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ABSTRACT

The article delves into the topic of digital abortion in the United States, focusing on how the possibility of obtaining an abortion through mifepristone has transitioned into the digital realm and how the law might support, reinforce, challenge, or be challenged by gender dynamics.

With these objectives, first, the contribution traces the historical and legal evolution that drove the abortion platformization – in other words, the digitalization of abortion services via online platforms – highlighting how this evolution led to the structuring of a digital abortion ecosystem. In a second moment, the challenges faced by this digital abortion ecosystem during the *Roe* era – when abortion was still recognized as a constitutional right – are underlined. Finally, the contribution moves to analyze the consequences for this ecosystem's users and workers of the Supreme Court ruling *Dobbs v. Jackson*, which overturned *Roe v. Wade* returning abortion regulation to the states.

Keywords: digital platforms; abortion; digital health and privacy; data protection; gender and law.

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The Abortion Platformization in the United States: A Critical Perspective

Introduction

The article focuses on the so-called digital abortion ([1]) – the possibility of obtaining the interruption of pregnancy with mifepristone, the abortion drug, entirely within cyberspace –, tracing the critical historical-legal aspects of abortion platformization in the United States.

The platformization of abortion refers to the process of abortion digitalization through various platforms – generally part of the so-called Sexual and Reproductive Health (SRH) platforms – that provide different abortion services: from online access to more general abortion information to the most specific telemedical abortion "procedure". The regulation of RU-486 ([2]) and access to medical abortion ([3]) – and consequently also telemedical abortion – in the US has seen a considerable delay compared to the European context. From the beginning, it entailed an encounter/clash and the constant interrelationship among the political and legal spheres, medical and scientific evolutions, market needs, and social movements within and beyond the US borders.

Focusing on a highly gendered subject such as abortion, the article introduces a different perspective on digital platform services regulation, raising crucial issues about the meanings of gendering platforms' laws. Specifically, through the phases of how abortion has been digitalized and platformized, the article explores how the law could promote or hinder the growth of platforms as well as protect or stress the right to abortion. In addition, to analyze digital abortion it is fundamental to consider the role of social movements and organizations in the creation of femtech tools – platforms

([1]) Digital Abortion, Telemedical Abortion, and TelAbortion are synonyms that refer to the obtaining of medical abortion through telemedicine entirely in cyberspace.

([2]) RU-486 is the denomination given by the "Roussel-Uclaf" laboratories to mifepristone and misoprostol combination used for medication abortion. In the article, RU-486 refers to this official combination, while mifepristone and abortion pills are used as synonyms for abortion drug use in the US.

([3]) Medical Abortion or Medication abortion are the terms to refer to the abortion procedure through drugs.

inspired by feminists' perspectives and discourses – and their evolution, consequences, and limits.

The article develops around the following main questions: to what extent does "gendering platforms' law" refer to the analysis of digital platforms and their law from a gender perspective, and to what extent does it refer to the building of gendered digital platforms? Moreover, what are the consequences of these new tools on the cultural, legal, and political frameworks, and at the same, those of these frameworks on the development and functioning of femtech platforms? To answer these questions, the article is structured as a historical-legal analysis of abortion digitalization and platformization, and the structuring and changes of the Digital Abortion Ecosystem.

In the first section, the article examines how the historical-legal path led to the structuring of a Digital Abortion Ecosystem in the US during the *Roe* era when abortion was recognized as a federal constitutional right. It analyzes parallelly and dialectically the regulation of the new digital space concerning the abortion discourse, that of mifepristone dispensing and medical abortion access, and that of patients' health data and privacy related to cyberspace, and how these changes affected the abortion platformization process. Three historical caesuras were decisive in shaping the platforms and services offered: a first platformization phase related to the changes in the 1990s of e-information; a second phase in the 2000s of e-counseling and e-prescribing and the launch of a national trial of telemedical abortion; and a third and final phase corresponding to Covid-19 of e-distribution, leading to the realization of the digital abortion model and then completing the abortion platformization process.

The focus of the second section highlights how telemedical abortion – ending up representing the most concrete possibility of self-management and self-determination – led already during the *Roe* era to attempts of restriction and opposition strategies that would become central after *Roe* overruling.

The third section investigates the scenario after the US Supreme Court decision *Dobbs v. Jackson Women's Health Organization* (2022), which dismantled *Roe* and abortion as a constitutional right, and how the legal and legislative changes have affected the precarious balances of the Digital Abortion Ecosystem. In the *Dobbs* era, the fragmentation of state regulations has profoundly affected platforms and digital abortion providers. In the more restrictive states, the "Trigger", T.R.A.P., and "Zombie" laws ([4]) have limited or sought to limit the scope of telemedical abortion meanwhile in the more liberal states the so-called "Shield laws" have been enacted precisely to protect patients and providers in the physical and digital spaces. Particularly, the article highlights how post-*Dobbs* abortion digital surveillance has transformed digital

([4]) The T.R.A.P. laws ("Targeted Regulation of Abortion Providers") establish stringent obligations and liabilities to abortion providers, both individual physicians and abortion clinics; the "Trigger laws" refer to regulations that were formally passed but could not apply as long as *Roe* regulated abortion; and the "Zombie laws" refer to laws predating the *Roe* decision that prohibited abortion – many of these enacted in the late 1800s and early 1900s –, never formally declared unconstitutional and potentially re-enforceable in the case of a judicial change.

technologies and cyberspace from learning tools and a space of education and care into evidence in abortion investigations. This phenomenon led to profound social and economic consequences, given the migration of US users/patients/clients to the European digital landscape for privacy and security reasons.

1. The Abortion Platformization in the US: a Slow and Incidental Walking

Historically, abortion platformization in the US followed the evolution of the regulations on both the Internet and the dispensing of abortion pills.

The right to abortion in the US was recognized at the federal level with the Supreme Court ruling *Roe v. Wade* in 1973 ([5]). However, since the French Roussel Uclaf laboratories synthesized mifepristone and misoprostol in the 1980s, the history of RU-486 in the US has been marked by intense struggles. These struggles centered around gaining cultural and political recognition, securing patent rights, and obtaining approval from the Food and Drug Administration (FDA).

Despite a short trial at the University of South Carolina, the manufacturer and its German partner Hoechst declined the requests to support the clinical trials in the country, reporting the fear of organizing the investment due to the antiabortion pressures ([6]). After the confiscation of RU-486 in a single dosage for personal use from Europe and the preliminary injunction to return the drug by the Eastern District Court of New York ([7]), the *Benten* case arrived at the Supreme Court. It denied the application of the lower court, expressively refusing to discuss the claim that holding the drug would constitute an undue burden upon constitutional abortion rights ([8]). Consequently, due to the large public debate around the ruling, feminists, physicians, and reproductive rights organizations began to push for political, legal, and medical responses ([9]).

1.1. The 1990s between RU-486 and Abortion Online Free Speech.

The clash on mifepristone remained polarized until 1993 when Roussel Uclaf finally donated the license to the nonprofit and non-governmental organization

([5]) *Roe v Wade* 410 US 113, 163–64, 1973.

([6]) R. Alta Charo, *A Politic History of RU-486* in K.E. Hanna (eds), *Biomedical Politics,* Institute of Medicine (US) Committee to Study Decision Making, Washington DC: National Academies Press, 1991.

([7]) *Benten v Kessler,* 799 E.D.N.Y. 281, 1992.

([8]) *Benten v Kessler*, 505 US 1084 (1992). The undue burden argument was argued by Justice Stevens in the dissenting opinion. This case was decided two weeks after the Supreme Court decision Planned Parenthood v. Casey that established the undue burden standard for the evaluation of abortion regulation. *See Planned Parenthood of Southeastern Pa v Casey*, 505 US 833 (1992) 112 S. Ct. 2791.

