Demand for Self-Managed Medication Abortion Through an Online Telemedicine Service in the United States

Abigail R. A. Aiken, MD, PhD, MPH, Jennifer E. Starling, MS, Alexandra van der Wal, MS, Sascha van der Vliet, MS, Kathleen Broussard, MA, Dana M. Johnson, MPAff, Elisa Padron, BA, Rebecca Gomperts, MD, MPP, PhD, and James G. Scott, PhD

Objectives. To examine demand for abortion medications through an online telemedicine service in the United States.

Methods. We examined requests from US residents to the online telemedicine abortion service Women on Web (WoW) between October 15, 2017, and August 15, 2018. We calculated the population-adjusted rate of requests by state and examined the demographics, clinical characteristics, and motivations of those seeking services, comparing those in states with hostile versus supportive abortion policy climates.

Results. Over 10 months, WoW received 6022 requests from US residents; 76% from hostile states. Mississippi had the highest rate of requests (24.9 per 100 000 women of reproductive age). In both hostile and supportive states, a majority (60%) reported a combination of barriers to clinic access and preferences for self-management. Cost was the most common barrier (71% in hostile states; 63% in supportive states; $P < .001$). Privacy was the most common preference (49% in both hostile and supportive states; $P = .66$).

Conclusions. Demand for self-managed medication abortion through online telemedicine is prevalent in the United States. There is a public health justification to make these abortions as safe, effective, and supported as possible. (*Am J Public Health.* Published online ahead of print October 17, 2019: e1–e8. doi:10.2105/AJPH.2019.305369)

A rapid increase in legislation restricting access to abortion in the clinic setting coupled with a decline in the US abortion rate to its lowest level in the post-Roe era,[1] has sparked renewed interest in abortions that are self-managed outside the formal health care setting.[2] The 334 abortion restrictions enacted by state legislatures between January 2011 and mid-July 2016 account for one third of all restrictions passed since 1973.[3] Moreover, the likelihood that *Roe v. Wade* will be overturned or severely diminished has increased with the current composition of the Supreme Court. Among the least advantaged, however, it is already clear that lack of access has compromised the right to choose to the extent that some are already seeking self-managed alternatives.[4,5]

Contemporary reports of self-management in the United States focus not on sharp objects or back-alley providers but on the abortion medications mifepristone and misoprostol. The development of modern medication abortion protocols using misoprostol with or without mifepristone, coupled with the role of the Internet as a go-to source for information and services, has changed the concept of what a self-managed abortion might look like. A 2014 sample of abortion clinic patients weighted to be representative of all US abortion patients suggested that 1.2% had ever attempted to self-manage using misoprostol,[6] whereas a study of Dominican women recruited from 3 obstetrics–gynecology clinics in New York in 2000 found that 5% reported misoprostol self-use.[7] A study conducted in 2015 in Texas, a state with some of the most burdensome barriers to clinic access in the country, found that an estimated 100 000 women had ever attempted to self-induce their own abortion.[8] Additionally, in-depth interviews conducted in 2015 with women living in the Texas Rio Grande Valley found that a prevalent route to self-induction was misoprostol purchased from pharmacies across the border in Mexico.[9]

More recently, studies have shown that people frequently seek information about "self-abortion" online through Google,[10] and that mifepristone and misoprostol are available for purchase in the United States through online pharmacy sites.[11] In the United States, mifepristone and misoprostol typically require a prescription from a medical provider, but many of these online pharmacy sites will provide the medications without such a prescription.[11]

Beyond barriers to access, people in the United States may also seek self-managed medication abortion because of a preference for self-care. Preliminary evidence from a qualitative study of people in 20 states who sought abortion medications online indicates

ABOUT THE AUTHORS

Abigail R. A. Aiken and Dana M. Johnson are with the LBJ School of Public Affairs, University of Texas, Austin. Jennifer E. Starling and James G. Scott are with the Department of Statistics and Data Sciences, University of Texas, Austin. Alexandra van der Wal and Sascha van der Vliet are with the Faculty of Science, VU University, Amsterdam. Kathleen Broussard is with the Department of Sociology, University of Texas, Austin. Elisa Padron is with the College of Natural Sciences, University of Texas, Austin. Rebecca Gomperts is with the Women on Web International Foundation, Amsterdam.

