

‘Roe’ling with the punches: Telehealth contraception and abortion

Soe-Na Choo¹ *Mb Bch BaO*, Judith Ong¹ *MBBS*

Unsafe abortion is a global health issue as it is a key preventable cause of maternal mortality. It has been estimated that up to 13% of maternal deaths per year are due to unsafe abortions.¹ Women in developing countries make up 97% of all unsafe abortions and more than 50% of unsafe abortions occur in conservative societies in Asia and Africa.² Fortunately, maternal mortality has been steadily decreasing, which can be attributed to several factors. One is the legalisation and normalisation of abortion, whereby access to safe abortion services and contraception reduces maternal mortality.² In 1996, when abortion was legalised in South Africa and safe abortion services established, maternal mortality dramatically dropped from an estimated 425 deaths per 1,000 abortions before the legislation to 32 deaths per 1,000 abortions in 1998.³

Abortion in Singapore has been legal since 1970, with the abortion act of 1969 instituted to protect women against the dangers of illegal abortions.⁴ According to the Termination of Pregnancy Act, there is no defined minimum or maximum age for the abortion procedure in Singapore and there is no legal requirement for parental consent for minors (under 16 years of age). Abortion is prohibited after 24 weeks of pregnancy unless the mother’s life is in danger.⁵ At present, abortion care is easily accessible and available in both public and private hospitals. While there have been occasional calls for a reduction in access to abortion services, the Association of Women for Action and Research, a Singapore women’s rights and gender equality advocacy group, has strongly advocated for abortion care.

Roe v Wade was a landmark ruling of the US Supreme Court in 1973, which led to legalisation of abortion across all its states.⁶ In June 2022 however, the Supreme Court ruled in favour of Mississippi’s ban on abortions after 15 weeks of pregnancy, allowing states to ban abortions again.⁷ Subsequently, access to abortions in medical clinics has been dwindling, with evidence showing that Americans have been performing self-abortions and abortions outside the medical setting.⁷ Self-managed abortions are not new, dating back centuries

involving physical and non-physical methods such as botanicals, and later misoprostol. An evolving concept of self-managed abortions in a safer environment is the use of online telemedicine to provide abortion medications to women seeking an abortion.⁸ This contemporary method of medical abortions via telemedicine has been offered since 2008,⁹ but has drawn greater attention recently due to the COVID-19 pandemic,¹⁰ and with the permanent allowance of mail-order abortion pills approved by the US Food and Drug Administration (FDA) in 2020.

Considering the recent proceedings in the US Supreme Court, there is warranted concern that maternal morbidity and mortality attributed to unsafe abortions will increase as access to abortions in medical clinics becomes restricted. However, if mail-to-order abortion pills remain available, this potentially could provide a safe alternative.

Implications of banned abortions

When obstacles to abortion exist, women usually find ways to circumvent the law. Prior to 2019, Ireland possessed one of the most restrictive abortion laws in the world, much like the circumstances in South Africa in the early 1990s. This resulted in maternal mortalities due to complications surrounding delayed medical termination. In addition, travelling across the border for an abortion became commonplace. For example, Mexico City in Mexico is the only state where abortion is available on request in the country, while in Chile, women travel to a Peruvian city where abortions are legal.² However, factoring in the additional cost of travel, travel experience and subsequent post-abortion care, women struggling financially become disadvantaged. An alternative cheaper method to avoid the abortion laws would then be procuring abortifacient medications via informal networks. With non-approved prescribed abortifacient medications and lack of post-abortion care, it is not surprising that unsafe abortions with related maternal mortality occur in developing countries or to those who are socially disadvantaged.

With more restrictive abortion legislation, changes in the number of abortions and maternal deaths are

¹ Department of Obstetrics and Gynaecology, National University Hospital, Singapore

Correspondence: Dr Soe-Na Choo, Department of Obstetrics and Gynaecology, National University Hospital, 5 Lower Kent Ridge Rd, Singapore 119074.