([9]) J.A. Hogan, *The Life of the Abortion pills in United States* (2000 Third Year Paper), *Harvard Law School Student Paper,* http://nrs.harvard.edu/urn-3:HUL.InstRepos:8852153, accessed February 5, 2024.

Population Council ([10]). This decision was due to the new Clinton administration's public support for the RU-486, the FDA's interest in receiving a New Drug Application (NDA) ([11]), the numerous signatures petitions and web campaign of the Feminist Majority Foundation (FMF), and the national pills' experimentation by the Abortion Rights Mobilization (ARM). After those changes, the ARM announced the expansion of clinical trials on the clone and the Population Council finally submitted the NDA ([12]). Nevertheless, the use of abortion pills was far from being approved.

In the same years, while abortion advocates started to see the new cyberspace as an opportunity to enlarge abortion information and care provision, the infotech progress led the government to regulate online speech. The link between abortion and the internet became clear with the enactment of the Telecommunication Act ([13]). Its Title V, commonly known as the Communication Decency Act (CDA) ([14]), proved immediately quite problematic. Amending subsection 1462 of the Comstock Act (1897) ([15]) on the importation and transportation of "obscene" matter, subsection 507 of the CDA could have potentially restricted online information and commercial activities related to abortion. Therefore, a pro-choice class action pursued a declaration of unconstitutionality because of the violation of the free speech clause and an injunction to block the enforcement ([16]). Furthermore, a second coalition led by the American Civil Liberties Union (ACLU) filed a lawsuit challenging the constitutionality of sections 223 (a) (1) and 223 (d): two provisions aiming to protect minors' access to "indecent" communication. For the plaintiffs, the CDA's lack of precision in distinguishing between "obscenity" and "child pornography" constrained free speech. After a judicial order not to prosecute the so-called "indecent" and "patently offensive" materials until the ruling, the government lawyers guaranteed no enforcement on abortion online speech, and a temporary restraint order was conceded only on the indecency provision, denying the one on "patently offensive" materials and on the Comstock laws. In

([10]) C.N. Baker, *History and politics of medication abortion in the US and the rise of telemedicine and self-managed abortion*, *Journal of Health Politics, Policy and Law*, 2023, 48,4, 485.

([11]) Before the FDA concedes a new drug's approval, an official sponsor must apply a New Drug Application (NDA), providing the research findings of the clinical trial and adequate evidence of its effectiveness, safety, benefits, labeling, and manufacturing. The approval process is based on three elements: first, the analysis of the target condition and the availability of treatments; second, the valuation of benefits and risks calculated from clinical data; and third, the risk management strategies. *See* Food and Drug Administration, Development and Approval Process, https://www.fda.gov/drugs/development-approval-process-drugs, accessed February 7, 2024.

([12]) R. Alta Charo, *A Politic History of RU-486*.

([13]) US Government Publishing Office, *Telecommunications Act*, (Pub. LA. No. 104-104, 110 Stat. 56 1996).

([14]) *Communications Decency Act* (CDA), Pub. L. No. 104-104 (Tit. V), 110 Stat. 133 1996.

([15]) 18. USC. Title 18, § 1462 (c).

([16]) A. C. Sanger of Planned Parenthood of New York; California Abortion and Reproductive Rights Action League (CARAL); National Abortion Reproductive rights Action League (NARAL); Feminist Majority Foundation (FMF); Medical student for Choice (MSFC); Prof. Rhonda Copelon of the New York School of Law; A. Guash-Melendez that contain an abortion informational site on World Wide Web; and National Abortion Federation (NAF). *Sanger v Reno*, 966 E.D.N.Y. 151 (1997).

addition, a commission of three judges was convened to decide the case. Meanwhile, a second legal challenge, initiated by the Citizens Internet Empowerment Coalition (CIEC) and organized by the American Library Association, America Online, and the Center for Democracy and Technology, was formalized in *ACLU v. Reno* ([17]).

In the meantime, the Department of Health and Human Services (HHS) formulated and adopted new federal standards to protect personal health information, and the government signed the first federal healthcare information privacy law. The primary aim of the Health Insurance Portability and Accountability Act (HIPAA) was to ensure the portability and continuity of health insurance coverage, protecting the health information exchange ([18]). However, due to the rapid evolution of the internet and its connection with health data recording and the right to privacy, the story of HIPAA regulation was only in its first chapter.

During the ACLU case discussion and after the HIPAA enactment, the Court of the Eastern District of New York finally ruled on the pro-choice class action. Given that the government had already assured that there would be no enforcement on abortion speech and Comstock laws were on the books for decades and not applied because of the constitutionality of the abortion right, the Court denied the request of the plaintiffs. Accepting the defendant's motion of a dismission for lack of ripeness, in the judge's opinion the plaintiffs had not shown a credible and imminent threat to represent a justiciable case or controversy ([19]). On the contrary, a unanimous decision recognized the unconstitutionality of the indecency provisions of CDA as a violation of the free speech clause protected by the First Amendment because of its overbroad, and a violation of the due process clause of the Fifth Amendment because of the vagueness ([20]). Then the government presented an appeal to the Supreme Court that in a unanimous opinion stroked down the regulation recognizing the highest level of protection for online speech under the First Amendment free speech clause. The government did not demonstrate how they could ensure the "block" of contents for minors without constraining adult's free speech, therefore proving a serious restraint in the freedom of expression protected by the Constitution ([21]).

On the contrary, the debate on mifepristone remained blocked, and only in 2000 did the FDA approve the drug under the name Mifeprex, outlining several restrictions and requirements on its dispensing: it could only be used to terminate pregnancies up to seven weeks, dispensed in person, and by registered physicians ([22]).

([17]) *ACLU v Reno,* 929 E.D.Pa. 824, 830-49 (1996).

([18]) *Health Insurance Portability and Accountability Act*, Pub. L. No. 104-191, § 261, 110 stat. 1936 (1996), codified at 42 USC §1320d (2000).

([19]) *Sanger v Reno*, 966 E.D.N.Y. 151 (1997).

([20]) *ACLU v* Reno, 929 E.D.Pa. 824, 830-49, 1996.

([21]) *Reno v ACLU*, 521 US 844, 1997.

([22]) *See* Food and Drug Administration, *Initial US Approval Mifeprex (mifepristone) tablets*, 2000, https://www.accessdata.fda.gov/drugsatfda_docs/nda/2000/20687_mifepristone.cfm, accessed February 5, 2024; L. Noah, *A Miscarriage in the Drug Approval Process: Mifepristone Embroils the FDA in Abortion Politics*, *Wake Forest Law Review*, 2001,136, 571.

Nevertheless, on these legal and juridical bases, the abortion platformization for e-information goals could finally start its rise.

1.1.1. *The E-information Platforms and Their Evolution*

Analyzing the first step of digital SRH startups, the growth in digital technologies led at first to the development of websites of information and later of mobile platforms of info-tracking period/fertility. The latter made available not only the tracking period services but also a full range of information regarding sexual health, birth control methods, reproductive choices, and abortion access. Currently, platforms such as Cycles, Stardust, Spot On, and EUKI based their contents and evolution on the necessity of both information and health self-management, covering the gap in public education.