Correspondence should be sent to Abigail R. A. Aiken, LBJ School of Public Affairs, University of Texas at Austin, Austin, TX 78712 (e-mail: araa2@utexas.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

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that some preferred the convenience and privacy of self-managing an abortion at home, whereas others found accessing clinical care impossible because of state policy restrictions.[4] However, regardless of whether their motivations were underpinned by barriers or preferences, those seeking to self-manage using medications obtained online were sensitive to the difference between online pharmacy sites that simply sell medications and online telemedicine services that are set up to provide physician oversight, instructions, and support, in addition to genuine medications in the correct dose.[4] This distinction is important, because although very little is known about experience of those who use online pharmacy sites, online telemedicine abortion services have demonstrated high levels of safety, effectiveness, and acceptability in other settings where they are widely used because of legal restrictions on abortion.[12–16] Findings from Ireland and Northern Ireland, where women have used online telemedicine to self-manage for more than a decade, indicate rates of effectiveness on par with medication abortion provided in the clinic setting, as well as very low rates of adverse events.[17] Until very recently, no such online telemedicine service has been available in the United States.

Given the potential for further restrictions on abortion clinic access at both the state and national levels combined with the ability to self-care using online services, our objectives in this study are to (1) assess demand and geographical variation in demand for medication abortion through an online telemedicine service in the United States, and (2) examine motivations for seeking this service and how types of motivation for doing so vary by state abortion policy context.

METHODS

We used data from US residents requesting early medication abortion from the online abortion telemedicine service Women on Web (WoW). WoW is a nonprofit initiative that provides abortion medications to women living in countries where safe abortion is not available.[12] The organization has been operating since 2006, and the help desk responds to more than 10 000 requests in 16 languages every month.[12] Women access the service by filling out an online consultation form, which contains questions about their medical and pregnancy history, demographic characteristics, and reasons for accessing the service. A doctor reviews the form to check for contraindications and a reported gestational age of 10 weeks or fewer at the time of request. Mifepristone and misoprostol are then prescribed according to the medication abortion protocol recommended by the World Health Organization and are mailed by a partner organization. WoW provides e-mail instructions on how to use the mediations as well as information on what to expect and how to recognize the signs of potential complications. WoW does not currently provide abortion medications to people living in the United States. However, the service receives requests from US residents. In mid-October 2017, the service began collecting data on these requests in the interest of capturing demand among this population. Those who contacted the service by filling out the consultation form received information from a specially trained help desk about locally available abortion services and funds, self-management, online pharmacies that sell mifepristone, and financial and logistical assistance accessing abortion in their state of residence.

We analyzed the online consultation forms of those living in the United States who contacted WoW to request medication abortion from October 15, 2017, through August 15, 2018. Consultation forms contained information about age, parity, state of residence, gestational age at the time of request, whether gestational age had been determined by ultrasound, the presence of comorbidities (e.g., diabetes, hypertension), the circumstances of pregnancy, and the reasons for deciding to choose abortion. Those making the request could decline to answer any question that did not determine medical eligibility. On November 24, 2017, a question asking people to share their motivations for seeking self-managed abortion through WoW was added to the consultation form.

Possible motivations were provided as a list based on previous insights from qualitative studies[4,14,15,18] and included an "other" option for specifying motivations not included on the list. The explicitly listed options included cost of clinical services, distance to a clinic, difficulty finding childcare, difficulty taking time away from work or school, legal restrictions such as being required to view an ultrasound, experienced or perceived stigma or judgement, intimidation or harassment by protestors, inability to maintain confidentiality from family members when accessing clinic services, fear of negative consequences from a controlling or abusive partner, the comfort of the home environment, preferring autonomy during the abortion process, feeling empowered by self-management, the privacy of the home environment, and the ability to have a support person or persons present during the abortion. Respondents could choose as many motivations as they felt applied to their situation. We divided motivations into 2 broad categories: barriers to clinic access and preference for self-management. The barriers category contains reasons that refer to difficulty accessing abortion services in the clinic setting, whereas the preferences category contains reasons that denote self-managed abortion as a first choice rather than as a recourse.

We conducted a spatial analysis of per capita requests to WoW at the state level. Following a state abortion policy classification developed by Nash et al. at the Guttmacher Institute,[19] we categorized states into "hostile" and "supportive" with respect to currently enacted abortion policies. The "hostile" category contains those classified by Nash et al. as "extremely hostile" or "hostile," and the "supportive" category contains those classified as either "middle ground" or "supportive." We combined state categorizations in this way to avoid creating categories that were too small to allow meaningful analysis and to reflect major differences in enacted abortion policies. A list of states in each category is shown as a footnote to Table 1. We used this categorization to compare 3 main outcome measures in hostile versus supportive states: (1) the volume of requests, (2) the demographic and clinical characteristics of those making the requests, and (3) the motivations of those making the requests for abortion medications from the online telemedicine service.

