VARIATION IN CONTRACEPTIVE INTEREST ACROSS THE UNITED STATES IN RELATION TO STATE-LEVEL ABORTION POLICY RESTRICTIVENESS

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Introduction

- Access to contraception is a key component of reproductive healthcare and becomes increasingly important when access to abortion is restricted
- The overturning of Roe v. Wade resulted in variation in abortion restrictiveness across the United States
- Prior studies evaluated general changes in contraceptive interest following abortion policy changes, but few have examined interest in specific contraceptive methods
- Contraceptive methods vary in efficacy, permanence, accessibility, and cost
- Patterns of interest may differ according to abortion policy environment
- Online search behavior may provide real-time insight into population-level reproductive health interests and needs
- Understanding patterns and interests in contraception may help identify reproductive health needs and guide resource allocation
- **Objective:** Evaluate the relationship between online interest in contraceptive methods and state-level abortion policy restriction across the United States

Methods

- Google Trends data reviewed from January to December 2025
- Contraceptive methods: tubal ligation, vasectomy, intrauterine device, condoms, oral contraceptive pill, contraceptive patch, birth control shot, coitus interruptus, emergency contraception
- Relative search volume used as a proxy for population-level interest
- Data on abortion policy gathered from Guttmacher Institute
- States that made changes to abortion gestational age limits during the study period (Missouri, North Dakota) were excluded
- Contraceptives were classified by efficacy level based on typical-use failure rates, with high efficacy methods defined as having a failure rate of < 1%, medium efficacy methods with failure rate of 1-10%, and low efficacy methods with failure rate > 10%
- Spearman rank analysis to identify associations between contraceptive interest and abortion restriction

Results

Figure 1. State-level abortion policy gestational age (GA) restrictions in 2025.

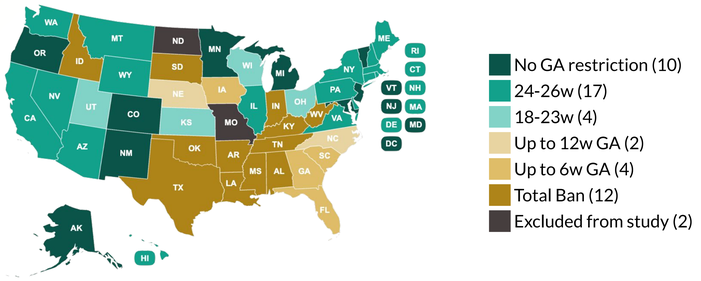

Figure 2. Associations between ranked contraceptive interest and increasing abortion restriction (1 = No ban, 2 = 24-26w ban, 3 = 18-23w ban, 4 = 12w ban, 5 = 6w ban, and 6 = total ban).

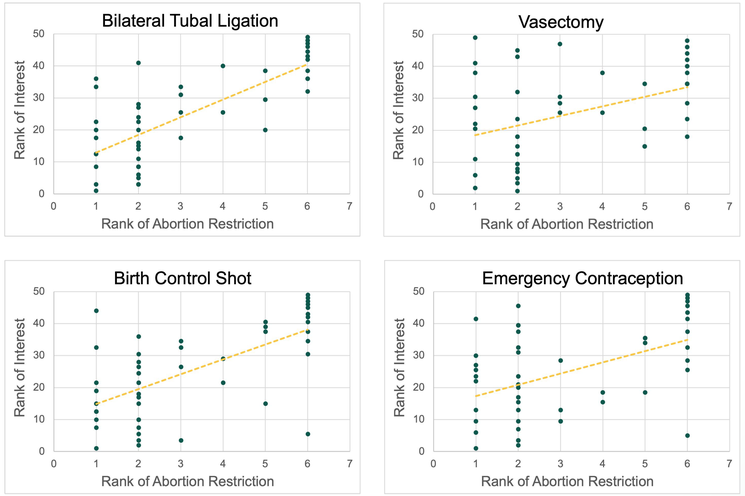

Table 1. Associations between ranked contraceptive interest and ranked abortion restriction. Strength of association is identified for clinically significant associations.

	Contraceptive Efficacy	Interest Association with Abortion Restriction	Spearman Correlation Coefficient (r_s)	Strength of Association
Tubal Ligation	High	**p < 0.001**	0.75	Strong
Vasectomy	High	**p = 0.002**	0.41	Moderate
Intrauterine Device	High	p = 0.425	-0.03	–
Birth Control Shot	Medium	**p < 0.001**	0.63	Strong
Oral Contraceptive	Medium	p = 0.177	-0.14	–
Patch	Medium	p = 0.023	0.28	–
Condoms	Low	**p = 0.005**	0.37	Weak
Coitus Interruptus	Low	**p = 0.003**	0.38	Weak
Emergency Contraception	–	**p < 0.001**	0.48	Moderate

Conclusions

- Abortion policy influences contraceptive interest at the population level
- In states with higher levels of abortion restriction, interest in highly effective contraceptive methods may reflect increased desire for definitive contraception
- Interest in low efficacy methods may be secondary to accessibility and availability
- Limitations:
  - Contraceptive implant interest could not be assessed due to unavailable data
  - Google Trends RSV may not reflect actual contraceptive utilization at population-level
  - Ecological design limits individual-level interpretation and causal inference
  - Findings may no longer be applicable to states that made policy changes this year
- Next steps: Future studies should evaluate whether online contraceptive interest translates into actual contraceptive utilization and whether reproductive health resources meet demand in states with more restrictive abortion policies

References

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