These platforms represent the major SRH learning tools, addressing to their users a broader range of topics: period self-knowledge; body changes, patterns, and symptoms out of the ordinary; fertility information and awareness; birth control options; and abortion possibilities. Looking at the list, particularly EUKI and Spot On represent interesting femtech ([23]) exemplars. EUKI was developed after a study launched by Ibis Reproductive Health and then it was released by Women Help Women (WHW), an international activist organization that worked since its outcome, physically and digitally, on equal and free access to safe abortion and to scientific-based information about SRH. The idea behind its development was to create a platform that could compensate for the bias experienced by underrepresented subjectivities and communities, and that could secure privacy for their users assuring no third-party tracking ([24]). In the same way, Spot On – based on the guidelines and medical standards of the Planned Parenthood Federation of America (PPFA) ([25]) – was launched by PPFA as a gender-neutral info-tracking app that provides privacy and security to their users, ensuring the non-sharing of data since it is not subject to HIPAA regulation ([26]). Thus, over time the most important e-information websites, such as WHW and PPFA, have

([23]) The term was coined in 2016 by Ida Tin, founder of the European info-tracking platform Clue, to represent and legitimize the technological innovations in women and unrepresented subjectivities health, a field which has shown a serious lack of attention reflecting in the lack of investments in the new tech sector. *See* Clue, https://helloclue.com/about-clue, accessed February 7, 2024.

([24]) EUKI, https://eukiapp.com, accessed February 8, 2024.

([25]) The history of PPFA relates to the birth control movement and activities of Margaret Sanger in the early 20th century. After the opening of the first birth control clinic in New York, in 1923 Sanger opened the Birth Control Clinical Research and incorporated the American Birth control League that, during the World War II, officially became the Planned Parenthood Federation. *See* L. Gordon, *The Moral Property of Women: A History of Birth Control Politics in America*, University of Illinois Press, 2002.

([26]) Spot On, https://www.plannedparenthood.org/blog/ive-heard-that-period-tracking-apps-can-make-your-personal-information-public-and-or-sell-it-to-others-if-they-want-to-is-that-true, accessed February 7, 2024.

also "become" mobile application platforms, making their content accessible to more and more users.

1.2. The 2000s: from the Abortion E-information to the E-counseling and E-prescribing Services

In the early 2000s, the increase in electronic health transactions drove the Bush administration to implement HIPAA: the Privacy Rule created federal standards for the use and disclosure of "protected health information" (PHI) by the so-called "cover entities" ([27]), while the Security Rule applied these standards to the e-PHI ([28]). Under the new Obama administration, the American Recovery and Reinvestment Act (ARRA) was enacted ([29]), and as part of it, the Health Information Technology for Economic and Clinical Health Act (HITECH) additionally strengthened the HIPAA standards, prohibiting the sale of e-PHI or the use of it for marketing purposes, then expanding patients' rights ([30]). However, the final rule, which provides patients access to their medical records, was released only in 2013 ([31]).

Despite the global history of safety and the states' different regulations on abortion pills, the FDA – regulating mifepristone under the REMS – continued to impose numerous barriers, such as the registration of the physicians with the drug manufacturer, the signature of a consent form and three office visits for the patients ([32]). Therefore, the struggle for access to abortion pills converted itself into a battle to eliminate the REMS restrictions, both for reproductive rights organizations and associations and for the scientific field. Particularly, researchers began to discuss the real necessity of the in-person and pre-abortion exam requirements ([33]) but when the FDA returned to reform the medical protocol in 2016, it only changed the gestational time limit from seven to ten weeks and substituted the term "physician" with "health care provider". The most controversial FDA requirement, the in-person requirement, remained ([34]).

([27]) 45 CFR §§ 160.102-160.103, 2003.

([28]) 45 CFR. §§ 164.302 – 164.318, 2005.

([29]) *American Recovery and Reinvestment Act (ARRA)*, Public Law No. 111-5, 123 Stat. 115, February 2009.

([30]) *Health Information Technology for Economic and Clinical Health Ac*t, 42 USC sec 139w-4(0)(2), February 2009.

([31]) US Department of Health and Human Services, *HITECH Breach Notification Interim Final Rule*, Federal Register, 78, 17, January 2013.

([32]) Food and Drug Administration, *Risk Evaluation and mitigation strategy (REMS)*, Mifeprex NDA 20-687, 2011, https://www.fda.gov/media/164648/download?attachment, accessed February 4, 2024.

([33]) E.G. Raymond, D. Grossman, E. Wiebe, B. Winikoff*, Reaching women where they are: eliminating the initial in-person medical abortion visit*, *Contraception*, 2015, 92, 3, 190.

([34]) Food and Drug Administration, *Risk Evaluation and Mitigation Strategy (REMS)*, Mifeprex NDA 020687', 2016, https://www.fda.gov/media/164649/download?attachment, accessed February 5, 2024.

Consequently, under a protocol filed to the FDA, the Gynuity Health Project launched the TelAbortion study to investigate the effectiveness, safety, and feasibility of medical abortion through the telemedicine model to reform the regulation in the US ([35]). Despite that, when the FDA reviewed the protocol again, it officially approved the RU-486 generic clone: maintaining the in-person requirement the regulatory regime still blocked the evolution of telemedical abortion dispensing and continued to force both patients and abortion providers to travel long distances across and out of states ([36]).

1.2.1. *The Abortion Digital Clinics*

Looking at the second step of digital SRH startups, due to the difficulties imposed by regulations, the PPFA began to work in a mixed-method between physical and digital: services of e-information and e-counseling in collaboration with clinics that did not have an on-site medical abortion physician for the dispensing ([37]). The first experiment took place in 2008 by Planned Parenthood of the Heartland in Iowa ([38]), leading years later the Iowa Supreme Court to overturn the state's telemedicine abortion ban ([39]).

The judicial and legal openness regarding telemedicine abortion led to the explosion of digital abortion clinics that provide e-counseling and then physical services of medical abortion. Platforms such as Carafem began to offer abortion e-counseling to patients from Virginia, Maryland, Washington DC, Illinois, and Georgia. Carafem, the business activity of FemHealth USA – a reproductive rights organization – represents another femtech instance. Since 2015, the website platform provided e-counseling on abortion care, birth control, and testing for sexually transmitted diseases (STDs) connected with its several physical clinics across the country, intending to normalize and destigmatize SRH. In addition, it was a member of the Abortion care Network and provider of the National Abortion Federation ([40]).

Generally speaking, these platforms – sponsored by the previously described e-information platforms, and connecting the digital space to the physical space so that

([35]) E. Chong, *Telabortion: a new direct-to-patient telemedicine abortion service in the U.S.A.*, April 28, 2016, https://www.safeabortionwomensright.org/news/telabortion-a-new-direct-to-patient-telemedicine-abortion-service-in-the-usa/, accessed February 4, 2024.

([36]) Food and Drug Administration, *Risk Evaluation and Mitigation Strategy (REMS) Single Shared System for Mifepristone 200mg*, 2019.

([37]) *See* E.G. Raymond, E. Chong, P. Hyland, *Increasing access to abortion with telemedicine*, *JAMA Internal Medicine*, 2016, 176, 5, 585; D. Grossman, K. Grindlay, T. Buchacker, et al., *Effectiveness and acceptability of medical abortion provided through telemedicine*, *Obstetrics & Gynecology*, 2011, 118, 2, 1, 296.

([38]) *See* Y.T. Yang, K. Kozhimannil, *Medication Abortion Through Telemedicine: Implications of a Ruling by the Iowa Supreme Court*, *Obstetrics & Gynecology*, 2016, 127, 2, 313; K. Grindlay, K. Lane, D. Grossman, *Women's and providers' experiences with medical abortion provided through telemedicine: a qualitative study*, *Women's Health Issues*, 2013, 23, 2, 117.

([39]) *Planned Parenthood of the Heartland, Inc. and Jill Meadows, Appellants, v. Iowa Board of Medicine*, 865 N.W.2d 252, 2015.

([40]) Carafem, https://carafem.org, accessed February 8, 2024.

after virtual counseling the person could physically access medical abortion – contributed to profoundly changing the socio-cultural and medical abortion perceptions.

