maryland 2020. https://www.supremecourt.gov/DocketPDF/20/20A34/151289/ 20200826115344506_20A-%20FDA%20v.%20ACOG%20Appendix%20FINAL%20a. pdf (accessed April 29, 2021).
- [12] Cartwright AF, Karunaratne M, Barr-Walker J, Johns NE, Upadhyay UD. Identifying national availability of abortion care and distance from major US Cities: systematic online search. J Med Internet Res 2018;20:e186. doi:10.2196/jmir. 9717.
- [13] Tschann M, Lange H, Ly E, Hilliard S. Family planning visits during the COVID-19 pandemic: phase 3 results. Society of Family Planning; 2021. doi:1046621/ KNUB8934.
- [14] Liptak A. Supreme Court revives abortion-pill restriction. N Y Times; 2021.
- [15] Woodcock J. FDA acting commissioner letter to american college of obstetricians and gynecologists; 2021. https://prochoice.org/wp-content/uploads/ FDA-. Acting-Commissioner-Letter-to-ACOG-April-12-2021.pdf (accessed April 29, 2021).
- [16] American College of Obstetricians and Gynecologists. Medication abortion up to 70 days of gestation. ACOG practice bulletin 225. Obstetrics and Gynecology 2020;136(4):225.
- [17] Upadhyay UD, McCook AA, Bennett AH, Cartwright AF, Roberts SCM. State abortion policies and Medicaid coverage of abortion are associated with pregnancy outcomes among individuals seeking abortion recruited using Google Ads: a national cohort study. Soc Sci Med 2021;274:113747. doi:10.1016/j. socscimed.2021.113747.
- [18] Jerman J, Frohwirth L, Kavanaugh ML, Blades N. Barriers to abortion care and their consequences for patients traveling for services: qualitative findings from two states. Perspect Sex Reprod Health 2017;49:95–102. doi:10.1363/psrh. 12024.