We used R statistical software version 3.5.3 (R Foundation for Statistical Computing, Vienna, Austria) to conduct all data analyses. The characteristics of interest in our analysis were categorical, and thus we used

TABLE 1—Demographic and Clinical Characteristics of Those Requesting Abortion Medications From Women on Web: United States; October 15, 2017–August 15, 2018

Characteristic	All States (n = 6022), No. (%)	Hostile States (n = 4571), No. (%)	Supportive States (n = 1451), No. (%)	*P*
Maternal age, y				.4
< 20	1241 (20.6)	952 (20.8)	289 (19.9)	
20–24	1705 (28.3)	1303 (28.5)	402 (27.7)	
25–29	1398 (23.2)	1048 (22.9)	350 (24.1)	
30–34	981 (16.3)	749 (16.4)	232 (16.0)	
35–39	495 (8.2)	377 (8.3)	118 (8.1)	
40–44	175 (2.9)	124 (2.7)	51 (3.5)	
≥ 45	27 (0.5)	18 (0.4)	9 (0.6)	
Number of children				< .001
0	2831 (47.0)	2026 (44.3)	805 (55.5)	
1	1217 (20.2)	955 (20.9)	262 (18.1)	
≥ 2	1974 (32.8)	1590 (34.8)	384 (26.5)	
Gestational age, wk				.06
< 7	4351 (72.3)	3274 (71.6)	1077 (74.2)	
7–10	1671 (27.8)	1297 (28.4)	374 (25.8)	
Ultrasound				.01
No	3872 (64.3)	2896 (63.4)	976 (67.3)	
Yes	2150 (35.7)	1675 (36.6)	475 (32.7)	
Circumstances				.16
Didn't use contraception	2943 (48.9)	2216 (48.5)	727 (50.1)	
Contraception failed	2733 (45.4)	2075 (45.4)	658 (45.4)	
Rape	297 (4.9)	243 (5.3)	54 (3.7)	
Unknown	48 (0.8)	36 (0.8)	12 (0.8)	
Comorbidities				.57
No	5930 (98.5)	4504 (98.5)	1426 (98.3)	
Yes	92 (1.5)	67 (1.5)	25 (1.7)	
Reasons for seeking abortion[a]				
Lack of money	3653 (60.7)	2801 (61.3)	852 (58.7)	.09
Want to finish school	2328 (38.7)	1783 (39.0)	545 (37.6)	.34
Too young	1828 (30.4)	1351 (29.6)	477 (32.9)	.02
Too old	289 (4.8)	229 (5.0)	60 (4.1)	.2
Can't at this point in life	4142 (68.8)	3139 (68.7)	1003 (69.1)	.77
Illness	112 (1.9)	91 (2.0)	21 (1.5)	.22
Family is complete	1202 (20.0)	971 (21.2)	231 (15.9)	< .001

Note. Hostile states were AL, AR, AZ, FL, GA, IA, ID, IN, KS, KY, LA, MI, MO, MS, NC, ND, NE, OH, OK, PA, RI, SC, SD, TN, TX, UT, VA, WI, WV. Supportive states were AK, CA, CO, CT, DE, HI, IL, MA, ME, MD, MN, MT, NH, NJ, NM, NV, NY, OR, VT, WA, WY.

[a]Percentages sum to > 100% because women could choose as many reasons as they felt applied to their situation.

the χ^2 test to formally assess differences between hostile and supportive states. When examining participants' specific reasons for seeking abortion medications through WoW (e.g., lack of money, wanting to finish school), we conducted a test for differences in proportions between hostile and supportive states. WoW provided all data in a fully de-identified format. At the time of accessing the service, those requesting the service consented to the fully anonymized use of their data for research purposes.

RESULTS

Over the 10-month study period, 6022 people living in the United States requested abortion medications from the WoW online service. Among these, 4571 (76%) lived in states considered to have a hostile abortion policy climate, and 1451 (24%) lived in states considered to have a supportive abortion policy climate. (For reference, 58% of women of reproductive age, 15–44 years, live in states with hostile abortion policy climates.)

Table 1 shows the demographic and clinical characteristics of those making requests. Information for the full sample was available for all characteristics except

circumstances of pregnancy, where information was missing for 48 women (0.8% of the sample). The age distribution represents the full span of reproductive ages. Fifty-two percent were aged between 20 and 29 years, and 21% were younger than 20 years. Just over half (53%) already had children. Compared with the population of US women obtaining abortions in nonhospital settings, our study population contained a higher proportion of women younger than 20 years and was more likely to be nulliparous.[6]

The majority (72%) were less than 7 weeks pregnant at the time of requesting medications, and 64% reported not having had an ultrasound to help determine gestational age and pregnancy location. Similar proportions reported getting pregnant because of contraceptive failure (45%) and because of not having used contraception (49%). Five percent reported becoming pregnant as a result of rape. Very few (1.5%) reported comorbidities. The most common reason for seeking abortion was simply not feeling able to have a child or another child at this point in life, accounting for 69% of responses, followed by not being able to afford a child (61% of responses). Overall, there were few demographic or clinical differences between those living in hostile versus supportive states. Living in a hostile state was significantly associated with number of children ($P < .001$). In particular, a lower proportion of participants in our sample from hostile states had no children (44% vs 55%). Those living in hostile states were more likely to seek an abortion because desired family size was complete (21% vs 16%; $P < .001$) and to have had an ultrasound to help determine gestational age (37% vs 32%; $P = .01$).

