

Letters

RESEARCH LETTER

Changes in Abortion in Texas Following an Executive Order Ban During the Coronavirus Pandemic

In response to the coronavirus pandemic, Texas Governor Greg Abbott issued an executive order on March 22, 2020, postponing surgeries and procedures that were not medically necessary.¹ Texas officials interpreted this to prohibit most abortions until the order expired on April 21, 2020, contrary to medical associations' recommendations.²



Supplemental content

The objective of this analysis was to assess changes in abortions following the executive order. We also hypothesized that abortions performed at 12 weeks' gestational age (GA) or more would increase after the order expired.³

Methods | The University of Texas at Austin and University of California, San Francisco, institutional review boards approved this study and waived informed consent. Since January 2017, monthly data were requested from Texas abortion facilities on the number of medication abortions, procedural abortions at less than 12 weeks' GA, and procedural abortions at 12 weeks' GA or more. Of 24 Texas facilities, 18 reported data for 2019 and 2020, including 4 that opened in 2019. These facilities provide 93% of abortions in Texas, according to comparisons with state vital statistics data.⁴

Monthly data were also collected on the number of Texas residents obtaining abortions at 30 of the 37 open facilities in Arkansas, Colorado, Kansas, Louisiana, Oklahoma, and New Mexico from February 2020 through May 2020 and compared with 2017 data collected previously from these states (Supplement).

Negative binomial regression models were used to estimate the percent change in the number of in-state abortions

that occurred in February, March, April (the month most affected by the order), and May 2020 for all abortions, medication abortions, procedures less than 12 weeks' GA, and procedures 12 weeks' GA or more relative to the same month in 2019, and all out-of-state abortions among Texas residents relative to 2017, separately. A second set of negative binomial models were used to estimate whether monthly in-state abortions occurring in February, March, April, and May 2020 differed from the overall linear trend in Texas since January 2019, after adjustment for the number of abortion facilities and abortion seasonality. Stata version 15 was used for analyses (StataCorp). A 95% CI not including the null defined statistical significance.

Results | Texas facilities provided 18 268 abortions from February through May 2019 and 16 349 abortions during these months in 2020 (Table 1). Overall, 4608 abortions were provided in April 2019 and 2856 in April 2020, a 38.0% (95% CI, -40.8% to -35.1%) decrease.

Texas residents receiving care at out-of-state facilities increased from 157 in February 2020 to 947 in April 2020; monthly totals ranged from 107 to 165 in 2017.

The number of medication abortions increased from 1808 in April 2019 to 2297 in April 2020, accounting for 39% and 80% of all abortions, respectively (Table 2). After adjustment for time trends and number of facilities, there was a 17.4% (95% CI, -7.1% to 48.4%) difference in the number of medication abortions in April 2020 relative to that expected had the linear trend from January 2019 continued. Compared with April 2019, there were fewer procedural abortions less than 12 weeks' GA (2318 vs 317) and at 12 weeks' GA or more (482 vs 242) in April 2020. After the executive order was lifted in May 2020, 815 procedural abortions at 12 weeks' GA or more were provided vs 507 in May 2019, an 82.6% (95% CI, 46.7% to 127.4%) increase over that expected based on linear trends.

Table 1. Number of Abortions Provided in Texas and to Texas Residents at Out-of-State Facilities and Percent Change in Abortions, February-May 2019 and February-May 2020^a

	Abortions						
	Total No.	Provided in Texas			Provided out of state ^b		
		2020	No.	Month-specific change 2019-2020, % (95% CI) ^c	No.	Month-specific change 2017-2020, % (95% CI) ^c	
February-May	17 923	18 268	16 349		532	1574	
February	4808	4287	4651	8.5 (4.1 to 13.1)	139	157	12.9 (-10.1 to 41.9)
March	4262	4922	3995	-18.8 (-22.2 to -15.4)	165	267	61.8 (33.3 to 96.5)
April	3803	4608	2856	-38.0 (-40.8 to -35.1)	107	947	785.0 (624.7 to 980.9)
May	5050	4451	4847	8.9 (4.6 to 13.4)	121	203	67.8 (34.0 to 110.1)

^a Data from 2017 on Texas residents obtaining abortions out of state were used to compare changes in 2020 because data from 2019 were not available.