1.3. The COVID-19 Pandemic and the Abortion E-distribution

The changes were accelerated when COVID-19, exacerbating the inequities in healthcare access, pushed the governments to confront the potentiality of the telemedicine model in all aspects of healthcare ([41]).

The constraint of in-person contacts for abortion care became the most controversial focus, and researchers began to question a reform of medical protocol for mifepristone dispensing and the possibility of implementing telemedicine abortion services ([42]). The studies have shown the safety of telemedical abortion and patients' preference for the telemedical model, proving at the same time how in-clinic visits and pre-abortion ultrasound tests were unnecessary and excessive ([43]). After several ignored requests for the suspension of restrictions by the FDA, the ACLU and a coalition of medical and reproductive rights experts led by the American College of Obstetricians and Gynecologists (ACOG) filed a lawsuit, and the final ruling of the District Court of Maryland temporally suspended the REMS, considering them as a "substantial obstacle" in time of the pandemic ([44]). Nevertheless, after the Trump administration's request to re-establish the restrictions, the Supreme Court reinstated the regulation provided before the pandemic outbreak ([45]).

On a social and cultural level, the temporal suspension between the District Court of Maryland ruling (2020) and the Supreme Court review (2021) and, additionally,

([41]) Telehealth includes services provided through telecommunications systems, allowing remote healthcare in place of an in-person office visit. Before COVID-19, telemedicine in the US faced difficulties related to multiple factors: restrictions on where it could be applied, inadequate reimbursements, and the costs connected to privacy regulations and the necessity to secure telecommunication technology. During the Covid-19 Public Health Emergency, despite these hurdles, telemedicine has quickly expanded in all aspects of healthcare, and individuals had broad access to telehealth services without the limits that usually apply facilitated by the Coronavirus Preparedness and Response Supplemental Appropriations Act and the Coronavirus Aid, Relief, and Economic Security Act. *See Coronavirus Preparedness and Response Supplemental Appropriations Act*, Public Law No: 116-123, 2020; and *Coronavirus Aid, Relief, and Economic Security Act*, S.3548 – CARES Act, 2020.

([42]) A. Mark, A.M. Foster, J. Perritt, *The future of abortion is now: Mifepristone by mail and in-clinic abortion access in the United States*, *Contraception*, 2021, 104, 1, 38.

([43]) *See* D. Grossman, K. Grindlay, *Safety of Medical Abortion Provided Through Telemedicine Compared with in Person*, *Obstetrics and Gynecology*, 2017, 130, 4, 778; K. Grindlay, D. Grossman, *Telemedicine provision of medical abortion in Alaska: Through the provider's lens*, *Journal of Telemedicine and Telecare*, 2017, 23, 7, 680; U.D. Upadhyay, N.E. Johns, K.R. Meckstroth, J.L. Kerns, *Distance Traveled for an Abortion and Source of Care After Abortion*, *Obstetrics and Gynecology*, 2017, 130, 3, 616; E. Raymond, E. Chong, B. Winikoff, et al., *TelAbortion: evaluation of a direct to patient telemedicine abortion service in the United States*, *Contraception*, 2019, 100, 3, 173.

([44]) *American College of Obstetricians and Gynecologists et. al. v. US Food and Drug Administration et. al.*, 8:2020cv01320 D. Md. – Doc. 90, 2020.

([45]) *Food and Drug Administration v American College of Obstetricians and Gynecologists*, 592 US, 2021.

the results of TelAbortion research had already brought fundamental and irreversible changes, which the new Biden Administration and FDA's decisions helped to validate. Qualitative studies on TelAbortion conducted pre-during-and after the Covid-19 pandemic – the majority published in whole special issues of the Journal Contraception ([46]) – demonstrated the feasibility and safety of digital abortion care, but first of all the studies confirmed the unnecessity of pre-abortion tests in the majority of cases and the patients' highest preference in telemedical abortion ([47]). Not surprisingly, the FDA's new guidance of 2021 lifted the in-person distribution requirement ([48]), and the Biden administration announced the review of the REMS. Finally, the FDA partially lifted the restrictions, removing the in-person requirement but allowing only certified pharmacies to the pills' e-distribution ([49]).

1.3.1. *The Digital Abortion Model*

In the aftermath of the Maryland District Court's ruling, the non-profits Just the Pill and Choix – respectively based in Minnesota and California – were the first digital clinics to appear using the no-test medical protocol. Just the Pill provided digital abortion care to patients from Texas, Utah, Idaho, North Dakota, South Dakota, Iowa, Washington, Nebraska, and Wisconsin ([50]), while Choix, collaborating with the mutual abortion fund Reprocare ([51]), offered its services to patients in California, Colorado, and Illinois. Additionally, new digital abortion providers emerged, as in the case of Hey Jane and Plan C. Plan C represents the first instance of a collective public health creative campaign – whose team partners include the University of Washington – for the increasing scientific-based and updated information on online medical abortion access ([52]). Instead, since its outcome, Hey Jane has provided digital abortion care to patients in California, Colorado, Illinois, New Mexico, New York, and Washington ([53]). After

([46]) K. Celand, A.M. Foster, A.Machikanti Gómez, C. L. Westhoff, E.G. Raymond, *Special Issue on the mifepristone Risk Evaluation and Mitigation Strategy (REMS)*, *Contraception*, 2021, 104, 1, 1.

([47]) *See* A.R.A. Aiken, J.E. Starling, A. van der Wal, et al., *Demand for Self-Managed Medication Abortion Through an Online Telemedicine Service in the United States*, *American Journal of Public Health*, 2020, 110, 1, 90; U.D. Upadhyay, R. Schroeder, S.C.M. Roberts, *Adoption of no-test and telehealth medication abortion care among independent abortion providers in response to COVID-19*, *Contraception*, 2:100049, 2020; A. Mark, A.M. Foster, J. Perritt, *The future of abortion is now: Mifepristone by mail and in-clinic abortion access in the United States*, 2021; H.A. Anger, E.G. Raymond, M. Grant, et al., *Clinical and service delivery implications of omitting ultrasound before medication abortion provided via direct-to-patient telemedicine and mail in the U.S*, *Contraception*, 2021, 104, 6, 659.

([48]) Food and Drug Administration, *Questions and answers on Mifeprex*, 2021.

([49]) Food and Drug Administration, *Risk Evaluation and Mitigation Strategy (REMS) Modification of Single Shared System for Mifepristone 200mg*, 2021.

([50]) Just the pill, https://www.justthepill.com, accessed February 8, 2024.

([51]) Reprocare, https://reprocare.com, accessed February 8, 2024.

([52]) Plan C, https://www.plancpills.org, accessed February 8, 2024.

([53]) Hey Jane, https://www.heyjane.com, accessed February 8, 2024.

the Biden administration announced the FDA's REMS review, also Abortion on Demand ([54]) and Pills by Post ([55]) were launched.

On a practical level, the abortion services are based on asynchronous consent forms and encrypted text messages, followed by a virtual appointment conducted by telephone or virtual call where the health care provider finally prescribes mifepristone to the patients after the eligibility evaluation, without requiring medical tests. The last step, e-distributing, was provided by digital pharmacies that mailed the pills after the digital clinics' e-prescribing. HoneyBee Health ([56]), American Mail Order Pharmacy ([57]), and Manifest Pharmacy ([58]) – respectively based in California, Michigan, and South Carolina – are the most known digital pharmacies. Particularly Honeybee Health, which found itself in a historically abortion-friendly state and has the lowest prices bringing the medications directly to FDA wholesale distributions, represents the major "partner" for digital clinics ([59]).