Figure 1 shows the spatial distribution and density of requests to WoW by state during the study period, expressed as requests per 100 000 women of reproductive age (15–44 years). The density of requests is generally higher in states considered to have hostile abortion policy climates, particularly in the South and Midwest. The highest density of requests came from Mississippi (24.9 per 100 000 women aged 15–44 years), Louisiana (21.3 per 100 000), Alabama (17.3 per 100 000), Tennessee (14.6 per 100 000), and Texas (14.4 per 100 000). The lowest density of requests came from New Hampshire (3.7 per 100 000 women aged 15–44 years), Oregon (3.8 per 100 000), Minnesota (3.9 per 100 000), California (4.2 per 100 000), and Maine (4.3 per 100 000).

During the 9 months in which the question asking about motivations for seeking medication abortion through online telemedicine was included in the consultation form, 4899 out of the 4967 people filling out the form (98.6%) shared their motivations. Table 2 shows the overall proportions of people requesting medication abortion from WoW by type of motivation in hostile compared with supportive states. The majority of people in both hostile and supportive states (60%) reported seeking abortion medications online because of a combination of both barriers and preferences. In both hostile and supportive states, proportions reporting only barriers (31%) were higher than were proportions reporting only preferences (7%). Overall, we found no significant association between type of motivation and state policy environment ($P = .21$).

Table 3 shows the specific reasons for seeking abortion medications from WoW, within the 2 broad categories of barriers and preferences. Most people (74%) expressed more than 1 specific reason. Participants reported a wide range of barriers to accessing clinical abortion care in both hostile and supportive states. Cost (71% vs 63%; $P < .001$), distance (29% vs 21%; $P < .001$), legal restrictions (18% vs 14%; $P < .001$), and protestors (15% vs 12%; $P = .01$) were more commonly cited as barriers by those living in hostile states. The need to keep an abortion secret (43% vs 40%; $P = .03$) was slightly more commonly cited as a barrier by those living in supportive states.

Table 3 also shows that participants expressed a wide range of reasons for preferring self-managed medication abortion, regardless of state policy environment. Privacy, the comfort of the home environment, autonomy, empowerment, and preferring to have someone present during the abortion were cited in very similar proportions and with no significant differences between hostile and supportive states.

DISCUSSION

We found considerable demand for self-managed medication abortion using online telemedicine among US residents. Those requesting abortion medications are demographically diverse and live in states with both hostile and supportive abortion policy contexts. Although demand is higher overall in states with hostile policy climates, the broad categories of motivations for seeking self-management are similar across policy context, with most individuals citing a combination of clinic access barriers and preferences for self-management, regardless of state policy context. A key difference, however, is in the specific types of barriers experienced. Access barriers related to the effects of legislative restrictions, such as increased cost and travel distance, are magnified in hostile states. Preferences, on the other hand, are notably similar across policy contexts.

The main limitation of our study is that we clearly cannot capture all demand for abortion medications from online sources. Some US residents may turn to online pharmacy sites that sell abortion medications, whereas others may contact other online telemedicine organizations that were not collecting similar data. Moreover, there are other ways of obtaining abortion medications that do not involve the Internet, as well as many other pathways to abortion self-management that do not involve medications at all.[9,20] Additionally, not all those who would be interested in obtaining medication abortion from WoW will have found or accessed the Web site or completed the consultation form. Thus, overall demand for self-managed medication in the United States is likely to be considerably higher than what we were able capture. Nevertheless, our aim in this study was not to come up with an accurate estimate of self-managed medication abortion in the United States. Rather, our goal was to explore whether, where, and why such demand exists. Thus our data allow us to fill an important gap in the literature by capturing demand from a major online telemedicine service and providing insight into why demand for online telemedicine abortion exists and how it varies by state.