Email: soe_na_choo@nuhs.edu.sg

most concerning. For instance, Romania implemented a more restrictive abortion law in 1966. The number of abortion-related deaths climbed rapidly from 20 per 100,000 livebirths in 1965 to almost 100 in 1974, and 150 in 1983. When abortions were legalised again in December 1989, the abortion-related maternal mortality fell by 67% in the first year to approximately 60 per 100,000 livebirths.¹¹

Safety of telehealth and mail-order abortions

Anxiety around potentially reduced access to in-clinic abortions due to alterations in legislation could shift abortion to telemedicine and mail-order abortion pills. In 2021, FDA permitted access to abortion pills via mail. As a large proportion of early abortions are performed medically,¹² it is only prudent to evaluate the safety profile of telehealth and mail-order abortions. Medical abortions with mifepristone and misoprostol are an established safe option for the termination of pregnancies. Success rates reach 99% with more than 95% of women successfully ending their pregnancy without surgical intervention. The large body of evidence around medical abortions displays adversity secondary to abortifacient medications to be minimal.

Specifically for mail-to-order abortion, a study in US revealed that 99% of women were satisfied with this method.¹³ When comparing abortions provided through telemedicine versus in-person consultations, there were no differences in adverse outcomes.^{8,9,13} This is further substantiated by the UK Royal College of Obstetrics and Gynaecology, which has supported gestational age calculation of a pregnancy based on the woman's last menstrual period for telemedicine abortions up until 10 weeks' gestation, without the need for pre-abortion ultrasound assessments.¹⁴ A study in Scotland exhibited high rates of complete abortion accompanied by low rates of complications and unscheduled medical contact.¹⁵ As recommended by the World Health Organization (WHO), if the necessity of a pre-abortion ultrasound is negated, this potentially expands the range of healthcare providers offering medical abortion and thus post-abortion care. Perhaps more importantly, telehealth abortions have been found to be more affordable,¹⁶ potentially targeting families suffering from financial hardships and who are at risk of not seeking conventional medical care, and maternal mortality. A study in the UK discovered that early medical abortions routinely performed at home through telemedicine could lead to healthcare savings of GBP3 million per year.¹⁷ The mere convenience of this method has resulted in its high patient satisfaction rates. The

advantages of telehealth are multifold in terms of safety, convenience and affordability.

Given the comparable efficacy, safety and patient satisfaction rates, mail-to-order abortion should be an alternative option. Advantages from an individual perspective include privacy as the women can have an abortion in the anonymity of their own home. From a cost-effectiveness standpoint, the ability to omit a pre-abortion ultrasound can save healthcare costs and time.¹⁷ Lastly, in the context of the pandemic, having mail-order abortions ensures there is equity of abortion care for all who need it globally even in more remote areas.

It must be recognised that mail-order abortions currently remain safe for first-trimester abortions. Therefore, the limitation of this method is that from the second trimester onwards, mail-order abortions as an option will no longer exist and patients will require inpatient medical care. In addition, managing post-abortion care from home hinges on a reliable telephone, internet connectivity or a fixed home mailing address, and not all who prefer home abortions will have access to or be able to seek help should there be any post-abortion complications.¹⁸ Patients who had not done pre-abortion ultrasounds were however more likely to seek post-treatment care and opt for procedural interventions including dilation and curettage, although there was no difference in rates of hospitalisation, ongoing pregnancies or blood transfusions.¹⁹ Safety nets around sexual assaults and sexually transmitted infections should also ideally be assessed prior to individuals obtaining abortion pills. These additional vulnerabilities may be more common in women seeking telemedicine or telehealth due to stigmatisation.²⁰ In the Singapore context, given its small geographic size, healthcare accessibility is less of an issue.

Contraceptive awareness

Primary prevention of unwanted pregnancies is important, and awareness of reliable contraception should be raised. The improvement in maternal mortality secondary to abortions is not merely due to legislation around abortion, but in part due to family-planning initiatives that reduce the incidence of unwanted pregnancies, and access to medical care in life-threatening situations.² In the US, women living in states with low abortion access were more likely to use highly effective contraception if this was available (relative risk ratio 1.4). Time-sensitive emergency contraception including ulipristal acetate is available over the counter in certain countries. There is rising concern that along with more restrictive abortion laws,

the availability of contraception may change. Perhaps the scope of telemedicine should be extended to contraception counselling and provision, to further increase affordability and accessibility.