^b Abortions provided to Texas residents at facilities in Arkansas, Colorado, Kansas, Louisiana, Oklahoma, and New Mexico.

^c Percent change in February, March, April, and May 2020 vs 2019 (or 2017 for out-of-state abortions) estimated from negative binomial regression models.

Table 2. Distribution of Abortion Type and Percent Change in Number of Abortions in Texas, February-May 2019 and February-May 2020

	No. (%) ^a		% (95% CI)	
	2019	2020	Month-specific change 2019-2020 ^b	Deviation from trend since January 2019 ^c
Medication abortion (≤10.0 wk GA)				
February-May	7097 (38.8)	8754 (53.5)		
February	1620 (37.8)	1928 (41.5)	19.0 (11.4 to 27.1)	-9.1 (-23.9 to 8.4)
March	1905 (38.7)	1980 (49.6)	3.9 (-2.4 to 10.7)	-7.5 (-23.6 to 12.0)
April	1808 (39.2)	2297 (80.4)	27.0 (19.5 to 35.1)	17.4 (-7.1 to 48.4)
May	1764 (39.6)	2549 (52.6)	44.5 (36.0 to 53.5)	29.2 (0.0 to 67.0)
Procedural abortions (<12.0 wk GA)				
February-May	8943 (49.0)	5395 (33.0)		
February	2123 (49.5)	2113 (45.4)	-0.5 (-6.3 to 5.7)	-4.8 (-16.3 to 8.4)
March	2322 (47.2)	1482 (37.1)	-36.2 (-40.2 to -31.9)	-32.9 (-41.8 to -22.6)
April	2318 (50.3)	317 (11.1)	-86.3 (-87.8 to -84.6)	-84.9 (-87.6 to -81.6)
May	2180 (49.0)	1483 (30.6)	-32.0 (-36.3 to -27.3)	-28.9 (-41.2 to -14.1)
Procedural abortions (≥12.0 wk GA)				
February-May	2228 (12.2)	2200 (13.5)		
February	544 (12.7)	610 (13.1)	12.1 (-0.1 to 25.9)	-4.2 (-17.6 to 11.5)
March	695 (14.1)	533 (13.3)	-23.3 (-31.5 to -14.1)	-14.7 (-27.8 to 0.8)
April	482 (10.5)	242 (8.5)	-49.8 (-57.0 to -41.4)	-46.7 (-57.5 to -33.3)
May	507 (11.4)	815 (16.8)	60.7 (43.9 to 79.6)	82.6 (46.7 to 127.4)

Abbreviation: GA, gestational age.

^a Percent of all abortions in month and year.

^b Percent change in February, March, April, and May 2020 vs 2019 estimated from negative binomial regression models.

^c Deviation from trend estimated from negative binomial regression models projecting the linear trend in abortion type from January 2019 through May 2020. Models also controlled for number of facilities and abortion seasonality.

Discussion | These data show that abortions declined in Texas during the executive order. Stay-at-home orders, facilities' coronavirus precautions, and patients' reluctance to seek in-person care may also have contributed to the decline. Other Texas patients traveled out of state or requested medications online.⁵ Abortions at 12 weeks' GA or more increased after the order expired, which likely reflects delays in care among those who waited for an appointment and facilities' limited capacity to meet backlogged patient need. Although abortions later in pregnancy are very safe, they are associated with a higher risk of complications and may require additional visits compared with those provided earlier in pregnancy.⁶

Study limitations include lack of data from some Texas and out-of-state facilities, which may affect these estimates. Monthly facility data do not allow assessment of changes associated with the exact timing of the order.