Important Aspects of Abortion Access

The motivations of US residents requesting abortion medications from WoW lead us to reflect on 3 important aspects of

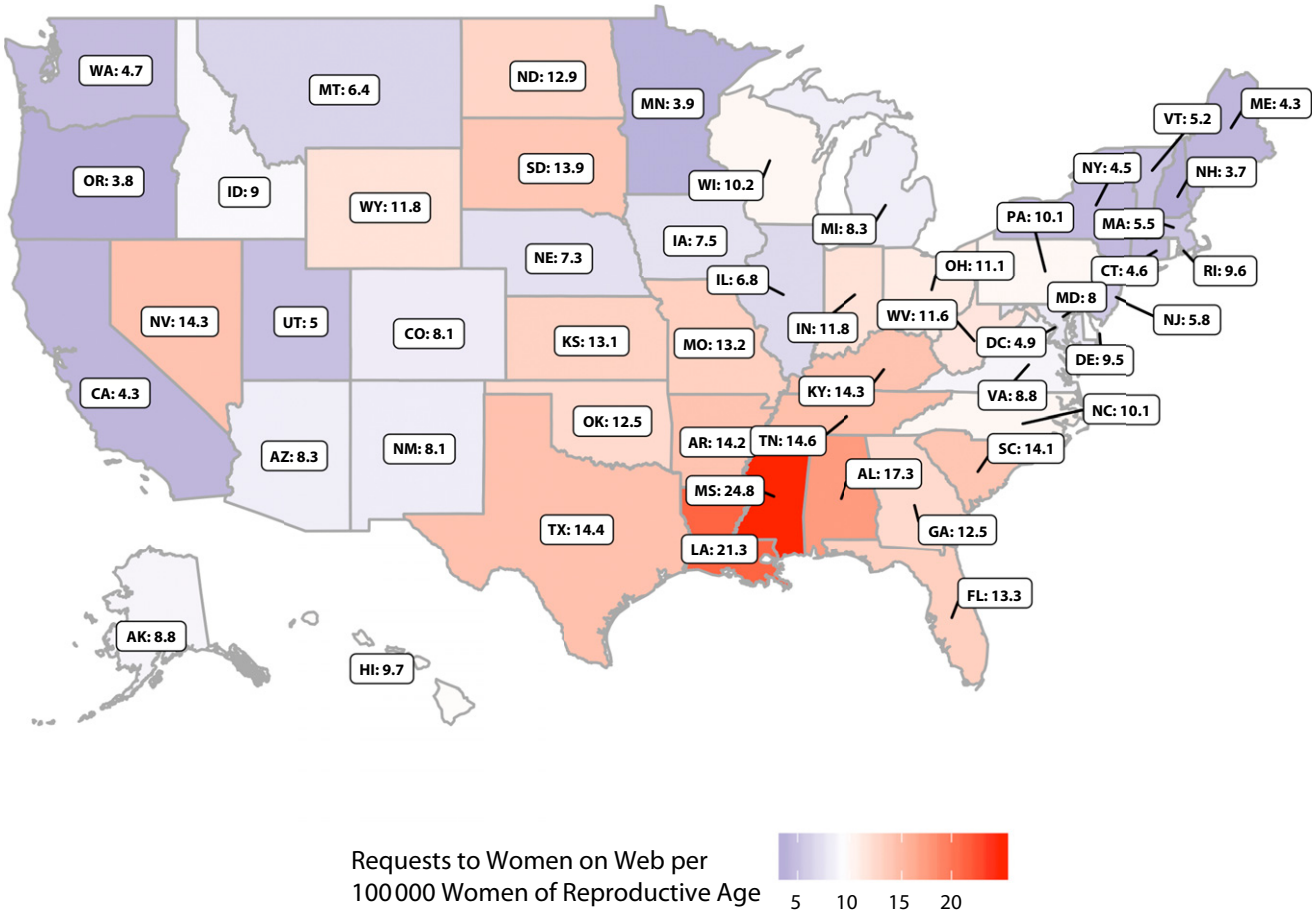

FIGURE 1—Map Showing Density of Requests for Abortion Medications to Women on Web by State of Residence: United States; October 15, 2017–August 15, 2018

abortion access in the United States. First, the volume of requests from states with hostile abortion policy climates, and the magnification of factors such as cost and distance in these states, provide preliminary evidence that restrictive state policies may have had a negative impact on clinical abortion access, particularly among those who struggled to afford an in-clinic abortion. This finding reflects the literature on the impacts of state-level abortion restrictions.[21–24] Although we cannot definitively attribute the higher proportion of requests to more restrictive state policies, we note that the study populations living in hostile versus supportive states were similar across measured demographic and clinical characteristics. However, the consultation form did not include measures of income or educational attainment.

Our findings also add a new dimension to the question of whether restrictive abortion policies might be contributing to the declining abortion rate within the clinic setting in the United States. Given the considerable

TABLE 2—Types of Motivation Reported by Those Requesting Abortion Medications From Women on Web, by State Policy Context: United States, October 15, 2017–August 15, 2018

	State Policy Environment		
Type of Motivation	Hostile States (n = 3750), No. (%)	Supportive States (n = 1217), No. (%)	*P*
			.21
Both barriers and preferences	2261(60.3)	720 (59.2)	
Barriers only	1177 (31.4)	370 (30.4)	
Preferences only	265 (7.1)	106 (8.7)	
No response	47 (1.3)	21 (1.7)	

Note. Participant size was n = 4967. Hostile states were AL, AR, AZ, FL, GA, IA, ID, IN, KS, KY, LA,MI, MO, MS, NC, ND, NE, OH, OK, PA, RI, SC, SD, TN, TX, UT, VA, WI, WV. Supportive states were AK, CA, CO, CT, DE, HI, IL, MA, ME, MD, MN, MT, NH, NJ, NM, NV, NY, OR, VT, WA, WY.