With this last step the abortion platformization process was completed, and the new structure of the Digital Abortion Ecosystem was finally composed of platforms that covered from e-information to e-counseling and e-prescribing, to e-distribution services. However, these changes also highlighted the new battleground for anti-choice advocates and the conservative agenda ([60]).

2. Digital Abortion Ecosystem in the *Roe* Era

The technological evolution and legal changes resulted in a flourishing of SRH services that made cyberspace a space of education, information, and care. Born as a result of abortion and SRH online free speech protection, the information website and later the mobile info-tracking platforms were immediately used by millions of people. Similarly, the later judicial aperture derived from the Maryland District Court ruling, the political changes, and the FDA review of REMS allowed the birth and proliferation of digital clinics. Due to COVID-19, with side agreements with digital pharmacies and sponsored by the info-tracking platforms, these digital clinics started to provide telemedical abortion care. Therefore, behind these platforms work a broad range of professionals such as doctors, midwives, nurses, reproductive rights health operators, SRH advocates, and lawyers.

([54]) Abortion on Demand https://abortionondemand.org/contactus/, accessed February 8, 2024.

([55]) Pills by Post https://www.pillsbypost.com, accessed February 8, 2024.

([56]) Honeybee Health, https://honeybeehealth.com, accessed February 8, 2024.

([57]) American Mail Order Pharmacy, https://amoprx.com, accessed February 8, 2024.

([58]) Manifest Pharmacy, https://manifestpharmacy.com, accessed February 8, 2024.

([59]) Baker, *History and politics of medication abortion in the US*

([60]) K.L. Frank, *Nat Effects: how the Internet has changed Abortion Law, Policy, and Process*, *William & Mary Journal of Women and the Law*, 2022, 8, 2, 311.

As previously observed, what has emerged is precisely an ecosystem in which the interconnectedness between platforms has edified and ensured the safeness ([61]) and feasibility of telemedical abortion. Consequently, abortion e-health ended up representing the highest preference for abortion seekers, contributing to destigmatizing individual and collective perceptions and broadening the abortion access possibilities. Among the reasons listed in telemedicine abortion studies, patients' preference was driven by convenience in costs – given the long distances traveling required by the in-person model–; the privacy, intimacy, confidentiality, and no stigma perception; the flexibility of the virtual appointment and not least the concerns regarding state's regulation. In addition, patients underlined the user-centered approach brought by telemedicine abortion care in the relationship between doctors and patients ([62]).

On the contrary, these positive results highlighted one of the oldest concerns for conservative parties and pro-life advocates: the progressive loss of abortion surveillance and the spectrum of self-management. According to the special report presented by If, When, How: Advocacy for Reproductive Justice – lawyers and advocates for reproductive rights organization and platform that provides legal services through a defense fund ([63]) and manages a legal helpline ([64]) – from 2000 to 2020, approximately 61 people across 26 states were criminally investigated for abortion or for helping someone in doing that. The report illustrated the role of digital devices as info and tracking period platforms, the sharing of digital health data, and the attempts to attack and obscure digital abortion advocates, for instance, the Digital Defend Fund ([65]). Additionally, the report highlighted the race-gender bias of the prosecutions, showing how Black, Indigenous, and people of color (BIPOC) were disproportionately treated as criminals. Previously, the report of the SIA Legal Team – which in 2019 merged with If, When, How – on the self-managed abortion criminalization, located these situations in states with a criminal legal system on abortion, both in books and practices. From 1973 to 2017, there were 21 arrests and criminal prosecutions in Indiana, Texas, Alabama, Louisiana, Arizona, Pennsylvania, and Idaho. The common characteristics in the cases were represented by the location where most investigations occurred, how the

([61]) The safety of digital abortion is demonstrated by the study conducted and the decision of the FDA. However, as underlined in the analysis telemedical abortion for patients means not only the "safety" of the procedure but first patients' sense of safeness for the entire abortion digital space.

([62]) *See* A.R.A. Aiken, J.E. Starling, R. Gomperts, *Factors associated with use of an Online Telemedicine Service to Access Self-managed Medical Abortion in the US*, *JAMA Netw Open*, 2021, 4, 5, e2111852; S. Kaller, S. Daniel, S. Raifman, et al., *Pre-Abortion Informed Consent Through Telemedicine vs. in Person: Differences in Patient Demographics and Visit Satisfaction*, *Womens Health Issues*, 2021, 31, 3, 227.

([63]) If, When, How: advocates for Reproductive Justice, https://ifwhenhow.org, accessed 8 February 2024.

([64]) The organization If, When, How: advocates for Reproductive Justice creates and manages the online Repro Legal Helpline offering legal services and resources to abortion seekers, https://www.reprolegalhelpline.org, accessed 22 March 2024.

([65]) *See* L. Huss, F. Diaz-Tiello, G. Samari, *Self-Care, criminalized: Preliminary Findings*, If, When, How: advocates for Reproductive Justice, 2022; L. Huss, F. Diaz-Tiello, G. Samari, *Self-care criminalized. The criminalization of self-managed abortion from 2000 to 2020*, If, When, How: advocates for Reproductive Justice Special Report, 2023.

cases came to law enforcement's attention, and how law enforcement continued the prosecution. Many of these investigations took place after a medical emergency, through the call of healthcare operators and the disclosure of patients' medical records and data ([66]).

Additionally, a cross-sectional study on abortion websites demonstrated how this ecosystem is challenged by algorithm bias and by the progressive prevalence and visibility during the years of anti-choice websites ([67]).

Therefore, if in the *Roe* era digital abortion represented a possibility for a pregnant person's self-determination, it also configured the new terrain for the antiabortion struggle. The antiabortion censorship and the end of the *Roe* era became clearer looking at the trigger laws ([68]) and the targeted regulation abortion providers (TRAP) laws enacted. As the Guttmacher Institute highlighted in 2021 at least 108 restrictions were enacted and another 50 in 2022, all of which provided in different ways a limitation of telemedicine abortion care access ([69]).

3. Teleabortion Restrictions after *Dobbs*

The new restrictive laws entered into force after the Supreme Court decision *Dobbs v. Jackson Women's Health Organization*, which overturned *Roe* and its 50-year guarantee of abortion as a constitutional right ([70]). Putting abortion back in the hands of the states and inaugurating the new *Dobbs* era, the recriminalization attempts of the conservative agenda officially became laws contributing to legal and medical chaos across the country ([71]).

Among the states that do not entirely ban abortion, however, new regulations that specifically banned telemedicine abortion care ([72]) – totally or reinstating the in-person requirement – were enacted. In contrast, other states passed the so-called shield laws to protect providers, patients, and those who help in seeking and obtaining an abortion from the antiabortion laws of other states. Connecticut was the first in May

([66]) SIA Legal Team, *Roe's Unfinished Promise: Decriminalizing Abortion Once and for All*, Special Report October 2018.

([67]) L. Han, E.R. Boniface, L.Y. Han, et al., *The Abortion Web Ecosystem: Cross-Sectional Analysis of Trustworthiness and Bias*, *Journal of Medical Internet Research*, 2020, 22, 10, e20619.

([68]) *See* E. Nash, I. Guarnieri, *13 States Have Abortion Trigger Bans – Here's What Happens When Roe is Overturned* (June 6, 2022), Guttmacher Institute, https://www.guttmacher.org/article/2022/06/13-states-have-abortion-trigger-bans-heres-what-happens-when-roe-overturned, accessed February 8, 2024.

([69]) E. Nash, P. Ephross, *State Policy Trends in 2022: In a Devastating Year, US Supreme Court's Decision to Overturn Roe Leads to Bans, Confusion and Chaos*, 2022, Guttmacher Institute, https://www.guttmacher.org/2022/12/state-policy-trends-2022-devastating-year-us-supreme-courts-decision-overturn-roe-leads, accessed February 8, 2024.