Kari White, PhD, MPH
Bhavik Kumar, MD, MPH
Vinita Goyal, MD, MPH
Robin Wallace, MD, MAS
Sarah C. M. Roberts, DrPH
Daniel Grossman, MD

Author Affiliations: Steve Hicks School of Social Work, University of Texas at Austin (White); Planned Parenthood Gulf Coast, Houston, Texas (Kumar); Population Research Center, University of Texas at Austin (Goyal); Southwestern Women's Surgery Center, Dallas, Texas (Wallace); Advancing New Standards in Reproductive Health, University of California, San Francisco (Roberts, Grossman).

Accepted for Publication: November 17, 2020.

Published Online: January 4, 2021. doi:10.1001/jama.2020.24096

Corresponding Author: Kari White, PhD, MPH, 1925 San Jacinto Blvd, Stop D3500, Austin, TX 78712 (kariwhite@utexas.edu).

Author Contributions: Dr White had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

Concept and design: White, Kumar, Goyal, Roberts, Grossman.

Acquisition, analysis, or interpretation of data: All authors.

Drafting of the manuscript: White, Kumar.

Critical revision of the manuscript for important intellectual content: Kumar, Goyal, Wallace, Roberts, Grossman.

Statistical analysis: White.

Obtained funding: White, Roberts, Grossman.

Administrative, technical, or material support: Goyal, Grossman.

Supervision: Kumar.

Conflict of Interest Disclosures: Dr Wallace was a named plaintiff in the case *Planned Parenthood Center for Choice v Abbott*. No other disclosures were reported.

Funding/Support: This research was supported by a grant from the Susan Thompson Buffett Foundation, and grant P2CHD042849 awarded to the Population Research Center at the University of Texas at Austin from the Eunice Kennedy Shriver National Institute of Child Health and Human Development.

Role of the Funder/Sponsor: The funders had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

Disclaimer: The findings and conclusions in this article are those of the authors and do not necessarily reflect the views of the Planned Parenthood Federation of America, Inc.

Additional Contributions: We thank Lina Palomares, LMSW, Gracia Sierra, PhD, and Elsa Vizcarra, BS, all at the University of Texas at Austin, for assistance with data acquisition and management, for which they received no additional compensation for their role in this study. We also thank the facilities that provided data on abortion patients.

Additional Information: Advancing New Standards in Reproductive Health (ANSIRH), University of California, San Francisco, provided information about abortion facilities in other states.

1. Health care professionals and facilities, including abortion providers, must immediately stop all medically unnecessary surgeries and procedures to preserve resources to fight COVID-19 pandemic. News release. Ken Paxton Attorney General of Texas. March 23, 2020. Accessed October 21, 2020. <https://www.texasattorneygeneral.gov/news/releases/health-care-professionals-and-facilities-including-abortion-providers-must-immediately-stop-all>
2. Joint statement on abortion access during the COVID-19 outbreak. News release. American College of Obstetricians and Gynecologists. March 18, 2020. Accessed October 21, 2020. <https://www.acog.org/news/news-releases/2020/03/joint-statement-on-abortion-access-during-the-covid-19-outbreak>
3. White K, Sierra G, Vizcarra E, et al. The potential impact of Texas' executive order on patients' access to abortion care. Texas Policy Evaluation Project; 2020. Accessed June 14, 2020. <http://sites.utexas.edu/txpep/files/2020/04/TxPEP-research-brief-executive-order-abortion-delay-4-8-20.pdf>
4. Baum SE, White K, Hopkins K, Potter JE, Grossman D. Rebound of medication abortion in Texas following updated mifepristone label. *Contraception*. 2019;99(5):278-280. doi:10.1016/j.contraception.2019.01.001
5. Aiken ARA, Starling JE, Gomperts R, Tec M, Scott JG, Aiken CE. Demand for self-managed online telemedicine abortion in the United States during the coronavirus disease 2019 (COVID-19) pandemic. *Obstet Gynecol*. 2020;136(4):835-837. doi:10.1097/AOG.0000000000004081
6. Upadhyay UD, Desai S, Zlidar V, et al. Incidence of emergency department visits and complications after abortion. *Obstet Gynecol*. 2015;125(1):175-183. doi:10.1097/AOG.0000000000000603