TABLE 3—Specific Types of Barriers and Preferences Reported by Those Requesting Abortion Medications From Women on Web (WoW), by State Policy Context: United States, October 15, 2017–August 15, 2018

Reasons for Requesting Abortion Medications From WoW	State Policy Environment: Hostile States (n = 3750), No. (%)	State Policy Environment: Supportive States (n = 1217), No. (%)	P
Barriers			
Cost of clinic abortion	2667 (71.1)	765 (62.9)	< .001
Need to keep abortion secret	1484 (39.6)	526 (43.2)	.03
Time off work or school	1290 (34.4)	395 (32.5)	.23
Distance to clinic	1089 (29.0)	255 (21.0)	< .001
State laws (e.g., waiting period)	678 (18.1)	172 (14.1)	< .001
Perceived abortion stigma	595 (15.9)	221 (18.2)	.07
Difficulty finding childcare	558 (14.9)	155 (12.7)	.07
Protestor harassment	548 (14.6)	140 (11.5)	.01
Intimate partner violence	150 (4.0)	39 (3.2)	.24
Preferences			
Privacy of home environment	1847 (49.3)	590 (48.5)	.66
Comfort of home	1762 (47.0)	542 (44.5)	.14
Feeling of autonomy	1571 (41.9)	532 (43.7)	.28
Ability to have others present	948 (25.3)	314 (25.8)	.74
Feeling of empowerment	406 (10.8)	156 (12.8)	.06

Note. Participant size was n = 4967. Hostile states were AL, AR, AZ, FL, GA, IA, ID, IN, KS, KY, LA,MI, MO, MS, NC, ND, NE, OH, OK, PA, RI, SC, SD, TN, TX, UT, VA, WI, WV. Supportive states were AK, CA, CO, CT, DE, HI, IL, MA, ME, MD, MN, MT, NH, NJ, NM, NV, NY, OR, VT, WA, WY.

demand our findings demonstrate for 1 specific route to self-managed medication abortion, it is possible that 1 component of the falling abortion rate is a higher number of abortions taking place outside the clinic setting using self-management. However, the demand for self-managed abortion observed in this study, as well as early figures from Aid Access (a new online telemedicine site that provides abortion medications to people in the United States),[25] suggest that the number of people seeking and conducting self-managed medication abortion is relatively low compared with the number of abortions known to occur in the clinical setting. Additionally, some self-managed abortions are also likely to be conducted by individuals who would not have obtained clinical abortions in the first place and thus would not contribute to the in-clinic abortion rate.

Second, we note that barriers to clinic access are present even in states considered to have more supportive policy environments for abortion. Factors that were magnified in hostile states, such as cost and distance, were still frequently cited as barriers in many supportive states. This fact likely points to the impact of wide-reaching policies such as the Hyde Amendment, a budget rider passed by Congress every year since 1976 that prohibits the use of federal funds to provide abortion services. The reality of the Hyde Amendment is that most people in the United States who need an abortion will need to pay the majority of costs out of pocket, a requirement that disproportionately affects those with low incomes.[26] Additionally, stigma and the need to keep an abortion secret for fear of negative consequences from a partner or family were slightly more commonly cited in supportive states.

This finding adds to the literature on barriers to abortion access even in settings where services are considered more easily available. In such settings, stigma, difficulty taking time away from work or childcare, and being unable to attend the clinic because of surveillance or control from a partner or family member are all common barriers to access.[27,28] Models of abortion access that reduce the need to attend a clinic in person, such as clinic or pharmacy-based telemedicine, have great potential to help overcome many of these barriers.[29,30]

Third, it is clear from our findings that demand for self-managed abortion using online telemedicine in the United States goes beyond barriers to clinic access. For many, self-managed medication abortion was viewed as a preference to accessing care in the clinic setting, because of the comfort, privacy, and convenience of managing an abortion independently at home. This fact raises important questions about how to accommodate reproductive autonomy and preference in current models of abortion care provision in the United States. In light of the overall safety of medication abortion, and growing evidence that self-managed medication abortion using online telemedicine can be a safe, effective, and acceptable choice,[12–15] the main risks to those who choose to self-manage in the United States are likely to be legal risks.[31] State laws on self-managed abortion are a complicated patchwork, and there is precedent for the prosecution of alleged self-management, often involving inappropriate use of legal statute to pursue aggressive punishment.[31]