([70]) *Dobbs v Jackson Women's Health Organization* 142 S. Ct. 2228, 2242-43 (2022).

([71]) D.S. Cohen, G. Donley, R. Rebouché, *The New Abortion Battleground*, *Columbia Law University*, 2023, 23, 1.

([72]) Wisconsin, Nebraska, Montana, Iowa, Ohio, North Carolina, South Carolina, Arizona, and Kansas.

2022, followed by California, Delaware, New York, Massachusetts, and New Jersey ([73]). Notably, states such as California, Washington ([74]), and Nevada ([75]) have passed laws to protect SRH information and data. These laws are unsurprisingly peculiar to states where most digital abortion platforms are based.

The California case appears particularly interesting. After *Dobbs*, with Proposition 1, abortion and contraception rights were recognized in the state's Constitution ([76]). Additionally, the state enacted interstate shield laws protecting providers, patients, and people who help in out-of-state abortion access ([77]); while other interstate shield laws prohibited arresting people in the state and from cooperating with law enforcement of other states regarding interstate abortion investigations ([78]). Other bills protected providers from work-related, insurance, and professional liability consequences; prohibited a person from being subject to criminal or civil liability in connection with pregnancy outcomes ([79]); and provided the opportunity for clawback lawsuits([80]). Finally, the state enacted privacy provisions to forbid data collection and require greater medical data security ([81]).

At the federal level, the FDA renewal of mifepristone's restrictions in 2023 – according to the previous approval letter of 2021 – reinstated the consent form and a statement of taking the drug for abortifacient purposes, adding a special certification to prescribe the drug for all providers: health operators and pharmacies. Although the FDA confirmed in-person requirements were unnecessary, clinics and pharmacies still needed to obtain special certification from the drug's distributor ([82]).

The general legal chaos was better illustrated by two opposite rulings against the FDA. In Texas an anti-choice class action sought to block the mifepristone's e-distribution, filing a lawsuit against the FDA at the Texas US District Court. The federal

([73]) *See* D.S. Cohen, G. Donley, R. Rebouché, *Abortion Shield Laws*, *New England Journal of Medicine Evidence*, 2023, 2, 4; Guttmacher Institute, *Interactive map: US abortion policies and access after Roe* https://states.guttmacher.org/policies/hawaii/abortion-policies, accessed February 8, 2024.

([74]) House Bill 1155 prohibits collection and sharing of health data without consent and requires entities that collect this data to provide a consumers privacy policy on the use and disclosing of these data. It restricts geo-fencing around healthcare facilities and guarantees to patients the right to withdraw the consent and the possibility to request data deletion. *See* Washington H.B. 1055, 'My Health my Data Act', 2023.

([75]) S.B.131, Nevada, 2023.

([76]) Senate Constitutional Amendment, Reproductive Freedom, No. 10, California, 2022.

([77]) A.B. 1666, Leg., Reg. Sess., California, 2022 codified at Cal. Health & Safety Code § 123467.5.

([78]) A.B. 1242, Leg., Reg. Sess., California, 2022; S.B. 345, Leg., Reg. Sess., California, 2023.

([79]) A.B. 2223, Leg., Reg. Sess., California, 2022; S.B. 345, Leg., Reg. Sess., California, 2023.

([80]) S.B. 345, Leg., Reg. Sess., California, 2023.

([81]) S.B. 345, Leg., Reg. Sess., California, 2023; A.B. 352, Leg., Reg. Sess., California, 2023; A.B. 254, Leg., Reg. Sess., California, 2023.

([82]) Food and drug Administration, *Questions and Answers on Mifepristone for Medical Termination of Pregnancy Through Ten Weeks Gestation*, January 2023, https://www.fda.gov/drugs/postmarket-drug-safety-information-patients-and-providers/questions-and-answers-mifepristone-medical-termination-pregnancy-through-ten-weeks-gestation#TheJanuary2023REMSModification, accessed February 8, 2024.

judge Matthew Kacsmaryk – a well-known antiabortionist and Trump administration appointee –upheld the distribution ban, invoking and then resurrecting the Comstock Act, one of the so-called "zombie laws" ([83]). After the appeal, the Fifth Circuit Court of Appeals issued its final decision on the Texas case, ruling that the FDA was wrong to update the approval conditions that confirm the telemedicine drug distribution, partially according to Kacsmaryk's opinion ([84]). On the contrary, the US District Court for the Eastern District of Washington ruled partially in favor of the plaintiffs – ten states led by the state of Washington – ordering the FDA to maintain the status quo in the plaintiffs' states. Nevertheless, the Court denied a nationwide injunction because of the variety of abortion restrictions between states and the different and not shared nationwide alleged harm ([85]). Shortly thereafter, the Supreme Court suspended both rulings, announcing the case's hearing. Finally, in June 2024, the Supreme Court unanimously ruled that antiabortion doctors lacked the standing to contest the FDA's regulation of abortion pills. Therefore, the Court reversed the previous court's order of the mifepristone in-person requirement for prescribing and dispensing ([86]).

Despite the different kinds of abortion regulations of each state, which vary from the most protected to the most restrictive, in early 2024 shield laws were enacted in 22 states ([87]), while over half of US states have in effect laws that restrict or ban abortion: 14 have almost completely banned abortion ([88]), and 16 states adopted restrictions related to who can provide the abortion pill and how this pill can be prescribed and distributed ([89]).

The changes after the *Dobbs* decision and the new and old states' abortion regulations brought several consequences, irreversibly changing the Digital Abortion Ecosystem and revealing the economic dimension of the digital abortion issue.

([83]) *Alliance for Hippocratic Medicine v US Food & Drug Administration*, No.2:22-cv-00223-Z, N.D. Tex. 2022.

([84]) *Alliance Hippocratic Medicine v FDA,* No. 23-10362, 5th Cir. 2023.

([85]) *State of Washington et al v United States Food and Drug Administration et al*, No. 1:2023cv03026 - Document 80, E.D. Wash. 2023.

([86]) *Food and Drug Administration v Alliance for Hippocratic Medicine*, 602 US, 2024.

([87]) Shield laws are enacted not only in the most protected states such as Minnesota, Maryland, California, New York, New Jersey, and New Mexico; or quite protective states as Washington, Colorado, Illinois, Massachusetts, Connecticut, Maine, District of Columbia, and Hawaii; but even in states that adopted "moderate" regulation, such as Delaware, Nevada, Michigan, Rhode Island; and finally in state with restrictive legislation, such as Pennsylvania, Arizona and North Carolina.

([88]) Alabama, Arkansas, Idaho, Kentucky, Louisiana, Mississippi, Missouri, North Dakota, Oklahoma, South Dakota, Tennessee, Texas, West Virginia, and Wisconsin.

([89]) A. Friedrich-Karnick, E. Stoskopf-Ehrlich, R.K. Jones, *Medication abortion within and outside the formal US health care system: what you need to know*, Guttmacher Institute, https://www.guttmacher.org/2024/02/medication-abortion-within-and-outside-formal-us-health-care-system-what-you-need-know, accessed February 8, 2024.

3.1. US-based E-information Platforms in the *Dobbs* Era

As previously noted, digital data as evidence in investigations has been used even before *Roe* overruling. However, the post-*Dobbs* abortion digital surveillance materialized this practice as the norm, rather than an exception, displaying the double face of technologies in abortion regulation. Although platforms had revealed the safety of telemedical abortion, *Dobbs* weaponized the digital scenario for control and criminalization purposes over the privacy and self-determination of reproductive choices ([90]). While HIPAA protects medical records from being used and/or shared, the rule also provides exceptions concerning cases involving law enforcement investigations or public health issues. Therefore, in a state that fully criminalizes or restricts abortion, chats, internet searching, personal communications, geofences, and social media messages could be obtained in different ways: for free through the gaps and failings of HIPAA or for sale using data brokers that collected information through the sale of apps, often info tracking period and fertility apps that fall outside the HIPAA ([91]).

