Letters

RESEARCH LETTER

Internet Searches for Abortion Medications Following the Leaked Supreme Court of the United States Draft Ruling

On May 2, 2022, a draft Supreme Court of the United States (SCOTUS) majority opinion was leaked, foreshadowing the decision to overturn the 1973 Roe v Wade decision and allow states to further restrict or ban abortions. Concerns about lost access to legal abortions may lead to the public educating themselves about how to obtain abortion services. We evaluated whether internet searches for abortion medications increased following the leak.

Methods | Using Google search trends (http://google.com/trends), we retrieved internet searches originating from the US that mentioned abortion pill or abortion medications (mifepristone/mifeprex, misoprostol/cytotec) from January 1, 2004 (since Google began collecting data), through May 8, 2022. Google provides relative search volumes (RSV) with a value between 0 and 100, where 100 is the highest volume of searches for the focal terms and user-selected time period or geography. Lesser values are assigned a proportionally lower number; eg, 50 indicates half as many searches compared with the highest volume.

First, we described weekly national trends for the entire study period with raw search counts inferred from Comscore estimates (comscore.com, eAppendix in the Supplement). Second, we studied hourly search volumes 3 days (72 hours) before and after the leak to reduce contamination from outside events. Observed and expected volumes were compared for the postperiod, with expected volumes forecasted from an autoregressive integrated moving average model applied to preperiod trends. The percent increase above expected volume was calculated from the ratio of observed and expected volumes and the corresponding 95% prediction intervals.

Third, we evaluated associations between state reproductive rights and abortion medication searches by comparing cumulative hourly search volumes for each state during the 72-hour period following the leak. We used the Institute for Women’s Policy Research rankings, which assigns each state a letter grade (A to F) based on a reproductive rights index (eg, public funding for abortions, women living in counties with an abortion services clinic). Differences in relative search volumes between whole letter grades were calculated using ANOVA. Analyses were conducted using R statistical software (version 3.5.3, R Foundation).

Results | The period following the SCOTUS leak corresponded with the greatest number of Google searches for abortion medication in the US, with about 350,000 internet searches the week of May 1 to 8, 2022 (Figure, A).

Isolating hourly search trends 72 hours before and after the SCOTUS leak revealed that the spike in abortion medication searches was immediate (Figure, B). Searches were cumulatively 162% (95% CI, 149%-175%) higher than expected during the 72-hour postperiod, with all 72 hourly periods having search volumes outside the expected prediction interval.

Nebraska (relative search volume = 100) had the highest cumulative search volume during the 72-hour postperiod, followed by Iowa (relative search volume = 70) and Missouri (RSV = 44) (Table). Significantly more searches occurred in the postperiod, with expected volumes forecasted from an autoregressive integrated moving average model applied to preperiod trends. The percent increase above expected volume was calculated from the ratio of observed and expected volumes and the corresponding 95% prediction intervals.

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Discussion | Internet searches for abortion medications reached record national highs following the SCOTUS leak and were more common in states with restrictive reproductive rights.

This study is limited in that it cannot confirm that any search was linked to an abortion attempt nor evaluate the demographic attributes of searchers. Nonetheless, elevated interest in abortion medications should alert physicians that many of their patients may pursue this option with or without them. Indeed, a national internet survey from 2017 indicated that 1.4% of women of reproductive age (18-49 years) reported having attempted a self-managed abortion in their lifetime, with adjustment for underreporting suggesting 7.0% may have attempted a self-managed abortion.5

Although, mifepristone/mifeprex or misoprostol/cytotec require a prescription and their use is restricted in some states, internet searches may reflect people exploring the safety and effectiveness of these medicines, how to obtain them, or stockpiling in anticipation of curtailed access. Some searchers may be seeking substitute and/or illicit abortion medications as alternatives. It is imperative that information on where women can legally and safely obtain abortion medications be accessible online; including telemedicine consultations with health care professionals.6

Continued surveillance is needed to monitor how changes in federal and state abortion laws affect demand for information about abortion medications and other medical interventions.

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