Public Health Implications

During our study, US residents had no viable option to access medication abortion

through online telemedicine. However, our study end date coincided with the beginning of AidAccess, a new online telemedicine service that provides medication abortion to those living in the United States.[32] The service follows the same model as the WoW service, with physician oversight and instructions, advice, and support provided by a trained help desk team. The launch of this service may well fulfill the unmet need we have identified for an online telemedicine service that serves the United States. It also ushers in a new era for abortion access in this country, along with a multitude of questions about how use of the service will affect clinical services and the role of clinicians in fielding questions, giving advice, and providing follow-up care for those who have self-managed. Questions will also arise regrading what the public health outcomes and the experiences of those using the service will look like and whether legal issues will affect both access and outcomes.

In a recent position article, the American College of Obstetricians and Gynecologists opposed the criminalization of self-induced abortion as well as the mandatory reporting of those suspected to have self-induced, citing the detriment of such actions to patient autonomy and the doctor–patient relationship.[33] Moreover, clinicians and public health professionals have proposed support for a harm-reduction approach to self-managed abortion in the United States, citing the clinical and ethical benefits to supporting the self-use of misoprostol.[34] In addition to harm reduction, human rights and reproductive justice perspectives compel us to recognize that women in the United States are either resorting to or choosing self-managed medication abortion. The responses of public health professionals, clinicians, and policymakers will be vital to ensuring that their experiences are as safe, effective, and supported as possible. AJPH

CONTRIBUTORS

A. R. A. Aiken originated the research question, devised the study, and wrote the first draft of the article. A. R. A. Aiken, K. Broussard, D. M. Johnson, and E. Padron interpreted the findings. J. E. Starling and J. G. Scott performed the data analysis. A. van der Wal and S. van der Vliet prepared the data for analysis. R. Gomperts provided the de-identified data. All authors discussed article findings and revised subsequent drafts of the article for accuracy and intellectual content.

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CONFLICTS OF INTEREST

R. Gomperts is founder and director of the Women on Web International Foundation. None of the other authors have any conflicts of interest to report.

HUMAN PARTICIPANT PROTECTION

The study was reviewed and approved by the institutional review board at the University of Texas at Austin.

REFERENCES

1. Jones RK, Jerman J. Abortion incidence and service availability in the United States, 2014. *Perspect Sex Reprod Health*. 2017;49(1):17–27.

2. Foster DG. Dramatic decreases in US abortion rates: public health achievement or failure? *Am J Public Health*. 2017;107(12):1860–1862.

3. Nash E, Benson-Gold R, Ansari-Thomas Z, Cappello O, Mohammed L. Laws affecting reproductive health and rights: state trends at midyear, 2016. 2016. Available at: https://www.guttmacher.org/article/2016/07/laws-affecting-reproductive-health-and-rights-state-trends-midyear-2016. Accessed December 14, 2018.

4. Aiken AR, Broussard K, Johnson DM, Padron E. Motivations and experiences of people seeking medication abortion online in the United States. *Perspect Sex Reprod Health*. 2018;50(4):157–163.

5. Grossman D, Ralph L, Raifman S, et al. Lifetime prevalence of self-induced abortion among a nationally representative sample of US women. *Contraception*. 2018; 97(5):460.

6. Jerman J, Jones RK, Onda T. Characteristics of US abortion patients in 2014 and changes since 2008. 2016. Available at: https://www.guttmacher.org/sites/default/files/report_pdf/characteristics-us-abortion-patients-2014.pdf. Accessed June 18, 2019.

7. Rosing MA, Archbald CD. The knowledge, acceptability, and use of misoprostol for self-induced medical abortion in an urban US population. *J Am Med Womens Assoc*. 2000;55(3 suppl):183–185.

8. Texas Policy Evaluation Project. Study finds at least 100,000 Texas women have attempted to self-induce abortion. 2015. Available at: https://liberalarts.utexas.edu/txpep/releases/self-induction-release.php. Accessed June 19, 2019.

9. Texas Policy Evaluation Project. Texas women's experiences attempting self-induced abortion in the face of dwindling options. 2015. Available at: https://liberalarts.utexas.edu/txpep/_files/pdf/TxPEP-Research-Brief-WomensExperiences.pdf. Accessed June 19, 2019.

10. Jerman J, Onda T, Jones RK. What are people looking for when they google "self-abortion"? *Contraception*. 2018;97(6):510–514.

11. Murtagh C, Wells E, Raymond EG, Coeytaux F, Winikoff B. Exploring the feasibility of obtaining mifepristone and misoprostol from the Internet. *Contraception*. 2018;97(4):287–291.

12. Gomperts RJ, Jelinska K, Davies S, Gemzell-Danielsson K, Kleiverda G. Using telemedicine for termination of pregnancy with mifepristone and misoprostol in settings where there is no access to safe services. *BJOG*. 2008;115(9):1171–1175; discussion 1175–1178.