Conclusion

An estimated 56 million abortions occur globally per year, with up to 25% of pregnancies ending in abortions.² When unsafe abortions are a preventable cause of maternal mortality, the morbidity and mortality surrounding unsafe abortions highlight social inequity. The significance is underscored by WHO, which defines reproductive health as not only the ability to reproduce, but also the freedom to decide if, when and how often to do so.²¹ Given the stark differences between the political landscape in the US and Singapore, the overturning of *Roe v Wade* is unlikely to significantly change the abortion legislation or care in Singapore. With the greater establishment of telemedicine during the COVID-19 pandemic specifically for mail-to-order abortion pills, this could offer a cost-effective and safe alternative to providing healthcare in the future. Vulnerabilities around sexually transmitted infections and sexual assault may be challenging to ascertain through telemedicine, but its use could potentially be a promising option for the provision of care to women of all demographics and socioeconomic status seeking contraception and mail-order abortions.

REFERENCES

1. World Health Organization. Abortion, 25 November 2021. <https://www.who.int/news-room/fact-sheets/detail/abortion>. Accessed 20 June 2022
2. Guillaume, Agnès, Clémentine Rossier. L'avortement dans le monde. État des lieux des législations, mesures, tendances et conséquences. Population 2018;73:225-322.
3. Jewkes R, Rees H. Dramatic decline in abortion mortality due to the Choice on Termination of Pregnancy Act. S Afr Med J 2005;95:250.
4. Chen AJ, Emmanuel SC, Ling SL, et al. Legalized abortion: the Singapore experience. Stud Fam Plann 1985;16:170-8.
5. Singapore Statutes Online. Termination of Pregnancy Act 1974, revised 2020. <https://sso.agc.gov.sg/Act/Tpa1974>. Accessed 20 August 2022.
6. *Roe v Wade*, 410 U.S. 113 (1973).
7. *Dobbs v Jackson Women's Health Organization*, 597 U.S. (2022).
8. Aiken ARA, Romanova EP, Morber JR, et al. Safety and effectiveness of self-managed medication abortion provided using online telemedicine in the United States: A population based study. Lancet Reg Health Am 2022;10:100200.
9. Grossman D, Grindlay K. Safety of Medical Abortion Provided Through Telemedicine Compared With In Person. Obstet Gynecol 2017;130:778-82.
10. Aiken ARA, Starling JE, Gomperts R, et al. Demand for Self-Managed Online Telemedicine Abortion in the United States During the Coronavirus Disease 2019 (COVID-19) Pandemic. Obstet Gynecol 2020;136:835-7.
11. Singh K, Ratnam SS. The influence of abortion legislation on maternal mortality. Int J Gynaecol Obstet 1998;63(Suppl 1):S123-9.
12. Kortsmit K, Mandel MG, Reeves JA, et al. Abortion Surveillance — United States, 2019. MMWR Surveill Summ 2021;70:1-29.
13. Chong E, Shochet T, Raymond E, et al. Expansion of a direct-to-patient telemedicine abortion service in the United States and experience during the COVID-19 pandemic. Contraception. 2021;104:43-48.
14. Royal College of Obstetricians and Gynaecologists. Coronavirus (COVID-19) infection and abortion care, 31 July 2020. <https://www.rcog.org.uk/en/guidelines-research-services/guidelines/coronavirus-abortion/>. Accessed 19 November 2022.
15. Reynolds-Wright JJ, Johnstone A, McCabe K, et al. Telemedicine medical abortion at home under 12 weeks' gestation: a prospective observational cohort study during the COVID-19 pandemic. BMJ Sex Reprod Health 2021;47:246-51.
16. Johnson DM, Madera M, Gomperts R, et al. The economic context of pursuing online medication abortion in the United States. SSM Qual Res Health 2021;1:100003.
17. Hawkins JE, Glasier A, Hall S, et al. RCOG Telemedicine cost-effectiveness working group. Early medical abortion by telemedicine in the United Kingdom: a costing analysis. BJOG 2022;129:969-75.
18. Mark A, Foster AM, Perritt J. The future of abortion is now: Mifepristone by mail and in-clinic abortion access in the United States. Contraception 2021;104:38-42.
19. Anger HA, Raymond EG, Grant M, 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;104:659-65.
20. Bosó Pérez R, Reid D, Maxwell KJ, et al. Access to and quality of sexual and reproductive health services in Britain during the early stages of the COVID-19 pandemic: a qualitative interview study of patient experiences. BMJ Sex Reprod Health 2022. doi: 10.1136/bmjshr-2021-201413.
21. World Health Organization. Reproductive Health. <https://www.who.int/southeastasia/health-topics/reproductive-health>. Accessed 19 November 2022.