The first consequences of digital surveillance could be observed properly on the first level of abortion platforms. Days before, *Dobbs*'s two articles in *The Guardian* respectively reported the increased trend in deleting info tracking US platforms by users, the immediate responses of platforms in changing their privacy policies, and the removal and shadowbanning of social media profiles and posts related to abortion pills ([92]). Secure Data Recovery reported in early 2023 the results of its study, showing how, since *Dobbs*, 61% of users deleted specific apps due to strong privacy concerns ([93]). Additionally, in this new abortion recriminalization scenario, the report released by the Center for Countering Digital Hate (CCDH) demonstrated the extension of misleading advertising by anti-choice websites – as fake health clinics called Crisis Pregnancy Centers – and that of the marketing infrastructure of their misinformation activities in the post ruling digital landscape ([94]).

([90]) A. Fox, E. Manis, *Pregnancy Panopticon. Abortion Surveillance after Roe*, Report Surveillance Technologies oversight project, May 2022.

([91]) E. Park, *Reproductive Health Care Data Free or For Sale: Post-Roe Surveillance and the "Three Corners" of Privacy Legislation Needed*, *Richmond Journal of Law and Technologies*, 2023, 30, 185.

([92]) K. Paul, *Facebook and Instagram removing posts with mentions of abortion pills*, *The Guardian*, 28 June 2022, https://www.theguardian.com/technology/2022/jun/28/facebook-instagram-meta-abortion-pills-posts; F. Garamvolgyi, *Why US women are deleting their period tracking apps*, *The Guardian*, 28 June 2022, https://www.theguardian.com/world/2022/jun/28/why-us-woman-are-deleting-their-period-tracking-apps, accessed February 11, 2024.

([93]) Y. Reznick, *Survey reveals the apps Americans trust least with their data*, Secure Data Recovery, January 2023, https://www.securedatarecovery.com/blog/apps-people-trust-least#:~:text=Women%27s%20health%20apps%20are%20the,more%20open%20to%20data%20collection, accessed February 11, 2024.

([94]) Center for Countering Digital Hate (CCDH), *Profiting from deceit. How Google Profits from Anti-Choice Ads distorting searches for Reproductive Healthcare*, 2023, https://counterhate.com/research/google-profiting-from-fake-abortion-clinics-ads/, accessed February 8, 2024.

Observing the phenomena of info-tracking platform removal, it was noted that the users' response was to change the service rather than cease its use. Users turned to EU-based platforms that adhere to the European General Data Protection Regulation (GDPR) privacy law ([95]) and the European trade agreements ([96]), even if none of them entirely removes the Member State's sovereignty around matters of public policy and morality ([97]). Clue – a femtech info-tracking platform based in Germany that counts over 15 million users worldwide and one of the most EU platforms used in the US – immediately published a response to *Roe* dismantling, ensuring US citizens the protection of health data from eventual prosecutions. The company explained to its users that in case of subpoenas by law enforcement, it was first obliged to the German and European regulations and that any German court would take part in an interstate abortion prosecution. In addition, the femtech company affirmed that even in a hypothetical case, they would resist according to their mission: protect sexual and reproductive health and freedom ([98]). Far from being only words, resistance is visible looking at the role played by organizations and associations for SRH in shaping and gendering the law during the past and that of today's platforms in circumventing the recent recriminalization of abortion care.

3.2. US Digital Abortion Ecosystem Crisis: the Change for Virtual Clinics and E-distribution Platforms' Services

In the first year after *Dobbs*, the consequences were also visible for the virtual clinics' platforms. As deleting info-tracking US-based platforms did not mean a general cease in their use, the abortion telemedicine bans did not coincide with a "deletion" of telemedical abortion existence and demand. On the contrary, telemedical abortion demonstrated its ability to cross borders in ways that circumvent and undermine abortion bans.

At first, the potential consequences led these platforms to change their privacy policy, for instance, in the case of Hey Jane. In a study conducted on the website platform, researchers showed how the site employed a series of trackers that notified searching and online payments to Google, Meta, and other companies, and Hey Jane

([95]) Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), *Official Journal of the European Union: Legislation series*, 119/1.

([96]) *See* Directive 2011/24/EU on patients' rights in cross-border healthcare; Directive 2000/31/EC on Electronic Commerce; art. 56 of the Treaty on the Functioning of the European Union (TFEU).

([97]) T. Harvey, S. Sheldon, *Abortion by telemedicine in the European Union*, *International Journal of Gynecology and Obstetrics*, 2019, 145, 1, 125.

([98]) Clue's response to *Roe v Wade*, https://helloclue.com/articles/abortion/clue-s-response-to-roe-vs-wade, accessed February 11, 2024.

announced the review of its privacy policy ([99]). Later, unsurprisingly, platforms such as Choix declared the cessation of its services and its partnership with Carafem, while others, such as Just the Pill, beginning from Colorado, decided to return to a mix-method work: e-counseling and e-prescribing but physical distribution through mobile clinics parked across states' borders ([100]). Additionally, even if the virtual clinics that continue to provide digital abortion generally require a patient's e-mail address in the state where the provider is licensed and telehealth is permitted, most of them do not require a physical presence in the state. Therefore, so long as the clinic sends the pills to an address in the state where abortion is legal, patients or people assisting them could bring them when and where it is more convenient ([101]).

Nevertheless, as patients did during the US mifepristone restrictions by traveling to Europe to access abortion pills, and as in the case of users' "migration" from US to EU e-information platforms, nowadays a lot of patients migrate to Europe-based platforms accessing telemedical abortion by preferring the mifepristone journey from abroad to the US.

As traced in the first part, the slow journey toward the approval of tele/medical abortion has resulted in several barriers to US citizens' reproductive health. For this reason, in 2018 Dutch physician Rebecca Gomperts founded Aid Access ([102]) – an international telemedicine provider platform – precisely in response to US restrictions, receiving 57,506 requests from people around the US only in the first two years of service. The model was inspired by the previous international platform Women on Web (WoW) developed by Gomperts in 2005, based in Canada but licensed in Austria, which currently works in a global context and sixteen languages. Aid Access was created and addressed only to US abortion seekers to protect the previous platform from the eventual US abortion criminalization attempts ([103]).

As reasonably expected, after its outcome the FDA sent the organization a warning letter requiring the cease of its services ([104]). Gomperts responded by filing a complaint against the FDA alleging that Aid Access was helping women to exercise their constitutional right to abortion, adding a long list of testimonies ([105]). Still, the Idaho

([99]) J. Keegan, D. Kerr, *Online Abortion pills providers Hey Jane used tracking tools that sent visitors to Meta, Google and others*, *The Markup*, July 2022, https://themarkup.org/pixel-hunt/2022/07/01/online-abortion-pill-provider-hey-jane-used-tracking-tools-that-sent-visitor-data-to-meta-google-and-others, accessed February 11, 2024.

([100]) H. Landi *Digital Abortion Providers, doctors brace for the complex legal landscape after SCOTUS ruling*, *Fierce Health Care*, 27 June 2022, https://www.fiercehealthcare.com/health-tech/digital-abortion-providers-doctors-brace-complex-legal-landscape-after-scotus-ruling, accessed February 8, 2024.

([101]) D.S. Cohen, G. Donley, R. Rebouché, *Abortion Pills*, *Stanford Law Review*, 2023, 76, https://scholarship.law.pitt.edu/fac_articles/554, accessed February 9, 2024.