13. Wainwright M, Colvin CJ, Swartz A, Leon N. Self-management of medical abortion: a qualitative evidence synthesis. *Reprod Health Matters*. 2016;24(47): 155–167.

14. Aiken ARA, Johnson DM, Broussard K, Padron E. Experiences of women in Ireland who accessed abortion by travelling abroad or by using abortion medication at home: a qualitative study. *BMJ Sex Reprod Health*. 2018; 44(3):181–186.

15. Aiken ARA, Padron E, Broussard K, Johnson D. The impact of Northern Ireland's abortion laws on women's abortion decision-making and experiences. *BMJ Sex Reprod Health*. 2018; Epub ahead of print.

16. Les K, Gomperts R, Gemzell-Danielsson K. Experiences of women living in Hungary seeking a medical abortion online. *Eur J Contracept Reprod Health Care*. 2017;22(5):360–362.

17. Aiken AR, Digol I, Trussell J, Gomperts R. Self reported outcomes and adverse events after medical abortion through online telemedicine: population based study in the Republic of Ireland and Northern Ireland. *BMJ*. 2017;357:j2011.

18. Grossman D, Holt K, Peña M, et al. Self-induction of abortion among women in the United States. *Reprod Health Matters*. 2010;18(36):136–146.

19. Nash E, Benson-Gold R, Mohammed L, et al. Policy trends in the States, 2017. 2018. Available at: https://www.guttmacher.org/article/2018/01/policy-trends-states-2017#_ftnref1. Accessed December 14, 2018.

20. Ojanen-Goldsmith AR, Dutton-Kenny M. Beyond the clinic: characteristics and experiences of community-based abortion providers, facilitators and counselors outside the formal health care system in North America. *Contraception*. 2017;96(4):275.

21. Jones RK, Jerman J. Time to appointment and delays in accessing care among US abortion patients. 2016. Available at: http://repositorio.gire.org.mx/bitstream/123456789/2088/1/delays-in-accessing-care.pdf. Accessed December 14, 2018.

22. Gerdts C, Fuentes L, Grossman D, et al. Impact of clinic closures on women obtaining abortion services after implementation of a restrictive law in Texas. *Am J Public Health*. 2016;106(5):857–864.

23. Karasek D, Roberts SC, Weitz TA. Abortion patients' experience and perceptions of waiting periods: survey evidence before Arizona's two-visit 24-hour mandatory waiting period law. *Womens Health Issues*. 2016;26(1): 60–66.

24. White K, Turan JM, Grossman D. Travel for abortion services in Alabama and delays obtaining care. *Womens Health Issues*. 2017;27(5):523–529.

25. Aiken ARA. Erosion of women's reproductive rights in the United States. *BMJ*. 2019;366:l4444.

26. Cates W. The Hyde amendment in action: how did the restriction of federal funds for abortion affect low-income women? *JAMA*. 1981;246(10): 1109–1112.

27. Aiken AR, Guthrie KA, Schellekens M, et al. Barriers to accessing abortion services and perspectives on using mifepristone and misoprostol at home in Great Britain. *Contraception*. 2018;97(2):177–183.

28. Doran F, Nancarrow S. Barriers and facilitators of access to first-trimester abortion services for women in the developed world: a systematic review. *J Fam Plann Reprod Health Care*. 2015;41(3):170–180.

29. Grossman DA, Grindlay K, Buchacker T, Potter JE, Schmertmann CP. Changes in service delivery patterns after introduction of telemedicine provision of medical abortion in Iowa. *Am J Public Health*. 2013;103(1): 73–78.

30. Kapp N, Grossman D, Jackson E, Castleman L, Brahmi D. A research agenda for moving early medical pregnancy termination over the counter. *BJOG*. 2017; 124(11):1646–1652.

31. Diaz-Tello F, Mikesell M, Adams JE. Roe's unfinished promise: decriminalizing abortion once and for all. 2017. Available at: https://ssrn.com/abstract=3082643. Accessed December 14, 2018.

32. Ravitz J. Abortion pills now available by mail in US—but FDA may be investigating. 2018. Available at: https://www.cnn.com/2018/10/23/health/abortion-pills-by-mail-us-fda/index.html. Accessed December 14, 2018.

33. American College of Obstetricians and Gynecologists. Position statement on the decriminalization of self-induced abortion. 2017. Available at: https://www.acog.org/Clinical-Guidance-and-Publications/Position-Statements/Decriminalization-of-Self-Induced-Abortion. Accessed December 14, 2018.

34. Tasset J, Harris LH. Harm reduction for abortion in the United States. *Obstet Gynecol*. 2018;131(4): 621–624.