([102]) Aid Access, https://aidaccess.org/en/page/561/who-are-we, accessed February 11, 2024.

([103]) Women on Web, https://www.womenonweb.org/en/, accessed February 11, 2024.

([104]) Food and Drug Administration, *Warning Letter Aidaccess.org*, 08 March 2019, MARCS-CMS 575658.

([105]) Aid Access Compliance against FDA https://aidaccess.org/en/media/inline/2019/9/9/19_09_09_verified_complaint_with_exhibits-420116928.pdf, accessed February 11, 2024.

District Court judge accepted the position of the FDA ([106]). Although Aid Access continued to offer its services assisting US abortion seekers, the FDA did not continue with other lawsuits because, as seen above, the new COVID-19 scenario led to the recognition of telemedical abortion safety in the country and to the outcome of national digital clinics and digital pharmacies services.

Looking at the data, between 2018 and 2020 Aid Access received approximately 30,000 requests from across the US, particularly and not surprisingly from Louisiana, Mississippi, Wyoming, Alabama, and Texas ([107]). Before the *Dobbs* ruling, the platform received an increase in demand from states that enacted abortion bans: a study counted 1831 requests from Texas only in September 2021, after the enactment of Senate Bill 8 ([108]). Another study found that requests spiked when the *Dobbs* ruling's draft was leaked in May 2022. Overall, between September 2021 and May 2022, Aid Access received about 25 requests per day, which rose to 250 requests per day after the ruling. In addition, between September 2021 and April 2023, the platform received nearly 50,000 requests for abortion pills from people who were not pregnant but wanted the drugs in case of need ([109]).

The concern of US users – which led to the deletion of US-based applications and the preference for Europe-based platforms due to the well-known privacy and security lack of protection– was quite clear and the same also for US patients on the grounds of mifepristone access. Although Virtual Clinics' services and privacy policy changed, patients seem to feel more comfortable and safer choosing a "journey" of abortion pills from abroad rather than risking their lives, health, and abortion trials.

Conclusion

As reconstructed in the analysis, abortion platformization has found itself grappling simultaneously with the positive aspects of technological development and with the dangers and gender bias of the public space reflected in cyberspace. The US case perfectly illustrates the problematic intersection of bias and discrimination between gender, technology, and law, considering that, currently, an abortion restriction inevitably means a digital abortion prohibition, with consequences on patients, SRH platforms, and the providers' labor. Additionally, as the "return to Europe" suggests, the consequences are not only confined to a national dimension.

The recriminalization of abortion involves a broad range of issues in both a local and global dimension. These issues are related at first to the health of patients, to the

([106]) *Gomperts v Azar*, Case No. 1:19-cv-00345-DCND., Idaho July 13, 2020.

([107]) A.R.A. Aiken, J.E. Starling, R. Gomperts, *Factors Associated with Use of an Online Telemedicine Service to Access Self-managed Medical Abortion in the US*, *JAMA Netw Open*, 2021, 4, 5, e2111852.

([108]) A.R.A. Aiken, J.E. Starling, J.G. Scott, R. Gomperts, *Association of Texas Senate Bill 8 With Requests for Self-managed Medication Abortion*, *JAMA Netw Open*, 2022, 5, 2, e221122.

([109]) A.R.A. Aiken, J.E. Starling, D.C. van Blitterswijk, et al., *Advance Provision of Mifepristone and Misoprostol via Online Telemedicine in the US*, *JAMA Internal Medicine*, 2024, 184, 2, 220.

scientific judgment on drugs by national and international Health Agencies, and the rights of abortion providers, but also to the role of internet providers in advertisements and contents and the privacy of users/patients and platforms workers. Since it is a recent development and paradoxically not yet "mainstream", the entire US Digital Abortion Ecosystem – and thus those who work in it – became unprotected, and digital abortion providers were affected by the prosecution of digital abortion. In addition, the digital migration of users to Europe laid the basis for an economic fall, highlighting the interconnectedness between the physical and digital dimensions of health and identity, security and privacy, and labor and market.

If the Supreme Court's decision in overturning *Roe* has created a return to the past for pregnant persons' health and providers' rights ([110]), it has also underscored new legal issues that need to be addressed. Indeed, the *Dobbs* era antiabortion battleground creates a precarious digital environment, underscoring how traditional privacy laws fail to safeguard reproductive rights effectively. Many privacy breaches present harms and threats that are not immediately recognizable, complicating both prevention and redress. As reconstructed, digital period tracking apps, as well as abortion-related information searching and geofencing, could easily become crucial evidence in legal proceedings. Additionally, threats to the privacy of abortion providers directly affect the security of those seeking services and vice versa, highlighting how digital vulnerabilities in the post-*Dobbs* landscape can have severe, life-altering implications. In the present day, a debate on abortion availability includes a debate over the double dimension of threats – physical and digital – to health and privacy for patients/users and people who helped them and that of privacy and work for digital abortion providers ([111]). In this direction, California's new laws make the state a sort of Data Heaven. Indeed, the comprehensive reforms in the states as seen regard not only the constitutionality of contraception and abortion within the state Constitution but also the structuring of legal protection around "reproductive digital privacy". The problem of privacy is also suggested by the migration to EU-based platforms, which highlight the public perception of GDPR. Users/patients increasingly favor these platforms, recognizing that law enforcement's ability to access data hinges on the app's headquarters location. For instance, if an app is based in the EU, GDPR's stricter privacy standards apply, potentially limiting external access. Additionally, location tracking further heightens risks by creating a digital trail that can be used in legal proceedings, while without (but also with) end-to-end encryption, private conversations on messaging apps can be exposed, compromising confidentiality. In this scenario, the wider coverage, stronger fundamental rights basis, and stricter enforcement make the European privacy framework perceived as more protective.

([110]) R.B. Siegel, *Memory Games: Dobb's Originalism as Anti-Democratic Living Constitutionalism and some Pathways of resistance*, *Texas Law Review*, 2023, 101,1.

([111]) M. Meister, K. Levy, *Digital Security and Reproductive Rights: Lessons for Feminist Cyberlaw*, in ML Jones A Levendowski (eds), *Feminist Cyberlaw*, University of California Press, 2024.

In conclusion and following Haraway and Harvey's theories, the analysis of the Digital Abortion Ecosystem has perfectly shown the embodiment of digital space for the self ([112]). Even if not in a physical dimension, pregnant persons and providers who live/feel the "materiality" of digital abortion space are – personally and politically – embodied and embedded in it and constructed by it as identities. Beyond the threats, however, as demonstrated, these subjectivities could also intersectionally shape and rewrite digital space and its tools, away from traditional gender norms, race and borders, class burdens, space and time, and laws.

([112]) Biologist and Philosopher Donna J. Haraway, the pioneer of cyberfeminism, with the concept of cyborg refers to a hybrid entity that combines machine and organism. She uses this figuration to challenge traditional boundaries between nature and culture and to propose a world that transcends binary distinctions such as nature/culture, male/female, and human/machine. By merging these elements, the cyborg undermines essentialist views of identity, highlighting the potential for new forms of social and personal existence in which the dualism between physical and digital, natural and technological disappear. *See* D.J. Haraway, *Manifesto Cyborg. Donne, tecnologie e biopolitiche del corpo*, trans. L Borghi, 4th Edition, Feltrinelli 2021; Feminist media scholar Alison Harvey focuses on how media representations shape and reflect gender roles and power dynamics. Examining how the traditional representations reinforce societal norms and inequalities, she critiques the portrayal of women and marginalized groups in various media and new media forms. Harvey claims the importance of accurate representations, exploring how media can be tools for feminist activism and social change to create a more inclusive and equitable media landscape. *See* A. Harvey, *Feminist Media Studies*, 1st Edition, Polity Press, 2019.

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